



---

## Water Licence Status Check Up

---

**Collins, Sarah** <SCollins@gov.nu.ca>

Wed, Dec 16, 2020 at 3:06 PM

To: Richard Dwyer <richard.dwyer@nwb-oen.ca>

Cc: Licensing Department <licensing@nwb-oen.ca>, Ali Shaikh <ali.shaikh@nwb-oen.ca>

Hi Richard,

Please see attached study completed by Dalhousie University, Center for Water Resources studies. I don't believe this was previously provided (I only just found out this study exists). This study included tracing for residence time, sampling at raw, influent, various points along the wetland and compliance point locations, as well as modelling scenarios. The modelling scenarios looked at controlled discharge from the natural depression, which mimics a lagoon with controlled discharge. The sampling indicated concentrations at the compliance point of significantly below current water licence requirements. The modelling displays expected reduction of approximately 43% for cBOD5.

We have proceeded with a 3<sup>rd</sup> party review of the lagoon design. The main intent was to review containment and wetland assumptions used in the original design. The GN will be proceeding with requesting additional studies on these aspects from the Consultant prior to proceeding.

I would like to propose that the licence proceeds with the following:

- Review the attached document as background information on anticipated removal.
- Add sampling of the raw influent (1 per year), discharge from depressed area (future lagoon area), and compliance point sampling beginning summer 2021.
- GN will submit to the Board for review any updates to lagoon design, once received (expected March 2021).
- We are still requesting that the amendment to the sampling parameters to match dalhousie's detailed work on wetland treatment areas in the north be considered, as included with the amendment/renewal submission.

Thank you,

Sarah Collins, P. Eng

Municipal Planning Engineer

Community and Government Services

Government of Nunavut

(867)975-5478

---

**From:** Richard Dwyer <[richard.dwyer@nwb-oen.ca](mailto:richard.dwyer@nwb-oen.ca)>

**Sent:** December 16, 2020 12:08 PM

**To:** Collins, Sarah <[SCollins@GOV.NU.CA](mailto:SCollins@GOV.NU.CA)>

**Cc:** Licensing Department <[licensing@nwb-oen.ca](mailto:licensing@nwb-oen.ca)>; Ali Shaikh <[ali.shaikh@nwb-oen.ca](mailto:ali.shaikh@nwb-oen.ca)>

**Subject:** Re: Water Licence Status Check Up

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good morning,

[Quoted text hidden]

[Quoted text hidden]



**Naujaat\_Dalhousie Wetland Study\_2017.pdf**

1211K