



8 Wing Environmental Management
74 Polaris Avenue, Room 305
PO Box 1000 Stn Forces
Astra, ON K0K 3W0

08 November 2021

Licensing Department,
Nunavut Water Board
P.O. Box 119
Gjoa Haven, Nunavut X0B 1J0

**RE: 8BC-ERK1621 – DEPARTMENT OF NATIONAL DEFENCE – EUREKA
WEATHER STATION – TYPE B WATER LICENCE RENEWAL
APPLICATION - RESPONSE TO ECCC TECHNICAL REVIEW COMMENTS**

Dear Licensing Department,

The Department of National Defence (DND) - 8 Wing Trenton Environmental Management Office is providing this response letter to the ECCC Technical Review Comments for 8BC-ERK1621 – Department of National Defence – Eureka Weather Station dated October 6, 2021 and subsequent Letter dated November 5, 2021.

DND - 8 Wing Trenton Environmental Management Office is committed to supporting and collaborating with the NWB and ECCC in this collective effort to help support the water licence renewal process for the Eureka Weather Station.

DND - 8 Wing Trenton Environmental Management Office's responses to the ECCC Technical Review Comments:

- 1) Regarding Recommendation Topic – Sludge Management Plan: ECCC recommends the Proponent provide additional clarification on the discharge of sewage effluent on site, specifically clarifying the contradiction between the licence and the response provided to ECCC-2.

DND Response:

The current sewage treatment system in Eureka is comprised of a two cell closed system lagoon. Since 2009, when the walls of the lagoon were raised the lagoon has not discharged overflow to the tundra and further down gradient to Slidre Fiord. For clarification proposes the water in the lagoon does eventually permeate through the walls and into the immediately surrounding Tundra, but this is a very slow process/release and limited to the surrounding area and does not make it to the Fiord. Slidre Fiord (closest receiving water body) is a distance of 1.2 Km over a

gradual slope. As previously directed by CIRNAC, DND also maintains a 1 metre (3feet) freeboard during occupancy.

If agreed to by all parties and in an attempt to demonstrate there is no discharge down gradient (ERK-1) DND will take several samples (where possible) down gradient of the lagoon during the 2022 water licencing sampling event and provide a separate report detailing findings and recommendations.

Due to the fact that the surrounding area is dry (no discharge) current sampling of ERK-1 is taken within the second cell of the lagoon. This is why we are observing results above the stated criteria.

In order to reduce ambiguity in the water licence and DNDs response as stated, DND will develop a Sewage Management plan to outline the designed lagoon intent and operation in the expectation of moving this application forward.

DND - 8 Wing Trenton Environmental Management Office is committed to work with the NWB, ECCC and all northern regulatory stakeholders; we are supportive of any teleconferences and technical meetings to collaboratively help establish an appropriate Water Licence for and to support the operations at CFS Eureka.

Should you have any further questions or comments, please do not hesitate to contact me.

Yours truly,

Nathan Koutroulides

Nathan Koutroulides, BSc, CD, PMP.
8 Wing Deputy Environment Officer
8 Wing Trenton Environmental Management Office
Department of National Defence
(613) 392-2811 ext 4821
Nathan.Koutroulides@forces.gc.ca