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March 18, 2022

Deepak Joshi, CAO Rural Municipality of St. Clements 1043 Kittson Road, Box 2 Grp 35 RR1 East Selkirk MB R0E 0M0

Dear Deepak Joshi:

Re: Beaconia Well - Fill Station Requirements

The intent of this letter is to clarify required actions as specified in the inspection letter from the regional drinking water officer dated September 17, 2020, and to share correspondence from the Well Drilling Liaison Officer sent February 16, 2021 regarding the Beaconia Well.

There are provincial regulatory requirements that are applicable to both the maintenance of a flowing artesian well and in the operation of a water fill station.

- Well upgrading and maintenance requirements fall under The Ground Water and Water Well Act and its supporting regulations.
- Water fill station approval, operation, and monitoring requirements fall under The Drinking Water Safety Act and its supporting regulations.

Well Upgrading

Installation of a <u>flow control device</u> is required on all flowing artesian wells, including the Beaconia Well. This requirement is to ensure that water does not flow from the well in an uncontrolled manner that may result in damage to nearby infrastructure, such as roads, drains, or private property. Uncontrolled flowing wells also waste a precious resource. A licenced well driller or knowledgeable plumber could perform this work.

We recognize that the Beaconia Well was drilled in 1964, prior to minimum construction standards. Attempting to extend the well's service life may result in the well becoming compromised, due to metal fatigue, corrosion or because construction standards were not available at that time. Please note that all flowing wells must now be grouted with sulphate resistant cement or other suitable material to ensure that the well can be properly controlled. Given this, you are encouraged to consult with a licenced well driller on well upgrading requirements and associated costs.

If it is decided that the well is to be decommissioned, because this is a flowing well, the Groundwater and Water Well Act requires this work to be completed by a licenced well driller.

Water Fill Station

Installation of a <u>chlorination system</u> is required at water fill stations to ensure that water being supplied and stored by residents carries a disinfectant residual. A basic chlorination system includes a chemical feed pump connected to a sodium hypochlorite (chlorine) barrel/pail, and a sampling valve after the point chlorine is added. The requirement for a chlorination system applies whether it is a truck fill station or pail fill station.

A <u>backflow prevention device</u> is required on the water supply line at a water fill station to minimize the risk of contamination. This requirement applies whether it is a truck fill station or a pail fill station, but the type of backflow prevention device will be different. A truck fill station requires a reduced pressure principle or double check valve assembly, while a pail fill station requires a hose bib vacuum breaker.

Before proceeding with the required fill station upgrades for the Beaconia Well, you must obtain <u>approval</u> from the Office of Drinking Water to ensure equipment meets industry standards. Contact your regional drinking water officer for guidance in submitting a request for approval.

The fill station will also require <u>specific signage</u> to indicate that only drinking water containers are permitted to be filled. Spray tanks, spray equipment or chemicals are not allowed on site. The RM will be responsible for enforcing this requirement.

The operating licence for the Beaconia fill station would need to be amended to include <u>additional operational requirements</u>. Bacterial sampling, currently being done on a quarterly basis, would not change. Chlorine residuals in the water would have to be tested three (3) days per week, with no tests done on consecutive days. The residuals will be recorded on a monthly reporting form that needs to be submitted to your regional drinking water officer at the end of each month. You would have to purchase a test kit for measuring chlorine.

You may also have to make other changes to the site if you want to have a fill station that water trucks can access. You are encouraged to work with an experienced water treatment equipment supplier to determine equipment needs and associated costs. The Manitoba Water Services Board has experience in constructing bulk fill stations and may be able to provide some advice.

Should you have any questions regarding the requirements outlined above, please contact the Office of Drinking Water at <u>odw@gov.mb.ca</u>.

Sincerely,

Kate Bolton Director, Office of Drinking Water

c: Melanie Betsill, Operations Manager, Office of Drinking Water Cory Vitt, Approvals Engineer, Office of Drinking Water Anjanie Gorcharan, Drinking Water Officer, Office of Drinking Water Richard Tattersall, Well Drilling Liaison Officer, Groundwater Management Arlita Madrigga, Water & Waste Coordinator, R.M. of St. Clements