



SCHEDULE C

(Subsection 5(1))

APPLICATION FOR LICENCE, AMENDMENT OF LICENCE, OR RENEWAL OF LICENCE

APPLICATION NO: N7L1-1836
(*amendment or renewal only*)

1. NAME AND MAILING ADDRESS OF APPLICANT

Mr. Ramy Rahbani, Project Manager

237 Fourth Avenue S.W.

P.O. Box 2480 Station 'M' Calgary, Alberta T2P 3M9

TELEPHONE: (587) 476-4262 **FAX:** (403) 237-2237

2. ADDRESS OF HEAD OFFICE IN CANADA IF INCORPORATED

Imperial Oil Resources Venture Limited

237 Fourth Avenue S.W.

Calgary, Alberta T2P 3M9

TELEPHONE: (587) 476-4262 **FAX:** (403) 237-2237

3. LOCATION OF UNDERTAKING

A remediation project is being completed at the former BAR-C DEW Line / Imperial exploration base located on the southern tip of Richards Island (Tununuk Point) in the Mackenzie delta. The water withdrawal location is from an unnamed lake located near the former Imperial camp on the southern tip of Richards Island.

Latitude: 69.01237 N / 69° 0' 44" N **Longitude:** -134.68258 W / 134° 40' 57"

4. DESCRIPTION OF UNDERTAKING (describe and attach plans)

This amendment application is intended to cover the removal of the BAR-C dock.

In 2014, Imperial Oil Resources Ventures Limited (Imperial) initiated the cleanup and remediation of the former BAR-C DEW Line site and former exploration drilling and staging area at the southern tip of Richards Island known as Tununuk Point (maps and figures of the dock location are included in attachments). This work is being conducted under existing approvals from the Inuvialuit Land Administration (ILA) under the Land Use Permit ILA14IQ011 and the Inuvialuit Water Board (IWB) Water License No. N7L1-1836.

As a result of discussions with the ILA it has been determined that the barge landing dock should be removed / dismantled. This activity is planned to take place in late summer 2015 with demolition of the sheet piling and associated metal tie-back structures. All steel materials and any contaminated soils will be removed offsite to appropriate landfills outside of the Northwest Territories. Reshaping of the shoreline will be completed to align with the natural surrounding area. The dock is approximately 67.5 m long by 30.5 m wide on the west and 22.5 m on the east.

Decommissioning of the dock will occur in stages and typically proceed from the downstream (i.e. east) to upstream (i.e. west) side using primarily land-based equipment such as a excavators, rock truck, front-end loader, and potentially a crane if required. Decommissioning tasks will generally include:

- Excavation of fill, storage, then use as backfill or treated/disposed off-site based on site remediation requirements.
- Removal of deadmen used for temporary repairs.
- Removal of bollards, cap plate, disconnecting of tie-rods and removal of associated hardware on the sheet piles.
- Removal of the main wall sheet piles.
- Disposal of steel sheet piles and associated hardware to an approved landfill.
- Reshaping of the shoreline area to closely match existing profile.

Imperial has advised and provided supporting information on the dock removal to the Environmental Impact Screening Committee (EISC). The EISC has exempted the project. The Inuvialuit Land Administration (ILA), Department of Fisheries and Oceans (DFO) and Transport Canada (TC) have been advised of the intended dock removal.

5. TYPE OF UNDERTAKING

- | | | | |
|-----------------------------|---|-----------------------|---------------|
| 1. Industrial | <u> X </u> | 2. Mining and Milling | <u> </u> |
| 3. Municipal | <u> </u> | 4. Power | <u> </u> |
| 5. Agriculture | <u> </u> | 6. Conservation | <u> </u> |
| 7. Recreation | <u> </u> | | |
| 8. Miscellaneous (describe) | <u>If required, water may be used for the camp in support of the BAR-C dock removal</u> | | |

6. WATER USE

- X To obtain water
 Flood control
 To cross a watercourse
 To divert water
 To modify the base or bank of a watercourse
 To alter the flow, or store, water

Other (describe)

Dock removal will result in restoration of the river bank to approximate pre-development conditions.

7. QUALITY OF WATER INVOLVED (litres per second, litres per day or cubic metres per year, including both quantity to be used and quality to be returned to source)

The vast majority of the earthworks (landfill capping) was completed in 2014 with 1158 m³ of the allowable 3800 m³/year being used. Only a minor amount, if any, will be needed for 2015 as part of remediation works. Removal of the dock will be completed after remediation work. Removal of the dock will extend the time that the camp barge will be at BAR-C by approximately one month which could result in an additional 300 m³ being needed based on daily camp use.

Including the dock removal component, the volume of water should not exceed the maximum annual allowance of 3,800 m³/year, or 31 m³/day (over the 90 day season).

No water is to be returned directly to the source lake. Considering the maximum volume of water withdrawal, the reduction of the lake volume for one year will be minimal.

In 2014, all wastewater was transported back to Inuvik to the wastewater treatment plant. The same management plan is intended for 2015 and during the dock removal. Should this management approach not be used then any grey water and treated sanitary sewage from the camp will be required to be stored, treated and tested prior to any discharge at the site. The Contractor would again be required to provide a Wastewater Management Plan prior to discharge.

8. WASTE DEPOSITED (quantity, quality, treatment and disposal)

Wastewater will be generated by camp activities at approximately 80-95% of the daily usage of 10 m³/day. All sewage generated in 2014 (756 m³) was sent to the Inuvik wastewater treatment plant. The same disposal method will again be used in 2015 for the barge-based camp.

Following completion of site restoration activities in summer 2015, demolition of the sheet pile dock will be completed. The sheet piles and associated tieback structures will be removed then disposed off-site. All contaminated soils will be removed offsite to appropriate waste disposal facilities outside of the Northwest Territories. A more detailed dock removal execution plan is included in the provided Project Detailed Report (PDR).

9. OTHER PERSONS PROPERTIES AFFECTED BY THIS UNDERAKING (give names, mailing address and location; attach list if necessary)

The Site is located on Inuvialuit 7(1) (A) private land within the Inuvialuit Settlement Region (ISR).
Inuvialuit Land Administration
Bag Service #21
Inuvik, NT, X0E 0T0
Attention: Mike Harlow, Chief Land Administrator

10. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION

Mitigation measures will be incorporated into the dock removal. No residual impacts to surface water quality are expected from the dock removal.

A more detailed dock removal execution plan has also been provided.

A Request for Review has been submitted to the Department of Fisheries and Oceans (DFO).

Predicted and potential environmental impacts will be dealt with in accordance with applicable governing laws, environmental policy, and in accordance with the Inuvialuit Land Administration (ILA) Environmental Monitor. The Environmental Monitor from the (ILA) will be present on Site during the dock removal as appropriate.

11. CONTRACTOR AND SUB-CONTRACTORS (names, addresses and functions)

Imperial will be designated the Owner for this project. The remediation and dock removal work will be completed by AECOM the "Prime Contractor" and their primary subcontractor MDIOS. Further contact information can be provided if required.

12. STUDIES UNDERTAKEN TO DATE (attach list if necessary)

- Environmental Sciences Group. (ESG) 1995. Environmental Study of Abandoned DEW Line Sites III. One Auxiliary and Eighth Intermediate Sites in the Canadian Arctic. 2 Volumes.
- Komex International Ltd. (Komex), 2001. 2001 Phase I and II Programs at BAR-C, N.W.T.
- IEG Consultants Ltd. 2009. Phase III Environmental Site Assessment Report at BAR-C/Tununuk Point, NT. (Assessment conducted in 2008).
- Golder Associates (Golder) 2011. BAR-C/ Tununuk Point Supplemental Phase III Environmental Site Assessment (Assessment conducted in 2010).
- C. Arnold Heritage Consulting. 2012. History and Traditional Knowledge of Tununuk Point.
- WorleyParsons, 2012. 2012 Supplemental Phase II Environmental Site Assessment Report at BAR-C/Tununuk Point, NT.

13. PROPOSED TIME SCHEDULE

Start date: 01-June-2014

Completion date: 31-October-2017

NAME: Ramy Rahbani
(print)

TITLE: Project Manager
(print)

SIGNATURE: 

DATE: May 28th 2015

FOR IWB OFFICE USE ONLY

APPLICATION FEE Amount: \$ _____

Receipt #: _____

WATER USE DEPOSIT Amount: \$ _____

Receipt #: _____