



The Regional Municipality of Durham
To: The Works Committee
From: Commissioner of Works
Report: 2014-W-11
Date: January 8, 2014

SUBJECT:

Decommissioning of Municipal Well No. 1 in Blackstock, in the Township of Scugog, and Approval to Enter Into a Source Water Protection Agreement with the Regional Municipality of York and the City of Kawartha Lakes

RECOMMENDATIONS:

THAT the Works Committee recommend to Regional Council that:

- a) Regional Council pass a resolution stating that the Regional Municipality of Durham intends to decommission Municipal Well No. 1 in Blackstock, in the Township of Scugog, and remove the well from the Trent Conservation Coalition Source Protection Assessment Report as specified under the *Clean Water Act, 2006*;
 - b) A copy of the resolution be sent to the Trent Conservation Coalition (TCC) Source Protection Committee, Kawartha Region Conservation Authority and the Township of Scugog;
 - c) The Commissioner of Works be authorized to negotiate and execute an agreement with the Regional Municipality of York regarding Source Water Protection responsibilities in the Whitchurch-Stouffville Wellhead Protection Area subject to the approval of the Regional Solicitor; and
 - d) The Commissioner of Works be authorized to negotiate and execute an agreement with the City of Kawartha Lakes regarding Source Water Protection responsibilities in the Mariposa Estates Wellhead Protection Area subject to the approval of the Regional Solicitor.
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REPORT:**1. BACKGROUND**

Blackstock, in the Township of Scugog, has three municipal drinking water supply wells designated Well No. 1, Well No. 7 and Well No. 8 (Well No. 7 is currently not in service). Currently, water is pumped from Well No. 1 and Well No. 8. Well No. 1 is considered to be a standby well, as it does not normally supply water to the distribution system.

Water quality data from Well No. 1 demonstrates an increasing trend for the concentrations of nitrate, sodium and chloride. If this trend continues, nitrate concentrations would exceed the Maximum Acceptable Concentration as per the Ontario Drinking Water Quality Standards by approximately 2023. The nitrate concentrations appear to be a result from the use of local residential sewage systems or agricultural land uses. Sodium concentrations have been variable over the past few years and show a trend that would result in sodium concentrations being consistently greater than 20 mg/L. This value is the threshold at which the Medical Officer of Health is to provide notice of the sodium content of the drinking water to persons with sodium-related diets. The sodium and chloride concentrations appear to result from winter road de-icing operations.

The Trent Conservation Coalition Assessment Report has also identified the nitrate concentrations in Well No. 1 as a drinking water issue. A drinking water issue exists where the concentration of a contaminant at a municipal well may indicate a deterioration of the quality of the water for use as a source of drinking water. Only issues that are the result of anthropogenic activity are considered significant threats under the *Clean Water Act, 2006*.

In order to decommission Well No. 1, Well No. 7 will have to be placed in service to meet demand and ensure adequate supply during emergencies and maintenance activities.

2. CLEAN WATER ACT

The *Clean Water Act, 2006* has a prescribed process for drinking water well decommissioning. This process ensures that public notification is provided and the Wellhead Protection Area (WHPA) is updated in the corresponding Assessment Report.

Decommissioning Well No. 1 needs to be reflected in the Assessment Report and Source Protection Plan (SPP) so that the implementation of source water protection policies is based on current and accurate data. Ontario Regulation 287/07, Section 14 outlines the statutory requirements of a municipality to decommission a well.

14. (1) *Subclause 15 (2) (e) (i) of the Act does not apply to an existing municipal drinking water system if the council of the municipality that owns the system has,*

(a) passed a resolution stating that the municipality intends, within five years after the day the resolution is passed,

(i) to discontinue the use of the drinking water system, and

(ii) to make an application under the Safe Drinking Water Act, 2002 for the revocation of any approval, municipal drinking water licence or drinking water works permit that is applicable to the drinking water system;

(b) published notice of the resolution referred to in clause (a) in one or more newspapers that, in the opinion of the council of the municipality, are of sufficiently general circulation to bring the notice to the attention of the public in the municipality; and

(c) sent a copy of the resolution referred to in clause (a) to the source protection committee for the source protection area. O. Reg. 385/08, s. 12.

3. PROPOSED DECOMMISSIONING PLAN

In the Assessment Report, 66 of the 74 identified properties in Blackstock have significant drinking water threats due to the nitrate concentrations at Well No. 1. When the SPP is approved by the Minister of Environment, each property will require the Regional Municipality of Durham (Durham) to prepare a Risk Management Plan and conduct follow-up inspections to ensure compliance. Decommissioning the well would remove these threats from the Assessment Report and result in fewer property owners requiring Risk Management Plans and private sewage disposal inspections under the Ontario Building Code.

4. INTER-REGIONAL SOURCE WATER PROTECTION AGREEMENTS

4.1 Agreement with the Regional Municipality of York

The Wellhead Protection Area for Stouffville Wells 1-3 extends into the Regional Municipality of Durham (Durham). Four significant drinking water threats have been identified within that portion of the wellhead protection area. Staff are currently reviewing a draft agreement for the Regional Municipality of York (York) in order to implement the source protection program in this area. Under the

Clean Water Act, 2006 it is the responsibility of the drinking water provider to implement the source protection program regardless of municipal boundaries. The proposed agreement envisions that York will be responsible for negotiating and enforcing Risk Management Plans to address existing significant threat activities within the Wellhead Protection Area and will collaborate with Durham's Risk Management Official during this process. Durham staff will accompany York staff during inspections and property visits. Durham's Health Department will be responsible for implementation of the required private sewage system inspections. Durham and the Township of Uxbridge will continue to be the lead on all new development applications as the responsible authority under the *Planning Act*.

4.2 Agreement with City of Kawartha Lakes

The Wellhead Protection Area for the Mariposa Estates municipal drinking water wells extends into Durham and significant drinking water threats have been identified within that portion of the Wellhead Protection Area.

Durham's Health Department will be responsible for implementation of the required private sewage system inspections. Durham and the Township of Scugog will continue to be the lead on all new development applications as the responsible authority under the *Planning Act*. The City of Kawartha Lakes has delegated their Part IV responsibilities to Kawartha Region Conservation Authority, who will also be involved in the negotiations of the agreement to ensure a collaborative approach. Staff will work with the City of Kawartha Lakes and the Kawartha Region Conservation Authority to draft an agreement that ensures the implementation of the source protection program in this area.

5. CONCLUSION

The purpose of the *Clean Water Act, 2006* is to protect existing and future sources of municipal drinking water. The Assessment Report and Source Protection Plan list nitrates in the Blackstock drinking water supply as an issue and significant drinking water threat. Decommissioning Well No. 1 would remove nitrates as a drinking water issue and ensure exemption of 66 of the 74 properties from the requirements of the *Clean Water Act, 2006*. In order to ensure exemption, the Regional Municipality of Durham would be required to adhere to the steps set listed above in Ontario Regulation 287/07. In addition, Inter-Regional Source Water Protection Agreements are required with the Regional Municipality of York and the City of Kawartha Lakes in order to implement source protection plans.

This report has been reviewed by the Legal Department.

Clifford Curtis, P.Eng., MBA
Commissioner of Works

Recommended for Presentation to Committee

G.H. Cubitt, M.S.W.
Chief Administrative Officer

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