



## Jericho Site Stabilization Project- Amendment

|                                |                               |
|--------------------------------|-------------------------------|
| <b>Application Type:</b>       | Amendment                     |
| <b>Project Type:</b>           | Remediation                   |
| <b>Application Date:</b>       | 6/5/2017 9:48:40 AM           |
| <b>Period of operation:</b>    | from 2017-07-01 to 2019-01-01 |
| <b>Proposed Authorization:</b> | from 2017-07-01 to 2019-01-01 |
| <b>Project Proponent:</b>      | Michael Westlake              |

### Non-technical project proposal description

English: The following are two proposed modifications for the Jericho Site Stabilization Project: 1) INAC on behalf of DFO proposes to remove the jetty which is in Carat Lake. The objective of this is to create approximately 1,207 m<sup>2</sup> fish habitat of Carat Lake through the development of an underwater rock shoal by excavating the existing causeway to at least 2 meter below normal summer water levels. All infrastructure associated with the water intake jetty will first be removed before excavations will commence. The reclamation of the causeway will be based on Tahera Diamond Corporation's design plan found in their Closure and Reclamation Plan Update Report (April 2007) which is attached for reference. In the report, the causeway is suggested to be "cut to 2m below the normal summer water level from the northern extent back to a water depth of 3.5m. From 3.5m water depth to 1m the causeway will taper up. The reclaimed causeway will intersect surface near the shoreline." This work will be conducted between July 1 to Aug 31 so as to not have any adverse impacts on the aquatic ecosystem. To isolate the jetty from the lake during the construction, silt booms and/or silt curtains will be used as sediment and erosion control measures. Additional sediment and erosion control measures that will be considered during in water workings are available on the DFO website at <http://www.dfompo.gc.ca/pnwpe/measures-mesures/measures-mesures-eng.html>. A qualified biologist or environmental inspector will be on site during all in-water restoration/construction works. 2) As a contingency measure to aid in the removal of the frozen core West Dam, explosives may be used. The details of this can be found in the attached document prepared by Outcome Consultants and Rowes Construction.

French: This project does not fall within the boundaries of a french speaking region. Should this be an issue INAC will get french translation of our project summary.

Inuktitut: not required. Inuinnaqtun provided below.

Inuinnaqtun: Tahapkuat malguk uuktugutik ihuaqhigiaqnit taphumunga Jericho Havakvia Huniumaitnia Havanga: 1) INAC-kut kivgaqtuqhugit tapkuat DFO-kut uuktutai ahivaqnianik tamna tikigannuaq talvaniittuq Carat Tahiq. Tamna ihumaginia uuma pinguqtaunianut mikhaani 1,207 m2 iqaluknut nayuqtauvakni talvani Carat Tahiq atuqhugit pivaliatitni immap iluani uyaqat natqanitnit ahivartiqhugit taty aurtuq apqtaunna mikiniqhamun 2 miitat ataani atuqpakniqhaq auyami imaugaqnit. Tamaita havagutai piqatauyut taphumunga imiqtuivik tikigannuaq hivulliqmik ahivaqtauniaq hivuani qimaktiqnit pigiaqniai. Tamna halumaqhainiqmun apqtaunia pihimaniaq tapkununga Tahera Diamond Kuap[urisanakut hanatyuhikhaliat parnaut nalvauyug tapkuat Umikiani Halumaqtiqianilu Parnaut Nutanguini

Tuhaqhityut (Aipuru 2007) tapkuat attaqtaqhimayut naunaipkutaunia. Talvani tuhaqhityutmi, tamna apqutaunia atugahuaquni piya "kipiyaunia 2 miitat ataani tamna atupaknihaq auyami imaugaqnia talvanga ungalaani tikitnia utimun immap itinia tamna 3.5 miitat. Talvanga 3.5 miitat immap itinia talvunga 1 miita apqutaunia itkalivalianiaq. Tamna halumaqtiqnia apqutauyuq atatyutauniaq qanganut haniani hinaani." Una havaq havagiyauniaq akungani Julai 1 tamnalu Aagasi 31 pitqunagu kitunikliqak ihuittumik aktuanit imaqmiutanut uumatyutaunit. Ilikkugianga tamna tikigannuaq talvanga tahiqlin atuqtitlugu tamna hanayaunia, nunavaluktaqnaqni tamnalu/tamnaluunit nunavaluk tulumatai atuqtauniat nunavaluit nungutpalianilu munagiyauni pityuhit. Ilagiagutit nunavaluit nungutpalianilu munagiyauni pityuhit ihumagiyauniat atuqtitlugu imaqmi havagini piyaulatlu talvani DFO-kut qagitauyakkuviani <http://www.dfompo.gc.ca/pnwpppe/measures-mesures/measures-mesures-eng.html> . Ayuitnilik uumayuligiya avatiligiyluniit qauyihaiyi havakvikmitniaq atuqtitlugu tamaita imaqmi ilitquhigaluat utiqtitninut/hanayauni havat. 2) Atugahuquninut piyauni ikayuqnit ahivartiqlinut qiqumayut Pingangnaani Haputa, qaqtautit atugaulat. Tamna unniqtuttiaqni uuma nalvaulat attaqtaqhimayumi ytitiqani hannaiyaqtat tapkuat Outcome Qauyimayuyut tamnalu Rowe's Hanayit. Una havaq ilaqaqniaq hivugut putuunit talvani qiqumayuy haputaunia iliugaqlugitlu akhut, hakugigutit qaqtautit alguyaqtungittutlu pigiaqutai havagutit atuni putuni. Breaj-Away Ikuutaqnit Qaqtainiqlu Nanminilgit (Break-Away) kanturaktitaulakniat havagini havat. Anginiqpamik 40,000 kg qaqtautit tamnalu 250 kg qaqtaityutit atuqtauniat. Qaqtainiq atuqniaq akungani Aagasi 15mi tamnalu Saptaiqa 30mi ihuittumik aktuaqunagu tuktut aulaqninut.

## Personnel

Personnel on site: 500

Days on site: 180

Total Person days: 90000

Period of operation: from 2017-07-01 to 2017-09-30

Proposed term of operation: from 2017-07-01 to 2019-01-01

Activities

Activities

| Location   | Activity Type            | Land Status | Site history   | Site archaeological or paleontological value  | Proximity to the nearest communities and any protected areas |
|------------|--------------------------|-------------|--|---|--|
| Jericho    | Site Cleanup/Remediation | Crown       | The West Dam was constructed for mining operations. As part of the remediation/site stabilization, the West Dam will be removed as described in the original application: "16UN052 Jericho Site Stabilization Project". This amendment includes the use of explosives as a back-up plan for the removal of the West Dam. | Site archaeological value same as described in original application: "16UN052 Jericho Site Stabilization Project" | 260km southeast of Kugluktuk, NU                             |
| Carat Lake | Site Cleanup/Remediation | Crown       | The jetty and pump house were installed at Carat Lake to draw freshwater for camp and minig operations. This amendment includes the removal of the pump house and jetty resulting in the creation of new fish habitat.   | n/a   | 260km southeast of Kugluktuk                                 |

Community Involvement & Regional Benefits

| Community                    | Name | Organization | Date Contacted |
|------------------------------|------|--------------|----------------|
| Information is not available |      |              |                |

Authorizations

Indicate the areas in which the project is located

Kitikmeot

Authorizations

| Regulatory Authority                               | Authorization Description | Current Status            | Date Issued / Applied | Expiry Date |
|--|---------------------------|---------------------------|-----------------------|-------------|
| Aboriginal Affairs and Northern Development Canada | Land-Use Permit           | Active                    |                       |             |
| Kitikmeot Inuit Association                        | Access to IOL             | Applied, Decision Pending |                       |             |
| Nunavut Water Board                                | Water Licence             | Active                    |                       |             |

Material Use

Equipment to be used (including drills, pumps, aircraft, vehicles, etc)

| Equipment Type  | Quantity         | Size - Dimensions | Proposed Use                    |
|---|------------------|-------------------|---------------------------------|
| explosives  | 40,000kg maximum | n/a               | removal of frozen core West Dam |
| all other equipment has been previously approved under "16UN052 Jericho Site Stabilization Project" | n/a              | n/a               | remediation/site clean-up       |

Detail Fuel and Hazardous Material Use

| Detail fuel material use:    | Fuel Type | Number of containers | Container Capacity | Total Amount | Units | Proposed Use |
|------------------------------|-----------|----------------------|--------------------|--------------|-------|--------------|
| Information is not available |           |                      |                    |              |       |              |

Water Consumption

| Daily amount (m3) | Proposed water retrieval methods | Proposed water retrieval location |
|-------------------|----------------------------------|-----------------------------------|
| 0                 |                                  |                                   |

Waste

Waste Management

| Project Activity             | Type of Waste | Projected Amount Generated | Method of Disposal | Additional treatment procedures |
|------------------------------|---------------|----------------------------|--------------------|---------------------------------|
| Information is not available |               |                            |                    |                                 |

Environmental Impacts:

Please see original application: "16UN052 Jericho Site Stabilization Project"

## **Details Part 2**

### **Project General Information**

#### **DFO Operational Statement (OS) Conformity**

##### **Transportation**

##### **Camp Site**

##### **Equipment**

##### **Water**

##### **Waste Water (Grey water, Sewage, Other)**

##### **Fuel**

##### **Chemicals and Hazardous Materials**

##### **Workforce and Human Resources/Socio-Economic Impacts**

##### **Public Involvement/Traditional Knowledge**

#### **SECTION F: Site Cleanup/Remediation: Project Information**

The following are two proposed modifications for the Jericho Site Stabilization Project "16UN052": 1) INAC on behalf of DFO proposes to remove the jetty which is in Carat Lake. The objective of this is to create approximately 1,207 m<sup>2</sup> fish habitat of Carat Lake through the development of an underwater rock shoal by excavating the existing causeway to at least 2 meter below normal summer water levels. All infrastructure associated with the water intake jetty will first be removed before excavations will commence. The reclamation of the causeway will be based on Tahera Diamond Corporation's design plan found in their Closure and Reclamation Plan Update Report (April 2007) which is attached for reference. In the report, the causeway is suggested to be "cut to 2m below the normal summer water level from the northern extent back to a water depth of 3.5m. From 3.5m water depth to 1m the causeway will taper up. The reclaimed causeway will intersect surface near the shoreline." This work will be conducted between July 1 to Aug 31 so as to not have any adverse impacts on the aquatic ecosystem. To isolate the jetty from the lake during the construction, silt booms and/or silt curtains will be used as sediment and erosion control measures. Additional sediment and erosion control measures that will be considered during in water workings are available on the DFO website at <http://www.dfompo.gc.ca/pnwppp/measures-mesures/measures-mesures-eng.html> . A qualified biologist or environmental inspector will be on site during all in-water restoration/construction works . 2) As a contingency measure to aid in the removal of the frozen core West Dam, explosives may be used. The details of this can be found in the attached document prepared by Outcome Consultants and Rowes Construction.

##### **Description of Existing Environment: Physical Environment**

##### **Description of Existing Environment: Biological Environment**

##### **Description of Existing Environment: Socio-economic Environment**

##### **Identification of Impacts and Proposed Mitigation Measures**

##### **Cumulative Effects**

Impacts

| Identification of Environmental Impacts |  |                                |                    |                          |                       |               |                    |   |                             |                           |                                |             |              |            |            |  |   |   |                          |
|---|--|--------------------------------|--------------------|--------------------------|-----------------------|---------------|--------------------|---|-----------------------------|---------------------------|--------------------------------|-------------|--------------|------------|------------|--|---|---|--------------------------|
|   | PHYSICAL                                   | Designated environmental areas | Ground stability   | Permafrost               | Hydrology / Limnology | Water quality | Climate conditions | Eskers and other unique or fragile landscapes | Surface and bedrock geology | Sediment and soil quality | Tidal processes and bathymetry | Air quality | Noise levels | BIOLOGICAL | Vegetation | Wildlife, including habitat and migration patterns | Birds, including habitat and migration patterns | Aquatic species, incl. habitat and migration/spawning | Wildlife protected areas |
|   |  |                                |                    |                          |                       |               |                    |   |                             |                           |                                |             |              |            |            |  |   |   |                          |
| SOCIO-ECONOMIC                          |  |                                |                    |                          |                       |               |                    |   |                             |                           |                                |             |              |            |            |  |   |   |                          |
|   | Archaeological and cultural historic sites | Employment                     | Community wellness | Community infrastructure | Human health          |               |                    |   |                             |                           |                                |             |              |            |            |  |   |   |                          |
| Construction                            |  |                                |                    |                          |                       |               |                    |   |                             |                           |                                |             |              |            |            |  |   |   |                          |
| -                                       | -  | -                              | -                  | -                        | -                     | -             | -                  | -   | -                           | -                         | -                              | -           | -            | -          | -          | -  | -   | -   | -                        |
| Operation                               |  |                                |                    |                          |                       |               |                    |   |                             |                           |                                |             |              |            |            |  |   |   |                          |
| Site Cleanup/Remediation                | -  | -                              | -                  | -                        | -                     | -             | -                  | -   | -                           | M                         | -                              | M           | -            | M          | M          | M  | P   | -   | P                        |
| Decommissioning                         |  |                                |                    |                          |                       |               |                    |   |                             |                           |                                |             |              |            |            |  |   |   |                          |
| Site Cleanup/Remediation                | -  | M                              | -                  | -                        | -                     | -             | -                  | -   | -                           | M                         | -                              | M           | -            | M          | M          | M  | P   | -   | P                        |

(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

Project Map

