

## **CSA B128.3 Performance of non-potable water treatment systems**

The CSA has just released the draft of the CSA standard B128.3 performance of non-potable water treatment systems for public review. This is the third standard in the 128 series which seeks to provide guidance on non-potable water systems utilized for water recycling.

This draft standard addresses the performance requirements for domestic wastewater and greywater treatment systems in cases where the treated reclaimed water is then utilized for applications such as toilet flushing and subsurface irrigation. This standard does not address the diversion of untreated greywater, nor does it address rainwater harvesting or stormwater systems. Rainwater harvesting systems will be considered for another section in the CSA 128 series in the future.

Specifically, standard 128.3 addresses package treatment plants utilized for domestic wastewater from residential and light commercial/institutional locations. However, the standard does not address the treatment performance of site specific engineered systems – these must be reviewed/approved by the authority having jurisdiction.

Treatment systems are categorized in one of three ways:

- treatment of the whole wastewater stream,
- treatment of the whole greywater stream – including laundry, handbasins, showers, and tubs; or
- treatment of a single greywater stream – either laundry or bathroom (handbasin, shower, tub)

Treatment systems can be certified to producing treated water that meets one of two water quality classifications: Class A or Class B. Class A requirements are based on Health Canada's draft guidelines for toilet and urinal flushing, while Class B requirements are based on the draft revised BC Municipal Sewage regulations for moderate exposure potential.

The testing protocol requires package plants to be tested under a range of conditions over a 46 week period. Stress events are chosen to reflect potential worst case scenarios anticipated in a residential setting.

The CSA B128.3 technical subcommittee welcomes your comments on the proposed standard. Instructions for providing comments are found on CSA's public consultation website.