



## **Demande de la CNER faisant l'objet d'un examen préalable #125419**

### **Transmit Array Antenna farm**

**Type de demande :** New

**Type de projet:** Scientific Research

**Date de la demande :** 11/1/2018 1:42:53 PM

**Period of operation:** from 0001-01-01 to 0001-01-01

**Autorisations proposées:** from 0001-01-01 to 0001-01-01

**Promoteur du projet:** Ed Riseborough  
DRDC Ottawa Research Centre  
3701 Carling Avenue  
Ottawa Ontario K1A0Z4  
Canada  
Téléphone :: 613-998-2052, Télécopieur ::

## DÉTAILS

## Description non technique de la proposition de projet

Anglais: This project will build a transmit antenna array that will be driven by electronics that will be housed in 3 modified shipping containers, There will be a 750 KVA generator that will power the electronics. The installation phase will have up to 12 people on site for a period of 3 to 6 weeks. The operations phase will have 3 to 4 people on site for 2 week periods, up to 4 times per fiscal year.

Français: Ce projet permettra la construction d'un réseau d'antennes d'émission qui sera commandé par du matériel électronique hébergé dans quatre conteneurs d'expédition modifiés. Une génératrice de 750 kilowatts alimentera ce matériel. Lors de la phase d'installation, une équipe composée d'au plus cinq personnes sera sur place pendant dix semaines. Trois ou quatre personnes seront sur place pendant des périodes de deux semaines et jusqu'à quatre fois par exercice lors de la phase d'exploitation.

[illegible]

Inuinnaqtun: not required

## Personnel

Personnel on site: 12

Days on site: 70

Total Person days: 840

Operations Phase: from 2018-07-10 to 2020-03-31

Operations Phase: from 2020-04-01 to 2023-03-31

### Post-Closure Phase: from to

## Activités

Emplacement	Type d'activité	Statut des terres	Historique du site	Site à valeur archéologique ou paléontologique	Proximité des collectivités les plus proches et de toute zone protégée
One corner of antenna Array	Equipment installation	Crown	Site owned by ECCC. Have an agreement to set up a transmit array with electronics for testing. Partial set up was in the summer 2018. Larger installation next year.	Unknown	Unknown
Shelter location	Equipment installation	Crown	The shelter was installed in summer 2018. 3 more planned for next FY.	Unknown	Unknown
Generator Location	Equipment installation	Crown	Generator installed in the Fall 2017. Larger generator planned for installation next year (not purchased yet).	Unknown	Unknown

### Engagement de la collectivité et avantages pour la région

Collectivité	Nom	Organisme	Date de la prise de contact
Information is not available			

## Autorisations

Indiquez les zones dans lesquelles le projet est situé:

North Baffin

### Autorisations

Organisme de régulation	Description des autorisations	État actuel	Date de l'émission/de la demande	Date d'échéance
Environment and Climate Change Canada	Land Use Permit N2017N0017 between ECCC and INAC. ECCC is currently working on a LUP amendment to include this project.	Active	2017-07-04	2022-07-03

### Project transportation types

Transportation Type	Utilisation proposée	Length of Use
Land	Pickup truck to get to site. Larger truck/crane to put containers in place.	

### Project accomodation types

Autre,

## Utilisation de matériel

Équipement à utiliser (y compris les perceuses, les pompes, les aéronefs, les véhicules, etc.)

Type d'équipement	Quantité	Taille – Dimensions	Utilisation proposée
Generator	2	10'Lx4'Wx8'H	To power electronics, and HVAC
Electronics	4	20'Lx8'Wx8'H	Radio Equipment in Shelters

Décrivez l'utilisation du carburant et des marchandises dangereuses

Décrivez l'utilisation de carburant :	Type de carburant	Nombre de conteneurs	Capacité du conteneur	Quantité totale	Unités	Utilisation proposée
Diesel	fuel	1	1000	1000	Liters	200 KW Generator with built in fuel tank. (future 750 KW generator TBD)
R410A	hazardous	1	25	25	Lbs	for HVAC

Consommation d'eau

Quantité quotidienne (m3)	Méthodes de récupération de l'eau proposées	Emplacement de récupération de l'eau proposé
0		

# Déchets

## Gestion des déchets

Activités du projet	Type des déchets	Quantité prévue	Méthode d'élimination	Procédures de traitement supplémentaires
Information is not available				

## Répercussions environnementales :

Air pollution and noise pollution expected from the generator during operations phase. Operations will be only over a 2 week span up to 4 times a year. Levels to be determined as the generator needs to be purchased. The shipping containers will mounted on cribs with styrofoam sheet between the container and the ground to eliminate heat being dissipated into the permafrost.

# **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**

### **Description de l'environnement existant : Environnement physique**

The site is located beside an airport, no wetlands or watercourses in the region. The Study Area is located in the tundra, and the ground remains frozen year round (permafrost) with only the top few feet thawing in the summer to allow vegetation to grow (EC 2010). The surrounding area is comprised of gentle rolling hills; however, mountainous terrain is easily visible from the station. A few kilometres to the north, Blacktop Ridge has peaks of up to 825 m. The rock formations around Eureka are quite unique, and the area is known for its Rose rocks and calcite formations (EC 2010). Geological features of the area include glaciers, low mountains, and the Arctic Ocean. Soils consist of marine clays, overlain with fine sands. See attached EED.

### **Description de l'environnement existant : Environnement biologique**

### **Description de l'environnement existant : Environnement socio-économique**

### **Miscellaneous Project Information**

### **Identification des répercussions et mesures d'atténuation proposées**

See attached EED.

### **Répercussions cumulatives**



# Impacts

## Identification des répercussions environnementales

	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													
Equipment installation		-	-	N	-	-	-	-	-	-	-	-	-
Exploitation													
Equipment installation		-	-	N	-	-	-	-	-	-	M	M	-
Désaffectation													
-		-	-	-	-	-	-	-	-	-	-	-	-

(P = Positive, N = Négative et non gérable, M = Négative et gérable, U = Inconnue)

## Site du projet



## Liste des géométries de projet

1	point	One corner of antenna Array
2	point	One corner of antenna Array
3	point	One corner of antenna Array
4	point	One corner of antenna Array (8 by 8)
5	point	Shelter location
6	point	Generator Location