Residents of Elmira and St. Jacobs are drinking fluoridated water they never asked for, and are getting more than just fluoride in that water, argues a local activist challenging Waterloo Region about its procedures.

Robert Fleming heads a citizens’ group that opposes the fluoridation of water in Waterloo. He contends that the science supporting fluoridation is out of date and the process adds traces of lead, arsenic and other contaminants to the water.

“We want to see fluoridation turned off until science proves the ingestion of fluoride reduces cavities and the ingestion of co-contaminants over our lifetime is safe.”

Residents in the City of Waterloo who receive fluoridated water will be asked to vote on whether fluoridation should continue in a plebiscite during next fall’s municipal election. That vote will include residents of Elmira and St. Jacobs, as well as a handful along Country Squires Road and the farmers’ market area who get water from Waterloo.

Water in Elmira and St. Jacobs has been piped in from Waterloo since 1992, after Elmira’s aquifers became contaminated with chemicals from the Uniroyal (now Chemtura) plant.

Fleming said the residents of the two towns were never consulted on whether they wanted fluoride added to their water.

Regional clerk Kris Fletcher, who was clerk of Woolwich Township at the time, said the issue of fluoride was raised in the early 1990s, but was of secondary importance.

“The priority was to ensure that water was received in Elmira during that time frame … I was in Woolwich Township at the time that all that was going on, and I do remember discussions with the public saying they would be getting fluoridated water. Now, were they ever formally told that? I don’t recall.

“But I do remember some discussions and debates – well, not so much debates as much as it was ‘we need to get water, it’s going to come through the Waterloo system, and that means it’s fluoridated water.’”

The council of the day was certainly aware the water was fluoridated, she said.

Fluoride is added at regional treatment facilities before entering the City of Waterloo’s distribution system, and from there is piped to Elmira and St. Jacobs.

“It’s not that we have a watermain from Kitchener that feeds directly across to St. Jacobs and Elmira. It’s fed through the Waterloo system and then across to St. Jacobs,” explained Nancy Kodousek, director of water services for the region.

That means fluoride can’t be added to one municipality’s water system and not the other.

Fluoridation in Waterloo is done by adding hydrofluorosilicic acid to the water, with a fluoride content between 0.5 and 0.8 parts per million (ppm.) Public health agencies, including Region of Waterloo Public Health, support water fluoridation as a means to reduce cavities.

Too much fluoride can cause dental fluorosis in children whose teeth are still forming, evident as white areas or brown stains on the teeth. High levels of fluoride over a long period of time can lead to skeletal fluorosis, where bones become more dense and brittle.

Dr. Liana Nolan, the region’s medical officer of health, said health problems occur when fluoride is present in high concentrations, which only occurs in naturally fluoridated water supplies.

“Water fluoridation that’s done intentionally is specifically added in the 0.5 to 0.8 parts per million range. That level of fluoridation is sufficient to reduce cavities, but it’s not in the higher levels which can cause health problems.”

Fleming is skeptical of the dental community’s support of water fluoridation, and argues that fluoride isn’t necessary to decontaminate water the way chlorine is. He contends that the process adds trace amounts of arsenic, mercury and other contaminants, which violates the Safe Drinking Water Act.

“Fluoride is not a water treatment; fluoride is a water contaminant.”

In a 2008 report to the region’s administration and finance committee, staff explained that water in the region is routinely sampled for lead and arsenic. Levels in Waterloo are consistently well below the maximum allowable concentrations under the province’s drinking water quality standards.

The issue of water fluoridation was brought back into the spotlight by the recent announcement by the medical officer of health that fluoride concentrations had dropped below 0.5 ppm for more than six months while the fluoridation systems were awaiting repairs.

Two of the smaller systems have since been brought back online, but the largest will be out of commission until the end of the year at the earliest. Currently, about 30 per cent of the water flowing to Elmira is fluoridated, depending on how much is being used on a given day.

The fluoridation question is one that will get greater attention from the public as next year’s municipal election draws closer and residents have their say on whether fluoridation should continue.