



WATER QUALITY ADVISORY
NOVEMBER 2010

What is the advisory about?

This is an update to keep you apprised of the water quality in Gillies Bay.

The turbidity and colour levels naturally present in Cranby Lake (typically from decaying leaves and vegetation) are high and this creates some difficulties in terms of effectively treating the water. One of the resulting difficulties is the creation of DBPs. When these substances combine with chlorine, they form undesirable disinfection by-products (DBP's) in the distribution system. The most common DBP is Trihalomethanes or THMs.

We wish to inform you that the annual average THM level exceeds this guideline.

Other water quality parameters that we monitor for your water supply meet the regulatory and potability standards. However, with the high turbidity and colour of the raw water, the effectiveness of the chlorine can be reduced and potentially allow the growth of disease causing microorganisms in the distribution system. Additionally, the chlorination process is not considered effective against eliminating protozoan organisms such as giardia and cryptosporidium. For these reasons we advise people with undeveloped or weakened immune systems to boil the water prior to consumption.

Why are we concerned about THMs (trihalomethanes)?

Trihalomethanes are a group of compounds that can form when the chlorine used to disinfect drinking water reacts with naturally occurring organic matter (e.g., decaying leaves and vegetation). The use of chlorine in the treatment of drinking water has virtually eliminated waterborne diseases, because chlorine can kill or inactivate most microorganisms commonly found in water. The majority of drinking water treatment plants in Canada use some form of chlorine to disinfect drinking water: to treat the water directly in the treatment plant and/or to maintain a chlorine residual in the distribution system to prevent bacterial regrowth. The health risks from disinfection by-products, including trihalomethanes, are much less than the risks from consuming water that has not been disinfected. THM levels above the maximum acceptable concentration are considered to be a possible carcinogen in humans, based on limited evidence in animals and humans. These studies suggest a link between THMs and colorectal cancer, kidney and bladder tumours and reproductive effects.

These risks are based on a lifetime of exposure and it's important to note that the health risks from THMs are much less than consuming water that has not been disinfected. The use of chlorine for disinfecting your water is considered safe and effective.

Is the water safe to drink?

Yes, we have been advised by Vancouver Coastal Health Authority that short-term exposure to elevated THMs such as these does not constitute a serious health risk to the consumers of this water.

What should I do?

In the short term, we are advising customers to take into account methods to reduce the risks that have been identified. Please consider the following individual precautions:

- ◆ Consider obtaining potable water from another approved source for drinking purposes.
- ◆ People who are immune compromised, the elderly or infants should consume bottled or boiled water.
- ◆ Install a point of use, point of entry or pour-through device that contains activated granular carbon. The activated carbon will help reduce the THMs. Make sure that the treatment device has been certified by an accredited certification body as meeting the NSF/ANSI Standard 53.
- ◆ Get informed:
 - For more information on THMs, go to the Health Canada website at <http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/trihalomethanes/guide-eng.php>
 - For more information on boiling your water refer to the Ministry of Health website; <http://www.hls.gov.bc.ca/pho/water.html>

What is the GBID doing?

- ◆ We are currently researching water systems that will be effective in providing both safe and potable drinking water, while also remaining cost-effective to our community.
- ◆ We will continue to maintain the present water treatment and ensure the risk of contamination from bacteria and viruses are reduced or eliminated.
- ◆ We will continue to monitor the water quality & levels of THMs.
- ◆ We will keep advising Gillies Bay consumers of the results and progress of our research.

THIS WATER QUALITY ADVISORY IS EFFECTIVE UNTIL FURTHER NOTICE
Effective Immediately

Inquiries?

Call the Gillies Bay Improvement District at 604-486-7757, email us at info@gillies-bay.ca or call Vancouver Coastal Health – Drinking Water Officer – Dan Glover at 604-485-3335.

Thank you for your cooperation in this matter.