



8 Wing Environmental Management  
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27 October 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.

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 ECCC #1 – Sludge Management Plan: ECCC recommends the Proponent provide an update on the status of the Sludge Management Plan. If already developed, the plan should be provided for review as part of the licence renewal.

**DND Response:**

The current sewage treatment system in Eureka is comprised of a two cell closed system lagoon. Typically, sludge from a lagoon system requires removal every 20-30 years. To monitor the rate that sludge is building up in the lagoon, sludge depth measurements are taken every 5 years. As this system was built to only be occupied for approximately one month out of the year, and the fact that the current system is well under capacity, it is DND's opinion that the requirement to develop a sewage sludge management plan is excessive as there would be limited information to be provided in the plan being requested.

- 2) Regarding Recommendation ECCC #2 – Exceedances of Effluent Quality Criteria: ECCC recommends the Proponent provide an evaluation of the lagoon performance and overall effluent quality at ERK-1, including analysis of trends over time, and potential measures or changes in operating procedures that may be implemented to improve effluent quality.

DND Response:

DND would like to remind ECCC that the lagoon is a closed cell system and does not discharge to any water bodies. Typically, DND has always had exceedances at location ERK-1 because the criteria is too stringent for the current lagoon applicant. Perhaps current criteria requirements need to be adjusted or more closely aligned with a closed sewage lagoon system with no active outflow. This would better help all parties in monitoring, achieving compliance, and planning going forward.

- 3) Regarding Recommendation ECCC #3 – Quality Assurance/Quality Control Plan – ECCC recommends that the Quality Assurance and Quality Control Plan be updated to include relevant and current site details.

DND Response:

DND is supportive of Recommendations in ECCC #3 and will update the Quality Assurance/Quality Control Plan.

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,

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