



NIRB Application for Screening #125473

Fisheries and Oceans Canada - Small Craft Harbour - Four Harbour Feasibility Study Field Program

Application Type: New

Project Type: Scientific Research

Application Date: 6/4/2019 7:18:57 PM

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

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

Project Proponent: Eleanor McEwan
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Canada
Phone Number:: 204-984-1102, Fax Number::

Operations Phase: from 2019-07-04 to 2019-08-15

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Resolute Bay	Baseline data	Inuit Owned Surface Lands	engagement with communities for harbour design is underway	pending field program	marine environment fronting community
Grise Fiord	Baseline data	Municipal	engagement with communities for harbour design is underway	pending field program	marine environment fronting community
Clyde River	Baseline data	Municipal	engagement with communities for harbour design is underway	pending field program	within
Arctic Bay	Baseline data	Municipal	engagement with communities for harbour design is underway	pending field program	marine environment fronting community

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Clyde River	James Arreak (SAO) Mayor and Council members	SAO - Hamlet	2019-05-24
Clyde River	Gary Aipellee (HTO manager) and HTO board members	Nangmautaq HTO	2019-05-24
Grise Fiord	Marty Kulukuqtuq(SAO), Mayor and Council members	Hamlet	2019-05-29
Grise Fiord	Amon Akeeagok (HTO manager) and HTO Board members	Iviq HTO	2019-05-29
Arctic Bay	Deborah Johnson (SAO), Mayor and Council members	Hamlet	2019-06-05
Arctic Bay	Jennifer Pauloosie (HTA manager), HTA board members	Ikajutit HTA	2019-06-04
Resolute Bay	Nancy Amarualik (HTA Manager), HTA Board members	Resolute Bay HTA	2019-06-02
Resolute Bay	Kimberly Young (SAO), Mayor, Council members and EDO	Hamlet	2019-06-03

Authorizations

Indicate the areas in which the project is located:

North Baffin

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Fisheries and Oceans Canada	License to Fish for Scientific Purposes (infaunal sediment collection, intertidal amphipods)	Applied, Decision Pending		
Nunavut Research Institute	Research Permit. Separate for each location	Applied, Decision Pending		
Government of Nunavut, Department of Environment	Wildlife Permit	Applied, Decision Pending		
Government of Nunavut, Department of Culture, Language, Elders, and Youth	Class 2 Nunavut Territory Archaeologist Permit. Arctic Bay (2019-51A)	Active	2019-06-05	2019-12-31
Government of Nunavut, Department of Culture, Language, Elders, and Youth	Class 2 Nunavut Territory Archaeologist Permit. Clyde River (2019-54A)	Active	2019-06-05	2019-12-31
Government of Nunavut, Department of Culture, Language, Elders, and Youth	Class 2 Nunavut Territory Archaeologist Permit. Grise Fiord (2019-52A)	Active	2019-06-05	2019-12-31
Government of Nunavut, Department of Culture, Language, Elders, and Youth	Class 2 Nunavut Territory Archaeologist Permit. Resolute Bay (2019-53A)	Active	2019-06-05	2019-12-31

Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Charter flight from Vancouver to each of the communities. Departure from Nunavut from last community will occur on commercial flight	
Water	Field work will require access to the marine environment (boats). Local support has been engaged for vessels and personnels in each community	
Land	Field work will require access to the terrestrial environment. Local support has been engaged for trucks/ATVs and personnels in each community	

Project accomodation types

Community

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
remote operated vehicle	1	2 ft x 2ft x 1.5 ft	underwater video survey
generator	2	1.5 ft x 1.5 x 1.5 ft	power supply for marine subtidal survey and geophysics survey
iPad	3	12 inches x 6 inches	GPS and photographs for all surveys
depth sounder	1	1 ft x 1ft x 8 inches	depth record for conducting subtidal habitat survey
CTD	1	3ft x 1ft x 1ft	conductivity, temperature and salinity during water quality survey
Niksin sampler	1	1.5 ft x 6 inch diameter	collection device to get water from depth during water quality survey
petit ponar	1	1ft x 1ft x 8 inches	collection of sediment from seabed during sediment quality survey
binoculars and spotting scope	2	6 inches x 4 inches x 3 inches	observation tools during wildlife and terrestrial survey
drogue	1	2.5 ft x 2.5 ft	floatation buoy with a GPS to track its position. Purpose to measure currents for possible modelling work
geotechnical hammer	1	8 inches x 4 inches	used to collect small quantities of rock during geotechnical survey
seismograph, hydrophone and cable	6	3ft x 3 ft x 2ft	equipment to conduct the geophysics survey

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Gasoline	fuel	2	20	40	Liters	fuel for generators, ATVs, trucks
formaldehyde	hazardous	1	5	5	Liters	preservative for infaunal sediment samples. to be diluted to be formalin

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	Non-Combustible wastes	1 garbage bag	waste will be packed out and disposed at land fill facility in Iqaluit before departing from Nunavut	see details above
Baseline data	Sewage (human waste)	NA	Group is small (6 people) and will be staying in accommodation that is within the community	not relevant

Environmental Impacts:

There are no effects anticipated as the program is a small field study to determine baseline conditions for each of the communities should the proposed small craft harbours proceed to detailed design and permitting.

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

the purpose of the field study is to collect baseline data which will be combined with traditional knowledge studies being conducted in October 2019. A baseline report will be produced to outline conditions for each community.

Description of Existing Environment: Biological Environment

the purpose of the field study is to collect baseline data which will be combined with traditional knowledge studies being conducted in October 2019. A baseline report will be produced to outline conditions for each community.

Description of Existing Environment: Socio-economic Environment

the purpose of the field study is to collect baseline data which will be combined with traditional knowledge studies being conducted in October 2019. A baseline report will be produced to outline conditions for each community.

Miscellaneous Project Information

not relevant

Identification of Impacts and Proposed Mitigation Measures

None expected. During the geophysics study, the vessel will cease operations when narwal are observed in close proximity (less than 200 m).

Cumulative Effects

None anticipated

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	Arctic Bay
2	point	Clyde River
3	point	Grise Fiord
4	point	Resolute Bay