



Staff Report PW2023-012

Title of Report: PW2023-012 Dundalk Drinking Water Adverse Sodium Notification

Department: Public Works

Branch: Water & Wastewater

Council Date: April 5, 2023

Recommendation:

Be it resolved that Council receive Staff Report PW2023-012 for information.

Background:

Staff received sodium sampling results from the Caduceon Environmental Laboratories on March 13, 2023. The sodium samples taken March 7, 2023 indicated the adverse test results from Well D3 of 28.9 mg/l and Well D4 26.6 mg/l respectively. The Maximum Acceptable Concentration, (MAC) is 20 mg/l for sodium. As mentioned in past years, historically sodium is naturally occurring in these Dundalk municipal wells. Dundalk Well D5 2023 sodium test result was 13.2 mg/l.

The Dundalk Municipal Drinking Water Licence states the following:

Schedule C

5.0 Additional Sampling, Testing and Monitoring

Drinking Water Health and Non-Health Related Parameters

5.1 For each treatment subsystem or treatment subsystem component identified in column 1 of Tables 5 and 6 and in addition to any other sampling, testing and monitoring that may be required, sampling, testing and monitoring shall be undertaken for a test parameter listed in column 2 at the sampling frequency listed in column 3 and at the monitoring location listed in column 4 of the same row.

Table 5: Drinking Water Health Related Parameters

Column 1 Treatment Subsystem or Treatment Subsystem Component Name	Column 2 Test Parameter	Column 3 Sampling Frequency	Column 4 Monitoring Location
Well No. D3	Radionuclides	Annually	Point of entrance to distribution system

	Sodium	Annually	Point of entrance to distribution system
Well No. D4	Sodium	Annually	Point of entrance to distribution system

The following is provided from the Safe Drinking Water Act 2002, Ontario Regulation 170/03, Drinking Water Systems:

[SCHEDULE 17](#)
CORRECTIVE ACTION

Large Municipal Residential

Sodium

17-13. If a report is required to be made under section 18 of the Act in respect of sodium, the owner of the drinking water system and the operating authority for the system shall ensure that the following corrective action is taken:

1. Resample and test as soon as reasonably possible.
2. If a concentration of sodium that exceeds 20 milligrams per litre is detected under paragraph 1, take such steps as are directed by the medical officer of health.

Corrective action that requires report under s. 18 of the Act

17-14. If a report is required to be made under section 18 of the Act as a result of a drinking water test that is a component of corrective action taken with respect to a parameter in accordance with this Schedule, it is not necessary to start the corrective action with respect to that parameter over again, but the owner of the drinking water system and the operating authority for the system shall ensure that any remaining components of the corrective action are completed.

O. Reg. 170/03, Sched. 17; O. Reg. 165/04, s. 6; O. Reg. 247/06, s. 28; O. Reg. 418/09, s. 24; O. Reg. 374/15, s. 8.

Staff Comments:

Staff contacted the Spills Action Centre, (SAC) and the Grey-Bruce Health Unit, on March 13, 2023 at 1:15pm. The following is provided from the Safe Drinking Water Act 2002, Ontario Regulation 170/03, Drinking Water Systems:

[SCHEDULE 16](#)
REPORTING ADVERSE TEST RESULTS AND OTHER PROBLEMS

DUTY TO REPORT UNDER S.18 OF THE ACT

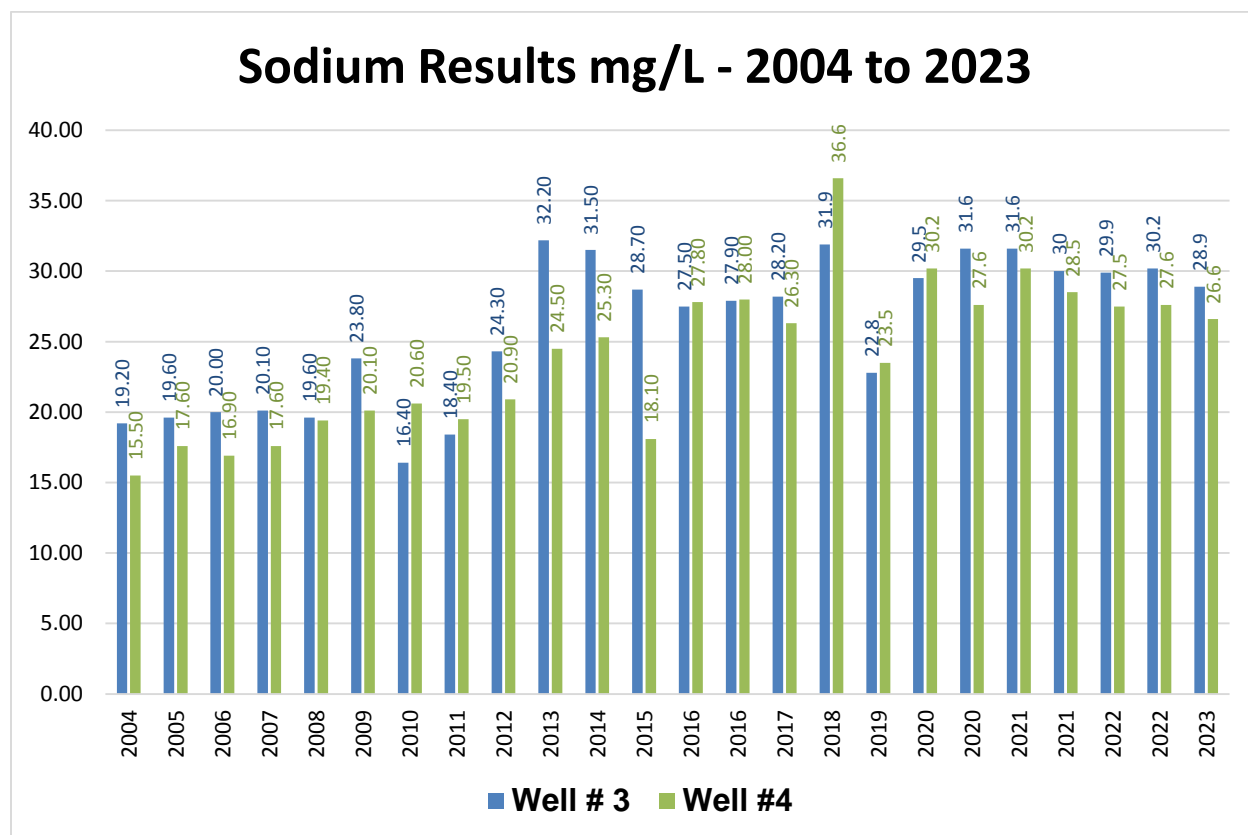
16-3. (1) The following are prescribed as adverse results of a drinking water test for the purpose of the Act

1. A result that exceeds any of the standards prescribed by Schedule 1,2 or 3 to the Ontario Drinking Water Quality Standards, other than the standards for fluoride, halocetic acids and trihalomethanes, if the result is from a sample of drinking water.
8. A result indicating that the concentration of sodium exceeds 20 milligrams per litre in a sample of drinking water, if a report under subsection 18 (1) of the Act has not been made in respect of sodium in the preceding 57 months.

This sodium adverse test result requirement was reported previously on March 9, 2018 to SAC and the Grey Bruce Health Unit. This year's sampling is reportable and notification to SAC was provided with SAC Adverse Water Quality Indicator No. 161472 issued.

Public Health Inspector, Meagan Bruce corrective action directive on March 13, 2023 was to notify users of the Dundalk water System with the communication of the Sodium In Drinking Water Fact Sheet (Attachment #1) to be posted on the Township website and be included in the next Dundalk Water billing invoice in May 2023. Notification was also hand delivered by staff to the Designated Facilities, Dundalk schools and Daycare.

The graph below is for sodium testing results at Dundalk Wells D3 and D4 from 2004 to 2023.



Financial Implications:

There is no financial impact with this staff report.

Communications & Community Action Plan Impact:

Goal 5 - Upgrading our "Hard Services"

Action 5:

The residents and businesses of Southgate recognize our linear services - roads, bridges, water and sewer works, for example - to be a fundamental purpose of

municipal government. This infrastructure needs to be serviceable and sustainable so that our businesses and communities can thrive and grow.

Concluding Comments:

Staff recommends that Council receive Staff Report 2023-012 for information.

Respectfully Submitted,

Dept. Head: *Original Signed By*
Jim Ellis, Public Works Manager

CAO Approval: *Original Signed By*
Dina Lundy, CAO

Attachments:

Attachment#1 - Sodium Drinking Water Fact Sheet – Grey Bruce Health Unit