

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

Fwd: Eureka HAWS CIRNAC comment on effluent lines/decanting hose

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

Draft To: Karén Kharatyan <karen.kharatyan@nwb-oen.ca>

Wed, Jul 17, 2024 at 9:06 AM

From: Cloutier-Dussault, Jean-Philippe (ECCC) < Jean-Philippe. Cloutier-Dussault@ec.gc.ca>

Date: Wed, Jul 17, 2024 at 6:47 AM

Subject: Fwd: Eureka HAWS CIRNAC comment on effluent lines/decanting hose

To: Lavallee, Don (ECCC) < Don. Lavallee@ec.gc.ca>, GPS-Eureka-SPM (ECCC) < gps-eureka-spm@ec.gc.ca>,

Monteith, Joseph <joseph.monteith@rcaanc-cirnac.gc.ca>

Cc: Deveau, Tony (ECCC) < Tony. Deveau@ec.gc.ca>, Karén Kharatyan (karen.kharatyan@nwb-oen.ca)

<karen.kharatyan@nwb-oen.ca>

Good morning,

Please see correspondence below ahead of your site visit in Eureka.

Don, please print the correspondence and share it with Inspector Monteith in case he doesn't have access to his emails before his visit.

Regards.

Jean-Philippe Cloutier-Dussault

Gestionnaire immobilier, Directions des actifs, des biens immobiliers et de la sécurité Environnement et Changement climatique Canada / Gouvernement du Canada jean-philippe.cloutier-dussault@ec.gc.ca / Tél.: 514-641-8753

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To CIRNAC Land Use Inspector (Joseph Monteith - joseph.monteith@rcaanc-cirnac.gc.ca)
Copy to NWB (Karén Kharatyan - karen.kharatyan@nwb-oen.ca)

Good day Mr. Monteith,

RE: CIRNAC Land Use inspection at Eureka (Summer 2023) and comment about effluent lines/decanting hoses:

• Ensure the end of the effluent lines/decanting hoses are over 31 metres from the high-water mark of any water body before pumping. Ensure all effluent parameter quality limits are not in exceedance.

On March 1, 2024, NWB confirmed to ECCC that:

- 1) the issuance of the NWB Water Licence (Type B Amendment Approval issued on June 13, 2022) approved the Wastewater Treatment Plant and design shown below and
- 2) there are no modifications to this in the new Type A licence Approval (issued December 19, 2023) in this regard.

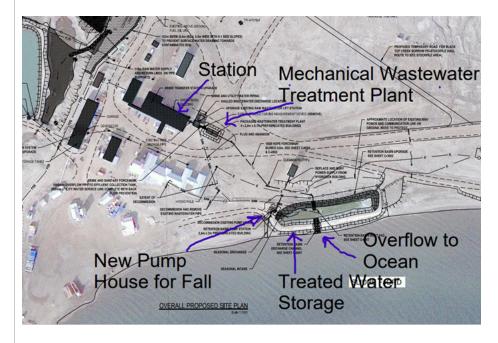
NWB was also of similar understanding with regard to the information provided below to CIRNAC on October 13, 2023

At present the existing lagoon treats the wastewater and it is disposed of in the ocean by pumping. The discharge and pumping occurs after the lagoon has been tested and it meets license limits. The discharge is direct to the ocean, so there is very limited erosion associated with the existing pumping process. Movement of the pump discharge to 100 ft away from the ocean could be done, with enough hose and with construction of a discharge swale. However due to the conditions onsite it is believed that development of a discharge path 100 ft from the ocean could result in additional erosion, and it is not recommended. The existing lagoon treatment process is set for replacement with a mechanical treatment system and should be fully operational by 2025.

By 2025, all wastewater will be collected and treated in a moving bed bioreactor (MBBR) mechanical treatment plant adjacent to the weather station. This treatment facility will meet current Wastewater

Systems Effluent Regulation (WSER) federal guidelines at well over a 100 ft from the water way. This will be high quality effluent that will be stored in the old lagoon prior to discharge. The treated water will be stored during winter rather than being released on or beneath the ocean ice. The storage cell will be the old lagoon after it is cleaned out and expanded, at which time it will be a retention pond. During the summer, the retention pond will overflow to the ocean through a channel lined with rip rap (see second drawing below). In the fall, the treated water will be pumped out of the retention pond to make space for the winter storage. Both the pumping and the overflow will be adjacent to the ocean, however they will be releasing stored treated wastewater. This outfall will not meet a 100 foot distance offset from the ocean but it will be discharging treated water meeting the WSER limits.

A figure showing the relative location for the treatment plant and the storage cell are shown below.



A figure showing a cross section of the overflow channel showing rip rap and geotextile is given below:

