



NIRB Application for Screening #125614

Kivalliq Hydro-Fibre Link Baseline Research

Application Type: New

Project Type: Scientific Research

Application Date: 5/17/2021 12:40:03 PM

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

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

Project Proponent: Kono Tattuninee
Kivalliq Inuit Association
32-4 Sivulliq Ave. P.O. Box 340
Rankin Inlet NU X0C 0G0
Canada
Phone Number:: (867) 645-5725, Fax Number::

DETAILS

Non-technical project proposal description

English: Applicant Kivalliq Inuit Association 32-4 Sivulliq Ave. P.O. Box 340 Rankin Inlet, NU X0C 0G0 Details The Kivalliq Hydro-Fibre Link (KHFL) is a renewable energy and broadband internet infrastructure project led by the Kivalliq Inuit Association (KivIA) of Nunavut. The Project will connect communities of the Kivalliq region of Nunavut (Arviat, Baker Lake, Chesterfield Inlet, Rankin Inlet and Whale Cove) to the Manitoba electricity and fibre-optic grids. A number of proposed fieldwork activities are required to support ongoing project design, evaluation and development of the Kivalliq Hydro-Fibre Link (KHFL). These activities are focused on gathering information about the wildlife biology, vegetation, aquatics and geomorphology and permafrost conditions of the region. The results from these activities will enhance understanding of the current environment of the region and, ultimately, contribute baseline information to submissions that may be made to environmental regulatory agencies for licenses and permits. The Kivalliq Hydro-Fibre Link proposed development corridor follows a “speculative linear infrastructure corridor” identified in the Draft Nunavut Land Use Plan (NPC 2016). The proposed fieldwork activities will occur within this speculative linear infrastructure corridor during the summer, fall, winter, and late winter of 2021 and 2022 consistent with regulatory stipulations respecting wildlife migrations. Potential wildlife disturbances during ground activities and helicopter overflights will be reduced as much as possible. Where research activities require ground access field teams will be consolidated to minimize disturbance. Ground activities will be typically limited to groups of three people and contained within the proposed development corridor. Researchers will avoid known important wildlife locations (e.g., nests) and will travel with local Inuit Wildlife Monitors who will be responsible for spotting wildlife and taking action to avoid crew interactions with wildlife. Where overflights or aerial survey are contemplated, altitudes will be maintained to ensure animals are not dispersed, and any circling will be minimal at an altitude sufficient to not cause disturbance. Helicopter flights, installation of equipment, and aquatic habitat investigations will adhere to guidelines issued by the responsible regulatory authority to minimize effects.

French: N/A

[illegible]

Personnel

Personnel on site: 5

Days on site: 30

Total Person days: 150

Operations Phase: from 2021-04-23 to 2023-04-23

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
KHFL proposed development corridor	Baseline data	Inuit Owned Surface Lands	N/A	N/A	Arviat, Whale Cove, Rankin Inlet, Chesterfield Inlet, Baker Lake, McConnell River (Kuugaarjuk) Migratory Bird Sanctuary, Inuujarvik Territorial Park, and Iqalugaarjuup Nunanga Territorial Park.

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Arviat	Mayor Joe Savikataaq Jr.	Hamlet of Arviat	2020-07-16
Whale Cove	Mayor Percy Kabloona	Hamlet of Whale Cove	2020-07-16
Rankin Inlet	Mayor Harry Towtongie	Hamlet of Rankin Inlet	2020-07-16
Chesterfield Inlet	Mayor Bernie Aggark	Hamlet of Chesterfield	2020-07-16
Baker Lake	Mayor Richard Aksawnee	Hamlet of Baker Lake	2020-07-16
Arviat	Daniel Kablutsiak	Arviat Hunters and Trappers Organization	2020-07-28
Baker Lake	Richard Aksawnee	Baker Lake Hunters and Trappers Organization	2020-07-28
Chesterfield Inlet	Harry Aggark	Aqigiq Hunters and Trappers Organization	2020-07-28
Rankin Inlet	Harry Ittinuar	Kangiqliniq Hunters and Trappers Organization	2020-07-28
Whale Cove	Simon Enuapik	Issatik Hunters and Trappers Organization	2020-07-28
Rankin Inlet	Stanley Adjuk	Kivalliq Wildlife Board	2020-07-29

Authorizations

Indicate the areas in which the project is located:

Transboundary
Kivalliq

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Government of Nunavut, Department of Environment	Wildlife Research Permit	Not Yet Applied		
Fisheries and Oceans Canada	Fish for Scientific Purposes Permit	Not Yet Applied		
Nunavut Water Board	Approval to Use Water/Deposit Water Without a License	Not Yet Applied		
Government of Nunavut, Department of Culture, Language, Elders, and Youth	Archaeology and Paleontology Research Permit, Class I	Not Yet Applied		
Kivalliq Inuit Association	Exemption Certificate	Not Yet Applied		
Aboriginal Affairs and Northern Development Canada	Class B Land Use Permit	Not Yet Applied		
Nunavut Research Institute	Physical and natural sciences license & Social sciences research license	Not Yet Applied		

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	helicopter	
Land	snowmobile and ATV	

Project accommodation types

Community

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Autonomous Recording Units	25	22x17x8	Provide data on song and waterbird presence
Helicopter	1	4 passengers	Overflights of proposed development corridor and crew transport between research sites
Ground temperature sensors	10	2x120x2	Ground temperature sensors will be installed to understand active layer dynamics and sensitivity to climate change.
Reconyx Remote Camera	30	15X25X 10	Recording photos of wildlife
Backpack electrofisher	2	20x36x12	Fish community assessment
YSI 556 multi-meter	1	15x5x10	Assess water chemistry
Lamotte 2020e turbidity meter	1	15x5x10	Assess water chemistry
Backpack-portable permafrost drill	2	81x66x52	Assess soil and ground ice conditions

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Aviation fuel	fuel	28	205	5740	Liters	Overflight of proposed development corridor and crew transport between research sites

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
Baseline data	Combustible wastes	less than one kilogram	Packaging associated with sampling materials will be collected and disposed at municipal waste sites	none applicable

Environmental Impacts:

Potential for wildlife disturbance during ground activities and helicopter overflights. Where research activities require ground access field teams will be consolidated to minimize disturbance. Ground activities typically limited to groups of three people along proposed development corridor. Researchers will avoid known important wildlife locations (e.g., nests) and will travel with local Inuit Wildlife Monitors who will be responsible for spotting wildlife and taking action to avoid crew interactions with wildlife. Helicopter altitude will ensure that animals are not dispersed, and any circling will be minimal at an altitude sufficient to not cause disturbance. Helicopter flights, installation of equipment, and any aquatic habitat investigations will adhere to guidelines issued by the responsible regulatory authority to minimize effects. Any packaging associated with sampling materials will be collected and removed from site and disposed of in acceptable municipal waste disposal facilities.

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

N/A

Description of Existing Environment: Biological Environment

N/A

Description of Existing Environment: Socio-economic Environment

N/A

Miscellaneous Project Information

N/A

Identification of Impacts and Proposed Mitigation Measures

N/A

Cumulative Effects

N/A

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																										
Baseline data		-	-	M	-	-	-	-	-	-	-	-	M		M	M	M	M	M		-	P	-	-	-	-
Decommissioning																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

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

Project Location



List of Project Geometries

1	polygon	KHFL proposed development corridor
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