

## Reviewer Comments and Proponent Responses

**Project: Inuvik Soil Treatment Facility**  
**Board: Gwich'in Land and Water Board**  
**Organization: KBL Environmental Ltd.**

No.	Topic	Reviewer Comment	Reviewer Recommendation	Proponent Response
GNWT-ENR - EAM (Environmental Assessment and Monitoring) - Erin Goose				
1	Engagement Plan	ENR notes that the Engagement Plan link on the Online Review System (ORS) leads to the Application Form. The Engagement Plan only seems to be available by going through the Public Registry.	ENR recommends that the Engagement Plan be made available on the ORS.	N/A
2	Disposal at Off-Site Facilities	Several of the documents in the application package refer to disposal of material, including soil and water not meeting criteria for re-use or discharge, at approved facilities. ENR notes that it is not clear which specific approved facilities may be used for this purpose.	ENR recommends that KBL specify which approved, off-site facilities may receive waste from the Inuvik Soil Treatment Facility (STF).	As the disposal location for any material, including soil and water not meeting criteria for re-use or discharge, depends on the type of material, parameters of concern, and the permitted facilities at the time of disposal, a comprehensive list is not available at this time. Materials would be disposed at a permitted facility appropriate to the material.
3	Geotechnical Drilling and Groundwater Monitoring	Section 11.0 of the Application Form and Information document states that "at the time of the geotechnical drilling to confirm the depth to permafrost beneath the proposed site, the type and any active layer considerations will be confirmed... If a significant active layer is identified above the permafrost table or a groundwater-bearing zone is encountered, KBL will install a network of groundwater monitoring wells (as indicated on the drawings in Appendix A) to monitor groundwater for potential contaminants of concern during the life of the STF." However, Section 10.3.3 explains that a drilling program was completed in 2017 and that KBL has already installed groundwater monitoring wells. ENR notes that it is not clear if Section 11.0 is referring to the work that has been previously completed, or if there are plans for further groundwater investigations, including the possibility of constructing additional groundwater monitoring wells.	ENR recommends that KBL clarify whether Section 11.0 of the Application Form and Information document is referring to work that was previously done, or if there are plans for further groundwater investigations, including the possibility of constructing additional groundwater monitoring wells. If there are plans for future work, ENR recommends KBL provide additional detail on this work, including a timeframe for when this is expected to be completed.	Section 11.0 of the Application Form and Information document is referring to work that was previously done. No development of additional groundwater monitoring wells is planned at this time.
4	Proposed Time Schedule – Possible Typo	Section 17.0 of the Application Form and Information document states the following: "Operations started once construction was completed in the fall of 2022." However, Section 10.3.1 states that construction of the facility occurred in fall 2021. ENR notes that the use of the year 2022 in Section 17.0 may be a typo.	ENR recommends that KBL revise Section 17.0 of the Application Form and Information document to reflect the correct year for the completion of construction of the STF.	Correct. Use of the 2022 is a typo. The facility was constructed in 2021. Revised document is attached.
5	Facility Measurements	Both Section 4.2 of the Application Form and Information Document and Section 6.1 of the Operations and Maintenance (O&M) Plan include measurements for the facility and the berms. ENR notes that the measurements in the two documents do not match. It is not clear if this is an error or if the measurements presented in the	ENR recommends that KBL either correct the measurements as needed to ensure that the measurements are consistent between the Application Form and Information document and the O&M Plan or provide clarification as to why the measurements are different.	Facility measurements have been confirmed and corrected in the application form.

		Two documents correspond to different sections of the facility.		
6	Spill Contingency Plan – Disposal of Waste Materials	Step 9 of the response protocol in the Spill Contingency Plan (SCP) addresses packaging and disposal of waste materials used for spill clean up. ENR notes that the details provided for Step 9 include temporary storage of the waste, but do not provide information on final disposal.	ENR recommends that KBL expand Step 9 of the SCP to provide information on the final disposal of waste material used for spill clean up.	Step 9 of the SCP has been expanded to include disposal of the materials in an approved facility.
7	Review of Lease	Section 3.0 (page 4) of the Waste Management Plan (WMP) states the following: "The permanent facility is intended to operate for five years commencing in summer 2017, after which it is anticipated that the Town of Inuvik will review its lease with KBL." ENR notes that summer of 2022 is the five year mark from summer 2017, yet no update is provided on the review of the lease held by KBL.	ENR recommends that KBL provide an update on the status of the review of the lease by the Town of Inuvik.	The quote provided by ENR is in the original WMP and not the plan included in this renewal application. Section 3.0 of the WMP indicates that "The permanent facility was constructed in 2021 is intended to operate for five years, after which it is anticipated that the Town of Inuvik will review its lease with KBL." The lease was renewed in 2022 and the next review is scheduled for 2027.
8	Soil Quality Information	Section 3.0 (page 8) of the WMP states the following: "Additional soil quality information will be collected through a drilling program scheduled for Spring 2017." ENR notes that it is not clear if this drilling program was carried out in 2017 and if so what additional information was gained from it.	ENR recommends that KBL update Section 3.0 of the WMP to confirm whether the drilling program did occur in 2017, and if it did, to provide details on what additional information was obtained through the program.	The quote provided by ENR is in the original WMP and not the plan included in this renewal application. Section 3.0 of the WMP states that "Test pit locations and detailed observations are provided in a Memo by Dillon Consulting Ltd, dated October 28, 2016. The Memo is appended to KBL's Water Licence Application submission. Additional soil quality boreholes were advanced in August of 2017. The Site is underlain by silt, clay, sand, and organic soils consistent with quaternary deposits, to a maximum investigative depth of 7.5 meters below ground surface (mbgs). Garbage was noted at surface in 4 out of 10 field logs from the August 2017 investigation and extended to a maximum depth of 6.1 mbgs."
9	Closure and Reclamation Plan – Reference to Section 7a	Section 5.2 of the Closure and Reclamation Plan (CRP) states that "step out sampling will occur as described in Section 7a of the Plan." ENR notes that the CRP does not include a Section 7a. Alternatively, if this is referring to Section 7a of a different document, it is not clear which document is being referenced.	ENR recommends that KBL update Section 5.2 of the CRP to clarify which section or plan contains the description of how step out sampling will occur.	As described in Section 5.1, step out sampling involves collection of surficial soil samples 7 m in each direction (north, south, east, and west) surrounding any sampling location where an exceedance was observed. Step out sampling will continue at this rate until the contamination has been delineated. The depth extent of any soil contamination will be limited by the presence of shallow bedrock (<1.5 m). Therefore, surficial soil sampling is considered sufficient to define any contamination arising from operation of the STF. The reference has been updated from 7a to 5.1.
10	Table 5-3: Regulations and Guidelines	Using an old GNWT Guideline as reference, Guideline for the General Management of Hazardous Waste in the NWT (1998)	Reference and use the 2017 Guideline for Hazardous Waste Management found at <a href="https://www.enr.gov.nt.ca/sites/enr/files/resources/128-hazardous_waste-interactive_web.pdf">https://www.enr.gov.nt.ca/sites/enr/files/resources/128-hazardous_waste-interactive_web.pdf</a> .	Noted.
11	Section 5.0 shipping documents regarding movement of soil to facility and treated soil being removed	NWT Hazardous Waste Movement documents must be completed for any waste received or materials removed for tracking purposes. Portions (copies) of those documents are required to be retained and submitted to ENR as outlined in the 2017 Guideline for Hazardous Waste Management.	Include the completion of NWT Hazardous Waste Movement Documents as a requirement of acceptance in either Section 5.0 (or another section as seen fit) as outlined in the 2017 Guideline for Hazardous Waste Management.	NWT Hazardous Waste Movement Documents are part of the transportation of the materials and are not included as part of the material acceptance process and acceptance requirements. These documents are obtained by KBL as part of the materials receipt at the facility and records of these movement documents are maintained.
12	Cover Letter	Comment Letter	N/A	N/A

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Gwich'in Tribal Council - Lands and Resources - Christina Martin				
1		GTC has concerns with the Type B Water Licence Renewal - Inuvik STF		N/A

		(G22L1-005) and requests the GLWB hold a Public Hearing on this project. GTC will submit a formal letter directly to the Board with this request, shortly.		
2		<p>Thank you for the invitation to review and provide feedback on the proposed renewal of a Type B Water Licence application submitted by KBL Environmental Ltd. (KBL) within the Gwich'in Settlement Area.</p> <p>In communications with KBL on April 28, 2022 and in consultation with the Nihtat Gwich'in Council, some clarifications on initial concerns were made, however several concerns remain.</p> <p>In April of 2022, large amounts of contaminated materials from Aklavik, including contaminated water, were hauled and stored onsite (treatment pad and retention pond) under License G17L1-002 (the 'License').</p> <p>Initial concerns around the volume of materials being stored at the site were conveyed to the applicant during the April 28, 2022 meeting. Of particular concern was the evident non-compliance surrounding the height of the stockpiled soil materials, which exceeded the 4m criteria stipulated in the Licence, and the lack of material placement into windrows as stated in Section 6.2 of KBL's Operations and Maintenance Plan. The stockpile also contained pieces of plastic material and the site was not fenced to limit access.</p> <p>Furthermore, during the April 28, 2022 meeting, KBL provided assurance that the site's non-compliance issues would be managed and remedied during their Treatment Campaign Plan in June 2022. However, it does not appear that this has taken place, which is particularly concerning because the non-compliance has continued even as considerations are being made to renew the water licence for the site's operations.</p> <p>Although the past and current application addresses many of the concerns surrounding the operation and management of the soil treatment cell through various plans, the observed disregard for adhering to those plans is concerning.</p>	<p>Based on the need for further clarity on this project, as well as to address concerns tied to current non-compliance issues, the Gwich'in Tribal Council requests the Gwich'in Land and Water Board enacts Section 72.15 (1)(a) of the Mackenzie Valley Resource Management Act, whereby: If a board is satisfied that it would be in the public interest, it may hold a public hearing in connection with any matter relating to its objects, including, in respect of a federal area or lands outside a federal area,</p> <p>(a) the issuance or renewal of, or an amendment to, a type B licence; hold a public hearing on this application.</p>	<p>No formal complaints or concerns of non-compliance at the STF have been received by KBL. To address the three items brought forward by the Gwich'in Tribal Council Department of Lands and Resources at this time: 1. Material height - Soil was received at the Inuvik STF in April 2022 and piles did exceed the height requirement during placement of the soils on the pad. Once all soil was received, the soil was moved and placed at heights that conformed with the permit. 2. Windrows – Placement of soil into manageable piles or windrows is ideal for the treatment of soil. Soil is currently in piles and is scheduled to be placed into windrows as part of the treatment process. This treatment process began as indicated to the Council in June with personnel arriving on June 13th and is scheduled to continue into July 2022. 3. Plastic within soil – It is not uncommon for inert debris such as rocks or plastic associated with torn soil bags to be contained within soil during the receipt of the soil. This debris is sorted, removed and properly disposed during the treatment process. 4. Facility Fence – As indicated in the application, a fence will surround the facility to prevent access. Currently the Facility is located at the Town of Inuvik landfill which is gated and fenced with an on-site attendant. An additional fence could not be installed during construction activities due to ground conditions and is scheduled for the summer of 2022. KBL does not agree that there is a disregard for the adherence of our Operations and Management Plans and recommends that at any concerns with non-compliance follow the Boards and ENR's established routes of inspections and enforcement. In addition, the proper permitting and renewal procedures have been followed, engagement and consultations adhered to and as such a formal public hearing is not warranted at this time.</p>

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Gwich'in Tribal Council - Department of Cultural Heritage - Kristi Benson				
1		DCH has no comments	The DCH has no comments at this time.	N/A

