



NIRB Application for Screening #125497

DRDC - Replacement of Buoys for International Cooperative Engagement Program for Polar Research (ICE-PPR)

Application Type: New

Project Type: Scientific Research

Application Date: 12/23/2019 12:49:53 PM

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

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

Project Proponent: Sarah Rahmer
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DETAILS

Non-technical project proposal description

English: As part of the International Arctic Buoy Program (IABP), placement of buoys on the Arctic ice cap is among the activities. A variety of buoys are placed by the IABP via various means, in an effort to monitor environmental conditions (wind, temperature, pressure, salinity, etc., depending on the buoy and location) and to track the movement of ice. ICE-PPR coordinates the airlift resources of the US, Canada, and Denmark, to place buoys on the ice or in leads, which is far from land in most cases. There are no land-based or maritime-based operations being contemplated at this time to deliver buoys to their destinations. Buoys will only be delivered by air. A C-130 aircraft operating out of Resolute, as arranged by the RCAF or other air force through established military protocols, will be the primary air operation. Buoys will be dropped in the far north, north of Ellesmere Island. Should it be required, any remaining buoys which were not dropped by the C-130, may be dropped by CC-138 Twin Otter. At this point in time, buoys replacement activity is being only contemplated for only three ice tracker buoys intended to be placed on ice locations following this year's operation (Op NA-NU 20), in March of 2020.

French: Not applicable

[illegible]

Inuinnaqtun: Not applicable

Personnel

Personnel on site: 0

Days on site: 0

Total Person days: 0

Operations Phase: from 2020-02-01 to 2025-06-30

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
USIABP IT #2	Researching	Marine	nil	nil	Approximately 75km west of Quttinirpaaq National Park 645 km north of Grise Fiord.
USIABP IT #3	Researching	Marine	nil	nil	Approximately 75km west of Quttinirpaaq National Park 645 km north of Grise Fiord.
USIABP IT#1	Researching	Marine	nil	nil	Approximately 400 km west of Quttinirpaaq National Park 580 km north of Grise Fiord.

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Information is not available			

Authorizations

Indicate the areas in which the project is located:

Transboundary

North Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Information is not available				

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	C130 Aircraft	

Project accomodation types

Other,

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Aircraft	1	C-130	In order to drop the buoys on the correct ice island/location
Buoyy	3	30 cm by 45 cm in size and less than 5 kgs in weight	to monitor environmental conditions (wind, temperature, pressure, salinity, etc, depending on the buoy and location) and to track the movement of ice.

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Information is not available						

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:

nil - there is no history of environmental impacts with previous buoy drop activities and none are predicted with the current proposed buoy drops.

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

sea-ice, uninhabited

Description of Existing Environment: Biological Environment

nil

Description of Existing Environment: Socio-economic Environment

nil

Miscellaneous Project Information

Identification of Impacts and Proposed Mitigation Measures

nil

Cumulative Effects

nil

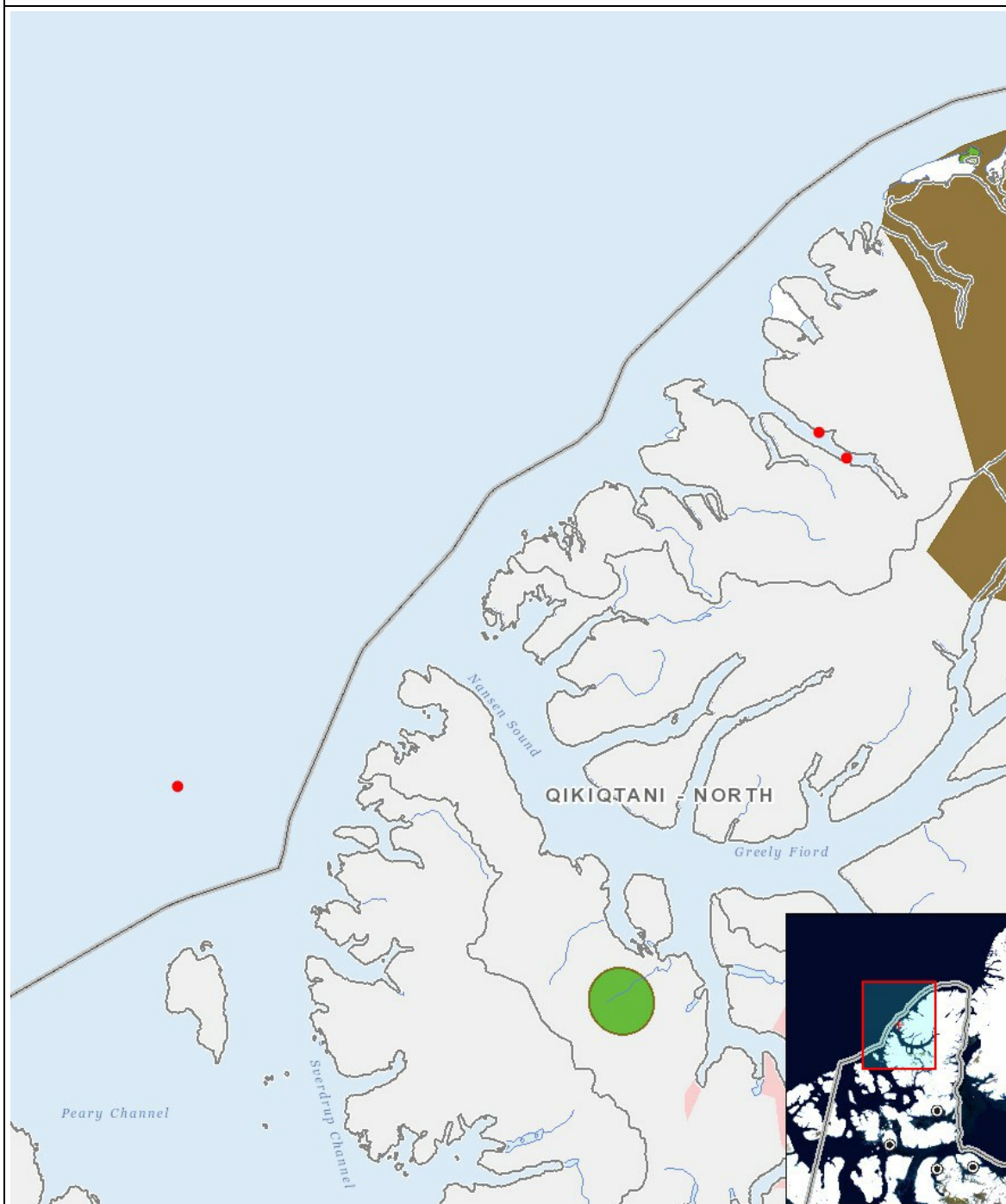
Impacts

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

Project Location



List of Project Geometries

1	point	USIABP IT#1
2	point	USIABP IT #2
3	point	USIABP IT #3