

## LOCAL NEWS

# Group to review water treatment options in Sydenham

By Mark Kerr

XCG Consultants has been hired to research and provide alternative treatment options to deal with the trihalomethane (THM) issue that continues to persist in Sydenham's treated drinking water.

The estimated cost of the study is \$12,830. The money will come out of the \$18,000 annual grant the township receives from the province to assist in the operation of the small water treatment facility.

The study will, in part, look at the use of aeration to remove THM from the treated water. Burns said Utilities Kingston has tested aeration and it has resulted in dramatic reductions in THM. For aeration to be adopted as a suitable treatment option, it must be reviewed by a consulting engineer, something that XCG will do, Burns said

in his report to council.

Utilities Kingston operates the plant for South Frontenac Township. Testing has regularly shown that THM levels are consistently higher than the maximum acceptable concentration of 0.10 mg/L. The Province of Ontario intends to reduce that amount to 0.08 mg/L in the coming months, which has necessitated the township to show how it intends to reach that level.

THMs are chemical compounds considered to be carcinogenic. They form when chlorine reacts with organic matter in the water being treated.

Burns told council that Utilities Kingston introduced a new coagulant to reduce the THM levels, but it has not been able to bring the levels down to 0.08 mg/L. Aeration has been shown to remove THMs and reduce the levels much more effectively.

"I am not saying it's going to work but I am hopeful. It's showing a lot of promise," Burns said. "It is much more cost effective than carbon filters which are expensive and require flushing and backwashing."

Burns said XCG Consultants will be looking at a variety of ways to reduce THM levels.

Elevated levels of THMs are thought to be caused in part by low use of the water treatment plant. Because the plant is operating below capacity, water is sitting in the lines much longer than it would under full capacity, which allows the chlorine time to evaporate. Utilities Kingston must add more chlorine to ensure the levels are high enough, which in

turn causes more reaction with organic matter and a rise in the THM levels.

Coun. Larry York said the municipality should consider making a planned subdivision in Sydenham hook up to the water treatment plant in order to boost the number of users of the water treatment plant. The idea is that water would circulate faster through the plant and require less chlorine, in turn reducing the THM levels.

Burns said it was possible to look at the option; however, he cautioned that it could be costly to pump the water uphill to the subdivision. "It's going to cost money, and then if you are going to make the subdivision pay for that, you could price them out of competitiveness."