



NIRB Application for Screening #125719

Assessment of trace metals contamination in marine sediments near Kugluktuk

Application Type:	New
Project Type:	Scientific Research
Application Date:	6/24/2022 3:29:26 PM
Period of operation:	from 0001-01-01 to 0001-01-01
Proposed Authorization:	from 0001-01-01 to 0001-01-01
Project Proponent:	Camille Brice Université du Québec à Rimouski 300 Allée des Ursulines Rimouski Québec G5L 3A1 Canada Phone Number:: 5148062394, Fax Number::

DETAILS

Non-technical project proposal description

- English: The proposed project is part of a PhD project at UQAR, partly funded by the Northern Scientific Training Program of Polar Knowledge Canada. The PhD project is an assessment of trace metals contamination in marine sediment from the Canadian Arctic Archipelago (CAA), with a special interest for areas close to northern communities. It will provide baseline information on the CAA seafloor chemical composition and will help to determine the ecological risk associated to trace metals contamination. Data collected for the proposed project and resulting information will provide baseline geochemical data for coastal surface sediments from Kugluktuk, which will help to distinguish between natural concentrations of potentially toxic elements and anthropogenic contamination. In the future, these geochemical data can then help federal government agencies with assessing environmental risk and setting regulatory levels of pollutants in coastal areas near Kugluktuk. Rest of the description is an attached file.
- French: Le projet proposé fait partie d'un projet de doctorat qui s'intéresse à la présence de métaux traces dans les sédiments marins de l'Arctique canadien. Le volet présenté dans le cadre du projet proposé s'intéresse spécialement à la contamination à proximité de communautés.
- Inuktitut: The project is taking place in Kitikmeot, therefore the description is in English and Inuinnaqtun. Short description is provide in french.
- Inuinnaqtun: Tamna havakhautit havakhikpaktunik havakatigikpaktunik ilauyuk aah pHd Ilihakhimakpaktunik Iniktikhutik Havakhutik havakhautait UQAR ILIHAKVIKYUAKVIK ILIHAKHIMAKPAKTUNIK INIKHUUTIK IHILHAKVIK, ilangalu tuutkikhaktauvuktunik talvunakukhugit havkahautit Tunungani Havakvit Ihiviuktit Nalukhunginamik Naunaitkutakhunik Havagiblugit Hilamiutanit Iihaktithimakpaktunik Iihautinik Iihaktitaiyut Havakhautit talvani havakvit Tunungani Kauhimaayuvuktunik Pitkuhiktukpaktunik Kanatami. Tamna havakhautit pHd Ilihakhimakpaktunik Iniktikhutik Havakhutik havakhautait havakhimayunik tuutkikhaiblutik nalvukhiukhuugit huvikakgiakhaniklu imak pikariaaagiakhaniklu huluumailgunik hinaanit iihiviuktauvuktuk havagiblugit naunaitkutakhunik imaakaknit ataanitlu ikaalguinit taryuup naunaitkutakhunik havakpaktunik talvunga Kanatami Taryumi Tunungani Hilaryuami Hingnaanginiklu (CAA), pingit aah aliagibluugit havagiayuvuktunik nunaani talvani tunungani nunalingnilu. Pilugit havagilugit ikayutikhunik tuukihigiarutikhunik tahapkunani Taryumi Tunungani Hilaryuami Hingnaanginiklu CAA taryumi ataanginit huluumailgukakgiakhainik ikaakukariakhaniklu tahapkunani havagiayuyunik ikayutauhunguyunik nalautakgutauvuktunik hilaamiutanik hila haluumaikpagiakhanik havagiblugit naunaiyainikmun kayaknaktunik atadjuutauvuktunik nalvukhiunikmun ihiviukhugit huvilhukariakhainik haalumailgunit. Havakpaktunik naunaitkutakhunik titikgaktuvuktunik katitiktuvuktunik havagiayuvuktuukhunik naunaitkutakhuniklu tukhigiarutik havagiblugit tuutkikhaiyukhunik havakviuvuktukhunik hilaamiutanik humi kanukgilidjutivuktunik nunaani imakmiutaniklu naunaitkutakhunik hignaanginik taryumi kanginit taryuup imaa ataanginiklu taryuup nunaanit kangnitaungani kangnilguani Kugluktuk, ikayutaulutik ilitukgiayuvuktuukhunik ilidjuhinik hilaamiutanik nauvuktunik ilaani haluumaikpakmut imakaknit ilingukpaktuniklu ilaani nauyungnaikpaktunik nunaani haluumailgunit haluumailgunit ikaakunitlu. Kakugu ilaani, tapkuat havagiayuvuktunik hliaryuami ihiviukhuugit naunaitkutakhunik ikayutauhunguuyut tahapkunanilu atanguyauluaktunik atanit havakvit kavamait havakviuvuktunik pihimayunik tuutkikhaiblutik hilryaumi hilmamiutanik kayaknaktunik pivuktuniklu havagiblugit kakungukgaangut nalautakgutauvuktunik havagiblugit haluumaigunit haalumailguit taryumi hingnaanginik kungituangani Kanilgumi Kugluktumi. Rest of description is an attached file.

Personnel

Personnel on site: 2

Days on site: 3

Total Person days: 6

Operations Phase: from 2022-08-08 to 2022-08-11

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
New project geometry	Scientific/International Polar Year Research	Crown	Not relevant	Not relevant	Sampling marine sediment near Kugluktuk community. The sampling will take place along Kugluktuk coast.

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Kugluktuk	Kimberley Young	Hamlet of Kugluktuk	2022-04-28
Kugluktuk	Ralph Kownak	Inuit Heritage Trust	2022-05-02
Kugluktuk	Sylvie Leblanc	Government of Nunavut-Culture and Heritage	2022-05-09
Kugluktuk	NA	Hunters and Trappers Organization of Kugluktuk	2022-05-18

Authorizations

Indicate the areas in which the project is located:

Kitikmeot

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Nunavut Research Institute	Authorization for conducting physical and natural scientific research in Nunavut.	Applied, Decision Pending		

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Plane	

Project accomodation types

Community

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Van Veen grab sampler	1	35 x 20 x 20 cm	Collect surface sediment samples
Boat	1	18'	To reach sampling stations from Kugluktuk

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Diesel	fuel	1	1	1	Liters	Diesel for the boat, quantity depending on the boat

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:

There will be no resulting risks to the health, safety or livelihoods of Nunavut residents and there will be no impacts on the environment.

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

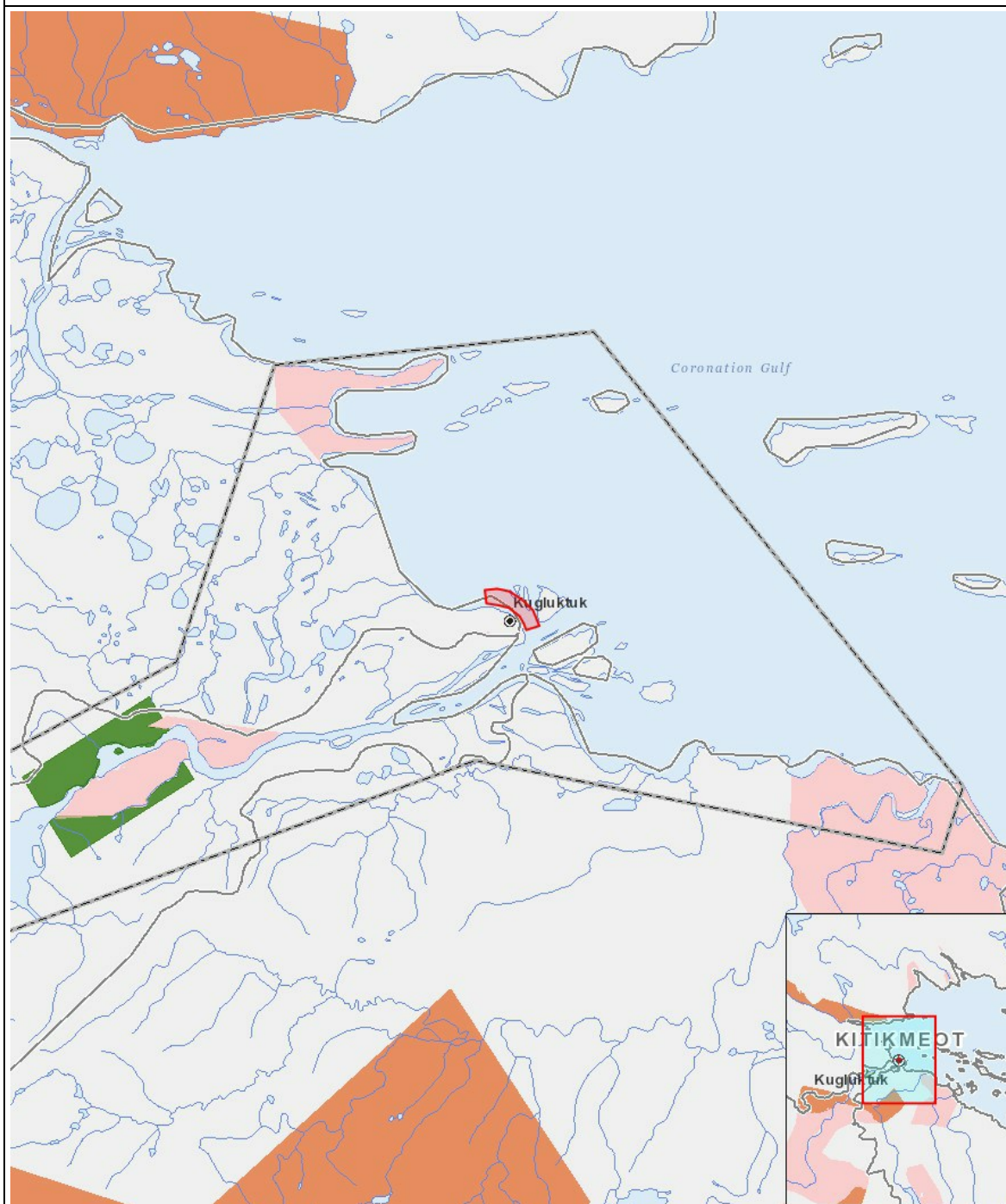
Impacts

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																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-
Operation																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-
Decommissioning																										
-		-	-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

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

Project Location



List of Project Geometries

1	polygon	New project geometry
---	---------	----------------------