

## **NIRB Uuktuutinga Ihivriuqhikhamut #125250**

### **Iqaluit Bulk Fuel Storage Tank Farm Upgrade**

<b>Uuktuutinga Qanurittuq:</b>	New
<b>Havaap Qanurittunia:</b>	Ukhukyuattigut
<b>Uuktuutinga Ublua:</b>	1/24/2018 11:24:00 AM
<b>Period of operation:</b>	from 0001-01-01 to 0001-01-01
<b>Piumayaat Angirutinga:</b>	from 0001-01-01 to 0001-01-01
<b>Havauhikhaq Ikayuqtinga:</b>	Maurice Guimond QEC Box 580 Bldg 243 Iqaluit Nunavut X0A 0H0 Canada Hivayautit Nampanga:: (867) 979-7526, Kayumiktukkut Nampanga:: (867) 979-751

# QANURITTUT

**Tukihiaqtaq havaariyauyumayumik uqauhiuyun**

**Qablunaatitut:** The Iqaluit power plant currently consumes 16 million to 20 million liters of fuel per year. QEC requires multiple fuel transfers throughout the year to ensure adequate volumes of fuel for the required consumption rates. This directly results in an extra cost to the KWh of generated electrical power and the unreliable power supply to the city of Iqaluit. To meet the shortfall in required diesel fuel storage capacity and comply with legislative regulations and codes, QEC plans to construct one additional tank (Tank#2) with a storage capacity of 5.7 million litres in the existing fuel tank farm and replace the farm liner within the berm area which was built in 1993 including the future tank#2 foundation Pad. The proposed upgrade will increase the diesel fuel storage capacity from 5.6 to 11.3 million liters. The tank will require hydrostatic testing as per the API 650 standard prior to being commissioned for use by August 31, 2018. The newly constructed 5.7 million litre tank will be filled with water for the purpose of checking the integrity of the welded joints. The tank will be filled at a rate of 299 m<sup>3</sup>/day. This application is for the use of 5.7 million litres of water from natural water ponds near the QEC power plant and city's Geraldine Lake to perform hydrostatic testing on the fuel tank. The water will remain in the tank for at least 24 hours once the tank is filled to detect any leaks. After hydrostatic testing, the proposed plan is to discharge the test water into a stream adjacent to the power plant where it will flow out into the ocean.

Uiviiitut: La centrale électrique d'Iqaluit consomme actuellement 16 à 20 millions de litres de combustible par an. La Société d'énergie Qulliq (SÉQ) doit procéder à de nombreux transferts de combustible tout au long de l'année, afin de s'assurer que les volumes entreposés satisfont adéquatement la consommation de combustible. Cela se traduit par une augmentation du cout du kilowattheure d'électricité produite et un manque de fiabilité du réseau de distribution d'électricité de la ville d'Iqaluit. Pour répondre à la nécessité d'augmenter la capacité de stockage de gazole et se conformer aux réglementations et législations, la SÉQ prévoit de construire un réservoir supplémentaire (réservoir no 2) d'une capacité de stockage de 5,7 millions de litres dans l'enceinte du dépôt de combustible actuel et de remplacer le revêtement interne du réservoir situé dans la zone remblai construite en 1993, y compris la dalle de fondation du futur réservoir no 2. Les travaux recommandés permettront d'augmenter la capacité de stockage de combustible, laquelle passera ainsi de 5,6 à 11,3 millions de litres. Le réservoir devra subir des essais hydrostatiques pour respecter la norme API 650 avant sa mise en service, d'ici au 31 aout 2018. Le nouveau réservoir de 5,7 millions de litres sera rempli d'eau, afin que l'étanchéité des soudures soit vérifiée. Le débit de remplissage du réservoir sera de 299 m<sup>3</sup>/jour. Un volume total de 5,7 millions de litres d'eau sera prélevé dans les mares d'eau naturelle avoisinant la centrale électrique de la SÉQ et dans le lac Geraldine, et ce afin de procéder aux essais hydrostatiques sur le réservoir de combustible. L'eau sera retenue dans le réservoir pendant au moins 24 h après la fin du remplissage pour détecter d'éventuelles fuites. Une fois les essais hydrostatiques terminés, il est prévu de vider tout le contenu du réservoir dans un ruisseau adjacent à la centrale électrique, pour que l'eau puisse s'écouler vers l'océan.

## Personnel

Personnel on site: 20

Days on site: 120

Total Person days: 2400

Operations Phase: from 2018-05-15 to 2019-08-31

Operations Phase: from 2018-10-15 to 2028-10-15

## Post-Closure Phase: from to

## Hulilukaarutit

### Hulilukaarutit

Inigiy	Hulilukaarut Qanurittuq	Nunannga Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannuqtut akhuurninnga	Qanitqiayuq qanitqiamut nunallaat kitulluuniit ahiruqtailiyainnit nuna
Iqaluit Power Plant Fuel Farm	Fuel and chemical storage	Commissioners	The fuel tank farm has existed since 1964 and has since then been used to store diesel fuel to power electrical generators. An upgrade was done in 1994 to expand the berm in anticipation of installing another fuel tank.	N/A	North of Iqaluit and 500m from residential area subdivision.
1st water source	Other	Crown	No past activities have been identified in this area. This lake lies on un-surveyed crown land within the Iqaluit municipal boundary.	N/A	west of the power plant and slightly south of the Road to Nowhere subdivision.
2nd water source	Other	Crown	same as 1st water source. This could be a potential 2nd choice for drawing water.	N/A	West of power plant and slightly north of Plateau Subdivision.

### Nunaliin Ilauyun, Aviktuhimayuniitunullu Ikayuuhiarunguyun

Nunauyuq	Atia	Timiuyuq	Upluani Uqaqatigiyauungmata
Information is not available			

### Angiuttauvaktunik

#### Naunaiqlugu nunanga talvani havauhikhqaq ittuq

South Baffin

### Angiuttauvaktunik

Munariniqmut Ayuittaqtuq	Angirutinga Qanurittuq	Tadja Qanurittaakhaanik	Ublua Tuniyayuq/Uuktuqtuq	Umikvikhaa Ublua
Nunavut Imaligiyit Katimayit	May require a water license to draw water from a nearby natural water source. Nature of license is unknown at this time.	Not Yet Applied		

### Project transportation types

<b>Transportation Type</b>	<b>Qaffiuyut</b>	<b>Qanuq Atuqtauniarmangaa</b>	<b>Length of Use</b>
Land	0	Transport equipment through city to mobilize and demobilize. Crew will travel daily by pickup truck to plant site.	

**Project accomodation types**

Nunauyuq

## Ihuaqutivaluin Atuqtauyukhan

Hanalrutit atuqtaunahuat (ukuallu ikuutat, pampiutainnik, tingmitinik, akhaluutinik, hunaluuniit)

Hanalrutit Qanurittuq	Qaffiuyut	Aktikkulaanga – Qanurittullu	Qanuq Atuqtauniarmangaa
Excavator	1	Large	Civil work to gravel berm
Crane	1	20 meters	Hoisting steel into place
Water pump	1	15 m3/hr	Draw water for hydrostatic testing
Welding machine	2	2m3	Weld plate steel together

## Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturninnga

Qanurittuq urhuqyuaq hunavaluit aturninnga:	Urhuqyuaq Qanurittuq	Qaffiuyut qattaryut	Qattaryuk Aktikkulaanga	Atauttimut Qaffiuyut	Ilanga	Qanuq Atuqtauniarmangaa
Diesel	fuel	1	205	205	Liters	Run excavator, crane and pump

## Imaqmik Aturninnga

Ubluq qanuraaluk (m3)	Aturumayain imavaluin utiqtittagaani qanuq	Atulirumayain imavaluin utiqtittagani humi
299	Pump a total of 5700 m3 direct from natural ponds using a gas powered water pump. Continuously monitored by qualified personnel.	There are two natural ponds near the power plant which may be used to retrieve water for hydrostatic testing. One is down gradient south of the road to nowhere subdivision and one north of the plateau

## Iqqakuq

### Ikkakunik Munakgiyauyunik

Havauhikhaq Hulilukaarut	Qanurittuq Iqqakut	Ihumagiayuuq Qanuraaluktut Atuqtait	Qanuq Iqqakuurniarmangaa	Halummaqtirarnirutikhan piyutin
Information is not available				

## Avatiliriniqmut Ayurhautingit:

N/A

## **Additional Information**

### **SECTION A1: Project Info**

#### **SECTION A2: Allweather Road**

#### **SECTION A3: Winter Road**

### **SECTION B1: Project Info**

#### **SECTION B2: Exploration Activity**

#### **SECTION B3: Geosciences**

#### **SECTION B4: Drilling**

#### **SECTION B5: Stripping**

#### **SECTION B6: Underground Activity**

#### **SECTION B7: Waste Rock**

#### **SECTION B8: Stockpiles**

#### **SECTION B9: Mine Development**

#### **SECTION B10: Geology**

#### **SECTION B11: Mine**

#### **SECTION B12: Mill**

### **SECTION C1: Pits**

### **SECTION D1: Facility**

#### **SECTION D2: Facility Construction**

#### **SECTION D3: Facility Operation**

#### **SECTION D4: Vessel Use**

### **SECTION E1: Offshore Survey**

### **SECTION E2: Nearshore Survey**

#### **SECTION E3: Vessel Use**

### **SECTION F1: Site Cleanup**

## **SECTION G1: Well Authorization**

## **SECTION G2: Onland Exploration**

## **SECTION G3: Offshore Exploration**

## **SECTION G4: Rig**

## **SECTION H1: Vessel Use**

## **SECTION H2: Disposal At Sea**

## **SECTION I1: Municipal Development**

### **Qanurittuq Ittunik Avatinga: Avatingalluanga**

The project is located on an existing tank farm. The infrastructure consists of a 5.7 M litre steel tank within a lined gravel berm. The potential water sources are fed by annual snow melt and rain, are not significant in the surrounding watershed and are not connected to the watershed which feeds Lake Geraldine (city potable water source)

### **Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga**

The potential water sources are not known to contain fish or any other substantial wildlife.

### **Qanurittuq Ittunik Avatinga: Inungit-maniliurutingit Avatinga**

The existing tank farm holds the total fuel for the production of electricity for the city. The potential water sources do not substantially contribute to community social, sporting or recreational activities.

### **Naunaiyainiq ukuninnga Ayurhautingit unalu Piumayaat Ikikliyuumiutinahuarutit**

Possible spill risk will be mitigated by lined secondary containment berm. Contractor will have extensive spill response equipment on hand. Positive impacts include a better fuel handling capacity with fewer transfer operations. Potential water sources hold well beyond the volume required for testing purposes.

### **Tamatkiumayunik Ihuikgutivaktunik**

Over time extended fuel storage will save money and time and eventually affect future power costs.

## Impacts

### Ilitariyauniq Avatiliriniqmut Ayurhautingit

Havakvinga																								
Other	-	-	-	-	N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fuel and chemical storage	-	P	N	-	-	-	-	-	N	-	-	-	-	-	-	-	N	-	P	-	-	-	-	-
Aulapkaininnga																								
Fuel and chemical storage	-	P	P	-	-	-	-	-	N	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-
Piiqtauniq																								
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

(P = Nakuuyuq, N = Nakuungittut unalu mikhilimaittuq, M = Nakuungittut unalu mikhittaaqtuq, U = Naluyaayuq)