



## **NIRB Application for Screening #125804**

### **Sanirajak, Nunavut MET Tower**

**Application Type:** New

**Project Type:** Scientific Research

**Application Date:** 4/25/2023 9:38:20 AM

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

**Proposed Authorization:** from 0001-01-01 to 0001-01-01

**Project Proponent:** Heather Shilton  
Nunavut Nukkiksautiit Corporation  
P.O. Box 1228  
Iqaluit NU X0A0H0  
Canada  
Phone Number:: 8672224658, Fax Number::

## DETAILS

### Non-technical project proposal description

English: The proposed Sanirajak MET Tower Project (the Project) is led by Nunavut Nukkiqsautiit Corporation (NNC), a wholly owned subsidiary of Qikiqtaaluk Corporation (QC), the Regional Inuit Development Corporation for the Qikiqtani Region. NNC is a 100 percent Inuit owned clean energy developer established in 2018. The proposed Project is located approximately 6km away from the nearest community of Sanirajak and includes the installation of a temporary meteorological tower (MET tower), collecting wind data for a period of 18-24 months, periodic site visits for tower maintenance, and dismantling and removing of mast and all materials/equipment from the site at the end of the project duration. The MET tower is comprised of a 15cm diameter metal pole mast extending 34m high on a 2ft x 2ft base structure and will be supported by guy wires anchored about 20m from the base in four directions. The guy wires will be anchored to either permafrost or bedrock depending on the ground conditions. The MET tower is necessary to support several wind monitoring instruments. The data from the instruments will be collected via satellite iPack. Site personnel will be visiting the mast if/when maintenance is required. The tower and all supporting equipment will be completely dismantled at the end of the monitoring period, and everything will be removed from the site. The MET tower will be transported to Sanirajak by sealift. Access to the site is over the land by snowmobile in the winter and by ATV in the summer. The purpose of this project is to collect wind data to assess the potential for wind energy generation. There is no intrusive or extensive on-site research for this project. The method for collecting wind data will be through the instrumentation supported on the MET tower. The instruments will gather continuous data that will periodically generate and send reports via satellite. Due to the nonintrusive nature of this project, detailed mitigation plans are not required. The purpose of collecting wind data is to assess and validate the wind resource in Sanirajak for potential wind energy generation. Currently, at this initial phase, there are no long-term developments planned. Depending on the outcome of this initial phase, any future proposed developments will go through the NPC and NIRB proposed project application process as well as full community and stakeholder consultations. Alternative locations were presented in a community consultation on November 23rd, 2022, and it was amicable between all parties that the site selected was the more favorable and recommended selection. The NNC received a Support Letter from the Hamlet of Sanirajak and the Hunter and Trapper Association fully supporting the Project. The proposed start date for construction of the Project is August 1, 2023 and should take approximately 7 days to complete. The period of operation will run for approximately 18-24 months. The tower and its supporting equipment will be decommissioned at the end of this period and be completely dismantled and removed from the site.

French: Le projet proposé de tour météorologique de Sanirajak (le projet) est mené par la Nunavut Nukkiqsautiit Corporation (NNC), une filiale en propriété exclusive de Qikiqtaaluk Corporation (QC) et une entreprise de développement régional des Inuit pour la région de Qikiqtani. Établie en 2018, NNC est une entreprise de développement d'énergie propre détenue à 100 % par des Inuit. Le projet proposé est situé à environ 6 km de la communauté la plus proche de Sanirajak et comprend l'installation d'une tour météorologique temporaire (tour MET) permettant la collection de données relatives au vent pour une période de 18 à 24 mois. De plus, le projet proposé comprend des visites périodiques du site pour l'entretien de la tour, ainsi que le démantèlement et retrait du mât et de tous les matériaux/équipements du site à la fin de la durée du projet. La tour MET est composée d'un mât métallique de 15 cm de diamètre, s'élevant à une hauteur de 34 m et supporté à la base par une structure de deux pieds par deux pieds. Le mât sera soutenu par des câbles de haubanage ancrés à environ 20 m de la base dans quatre directions. Les haubans seront ancrés au pergélisol ou au substrat rocheux selon les conditions du sol. La tour MET est nécessaire pour supporter plusieurs appareillages de surveillance du vent. Les données des instruments seront collectées depuis le satellite iPack. Le personnel du site visitera le mât si/quand une maintenance est requise. À la fin de la période de surveillance, la tour MET ainsi que tous les équipements de support seront entièrement démantelés, et tout sera retiré du site. La tour MET sera transportée à Sanirajak par voie maritime. L'accès au site se fera par voie terrestre en motoneige durant l'hiver et en véhicule tout terrain durant l'été. L'objectif de ce projet est de recueillir des données de mesure des vents afin d'évaluer le potentiel de production d'énergie éolienne. Il n'y a pas de méthode de recherche intrusive ou de travaux de recherche étendus des lieux prévus pour ce projet. La collection des données sera possible grâce aux appareils de surveillance supportés par la tour MET. Les instruments recueilleront des données continues qui généreront des rapports lesquels seront communiqués périodiquement par satellite. En raison de la nature non intrusive de ce projet, des plans d'atténuation détaillés ne sont pas requis. Le but de la collecte de données relatives sur les vents est d'estimer et de valider les ressources éoliennes à Sanirajak pour la production potentielle d'énergie éolienne. Présentement, à cette phase préliminaire, aucun développement à long terme n'est prévu. Selon le résultat de cette phase préliminaire, tous développements futurs envisagés seront sujets au processus de demande de projet proposé de la Commission d'Aménagement du Nunavut (CAN) et Commission du Nunavut chargée de l'examen des répercussions (CNER), ainsi qu'à des consultations exhaustives avec la communauté et les parties prenantes. Le 23 novembre 2022, une sélection d'emplacements alternatifs a été présentée au cours d'une consultation communautaire. Les parties présentes ont consenti que le site retenu était fortement conseillé et le plus favorable parmi la sélection. Le NNC a reçu une lettre de soutien des résidents agglomérés autour de

[illegible]

### Post-Closure Phase: from to

## Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Proposed Sanirajak MET Tower Location	Scientific/International Polar Year Research	Municipal	n/a	n/a	Approximately 6km to the Hamlet of Sanirajak

## Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Hall Beach	Mayor Jaypetee Audlakiak	Hamlet of Sanirajak	2023-03-23
Hall Beach	Paul Nagmalik	Hunter and Trapper Association	2023-04-12
Hall Beach	Open House	Community Feast	2022-11-23
Hall Beach	Acting Mayor Stacey Kadlutsiak	Hamlet of Sanirajak	2021-10-14

## Authorizations

Indicate the areas in which the project is located:

South Baffin

### Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Hunters and Trappers Associations/Organizations	Letter of Support was received from the HTA	Active	2023-04-12	
Hamlets and Municipalities	Letter of Support was received from the Hamlet of Sanirajak	Active	2023-03-23	
Nunavut Research Institute	Physical/Natural Sciences Research Application	Applied, Decision Pending		
Other	NAV Canada Land Use Proposal. Decision made with no object to the project. File # 23-1450	Active	2023-05-05	
Transport Canada	Aeronautical Assessment Form for Obstruction Evaluation - File # 2023-271	Active	2023-05-03	

### Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Personnel in and out of Sanirajak	
Water	Project equipment on sealift to Sanirajak	
Land	Transportation between community and project site	

### Project accomodation types

Community

## Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
ATV	3	n/a	To access the site during installation and periodically during the year to maintain the MET tower
Drill	1	typical size	Installation tool to construct the MET tower
Winch	1	typical size	Installation tool to construct the MET tower
Generator	1	typical size	To provide power for electric drill
Battery	1	12V 108AH	To operate drill

## Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Gasoline	fuel	1	20	20	Gallons	To fuel ATV's and generator when necessary

## 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
Scientific/International Polar Year Research	Other, No waste generated	0	N/A	N/A

### Environmental Impacts:

There are no predicted long-term environmental impacts of the MET tower. The tower is not a permanent structure and will be removed after one year. There is no waste that will be generated as a result of this project. All materials will be removed from the site at the end of the study period.

# **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 of Existing Environment: Physical Environment**

**Description of Existing Environment: Biological Environment**

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

**Miscellaneous Project Information**

**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																									
Scientific/International Polar Year Research		-	-	-	-	-	-	-	-	-	-	-	M		M	-	-	-	-		M	P	-	-	-
Operation																									
Scientific/International Polar Year Research		-	-	-	-	-	-	-	-	-	-	-	-		M	-	-	-	-		-	P	-	-	-
Decommissioning																									
-		-	-	-	-	-	-	-	-	-	-	-	-			-	-	-	-		-	-	-	-	-

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

## Project Location



## List of Project Geometries

1	point	Proposed Sanirajak MET Tower Location
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