



REPORT

To: Electoral Area Directors Committee

Report Number: ENV-EADC-011

From: Kari Bondaroff, Environmental Services Manager

Date: March 4, 2021

Subject: Area B Water – Rose Prairie Water Station

RECOMMENDATION #1:

That the Electoral Area Directors Committee recommend that the Regional Board authorize the closure of the Rose Prairie Potable Water Bulk Fill Station and cease all operations; further, that the Rose Prairie Potable Water Bulk Fill Station be decommissioned including termination of all legal agreements and removal of all physical infrastructure assets located within the PRRD Statutory Right of Way for the Rose Prairie Potable Water Bulk fill station.

RECOMMENDATION #2:

That the Electoral Area Directors Committee recommend that the Regional Board authorize a virtual town hall meeting with the residents within the vicinity of the Rose Prairie Potable Water Bulk Fill Station before the end of March 2021.

RECOMMENDATION #3:

That the Electoral Area Directors Committee recommend that the Regional Board authorize a feasibility study within the Rose Prairie region of Area B to identify potential treatable surface and/or ground water sources to establish a potable water bulk fill service station.

BACKGROUND/RATIONALE:

In spring of 2019, four of the five Area B potable water bulk fill stations were opened to the public¹. Due to ongoing issues with the source water, in terms of both chemical and physical water parameters, the Rose Prairie water bulk fill station has not yet opened. In May of 2020, a granular activated carbon (GAC) pilot study was approved by the Board. The pilot began in August of 2020, and with slight modifications to the treatment regimen, the GAC filter pilot proved to be successful.

After successful competition of the pilot, the PRRD received a water license for the water system from the Province of BC on February 12, 2021, and an operating permit for the water system from Northern Health on February 17, 2021. With all of the required approvals in place, the Rose Prairie water station was scheduled to open to the public on Monday, February 22, 2021.

On Sunday February 21, 2021, the operator was conducting final checks on the system, and observed a change in the treatment storage tanks. This prompted further testing of the air within the tanks, and explosive levels of gas were found. The pump house² was also tested, and while levels in the building

¹ The 4 operating stations are located near Boundary Lake, Buick, Fey Spring and Prespatou.

² The source water is from a well, contained in a small pump house, 1.4 km from the bulk tankloader.

were found to be 0%, lower explosive limits (LEL) monitors detected high levels of gas localized in the well casing. Immediately, the PRRD drafted and delivered communications to the public which stated that the opening of the station would be delayed to allow for more investigation.

On Monday, February 22, 2021, further testing of the water storage tanks and the pump house and well casing were completed. The water within the treated water storage tank at the tankloader was tested very close to when the water had just finished its treatment production cycle. The LEL levels at this time had dropped by two-thirds, indicating that gasses were dissipating. Within the pump house, no LEL % was detected, however, low levels of oxygen were detected at the floor level and the ceiling level. Within the well casing, high levels of LEL were still detected. The station was immediately powered off and production of water was ceased at that time.

WorkSafe BC was notified on February 22, 2021, as was Northern Health and the Oil and Gas Commission (OGC). WorkSafe BC conducted an investigation on February 23, 2021 and the inspection reports were delivered on February 24, 2021.

As the station was not opened to the public and their focus is human safety, Northern Health was content with the notification and were relieved to hear that WorkSafe BC was involved. A formal water well complaint was filled with the C&E³ department of the OGC as well as their Hydrogeologist and Hydrologist.

On February 25, 2021, a team from the OGC visited the site and found similar high levels of LEL's in the well casing. At the tankloader, no LEL's were detected, however, the station had also not produced water for 4 days.

To date, the information by site operators and verified by the OGC, makes it clear that the water chemistry from the source well has changed since Friday, February 19, 2021 to the point where it is affecting operator safety. Prior to this date, there have never been LEL concentrations detected at either the well pump station or the tankloader site.

Concurrent to the operations described above, staff had obtained pre-budget approval for the capital expenditures for the Rose Prairie bulk tankloader full-scale GAC construction. The RFP was issued and closed on February 24, 2021. Due to the current status of the station, it is recommended that this RFP be cancelled and the bidding proponents be notified accordingly.

ALTERNATIVE OPTIONS:

1. That the Electoral Area Directors Committee provide further direction.

STRATEGIC PLAN RELEVANCE:

- ☒ Organizational Effectiveness
- ☒ Develop a Corporate Asset Management Program

³ Compliance and Enforcement.

FINANCIAL CONSIDERATION(S):

Within the 2021 Area B Potable Water Draft Budget, \$600,000 has been allotted towards the full scale construction of the GAC system at Rose Prairie. These funds will still be necessary for installation of proper ventilation systems as outlined by WorkSafe, including heating upgrades to protect infrastructure from freezing at low temperatures, within each of the Area B potable water station buildings. The funds will also be required for decommissioning of the Rose Prairie Station, feasibility studies, and potential relocation, construction within a new site location.

The current capital expenditures for the Rose Prairie water station construction from 2019-2021 are \$919,169. Operational expenditures for the Rose Prairie water station, excluding administrative allocations and costs, are \$407,233 inclusive of contractor fixed rates, property lease payments, electricity, insurance, and operational expenditures. There has been no revenue generated at this station to date.

COMMUNICATIONS CONSIDERATION(S):

The Area B Director would like to schedule a virtual town hall meeting to discuss the future of the Rose Prairie water station. This will need to include potential areas for a water station that the public would be willing to access. As well, the public will need to be informed as to the reasons for the stations closure.

OTHER CONSIDERATION(S):

None at this time.

Attachments:

1. Rose Prairie Water System Map