

Bottled water versus municipal tap water

by Richard Pasquill, Manitoba Water Services Board

Each year, more people are questioning whether to drink their municipal tap water or to switch to bottled water.

While this trend may be a result of a current fad or advertising, it may also be a result of the public's perception that the quality of our raw water supplies are being compromised.

In order to make a rational decision regarding which water source to use for drinking, the public needs certain facts regarding the differences in the two types of water and the regulations governing the production of each.

Since municipal water is supplied to the general public being served by the utility, the quality standards to be met are set down and monitored by the local health authority. In general, the health authority is concerned that all the water meets certain mineral criteria, is bacterially safe before it leaves the treatment plant and remains bacterially safe until it reaches the consumer.

In order to achieve these results, all the water produced by a public utility must meet the provincial/national drinking water quality standards adopted in that area. These standards may include up to 75 different minerals, gases and bacteria that may occur in the water and affect human health.

If certain minerals are too high for public consumption, the water treatment plant conditions the water to bring it to acceptable limits. Treatment plants that use surface water, which has the potential to be contaminated by parasites such as *Giardia* or *Cryptosporidium*, may have to use a multi-barrier treatment process to remove such parasites.

Once the water quality is acceptable, the water is disinfected to kill any bacteria and sufficient chlorine is added to insure that any bacteria which may be encountered in the distribution system are killed before the water is used by the consumer.

With bottled water, there are few regulations. At present, there are no regulations governing the quality of bottled water other than disinfection before bottling. Since the bottled water is normally not subjected to any other possible bacterial contamination encountered during transportation, no additional chlorine or disinfectant is added to provide additional protection against possible contamination.

If a person has decided to use bottled water for drinking purposes due to some specific concerns regarding such things as parasites and wants a low mineralized water, then bottled water produced with the use of membrane technology, such a reverse osmosis, should meet that consumer's needs.

As the water is passed through the membranes, not only are most of the minerals removed, but any parasites that may be present.

Care must be taken before choosing any bottled water to ensure it meets the consumer's requirements.

There are a great variety of different types of water sold in bottles throughout the country. It **should not** be assumed that any bottled water product is mineral reduced unless stated on the label. In short, if the label indicates "spring water" this just means the water source is a spring, which is no indication of the water quality.

As with anything you purchase, always be careful and read the label.

To contact the author, write to: Manitoba Water Services Board Box 22080, 2022 Currie Boulevard, Brandon, MB R7A 6Y9