

When bad water turns sweet

Village introduces revolutionary purification treatment

By **Bill Redekop**

HOLLAND - The water in this town was so bad people wouldn't even use it to boil coffee. It left a scum on the top.

Everyone drank bottled water. Even people at the nearby campground brought their own water, as did visiting sports teams.

The water tasted rank, it reeked, and it blackened pots and pans and toilet bowls.

"The only thing I used the water for is flushing the toilet," said Home Hardware store owner Brad Lohr.

It's all sweetness now, ever since the Village of Holland, 125 kilometres southwest of Winnipeg, introduced a revolutionary water purification treatment that's the first in Western Canada. Osorno Enterprises Inc., a Winnipeg-based technology company, introduced a purification process developed in Belgium in 1948 and now used throughout Europe and parts of the United States.

The method uses a chemical called chlorine dioxide, instead of the more common water disinfectant sodium hypochlorite.

Chlorine dioxide is a strong germ-killer that also removes unwanted elements like manganese from drinking water, without creating the cancer-causing byproducts that hypochlorite leaves behind.

The system was given a six-month trial, monitored by the Manitoba Water Services Board. The improvement was dramatic. People actually started drinking Holland water. Staining was eliminated, or at least dramatically reduced, depending on who you talk to.

The new system went into force for good in November.

The Rural Municipality of Victoria, the local government for Holland, was recently recognized with the Municipal Innovation Award from the Association of Manitoba Municipalities.

Holland has long had a problem with water because it depends on a deep aquifer where water is high in manganese, iron and ammonia. So, the town would heavily chlorinate the water just to make it passable.

"It was like drinking out of a swimming pool," said Allan Steinke, reeve of the RM of Victoria. "It was a real problem."

Meanwhile, the existing water treatment system needed upgrading. The problem was that upgrading was too costly for the small community, population 400.

Then Osorno came along. At less cost, the company demonstrated the wonders of chlorine dioxide. It's such a strong killer of germs that it requires less chemical, and has a purer taste.

Steinke added it's appropriate the process started in Belgium, because the village was settled by many Belgians more than a century ago.

Armand Hacault, who used to leave water in the fridge overnight so the chlorine would dissipate -- an old trick -- doesn't have to do that anymore.

"I've noticed a big difference," he said.

Dr. Peter Hombach of Osorno said in a paper prepared by the RM that chlorine dioxide has really caught on in the U.S. in the past 15 years. He expects its use will spread in Western Canada, too, because Prairie water tends to be high in iron and manganese.

bill.redekop@freepress.mb.ca

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