



BEHDZI' AHDA FIRST NATION
P.O. Box 53, Colville Lake, N.T. X0E 1L0
Ph: (867)709-2200 FAX: (867)709-2202

April 24, 2024

Sahtu Land and Water Board
P.O. Box 1
Fort Good Hope, NT X0E 0H0

Attention: Natalie Lippa, Regulatory Specialist

Dear Natalie:

This letter provides Proponent Responses regarding the **Draft Municipal Water Licence** for the Community of Colville Lake, Sahtu Region, Northwest Territories. As you know, the Behdzi Ahda First Nation's (BAFN) approach to water treatment of withdrawn Colville Lake water is currently in-truck chlorination (with circulating pump) followed by home delivery which will continue until replacement of the water treatment system. The following sections provide BAFN's Draft Water Licence (WL) responses.

BAFN Input Requested

We appreciate SLWB's comments in the Draft WL asking for BAFN input:

1. Draft Page 8, Part B: General Conditions, #7 – Input requested for the submittal date for the Annual Plan Review letter:

BAFN requests a date of 31 August, annually. This will allow adequate time to complete all Plan reviews prior to annual provisioning using the winter road, and between Spring and Fall hunts that are essential to our community.

2. Draft Page 13, Part F: Waste and Water Management, Water, #9 – Submittal date for Water Treatment Plant Operation & Maintenance (O&M) Plan:

For current lake water extraction with in-truck disinfection, BAFN is using the Water Treatment Plant (WTP) O&M Plan Template submitted with the Water Licence Application Package. The new WTP O&M Plan will be written closer to commissioning and will not meet the 12 month following WL effective date requirement.

3. Draft Page 16, Part H: Spill Contingency Planning, Condition, #3 – BAFN Input requested for preferred timeline for the Spill Contingency Plan – Revised.

Due to the excellent decision-trees identified in the Spill Contingency Plan (SCP) Template, BAFN would like to use the completed SCP submitted with the WL Application. The submitted SCP will be revised to include a cover letter, brief project background, and training details for the Municipal requirements. Additionally, training provided by the appropriate Federal entity will also be included in the revised SCP for those community members who may assist with the Emergency Response actions at the Airport or Fuel Tank Farm. Training for both Municipal and Federal needs to be updated.

Assuming use and revision of the WL Application SCP Template; the draft licence submittal date of 90-days following the effective date of the Licence would be a suitable timeline.

4. Draft Page 18, Schedule 1: Surveillance Network Program, #4, SNP – E, C, W and SLWB Comment - BAFN Input requested to 1) convert proposed groundwater monitoring stations to surface water monitoring stations and 2) move at least 2 locations closer to the adjacent water body.

BAFN is agreeable to have proposed SNP locations SNP-E and W converted from groundwater to surface water sampling and moved closer to the natural pond as shown on revised Figure 4, Appendix 1 (Attached). It is thought that sufficient surface water will be present during open water season. Rather than sampling groundwater at SNP-C, surface water pond sampling is proposed instead at location SNP-P, obtaining grab samples from shore with extension pole/litre lab bottle collection.

5. Draft Page 22, Schedule 2: Annual Water Licence Report, #1 – Input requested for the submittal date for the Annual Water Licence Report.

BAFN requests an annual date of 30 June, for the Annual Water Licence Report. As in #1 above, this allows for preparation time compatible with essential winter road and hunt activities.

6. Draft Page 24, Schedule 2: Annual Water Licence Report, #1 n) – BAFN Input requested for preferred submittal date for “other details requested by the Board”.

BAFN requests that this date be 30 June annually, to coincide with the submittal of the Annual Water Licence Report.

Additional BAFN Comments

7. Draft Page 4, Defined Terms - Community versus Lake names

To prevent confusion between the Community of Colville Lake and the Lake itself, we request two definitions be added to the Defined Terms section of the licence and that the appropriate phrase be used within the body of the licence:

“Community of Colville Lake – refers to the people and community of Colville Lake (Designated Authority).”

“Colville Lake – refers to the water body named Colville Lake.”

8. Draft Page 9, Part D: Water Use, Condition, #12 – Surveillance Network Program implementation

In the past, others have performed this sampling and evaluation. BAFN was told it was not their asset to manage. BAFN understands the intention for this to be a FN responsibility but does not necessarily agree with this position. This is one issue that is part of current self-government negotiations. Until such time as a decision has been made, current sampling and evaluation should be continued and performed by those who have been doing these tasks.

9. Draft Page 10, Part D: Water Use, #2 - Licence Coverage for water withdrawal methods

We would like to verify that both pumphouse and direct withdrawal are covered in this Licence. The WL application identified water withdrawal by 1) the existing pumphouse routed through the bypass piping (in the inoperative WTP) to the truck fill, and 2) direct water withdrawal via portable pump to be used as a backup should the pumphouse be down for any reason.

10. Draft Page 11, Part E: Construction, #2 – Independent sourcing of engineering consulting and repair work

The Sewage Lagoon has exterior erosion on side slopes needing repair. Can privately funded, P. Eng. stamped and directed work be done without prior submittal for review and approval by the Board?

11. Draft Page 11, Part E: Construction, #3 – written authorization on materials

Do everyday repairs need this written authorization?

12. Draft Page 11, Part E: Construction, #6 – Review of Design and Construction Plan and/or Design Drawings

For privately funded projects requiring new designs or significant design changes; depending on how many entities wish to review, 90-days may not be sufficient time for these reviews and for design team response to make final changes. The concern is also that contracted mobilization schedules are greatly affected by the ability to transport equipment and supplies via the winter road with little flexibility and are directly connected to project costs.

BAFN requests clarification on process to control the number of reviews and response time for designs such as the new Water Treatment Plant.

13. Draft Page 13, Water #9 – Time Period for Water Treatment Plant Operation & Maintenance Plan (O&M Plan)

The Water Treatment Plant O&M Plan submittal date is listed as 12 months following the effective date of the Licence. The new plant O&M Plan will be completed following construction and is expected to exceed the 12 month requirement. Due to self-government negotiations, preliminary bidders list and bid documents have not yet been started.

14. Draft Page 14, Conditions, #13 and #14 – Sewage Lagoon freeboard and discharges from the Sewage Lagoon to the adjacent natural wetland.

The Sewage Lagoon is, by design, an evaporative process; there is no discharge pipe to the adjacent wetland. The Emergency Discharge which is connected to the wetland has never been needed or used. This is due to the low population and minimal sewage and wastewater trucked to and discharge into the Sewage Lagoon. The Lagoon was designed for thousands of people and is used by the community of fewer than 170. We understand the need to have these standard descriptions of operation, but these items are not currently applicable to how the BAFN Sewage Lagoon is operated.

15. Draft Page 15, Solid Waste, Condition, #21 – Prohibition of from incinerating materials at unlined landfills at Solid Waste Disposal Facilities, unless authorized in writing by inspector.

Due to our remote location, and the need to manage landfill space, we may request this authorization. Can this be done by simple letter or is it necessary to discuss during a site inspection?

16. Draft Page 16, Part H: Spill Contingency Planning, Condition, #3 – 90-day submittal for revised Spill Contingency Plan

Please see #3, above. Additionally, a significant amount of fuel is held in the Tank Farm. Larger and a greater number of response kits are needed for use in the Federally managed Fuel Tank Farm.

17. Draft Pages 18 and 20, Schedule 1: Surveillance Network program, SNP Station Quick Reference Guide; SNP Station SNP-L

Please clarify which parameter is requested at SNP-L: quality by sampling Colville Lake (SNP Station Quick Reference Guide) or volume as listed in Station SNP-L (Page 20) measured in m³.

Per the GNWT Environmental Health Services requirements, raw water from Colville Lake will be sampled monthly for bacteriologic parameters and yearly for chemical and physical parameters.

18. Draft Paged 20, Schedule 1: Surveillance Network program, SNP Station SNP-L

Please confirm if the current in-truck disinfection and distribution procedure which uses the truck-fill gauge to determine the volume of water withdrawn from Colville Lake is sufficient.

Station SNP-L identifies volumetric measurement. For “Sampling Frequency”, we suggest “Measurement Frequency”. The frequency included here is “Continuous” which applies to the new Water Treatment Plant but would not apply to the current episodic water withdrawal, disinfection, and delivery which measures volume via the truck gauge. Episodic water treatment will continue until the new Plant is constructed and brought on-line.

19. Draft Paged 22, Schedule 2: Annual Water Licence Report, #1. f) iv. Laboratory Reports

Do the raw and treated water analytical laboratory reports required by GNWT Environmental Health Services need to be included in the Annual Water Licence Report?

20. Draft Page 23, Schedule 2: Annual Water Licence Report, Sewage Disposal Facility, #1 g) vi. annual quantity of discharges

As previously described, there are no discharges from the Sewage Lagoon. The Lagoon is an evaporative design, and the base is rarely covered with wastewater. No Emergency Discharges have occurred since the Lagoon was commissioned in 2013. We understand that this is a standard tracking

requirement, but it is not applicable to the design and current operation of the structure for this low population community.

21. Draft Paged 18 and 20, Schedule 2: Annual Water Licence Report, 1. i) i - vi., sludge management

The very small population generates very little wastewater and sludge relative to the Sewage Lagoon design. There is no accumulation of liquid in the base of the lagoon; and it is not possible to deploy a boat to measure or access sludge. Under current operation, items i. – vi. will not be performed or presented in the Annual Water Licence Report.

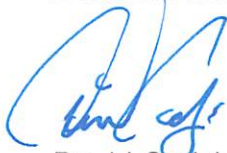
We understand that these are standard tracking parameters, but they do not apply to the current design or operation for this small community.

22. Draft Paged 28, Attachment A – Concordance Table of Items Requiring Submission, Part F, Condition 9 – WTP O&M Plan

As previously mentioned, the WTP will not be designed and constructed, and O&M Plan written within the time period specified. The existing WTP O&M Plan Template will be used until the new Plant and O&M Plan are complete.

We appreciate the opportunity to respond to the Draft Water Licence. Please direct any questions or concerns regarding this application to the attention of the undersigned at 867-709-2200 or codzi@behdziahda.ca or to Margot Ferguson at 403-921-6001 or margot.ferguson@envirosearch.ca.

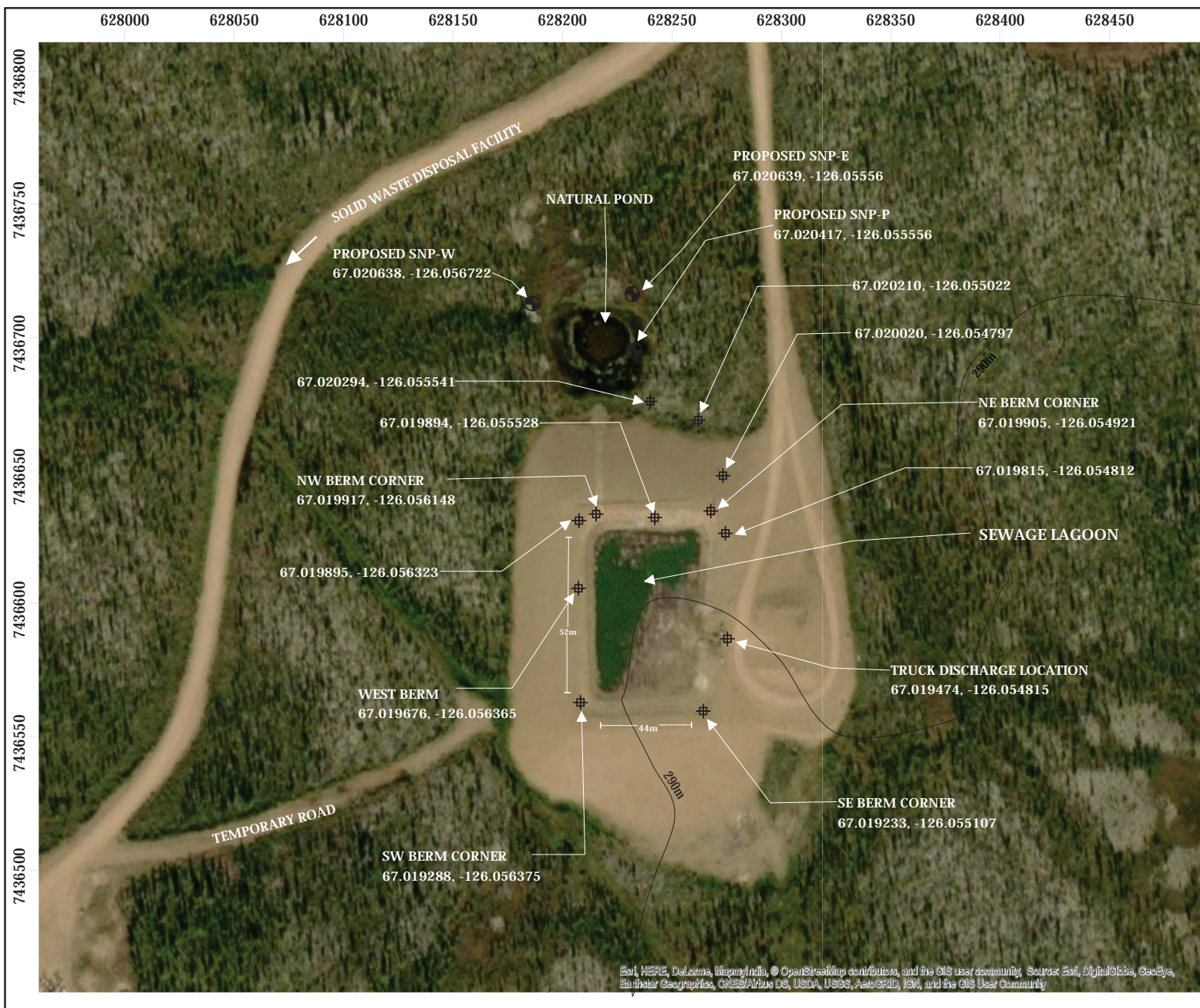
Sincerely,
Behdzi Ahda First Nation



David Codzi
Assistant Band Manager

Attachment: Revised Figure 4, Appendix 1 (WL Application Package)

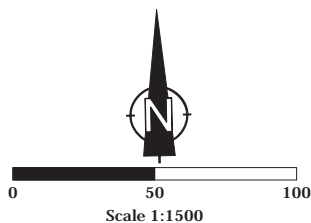
Cc: Jenna Grandjambe – SLWB
Fatima Youssef – SLWB
Margot Ferguson – EnviroSearch Ltd.



LEGEND:

- Surveillance Network Program (SNP) Surface Water Sample
- Waypoint
- Topographical Lines
- P** Pond
- E** East
- W** West
- NE** Northeast
- NW** Northwest
- SE** Southeast
- SW** Southwest

67.019815, -126.054812 Latitude, Longitude



PROJECT NO.	FIGURE VERSION	DRAWING DATE	DRAWN BY	REVIEWED BY
22NT0332	2	APR 2024	RK	AV

TITLE:
Sewage Lagoon

LOCATION:
Colville Lake, NT

DRAWING REFERENCE(S):
1. Aerial Photo obtained November 15, 2022 from ArcGIS
2. Coordinates: NAD 1983 UTM Zone 096M



FIGURE:

4