



Sahtu Land and Water Board

Staff Report

Division: Water Program	Report No.: 1
Date Prepared: May 10, 2019	File No.: S19L3-001
Meeting Date: May 17, 2019	
Subject: Renewal application for Type B Water Licence submitted by Great Bear Lake Lodge Ltd. for use of water and deposit of waste in support the seasonal operation of their fishing camp located on Dease Arm of Great Bear Lake in the Deline District.	

1. Purpose/Report Summary

The purpose of this Report is to present to the Sahtu Land and Water Board for consideration:

- a) The Water Licence Renewal Application submitted by Great Bear Lake Lodges Ltd. (GBLL);
- b) Confirm the eligibility of Application for preliminary screening exemption;
- c) The updated Engagement Record;
- d) The Spill Contingency Plan Version 4.0;
- e) The Waste Management Plan Version 3.0;
- f) The Closure and Restoration Plan Version 3.0; and
- g) The terms and conditions for the new Water Licence S19L3-001

2. Background

- **May 30, 2018** – SLWB approved the Water Licence renewal S17L3-001 for a period of one year, directing GBLL to update the Record of Engagement in the renewal of this Licence to demonstrate engagement with Deline Got'ine Government (DGG) and discussion with DGG about some form of Agreement. The Board also did not approve the Spill Contingency Plan, the Waste Management Plan or the Closure and Restoration Plan, directing GBLL to resubmit the Plans for Board approval, addressing comments and recommendations made by reviewers;
- **March 6, 2019** – SLWB received a Water Licence renewal application for S19L3-001 held by Great Bear Lake Lodge Ltd. (GBLL or Proponent) for continued water use and deposit of waste in support of the seasonal operation of their fishing camp located on Dease Arm of Great Bear Lake in the Deline District. The current Water Licence S17L3-001 expires on May 28, 2019;
- **March 12, 2019** - the application was deemed complete;
- **March 12, 2018** – Review packages were sent out electronically to members of the Deline District Distribution List using the Online Review System with a request for comments by April 2, 2019;
- **April 2, 2019** – Reviewer comments received;

- **April 18, 2019** – Proponent response deadline (note: deadline for proponent responses was extended from April 9, 2019 as the proponent required additional time to address the comments and recommendations received);
- **April 18, 2019** – Proponent submitted revised Spill Contingency Plan (Version 4.0), revised Waste Management Plan (Version 3.0) and revised Closure and Restoration Plan (Version 3.0) to address reviewer comments and recommendations;
- **April 25, 2019** – Revised Management Plans were added to the item for review and were sent out electronically to members of the Deline District Distribution List using the Online Review System with a request for comments by May 9, 2019;
- **May 9, 2019** – Review comments received;
- **May 15, 2019** – Deadline for Proponent responses to review comments and recommendations;
- **May 17, 2019** – Board meeting to consider Water Licence renewal application for a term of 5 years.

3. Discussion

3.1 Project Overview

Great Bear Lake Lodge has been operating at its present location since 1967 with Plummer’s Arctic Lodges being the one of the longest running operators in the NWT (Attachment 1). The lodge has the capacity to serve approximately 50 guests and at peak capacity is managed and operated by a staff of up to 30 personnel. The lodge generally operates from late June to mid-September annually under a GNWT Tourism Operator Licence with permission for use of lands granted under NWT Lease 86L/12-2-5 (current authorization with 25-year term commenced February 1, 2008). The application included figures detailing the water supply and an overview map of all project related areas. The Applicant has an active Permit for use of heavy equipment and fuel transfer along an existing private road and quarry associated with the undertaking under S16F-001.

Water will be obtained from Great Bear Lake and the rate of domestic use is estimated at 6000 gallons (22,712 L) per day based on usage of 75 gallons (284 L) per day per person. Grey water and sewage wastes flow to three septic tanks, two with 1000 gallon (3785 L) capacities and the other with 500 gallon (1893 L) capacity. The liquid wastes are pumped almost a kilometer east of the lodge to a gravel filtration field where they disperse into the soil. The camp manager frequently adds SeptoBac to facilitate decomposition of the solids in the septic tanks which are completely emptied at the end of each operating year with the solids buried in a pit east of the filtration field.

All paper, cardboard, and untreated wood is burned in a previously approved custom Behlin Industries made incinerator. The Proponent has confirmed that only those waste streams identified in the Municipal Solid Wastes Suitable for Open Burning document located on the GNWT ENR website are burned. Concerns about mercury and dioxins and furans are avoided by eliminating food waste and plastics from this waste stream. The incinerator is emptied at the end of each operating year and the remains are buried east of the filtration field under 90 cm of compact soil. Food waste is fed to camp dogs. Hazardous wastes (i.e. batteries, waste oil and antifreeze) and household recyclables (i.e. plastics and cans) are transported for appropriate disposal in Yellowknife annually. Great Bear Lake Lodge has registered with the GNWT as a generator of hazardous wastes (NTG650), for the shipment of hazardous wastes to Yellowknife.

3.2 Program Components

3.2.1 Management Plans

A Waste Management Plan (2019, Version 2.0), Spill Contingency and Emergency Response Plan (2019, Version 3.0) and Closure and Reclamation Plan (2019, Version 2.0) were included with the updated renewal Application. An updated Engagement Record was also submitted detailing consultations made during 2018-2019. The Engagement Plan that had been submitted with the renewal application S17L3-001 was previously approved by the Board.

3.2.2 Fuel Storage

Fuel storage is a large component of the operation. The following Table 1 lists the fuel storage containers, product stored, capacity of the storage container and location.

Table 1: Fuel Storage Tanks at Great Bear Lake Lodge

ID	Description	Product	Capacity	Location
A	Horizontal Steel Tank in Berm	P-50 (Diesel)	67,000 L	Bulk Fuel Storage Area Airport
B	Horizontal Steel Tank in Berm	Gasoline	67,000 L	Bulk Fuel Storage Area Airport
C	Horizontal Steel Tank in Berm	Gasoline	67,000 L	Bulk Fuel Storage Area Airport
D	Horizontal Steel Tank in Berm	P-50	67,000 L	Bulk Fuel Storage Area Airport
E	Horizontal Steel Tank in Berm	P-50	9,000 L	Bulk Fuel Storage Area Airport
F	Square Steel Tank in Berm	Gasoline	7,800 L	Boat Gas Fueling Area
G	Horizontal Steel Tank in Berm	Gasoline	2,100 L	Truck Gas Fueling Area
H	Horizontal Steel Tank in Berm	P-50	4,500 L	Lodge Heating Fuel Tank
I	Horizontal Steel Tank in Berm	Jet-A	8,800 L	Airplane Fueling Area
J	Round Steel Tank in Berm	Gasoline (2 stroke mixed)	450 L	Boat Gas Fueling Area
K	Horizontal Steel Tank in Berm	P-50	4,500 L	Generator Tank
L	Horizontal Steel Tank in Berm	P-50	9,000 L	Generator Tank
M	Horizontal Steel Tank in Berm	P-50	2,200 L	Generator Tank
N	Used Waste Oil and Used Antifreeze Storage	Used Lubricating Oil and Antifreeze	25 L buckets	Storage Shed

3.2.3 Access

The camp is located in a sheltered bay on a heart shaped island that is connected to the mainland by a bridge. There is a road that runs three kilometers around the bay to a 5500' gravel airstrip. GBBL has a land use permit with the SLWB for this private road, S16F-001 and a quarry to supply material for road maintenance.

3.2.4 Camp

The lodge can accommodate a maximum of 80 people in any given week during its operating season.

Camp	Number of Buildings
Island	15 ; 1 main lodge, 9 guest cabins, 2 manager cabins, 1 laundry facility, 1 small store, and 1 fish house (storage)
Mainland	8 ; 4 guide houses, 1 laundry /showers, and 3 generator shacks

3.3 Regulatory Requirements

3.3.1 Type of Area

The proposed project exists wholly within the Edaiila (Caribou Point) Conservation Zone (27) of the Sahtu Land Use Plan in the north-eastern part of the Great Bear Lake Watershed. Edaiila provides important habitat for a number of wildlife species but the primary reason for its conservation status is to protect the Bluenose-East barren-ground caribou herd which regularly aggregates on and close to the zone from mid-July to mid-October. Edaiila is also an extremely important cultural and ecological area for the people of Deline. The land is administered by the territorial government.

3.3.2 Application Fee

The required Application Fee of \$30.00 has been submitted with the renewal application.

3.3.3 Term

The Applicant has requested a term of 5 years.

3.3.4 Triggers

A Type B Water Licence is required in accordance with Schedule F (Licensing Criteria for Municipal Undertakings), item 3.b (camps or lodges) of the Water Regulations for: a deposit of waste by a camp or lodge with capacity of more than 50 occupants per day or a direct or indirect deposit of waste to surface waters.

4. Public Review

Of the 22 organizations to which the application was distributed, nine (9) of which are represented within the Sahtu Settlement Area, review comments were received from:

- Environment and Climate Change Canada (ECCC);

- GNWT – Department of Environment and Natural Resources (ENR); and
- Sahtu Renewable Resource Board (SRRB) – no comments or recommendations.

The Review Comment Table with proponent responses and submitted letters from ENR are attached to this report (Attachment 2).

4.1.1 Main Issues Raised During the Review

The main issues raised were related to the three Management Plans:

- Spill Contingency Plan
- Waste Management Plan
- Closure and Restoration Plan.

Spill Contingency Plan

ECCC requested one change for the NT-NU 24-hour Spill Report Line number in the SCP.

GNWT-ENR requested clarification about locations for waste disposal, details about incineration and open burning materials and practices and movement of hazardous wastes. They provided corrections to the Spill Response Emergency Contacts Table and the flow chart for spill response. They sought clarification about secondary containment, potential spill scenarios, facility information, training, spill response method, list of spill response resources available for any spills near water, treatment of contaminated soil or water, an explanation of berm deployment to contain free product.

GNWT-ENR recommended the proponent follow best practices for fuel storage and spill containment during project activities. All of these best practices are covered by standard licence conditions.

GNWT-ENR requested that GBLL show the locations of:

- temporary storage sites for all hazardous materials;
- on-site temporary storage tanks;
- temporary storage of contaminated soil.

The biggest issue with the SCP for the **GNWT-ENR** was that the Plan does not follow the outline provided in the INAC 2007 Guideline for SCP which makes it very confusing and a lot of information that can be put at the end of the document, such as the references, MSDS.

GBLL responded to all of the 43 comments and recommendations on the SCP and resubmitted a revised Plan (version 4.0). This revision was added to the ORS and sent for further review to determine if the requested changes were satisfactory for the GNWT-ENR.

GNWT-ENR noted that all of the references were removed from the SCP. They recommended GBLL ensure all references such as standards, guidelines, acts or regulations that were used in the creation of the plan are included in the Spill Contingency Plan. They also requested that future revisions include a concordance table documenting changes made.

Waste Management Plan

GNWT-ENR requested that a detailed procedure be provided for incinerating waste. A description of the type of cover material and the frequency the cover material is moved for the landfill is required. They recommended that a log book be required for the annual review of the WMP and required changes at the lodge.

GNWT-ENR requested better maps be made available. However, GBL does not have the software and mapping tools available to produce higher quality images.

The Proponent responded to all 11 comments and recommendations and resubmitted a revised WMP (version 3.0). This revision was added to the ORS and sent for further review to determine if the requested changes were satisfactory for the GNWT-ENR.

GNWT-ENR recommended that more detail about the Incineration Management Strategy should be included in a revised WMP; including: the selected incineration technology and rationale for selection; the procedures for operation and maintenance; and, operator training and qualifications.

Closure and Restoration Plan

GNWT-ENR provided 10 comments and recommendations on the C and R Plan, including some changes to Tables and figures, clarification of information, adding additional sections, correcting grammar, etc.. The Proponent responded to all comments and recommendations and resubmitted a revised Closure and Restoration Plan (version 3.0). This revision was added to the ORS and sent for further review to determine if the requested changes were satisfactory for the GNWT-ENR.

GNWT-ENR recommended better descriptions be provided for the Water Intake facilities (the type of equipment used to pump the water and the location of the water intake) and the type of Water Treatment Facility.

5. Board Staff Analysis of Evidence

5.1 Permission of Land Owner, Community Consultation and Traditional Knowledge

5.1.1 Permission of Land Owner

Permission for use of lands associated with this undertaking is granted under NWT Lease 86L/12-2-5 and the current authorization commenced February 1, 2008 with a 25-year term.

5.2.2 Community Consultation

The Engagement Plan and Record Version 2.0 submitted for the renewal application of S17L3-001 met the minimum requirements as identified in the Board's *Engagement and Consultation Policy* (2013) and associated *Guidelines for Applicants and Holders of Water Licences and Land Use Permits* (2014) and was approved by the Board. The renewal application included an updated Engagement Record covering the period from April 2018 until February 2019. The record documents several attempts made by GBL to hold a meeting with the Deline Got'ine Government between the months of July and mid-September as required for "life of project" consultation in order to provide a summary of the season past, plans for the

upcoming season, and to see if there are any concerns that need addressing. Unfortunately, no meeting was able to be arranged. GBLL also tried to renew their joint venture partnership with the annual muskox hunt where all the meat is cut and processed and donated back to the community. As of February 2019, an Agreement had been circulated for review, but had not been signed. GBLL has made best efforts to fulfill their Engagement requirements with Deline.

5.2.3 Traditional Knowledge

The application has relied on Traditional Knowledge (TK) previously submitted in the S12L3-002 complete application.

5.2 Management Plans

In the Board’s decision letter from May 30, 2018 for the renewal application (S17L3-001), the Board did not approve the three Management Plans, requesting revisions be made to each Plan following the requirements in Table 2, below.

Table 2: Revisions required to Management Plans

Management Plan and Information Required	Staff Review
<p>Spill Contingency Plan</p> <ul style="list-style-type: none"> • a site map showing the direction of flow on land and in water based on probable spill locations; • notification procedure to alert the public should a spill occur (ENR ID1 and 2); • Due to the location of GBLL and its close vicinity to Great Bear Lake, it is recommended that spills of any amount are reported as per the Reportable Quantities for NWT Spills outlined by Department of Environment and Natural Resources (ENR ID10); • Missing information regarding the Fire Emergency phone number and also missing Deline Got’ine Government contact information (ENR ID16); • ENR recommends the SCP and ERP information (figures) be put into proper order (ID20) and the Table of contents be reorganized (ENR ID21) and the SCP and the ERP be separated into two distinct documents (ENR ID25); 	<ul style="list-style-type: none"> • Confirmed – Appendix A and B • Confirmed - Section 11 and Figures 2, 3 • SCP states that all spills greater than 100 L will be reported; spills less than 100 L will be recorded at GBLL and cleaned up – however; the reportable quantities for NWT spills that occur near water bodies are any amount. • missing DGG contact information • some reorganization and reformatting has been done
<p>Waste Management Plan</p>	
<ul style="list-style-type: none"> • A number of discrepancies between what was reported in the Plan 	<ul style="list-style-type: none"> • Discrepancies have

<p>versus Annual Report summaries and maps and figures (ENR ID 31, 32, 33, 35, 36);</p> <ul style="list-style-type: none"> • The attachment with map of waste facilities was not included (ENR ID34); • ENR recommended GBLI provide greater clarity on the removal of hazardous wastes from the site and how they are stored on the site (ENR ID 30). 	<p>been largely resolved – GBLI has a metered device now to accurately measure water used. There is still a discrepancy about how many septic tanks are in use – 3 or 4.</p> <ul style="list-style-type: none"> • Map now included • Details provided
<p>Closure and Reclamation Plan</p>	
<ul style="list-style-type: none"> • Include a map • Consideration of future area use • Consideration of other facilities included in the Licence (e.g. fuel storage containers) • Consider restoration of all land use areas included in the undertaking and/or under authorization by the Board such as the access road, quarry, lodge infrastructure and equipment on site. 	<ul style="list-style-type: none"> • map included • the site would be restored to pre-disturbed conditions suitable for other uses. • fuel storage containers were addressed • all areas addressed

A Waste Management Plan (2018, Version 2.0), Spill Contingency and Emergency Response Plan (2018, Version 3.0), and Closure and Restoration Plan (2018, Version 2.0) were included with the renewal Application as directed by the Board on May 30, 2018. After receiving comments and recommendations from reviewers on these Management Plans, the Proponent resubmitted revised versions which were added to the ORS review.

5.2.1 Spill Contingency and Emergency Response Plan

As previously recommended by ENR and the Board in the review of the SCP, there are still components recommended in the 2007 INAC *Guidelines for Spill Contingency Planning* that are either missing from the Spill Contingency Plan for GBLI, or they are confused by information that is not immediately relevant to the Plan, but could be put in an appendix for information. Board staff agree that the SCP could still be revised to follow more closely the 2007 INAC Guidelines. In addition, GNWT-ENR noted that the revised Plan has removed all of the references. GBLI should ensure all references such as standards, guidelines, acts or regulations that were used in the creation of the plan are included in the Spill Contingency Plan. The SCP should also provide more description of the lodge and facilities as identified in the maps in the Appendix A and B.

Other minor changes to improve the SCP include:

- In Section 7, Table 5 of the SCP, the amount of fuel normally stored should be included in the Plan, not just the capacity of the storage tanks.
- Due to the proximity of fuel storage areas to Great Bear Lake, GNWT-ENR recommended that all spills, regardless of size are to be reported and cleaned up. This needs to be corrected in the SCP which states only spills > 100 L will be reported to the spill line and spills <100 L will be recorded at the lodge and cleaned up.
- A contact name and number for the Coast Guard needs to be added to Table 1.
- GNWT-ENR also requested that future revisions include a concordance table documenting changes made.

The Proponent has made best efforts to improve the Plan presented for approval. Based on the review comments received from GNWT-ENR on the revised SCP (version 4.0), Board staff believe that the basic requirements are provided, but the format could still be improved. Board staff will offer to work with GBLL to revise the SCP into a more user-friendly format.

5.2.2 Waste Management Plan

Staff have reviewed the Waste Management Plan with the Board's Guidelines for Developing a Waste Management Plan (2011). The Introduction section has been improved with a purpose and scope of the plan including waste management goals and objectives for each of the main waste streams; a map showing the proposed location for all waste management activities was included; and a description of the lodge setting and site physical characteristics. The identification of waste types and management of those waste types has been provided in text and in the Waste Management Summary Table. As well, more detailed description of the landfill site and gravel filtration field was included.

The GBLL is a small, short season duration operation. The WMP provides adequate description of the waste generated and how it is treated and disposed of.

GNWT-ENR would still like to see more detail about the Incineration Management Strategy in a revised WMP that includes:

- the selected incineration technology and rationale for selection;
- the procedures for operation and maintenance; and
- operator training and qualifications.

5.2.3 Closure and Restoration Plan

The Proponent submitted a revised Closure and Restoration Plan with the renewal application and made additional revisions based on review comments received. The newest version 3.0 address all of the requirements of Part G, Condition 1 of the current WL (S17L3-001). There are still a few discrepancies in the plan (e.g. 4 septic tanks are reported but the WMP describes only 3) and some details missing that could provide a better description of the materials and methods for closure and restoration of the lodge and its' facilities; however these details can be further developed when closure of the operation is more imminent (i.e. one to two years prior to closure, a revised Closure and Restoration Plan would be

required). This requirement to submit a detailed Final Plan two years prior to closure was included as a new condition in the Water Licence.

In addition, there were requirements for a Closure Plan for the associated Permit S16F-001. Only one Plan needs to be prepared and approved for this Project. Board staff reviewed the requirements for the Permit and revised the wording in the Licence requirements to be consistent and ensure all required components have been included.

5.3 Potential for Environmental Impacts and Mitigation Measures

The most significant potential impact of this project is related to contamination of groundwater, surface water, or soils from fuel spills. A Spill Contingency Plan has been prepared to address and respond to any spills using appropriate mitigation measures. All potential environmental impacts and mitigation measures were documented in the original Water Licence application for S12L3-002.

5.4 Preliminary Environmental Screening

The Proponent submitted a letter with the renewal application requesting exemption from Preliminary Screening noting that the location and activities described for S19L3-001 are the same as S12L3-002 and S17L3-001. To be exempt from a preliminary screening, a development must meet the requirements outlined in Schedule 1, Part 1, section 2 of the Exemption List Regulations annexed to subsection 143(1) of the *Mackenzie Valley Resource Management Act*.

Board staff had stated that the application was considered exempt from the preliminary screening provisions of the MVRMA when the item was circulated for public review. No reviewer comments or concerns were submitted.

5.5 Conformity with the Sahtu Land Use Plan

As part of the regulatory process for the Land Use Permit S16F-001, the Board had deemed this undertaking a legacy use as defined under the Sahtu Land Use Plan (SLUP or Plan) and therefore exempt from meeting Conformity Requirements (CR) #1, #16 and #18. During the S16F-001 proceedings, Board staff had prepared a table that outlined how the undertaking was meeting the intent of the Plan's other CRs. This table is still applicable for this renewal application and Board staff are of the opinion that the project conforms to the SLUP.

The Board did not receive any reviewer comments regarding conformity to the SLUP. The SLWB has met the requirements as per Section 46 of the MVRMA.

5.5 Security Deposit

Security is prescribed by Section 35(1) of the *Waters Act* and Section 11(3) of the Waters Regulations. A security deposit of \$15,000 was required and submitted to the GNWT for S12L3-002. The GNWT-ENR requested a security increase of \$5,000 with the renewal application S17L3-001. This additional security was received by the GNWT in August 2018. The total security of \$20,000 held by the GNWT for this Licence is appropriate and ensures conformity with the Sahtu Land Use Plan (CR #12 – Financial Security).

5.6 Draft Licence

A draft Licence with term and conditions was prepared by Board staff and distributed for review on the Online Review System. Reviewer comments recommended some changes and additions to the draft conditions which staff have made. The revised Licence cover page and terms and conditions are included in Attachment 3.

6. Conclusion

In May of 2018, the Board only approved a one-year Licence renewal for Great Bear Lake Lodge (S17L3-001). This was mainly due to previous concerns expressed by Deline Got'ine Government (DGG) about the lack of engagement and agreements. Despite repeated efforts by GBL to arrange for a meeting and develop an agreement with DGG (as documented in the updated Engagement Record), these events did not take place. No additional comments were submitted by DGG during this Licence renewal application process. GBL has demonstrated a commitment to engagement as outlined in their approved Engagement Plan that has not been reciprocated.

In addition, the Board did not approve the Spill Contingency Plan, the Waste Management Plan or the Closure and Restoration Plan that had been submitted with the renewal S17L3-001 and GBL did not submit revised versions of the Plans within the time limit imposed by the Board (30 days for the WMP and the SCP; one year for the C and R Plan). For this renewal, however; revised versions of all three Plans were submitted, and following the review comment period, revised versions were resubmitted to address reviewer recommendations.

It is Board staff's opinion that the three Management Plans meet the basic requirements for the scope of this operation. Some additional information has been recommended to add to the Plans to improve their content and clarity, and these requirements can be addressed during the annual review of the Plans. The Spill Contingency Plan needs some additional formatting to better reflect the 2007 INAC Guidelines. Board staff will offer to assist GBL with these revisions.

7. Recommendation

Board staff recommend that the Board proceed with the regulatory process by:

- 1) Approving the renewal of the Water Licence with a term of five years;
- 2) Approving the exemption from **Preliminary Screening**;
- 3) Approve the **Spill Contingency Plan v. 4.0**; with the requirement to reformat the SCP in accordance with the 2007 INAC Guidelines and make minor changes as documented in this staff report and resubmit to the Board for review and approval within 9 months of issuance;
- 4) Approve the **Waste Management Plan v. 3.0**; with the requirement to revise the WMP within one year to include more details about the Incineration Management Strategy;
- 5) Approve the **Closure and Reclamation Plan v. 3.0**.

Should the Board decide to proceed with the regulatory process for the Water Licence, Board staff also recommend that the Board:

- Approve the draft **Reasons for Decision** and draft **Decision Letter** prepared for the Board.

Should the Board grant approval, the Licence could be issued on May 29, 2019.

8. Reference Material Attached

1. Location Map of Great Bear Lake Lodge
2. Review Comment Table with attachments
3. Draft Water Licence Cover Page & Conditions
4. Draft Reason for Decision
5. Draft Issuance Letter

Respectfully submitted,



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Regulatory Specialist

Executive Director Comments:



Paul Dixon
Executive Director