

January 2005

Please find enclosed the application for renewal of the water license for the Eureka High Arctic Weather Station (HAWS) on behalf of Environment Canada. The Supplementary Questionnaire for Municipalities is also enclosed along with the appropriate supporting documentation.

This application, prepared by Public Works and Government Services Canada's Environmental Services group on behalf of Environment Canada, is requesting approval to continue to withdraw water from Station Creek once per year to fill the fresh water reservoir. Included in the application is a request to continue to employ a sewage lagoon. Approximately 5700 - 8000 cubic meters of water is withdrawn from Station Creek and approximately 3000 cubic meters of treated effluent is decanted into Slidre Fiord annually. A Surveillance Network Program is in use to monitor water and effluent quality as per the current License.

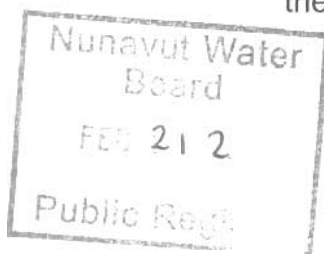
The Eureka HAWS site occupies 1125 ha. of INAC reserve No. 1021 lands. The station has been operated by Environment Canada since 1947, and will continue operation into the foreseeable future.

The primary purpose of the Eureka HAWS is to collect weather information in order to produce public weather forecasts. It additionally serves as support to the Arctic aviation community and as a staging location for various High Arctic scientific activities.

Environment Canada provides infrastructure support for the Station's activities including staff necessities, electrical power, transportation services and water and sewage services. Public Works and Government Services Canada provides technical expertise regarding sampling to fulfill current License requirements.

There are several improvements that have been made to the operation of the Eureka station during the period of the last License, greatly reducing the possibility of impacting the environment:

- Water from Station Creek is now withdrawn using a pump and screened intake, replacing the former method of diverting the creek to fill the reservoir, as recommended by the Nunavut Water Board.
- Water is withdrawn from the creek at a slower rate over a longer period of time.
- The photographic darkroom has been decommissioned, thus eliminating the possibility of discharging waste silver with the treated effluent.



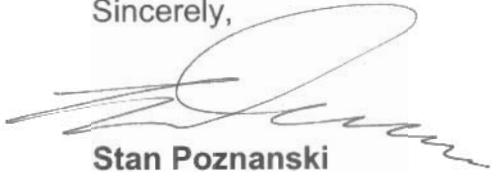
- Treated sewage effluent is no longer discharged in a single, large “slug” via a temporary channel in the retainment berm. Rather, it is decanted into Slidre Fiord over a period of a couple of days using a pump system.

It is important to note that the sewage lagoon operates as a facultative treatment system for the raw sewage. Holding time in the lagoon ensures separation of solids from the effluent and assists in beneficial microbiological activity.

Current construction activities at the site are temporarily increasing the population at the site. This will affect water consumption rates and treated effluent decanting quantities over the period of construction. As this is a temporary impact, it will not affect the application.

Should you require clarification or additional information please do not hesitate to contact me at the above or via email at stan.poznanski@ec.gc.ca

Sincerely,



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