

Weber Arctic Expeditions response to ECCC Review Licence 2BL-AWL1722 Renewal Application for the Arctic Watch Lodge Project in the Qikiqtani Region of Nunavut

May 1st, 2023

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The following are the responses to the comments provided by ECCC to Weber Arctic Expeditions Ltd. on behalf of Arctic Watch water license renewal.

1. Topic: Contingency for spills on/near water

Comment:

Section 11.0 “Initial Action - Measures to address spills” of the Spill Contingency Plan states that oil, gas or diesel are not transported onto water or ice, and therefore the Plan does not describe measures for containment and clean up on water or ice. It is not clear how fuel is transported to camp without stream crossings (if fuel is flown in - map included in Appendix A shows streams between the lodge and airstrip) or if work is very near shore (if fuel is shipped in).

- Clarify how the camp is refueled without transporting fuel across streams or near shore.

If it is necessary to move fuel across water or on ice, the Spill Contingency Plan should be modified to include actions to address spills in water or on ice, and appropriate equipment should be available on site;

Response:

The Spill contingency plan has been revised to address the above comments. Also please see section 18.0 Transporting Fuel from CYRW to Arctic Watch Lodge.

Fuel drums arrive via ATR-72 freight aircraft landing on the CYRW airstrip (IOL land). The fuel barrels are then deposited on the fuel berm located beside the airstrip. When fuel is needed at Arctic Watch lodge, The fuel drums are loaded using a John Deere skid-steer into the back of a Mercedes Unimog utility truck. We transport no more than 5-6 drums at a time. The drums are securely fastened into the back of the flatbed utility truck with airplane grade straps. The drums are unable to fall out of the truck because the steel side walls of the truck are higher than the drums themselves. In the event that a strap securing the barrels broke, the drums would slide and/ or roll inside the back of the truck. The truck is moving very slowly and the driver would stop and correct the situation. Additionally, there are no holes large enough for a drum to fall out. The back of the truck has no sharp edges that would be able to puncture a drum.

The truck then drives a distance of approximately 1.8k at a speed of 5-10 km/h down our designated road to the lodge. The road is flat with one final uphill on to the bank at the lodge that is approximately 20 meters long and 8 meters high. The drums are unloaded to a fuel berm. Yes the truck crosses 2 sections of river. The section of river varies depending on water height, we do not exceed approximately 200m of actual river crossing at the highest water level. Most of the time the river crossing is 50-100 meters in distance. The water crossing takes approximately 1 - 2 minutes. We do not cross fuel in the truck more than 8 times a year. It is not a daily occurrence.

In 20 years we have not had an incident.. In the worst case scenario if the truck breaks down in the middle of the river and or did get stuck in the river while carrying fuel, we also have a secondary Mercedes Unimog utility truck we can use to winch the dead vehicle to safety.

When the water level of the river is too high to cross we sling the barrels using a helicopter from the CYRW airstrip directly to the lodge. This sometimes does not occur in a season or it might occur 2-3 a season. Again this is totally dependent on water levels.

*Please see attached image below of the route taken by the utility vehicle to transport fuel to the lodge.

2. Topic: Waste management

Comment: The only type of waste generated identified in box 14 of the application is greywater, however other information references other waste, including sewage. Both the 2021 and 2022 annual reports detail waste shipped to Yellowknife including household garbage, glass, waste oil, scrap metal and other types. Sewage is described in box 15 of the application, “Toilets are marine toilets and disposed in latrine pits approved and inspected by the GN”, the Spill Photo provided with the application identifies a “Black water pit”, and the Response to CIRNAC review refers to a mobile sewage storage tank.

Identify all waste generated at the camp to help regulators develop appropriate license conditions;

- Provide more detail on how sewage is disposed of, including a description of proximity to surface waters and a copy of the Government of Nunavut approval for latrine pits;
- Update the Spill Contingency Plan to include responses to sewage spills, including from the mobile sewage storage tank.

Response:

At Arctic Watch we have the following types of waste:

- Household garbage
- Paper and wood
- Hazardous waste (oil)
- Grey water
- Human sewage

Household garbage is either incinerated or shipped to Yellowknife.

Paper and wood are burnt in secondary incineration. The ashes and residue are sent back to Yellowknife in contained bags.

Hazardous waste is returned to Yellowknife as already discussed. It is contained on fuel berms as outlined in the spill contingency plan.

Grey water is gravity drained into tanks, filtered and then pumped up to a location more than 31 meters from the water and allowed to seep into the ground. The pipes have a series of holes so that the grey water drains over an area of material membrane. The liquid then evaporates off the membrane or seeps into the ground. This site has been inspected numerous times by the federal inspectors. We are diligent at Arctic Watch to use environmentally friendly cleaning products and soap to minimize any damage to the ecosystem.

Human waste: At Arctic Watch lodge we use marine toilets. The human waste collects in a holding tank under the toilet. Human sewage is pumped out of a marine toilet holding tank using a honda transfer pump. It is entirely human feces and toilet paper in the toilet holding tanks. No other items are disposed of in the toilet. We know this because, if other materials such as tampons, face cloth are put in the toilet, it automatically plugs the pump and the system is not able to empty the holding tank. (In the bathroom stalls, we have posted an advisory sheet to make sure guests are only depositing human waste into the toilets, tampons and sanitary towels go in the trash) As the waste is pumped through using the transfer pump, it is mulched into a thick sludge and deposited onto the mobile sewage holding tank. Once the lodge toilets are pumped and the mobile sewage holding tank is full, it is driven to the and emptied into a sewage sump. The pit is self-contained and does not overflow. We do not produce enough sewage in a season to fill both sumps. The sewage naturally breaks down fast enough. We have been using the same sumps for years.

If there is a sewage leak from a toilet it is cleaned up with soap and water. If there is a leak from the mobile sewage tank it is cleaned up with a shovel and a bucket and put in the sump.

The closest surface water is the river about 100 meters away from the sump.

Concerning a Latrine Pit Permit from GN. We don't use latrine pits. A latrine pit is an outhouse. We use marine toilets and a sewage sump. You can access the inspection reports through CRINAC. It has been inspected many times in the past 25 years, the last inspection being in 2019 and no negative comments were made. It is a clean and effective method for the waste to naturally break down. We have another CIRNAC inception scheduled for July 8th 2023. They can confirm its environmental effectiveness and cleanliness.

We will update the spill Contingency Plan to include responses to sewage spills, including from the mobile sewage storage tank.

