Your file - Votre référence 3BC-NEI1215

July 4, 2016

Our file - Notre référence IQALUIT-#1070330

Licensing Department Nunavut Water Board P.O. Box 119 GJOA HAVEN, NU, X0B 1J0

Sent via email: <u>licensing@nwb-oen.ca</u>

Re: Technical Review of Cancellation Application – 3BC-NEI1215 – Luke Copland (Department of Geography, University of Ottawa)

To Whom It May Concern,

Thank you for the Nunavut Water Board's May 25, 2016 notice of the above mentioned water licence cancellation application. A memorandum is provided for the Nunavut Water Board's consideration. Comments and recommendations have been provided pursuant to Indigenous and Northern Affairs Canada's mandated responsibilities under the *Nunavut Waters and Nunavut Surface Rights Tribunal Act* and the *Department of Indian Affairs and Northern Development Act*.

Please do not hesitate to contact me by telephone at 867-975-3877 or email at <u>Amanda.Winegardner@aandcaadnc.gc.ca</u> for further information.

Sincerely,

Amanda Winegardner
Water Management Specialist
Water Resources Division
Resource Management Directorate
Indigenous and Northern Affairs Canada
P.O. Box 100
IQALUIT, NU X0A 0H0

Encl.

Cc. Scott Burgess, A/Manager, Water Resources - INAC, Nunavut Regional Office (NRO) Erik Allain, Manager, Field Operations – INAC, NRO



Memorandum

To: Licensing Department, Nunavut Water Board

From: Amanda Winegardner, Water Management Specialist, Indigenous and Northern Affairs Canada

Cc: Scott Burgess (NRO), Erik Allain (NRO)

Date: July 4, 2016

Re: Technical Review of Cancellation Application for Licence No. 3BC-NEI1215

Applicant: Luke Copland, Department of Geography, University of Ottawa

Project: Research and camp activities- Northern Ellesmere Ice Shelves, Epishelf Lakes and Climate

Impacts Project

Region: Qikiqtani

Comments:

A. Background

On May 25, 2016, the Nunavut Water Board (NWB) invited interested parties to review Dr. Luke Copland's (the Licensee) application for the cancellation of Type B water licence 3BC-NEI1215. The Licensee is seeking to cancel 3BC-NEI1215 (expired in May 2016), covering water use and deposit of waste at a seasonal research camp and instead plans to apply for an approval without a licence. The expired water licence supports seasonal science activities/a camp located on Northern Ellesmere Island (Milne Ice Shelf and Milne Glacier) for the 'Northern Ellesmere Ice Shelves, Ecosystems and Climate Impacts' project based out of the University of Ottawa. Fieldwork for this project includes water profile measurements, ice penetrating radar surveys and the installation of weather stations and has included students and teachers from the community of Resolute Bay. More details on research activities and findings can be found in the Licensee's annual reports.

The expired licence permits the Licensee to withdraw 10 m³ of water per year from the Milne Fiord Epishelf Lake to support domestic purposes at a temporary science research camp. The Licensee is also permitted to dispose of non-hazardous greywater in a sump and toilet wastes in latrine pits or portable/composting toilets. The Licensee is required to backhaul all hazardous wastes. The Licensee reports that activities at the camp amounts to approximately 80 person days per year and that all waste is removed from the site at the end of each field season.

Access to the site can be challenging due to weather conditions and as such, no inspection of the site could be completed in 2011. A successful inspection was completed in the summer of 2015.

B. Results of review

On behalf of Indigenous and Northern Affairs Canada's Water Resources Division, the following comments and recommendations are provided:

1. Cancellation application and application for approval without a licence

Source:

1) 3BC NEI1215 Copland 100401 – Application for Water Licence Cancellation

Comment: The Licensee recognizes that their licence has expired and has indicated in their cancellation application that they intend to apply for an approval without a licence for continued research activities at the seasonal camp.

Recommendation 1: INAC encourages the Licensee to be aware of application timelines in relation to approvals without a licence in order to ensure proper authorizations are obtained for any upcoming field seasons.

2. Format of annual reports

Source:

- 1) 3BC-NEI1215 NRI Annual Report 2015 English
- 2) 3BC-NEI1215 2014 Copland NWB Annual Reporting Form
- 3) 3BC-NEI1215 Annual Summary Report 2014
- 4) 3BC-NEI1215 NRI Annual Report 2013
- 5) 3BC-NEI1215 2012 Annual Report
- 6) 3BC-NEI1215 NRI Annual Report 0210611R (2012)

Comment: The Licensee has submitted annual reports in the form of copies of their annual report to the Nunavut Research Institute (NRI) to the NWB for each year of the current licence (2012-2015). In 2012 and 2014, the Licensee also submitted the NWB's required 'Annual Reporting Form'. The annual reports required by the NRI and forwarded to the NWB contain useful information about the project's research activities and are useful in updating the NWB on research findings and community engagement. However, they do not include information on water use and waste disposal as required in 3BC-NEI1215.

Recommendation 2: INAC recommends that the Licensee complete and submit to the NWB, the standardized 'Annual Reporting Form' for years 2013 and 2015. This information is also necessary to ensure that annual water use does not exceed that that is permissible for an approval without a licence.

3. Fuel storage

Source:

1) 3BC-NEI1215 Copland Purple Valley Spill Contingency Plan

2) 3BC-NEI---- new application AANDC review

Comment: A small fuel storage area is maintained near the research camp to support field activities. According to the Licensee's Spill Contingency Plan (SCP), this area may include 2-4 drums of gasoline and up to 6 drums of Jet-B/JP-4 fuel during operation of the camp. At the completion of each field season, empty drums are removed to either Eureka or Resolute Bay for disposal by the Polar Continental Shelf Program (PCSP) as per the SCP.

Recommendation 3: INAC recommends that the Licensee update the Safety Data Sheets (SDS) included in their SCP to reflect that the site may have both Jet-B and JP-4 stored on site (currently a SDS is included only for JP-4).

Recommendation 4: INAC recommends that the Licensee confirm that empty fuel drums are still being removed from the site by PCSP (or other organization), and provide the NWB with the number of full fuel drums being stored on site to support future camp/research activities (as such activities will likely be continuing upon successful application for an approval without a licence). INAC also recommends that the Licensee verify that the expected number of fuel drums on site during operation of the camp (as outlined in the SCP) is still accurate and specify the number of fuel drums for both Jet-B and JP-4, as opposed to reporting the total number. This information is required to ensure that the Licensee does not intend to store more fuel barrels than would be allowed without a water licence.

C. Conclusion

Indigenous and Northern Affairs Canada expects that the activities under the current license are likely to continue under an approval without a licence (pending a successful application), and that conditions regarding water use and deposit of waste set out under an approval without a licence will continue to be enforced by an INAC inspector.