



Water Resources Division
Resource Management Directorate
Nunavut Regional Office
P.O. Box 100
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Your file - Votre référence
8BC-CLY2225
Our file - Notre référence
GCDocs# 110748571

March 20, 2023

Richard Dwyer
Manager of Licensing
Nunavut Water Board
P.O. Box 119
Gjoa Haven, NU, X0B 1J0
E-mail: licensing@nwb-oen.ca

**Re: Crown-Indigenous Relations and Northern Affairs Canada's Review of the
Licence Annual Report for the Clyde River Small Craft Harbour Development
Project, Type B Water Licence No. 8BC-CLY2225**

Dear Richard,

Thank you for the February 24, 2023 invitation to review the referenced licence annual review, submitted by Fisheries and Oceans Canada-Small Craft Harbours, for Type B Water Licence No. 8BC-CLY2225.

Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) examined the application pursuant to its mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Crown-Indigenous Relations and Northern Affairs Act*. Please find CIRNAC comments and recommendations in the attached Technical Memorandum.

If there are any questions or concerns, please contact me at (867) 975-3877 or Joyce.Demers@rcaanc-cirnac.gc.ca or Andrew Keim at (867) 975-4550 or Andrew.Keim@rcaanc-cirnac.gc.ca.

Sincerely,

Joyce Demers, B.Sc.,
Industrial Coordinator



Technical Review Memorandum

Date: March 20, 2023

To: Richard Dwyer – Manager of Licensing, Nunavut Water Board

From: Joyce Demers – Industrial Coordinator, CIRNAC

Subject: **Crown-Indigenous Relations and Northern Affairs Canada's Review of the Licence Annual Report for the Clyde River Small Craft Harbour Development Project, Type B Water Licence No. 2BC-CLY2225**

Region: Kitikmeot Kivalliq Qikiqtani

A. BACKGROUND

Fisheries and Oceans Canada-Small Craft Harbours (DFO-SCH) is submitting their annual review for the Clyde River Small Craft Harbour Development Project (the project) for water license 2BC-CLY2225. The project was awarded to Polotak Enterprises Ltd by Public Services and Procurement Canada on behalf of DFO-SCH. The project is located in Clyde River, Nunavut. The small craft harbour will be located alongside the existing community sealift ramp and will extend into Patricia Bay.

The project consists of the construction of: two large breakwaters, a fixed wharf structure, two lines of floating wharf modules, a retrofit of existing sealift ramp, improvements to the uplands and a temporary camp. The construction is scheduled to commence in the summer of 2023 and end in 2025.

The water license is for up to 299 m³/day. The Hamlet of Clyde River (the hamlet) delivered 1.08 m³/day of water for the project using the Hamlet's water truck. The allowable quantity for domestic purpose is 6 m³/day for domestic use and 36 m³/day for dust control. No water was used for dust control during the 2022 season. In 2022 no spills were recorded, during the working period of August to November.

The project started in the fall of 2022 and consisted of the following activities: camp and garage installation, explosive magazines installation and explosive transfer from marine containers, truck scale installation at the construction site, removal of surface material before drilling, drilling and blasting where roughly 10,000 m³ were blasted from the east side of the existing quarry, installation and testing of the rip rap plant, the screener plant and conveyors, quarry cleanup and blasted material removal, core stone production (2,750 m³), filter stone production (975 m³), aggregate production (1,850 m³), road to quarry improvements, bridge to quarry improvements and winterization of the equipment and facilities. 14 boreholes were drilled, each at a depth of 10 meters, in order to install steel piles meant for the bridge improvements. The drill cutting were collected and transported to the quarry to be reused at a later time.



CIRNAC provides the following comments and recommendations pertaining to the application package. A summary of the subjects of recommendations can be found in Table 1. Documents reviewed as part of this submission can be found in Table 2 of Section B. Detailed technical review comments can be found in Section C.

Table 1: Summary of Recommendations

Recommendation Number	Subject
R1	Hazardous Water Waste
R2	Spill Kit Location at Refuelling Pick-up Truck Stations
R3	Distance from Water Bodies
R4	pH Testing

B. DOCUMENTS REVIEWED AND REFERENCED

The following table (Table 2) provides a list of the documents reviewed under the submission and reference during the review.

Table 2: Documents Reviewed and Referenced

Document Title	Author, File No., Rev., Date
230224 8BC-CLY2225 2022 Annual Report E-mail Dist-OMLE	
230224 8BC-CLY2225 2022 Annual Report-IMLE	
220120 8BC-CLY2225 Water Licence-OASE	
211214 8BC-CLY---- DFO Clyde River Harbour Development CIRNA Comments-IMLE	
220105 8BC-CLY---- DFO Response to Comments- IMLE	



C. RESULTS OF REVIEW

1. Hazardous Water Waste

Comment:

The applicant did not state where and how hazardous water waste would be stored. This is a concern as all hazardous waste should be properly stored and monitored to ensure that it is not accidentally released and possibly making its way into a water body.

Recommendation:

(R-01) CIRNAC recommends that the applicant confirm how hazardous water waste will be stored.

2. Spill Kit Location at Refuelling Pick-up Truck Stations

Comment:

The location of spill kits does seem to include refuelling stations occurring outside of the hamlet facilities. Section 3.2.a of the Spill Prevention & Response Plan indicates that the fuel truck will be refilled at the tank farm according for PPD's procedures. However, it does not state how the fuel within that fuel truck tank will be removed and if a spill kit will be available during that time. The concern is that refueling stations have a higher likelihood of generating spills than other locations.

Recommendation:

(R-02) CIRNAC recommends that a spill kit be located in areas where refueling will take place on site.

3. Distance from Water Bodies

Comment:

A. The applicant states in section 5.1 of the Spill Prevention & Response Plan that

“All liquid that could be potentially spill should be stored in a way to have a double containment, as per applicable regulations... Liquid storage should be done at least 20 meters away from any water body.”

B. Dredge Spoil Disposal Area

The location of the dredge spoil disposal Area as seen in Figure 2.6.1 in the Erosion & Sediment Control Plan is difficult to determine if the distance from the water body is greater than 31 meters.



CIRNAC notes that in the water license under Part H.2 states that

"The Licensee shall prevent any chemicals, petroleum products or wastes associated with the Project from entering Water. All Sumps and fuel caches shall be located at a distance of at least thirty-one (31) metres from the ordinary High-Water Mark of any adjacent water body and inspected on a regular basis."

Recommendation:

(R-03) CIRNAC recommends that the applicant store materials at least 31 meters away from any normal high water mark of any water body.

4. pH Testing

Comment:

The applicant states in section 4.2 of the Erosion & Sediment Control Plan that

"These particulates will originate from the washout and leachate of inorganic manipulated soil material, and should not affect the chemical balance of the water, so the pH will not be monitored."

The water license under Part E.5 states that

"All surface runoff or discharges impacted by construction activities associated with the Project, where flow may directly or indirectly enter Water, shall not exceed the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample (mg/L)
Total Suspended Solids	50.0	100
Oil and Grease	No Visible Sheen	No Visible Sheen
pH	Between 6.0 and 9.5	Between 6.0 and 9.5

"

The concern is that if the applicant does not test the pH how will they know if they are actually complying with the water license.



Recommendation:

(R-04) CIRNAC recommends that the applicant test for pH as well to ensure compliance with the water license.