A Simple Solution to Cloudy Tap Water

The Town of Gander has received a number of enquiries about tap water appearing cloudy when first drawn from the faucet. While it clears after standing for a few moments, a film appears to remain on the surface. Investigation by the Town's Municipal Works and Services Department has traced the problem to a lack of proper aeration at the faucet.

The Town's new Water Treatment Plant uses ozone as the primary disinfectant. Ozone is simply modified oxygen which, once infused into the raw water, quickly reverts back to pure oxygen.

From the treatment plant to the faucet, the water remains under pressure which keeps the oxygen dissolved in the water. Once the water leaves the faucet, the pure oxygen comes out of solution, giving the water a cloudy appearance until these microscopic bubbles make their way to the surface and escape into the air.

The 'film' described as remaining on the surface of the water is simply the last of the oxygen bubbles held back by surface tension.

A household faucet is normally equipped with an aerator, the device at the faucet mouth containing screens and disks. In addition to filtering out any sand or debris that may have entered the system or been dislodged from inside older pipes, the aerator mixes the water with air to deliver a smooth flow and reduce splashback from the sink below. Because the water is briefly saturated with bubbles of air from the room, the surplus oxygen quickly and easily migrates to those much larger air bubbles and the water clears almost immediately.

Residents experiencing cloudy tap water are advised to ensure that aerators are installed and that all aerator screens, disks and washers are present, clean and assembled in the correct order and orientation. When cleaning an old aerator, care should be taken to note the order and position of each part. If in doubt, a new aerator should be installed.

The Town of Gander strongly recommends that aerators be installed on all faucets, regardless of this issue, as the volume of water delivered by a faucet without an aerator is dramatically higher than necessary for household purposes.

Pumping and treating water represents a significant part of the municipal budget and homeowners are routinely urged to fix even the smallest drip from their faucets to help keep costs down. The amount of water wasted by a faucet with no aerator is many times greater than that lost by a dripping faucet. Installing or cleaning aerators takes only minutes, once or twice a year, but will make a huge impact and actually save you money in the long run by keeping your taxes down.

Aerators are inexpensive, readily available at any hardware store and normally require no tools to install.