

Fisheries and Oceans Pêches et Océans Canada Canada

Eastern Arctic Area Iqaluit Office Region Arctique de L'est Bureau de Calgary

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January 4, 2011

Nunavut Water Board Attn: Phyllis Beaulieu P.O Box 119 Gjoa Haven NU X0B 1J0

Dear Ms. Beaulieu:

Subject: Proposed works or undertakings will not likely result in negative effects to fish habitat if additional protection measures are implemented.

Your file Votre référence

Notre référence

1BR -PEE

NU-05-0107

Our file

Fisheries and Oceans Canada (DFO) received your proposal on December 13, 2010 concerning the water withdrawal application associated the PIN-E Cape Peel DEW Line Site Remediation Project. To expedite future correspondence or inquiries, please refer to your referral title and habitat file number when you contact us.

Habitat File No.: NU-05-0107

Referral Title: DEW Line Site Remediation PIN-E Cape Peel

It is our understanding that the proposal consists of:

- Extraction of 7.0 cubic meters of water per day from a fresh water lake located at latitude 69° 03'25" N and longitude 107°21'25" W. The water will be used primarily for domestic use at a temporary work camp located at the PIN-E Cape Peel DEW Line Site;
- No water will be returned to the lake;
- Water will be extracted from the lake using a truck or trailer and transported to the camp location for storage and
- Water withdraws will occur between July and September in 2011 and 2012.

as outlined in the following plans:

- Nunavut Water Board, General Water Licence Application, Project Name, PIN-E
 Cape Peel Intermediate Distant Early Warning (DEW) Line Site Remediation
 Project, dated November 12, 2010 and
- Written correspondence from AECOM, titled Remedial *Action Plan, PIN-E Cape Peel Intermediate DEW Line Site*, dated March 8, 2010

We have reviewed this proposal under the habitat protection provisions of the *Fisheries Act*. The measures described in the plans are not adequate to protect fish and fish habitat. Therefore, please ensure that the following additional measures are incorporated into the project plans.

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- Pumps should be screened with a maximum mesh size of 2.54 mm and a maximum screen approach velocity of 0.038 m/s as per 'DFO's Freshwater Intake End-of-pipe Fish Screen Guideline' (1995). Pump outlet(s) should be placed in a manner or location that does not create erosion from the outflow.
- Non-flowing fish-bearing waterbodies with less than 1.5m of free water beneath the ice are particularly vulnerable to the effects of water withdrawal and should be avoided.
- Where possible, water should be drawn from deeper areas (>2 meters). Care should be taken to ensure the bottom substrate is not disturbed during water withdrawal.
- The total water withdrawal from a non-flowing fish bearing waterbody should not result in a reduction in water surface elevation of more than 5 cm, or result in a reduction in flow at the lake outlet of 5% or more of instantaneous flow.
- Disturbance of riparian vegetation shall be kept to a minimum. Approaches shall be stabilized, vegetated and/or seeded as soon as possible after disturbance, and effective, long-term erosion control measures shall be implemented.
- Equipment operating near the water shall be free of external fluid leaks, grease, oil and mud. The cleaning, fuelling, and servicing of equipment shall be conducted in an area from which spills and wash water will not enter the water.

By implementing these additional measures, it is our opinion that the proposed works and undertakings will not likely result in the harmful alteration, disruption or destruction (HADD) of fish habitat, which is prohibited unless authorized by DFO. These are recommendations to ensure that the proposed works will likely not result in a HADD of fish habitat. Therefore a subsection 35(2) authorization is not necessary.

The proponent could contravene subsection 35(1) of the *Fisheries Act* if a HADD of fish habitat results from any change in your proposed plan or from failure to properly implement these additional measures. Subsection 35(1) states, "*No person shall carry on any work or undertaking that results in the harmful alteration, disruption or destruction of fish habitat.*"

This letter of advice does not permit the deposit of a deleterious substance (section 36 of the *Fisheries Act*) into waters frequented by fish nor does it release you from the responsibility to obtain any other federal, territorial or municipal approvals.

If these plans have changed since the time of submission, the advice in this letter may no longer apply and the proponent should consult with us to determine if further review is required.

If you have any questions concerning the above, or if my understanding of the proposal is either incorrect, incomplete, or if there are changes to the proposed works or undertakings, please contact me directly by telephone at (403) 292-8675 by email at Robert.Bedingfield@dfo-mpo.gc.ca

Sincerely,

Bobby Bedingfield Fish Habitat Biologist Eastern Arctic Area, Iqaluit Office

cc. Derrick Moggy, DFO Eastern Arctic Natalie Plato, INAC, Iqaluit Nunavut Impact Review Board