



## Norman Wells Land Treatment Unit Sump Water Discharge Criteria Discussion Teleconference

Teleconference Meeting Minutes

Thursday, January 17, 2019 – 1pm – 2pm MST

Sahtu Land and Water Board Water Licence Number: S17L8-003

BluMetric Project Number: 180501

Project Name: Norman Wells Land Treatment Unit (LTU)

### In Attendance:

Representing Public Services and Procurement Canada (PSPC): Michael Brownlee

Representing Transport Canada (TC): Melissa Fraser

Representing BluMetric Environmental Inc.: Andrea Jenney and Dan Tucholski

Representing the Sahtu Land and Water Board (SLWB): Bonnie Bergsma

Representing the Government of the Northwest Territories Environment and Natural Resources (GNWT-ENR): Laurel McDonald and Erin Goose

### Accuracy of Minutes:

These minutes were prepared by Dan Tucholski of BluMetric Environmental Inc. (BluMetric™), on Thursday, January 17, 2019, and shall be considered complete and accurate unless otherwise disputed, in writing, within one week of receipt. **Action Items are in Bold.**

### Summary of Contents of Teleconference

#### Project Background:

- The Norman Wells LTU sump discharge teleconference call was opened with introductions and a short briefing of where the project stands by Andrea Jenney (BluMetric), specifically work completed on the sump and sump water.
- Andrea Jenney indicated that the sump was sampled, pumped out, and discharged to the ground surface as previously approved by the Board. After discharge, approximately 50,000 litres of water accumulated within the sump. The accumulated sump water was re-sampled and found to exceed discharge criteria for aluminum, arsenic, iron, and manganese.
- Initial results were discussed with Laurel McDonald and Erin Goose (GNWT-ENR) and permission to discharge was not granted due to these exceedances. As such, this water was pumped out of the sump and stored in a tank rented from HRN Contracting in Norman Wells.
- Laurel McDonald indicated that she has heard anecdotal stories of soil from unknown locations and with potentially unknown contamination being deposited into the LTU in the past.
- Michael Brownlee (PSPC) responded that the soil within the LTU has been sampled and analyzed thoroughly, and has not been found to contain any of the four previously-mentioned metals in exceedance of their applicable guidelines.

- Andrea Jenney added that the upgradient monitoring well, indicative of background conditions at the site, has been shown to metals in exceedance of their applicable guidelines as well.

#### Memo Discussion:

- Andrea Jenney described the memo that was sent to the SLWB and ENR Inspectors on January 7, 2019
- The criteria being applied for discharge of the sump water were discussed as well as the potential receptors, and the concentrations of the metals in question in the Mackenzie River. The Mackenzie River is the assumed downgradient receptor of the groundwater at the site, and that the concentrations of the analytes in the sump water are less than the concentrations of the same analytes in the river.
- The memo concludes that the discharge of the sump water at the site is unlikely to result in undue risk to downgradient aquatic receptors.
- Laurel McDonald, Erin Goose and Bonnie Bergsma were in agreement that the memo provides sufficient rationale for the discharge of the sump water to occur on site.
- SLWB and ENR will meet in the next week to prepare a memo to authorize the discharge of the stored water.
- Erin Goose asked when the sump water would be discharged, and it was suggested by Andrea Jenney that it would be discharged when the ground was thawed in order for the ground to properly receive the sump water.
- Michael Brownlee noted that there is also soil/sediment that was removed from the sump which was saturated with the same sump water and requested that this saturated soil be returned to the LTU as the soil chemistry meets the treated soil criteria.
- Andrea Jenney indicated that a memo will be drafted discussing this soil and requesting approval for movement.

#### Other Discussion Items:

- Andrea Jenney noted that a replacement groundwater monitoring well will be installed upgradient of the LTU at the end of January and BluMetric will be advising the SLWB and GNWT-ENR of this work.
- Teleconference ended 2pm MST.