



Staff Report

Report Title: Water Wastewater October 2022

Prepared By: John Yungblut, C.E.T., Director of Public Works

Department: Public Works

Date: Oct. 5, 2022

Report Number: PW-2022-10-70

**File Number: E08 WAT 22
E03 RIP 22
E13 RIP 21**

Attachments: Monthly Water/Wastewater Summary, Fluoride Fact Sheet

Recommendation:

THAT the Township of Huron-Kinloss Committee of the Whole hereby receives for information, Report Number PW-2022-10-70, prepared by John Yungblut, Director of Public Works

Background:

Monthly Summary

Veolia Water Canada has prepared a summary of the water and wastewater operations over the past month.

Fluoride Report

Every five years, the Township is required to test our drinking water for fluoride and report any exceedances of 1.5 mg/L to the Grey-Bruce Health Unit. The 2022 results are slightly lower than the results in 2017:

Well Location	2017 Fluoride Concentration (mg/L)	2022 Fluoride Concentration (mg/L)
Blairs Grove (Lakeshore)	2.20	1.79
Huronville (Lakeshore)	2.24	2.17
Murdoch Glen (Lakeshore)	2.14	2.07
Point Clark (Lakeshore)	2.20	2.12
Well 4 (Lucknow)	1.75	1.73
Well 5 (Lucknow)	1.78	1.65
Wells 1 & 2 (Ripley)	2.10	2.00
Elevated Tank (Ripley)	2.10 (raw water from 2011)	2.08

Fluoride levels in Whitechurch from 2019 was 1.09 mg/L and the next sample date is 2024.

Ripley Wells 3 & 4 Contamination Investigation

From June – November 2021, the raw water samples from the new wells near the Ripley Elevated Tank resulted in low levels of coliform and E. Coli bacteria. Although the weekly samples have been clear of any contamination since that time, Township staff continue to investigate potential causes of this issue. A pumping test was conducted by our hydrogeologist from May 17-18, 2022 to help determine a potential source of contamination. The conclusion of the report issued on June 29th indicated that a leak in the piping between one of the wells to the elevated tank was the most likely source of contamination.

On Aug. 5th, our Operating Authority, Veolia Canada, conducted a pressure test under the supervision of our consulting engineer and found no indication that a leak exists between the wells and the elevated tank.

Well Video Inspections

On July 4, 2022, Council awarded the video inspections of the municipal drinking well in Whitechurch, Huronville and Murdoch Glen.

Both wells in Whitechurch were inspected on Aug. 25, 2022. Murdoch Glen was inspected on Aug. 31st and the well pump motor was replaced due to age. Huronville was inspected on Sept. 15th and the steel pressure piping from the well pump was replaced due to corrosion.

Huronville SCADA Upgrades

On April 18, 2022, Council awarded SCADA upgrades at the Huron S Pumphouse.

Discussion:

Monthly Summary

The summary prepared by Veolia Water Canada is attached to this report.

Fluoride Report

Fluoride is a naturally occurring element that is beneficial to dental health in low levels. More information regarding safe levels of fluoride in drinking water is provided by the Grey-Bruce Health Unit in the fact sheet attached this report.

Ripley Wells 3 & 4 Contamination Investigation

Township staff have scheduled another pressure test that will be at a higher pressure than normal line pressure to see if any leaks are detected. If this test does not indicate any concerns with the piping, we plan to end the investigation and continue to monitor the raw water results. The raw water results from both wells since November 2021 have been clear of any contamination.

Well Video Inspections

The video report from W.D. Hopper has been received by Township staff. They recommend brushing the well casing in Whitechurch in the near future to provide a better inspection of the areas of corrosion. Hopper also recommends video inspecting the Huronville well in five years rather than waiting until the standard ten year interval to determine if a corrosion build up that was identified in the video is getting worse or not.

Huronville SCADA Upgrades

We still do not have a delivery date for some of the SCADA equipment and it appears that it will not arrive until this winter. Township staff have been informed by the Municipality of Kincardine that their original Oct. 25th start date for their reservoir repairs has also been delayed, so we don't expect that the Township will be supplying water to Kincardine until mid to late November.

Financial Impacts:

Ripley Wells 3 & 4 Investigation and the Huronville SCADA Upgrades are included in the 2022 Capital Budget.

Strategic Alignment / Link:

We are an environmentally conscious community that are good stewards of our natural environment by being aware and taking responsibility.

We are a prosperous community that continues to grow in a sustainable manner by investing in infrastructure.

Respectfully Submitted By:

John Yungblut, Director of Public Works

Approved By:

Mary Rose Walden, Chief Administrative Officer