



## **NIRB Application for Screening #125857 Chesterfield Inlet Sealift Facility Improvements Project, NU**

**Application Type:** New

**Project Type:** Scientific Research

**Application Date:** 9/19/2023 12:32:17 PM

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

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

**Project Proponent:** Richard Hoos  
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Vancouver British Columbia V6C 1N5  
Canada  
Phone Number:: 604 813 4952, Fax Number::



Operations Phase: from 2023-09-29 to 2023-10-29

Operations Phase: from 2024-07-14 to 2050-09-29

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
General_Sealift_Laydown_Expansion_Area	Sampling sites	Marine	the sampling area is located adjacent to the existing community sealift laydown area	No archaeological material is expected to be present in the adjacent beach area	the project area is located immediately adjacent to the existing community
ESRI shapefiles	Sampling sites	Marine	sampling sites are located in the intertidal zone immediately adjacent to the existing sealift laydown area	No known archaeological sites are located in the marine area	approximately 200 m from the nearest community infrastructure

## Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Chesterfield Inlet	Mr. John Ivey	SAO of Chesterfield Inlet	2023-03-01
Chesterfield Inlet	Mayor Tony Amauyak	Mayor of Chesterfield Inlet	2023-03-01

# Authorizations

Indicate the areas in which the project is located:

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Fisheries and Oceans Canada	Letter of Advice	Active		
Government of Nunavut, Nunavut Research Institute	Scientific Research Licence	Active		

## Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Tetra Tech to travel to site via commercial air services	

## Project accomodation types

Community

# Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Community Backhoe	1	89x27x45 inches	to excavate and backfill 6 shallow holes in the beach at low tide

## 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	50	50	Liters	diesel fuel used to operate the community backhoe which will be used to excavate 5-10 holes for geotechnical investigation and sampling
Diesel	fuel	1	50	50	Liters	fuel for backhoe
No hazardous chemicals	hazardous	0	0	0	Liters	Not applicable

## Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0	No water will be used. the geotechnical sampling of the test pits will take place in the dry at low tide	Not applicable

# Waste

## Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Sampling sites	Other, No wastes will be generated. backfilled material will be returned to test pit as soon as geotechnical sampling has been completed	0	Not applicable, not required	Not applicable

### Environmental Impacts:

No environmental impacts are anticipated to occur as a result of the proposed geotechnical test pit sampling program. the test pits will be excavated in the dry at low tide and will be backfilled as soon as sampling has been completed at each test pit.

# **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**

Not Applicable at this time. the proposed Sealift laydown area expansion project is subject to future government funding. The Community is applying for Federal funding to through the Oceans Protection Plan Safety Equipment and Basic Marine Infrastructure Initiative to advance this project.

## **SECTION D2: Facility Construction**

Tetra Tech anticipates undertaking the analysis and design of the project during 2023, with the tendering and construction anticipated during the spring and summer of 2024 (pending receipt of regulatory approvals).

## **SECTION D3: Facility Operation**

Once constructed the Sealift laydown area expansion project is anticipated to operated for the foreseeable future

## **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**

Proposed enhancements to the barge ramp will improve vessel operations and safety in the nearshore area

## **SECTION H2: Disposal At Sea**

No disposal at sea is required for this project

## **SECTION I1: Municipal Development**

### **Description of Existing Environment: Physical Environment**

Chesterfield Inlet's climate is noteworthy for its windiness, since the inlet is aligned with prevailing winds from the northwest, which are remarkably strong in winter (mean velocity 8.7 m/s, reaching 36 m/s) and constant, blowing on average 20% of the time. The mean annual temperature is approximately -11°C, with a summer mean of 4.5°C and a winter mean of -26.5°C. The mean annual precipitation ranges between 200-300 mm.

### **Description of Existing Environment: Biological Environment**

The proposed geotechnical program will take place in the upland foreshore and low tide areas of the proposed sealift laydown expansion area. The intertidal zone in this area is subject to natural seasonal ground ice and ice scouring activities, which result in a low level of macro flora and fauna productivity in this area. The Western Hudson Bay is an important Arctic Char (*Salvelinus alpinus*) migration corridor and marine feeding region, and a Beluga Whale (*Delphinapterus leucas*) aggregation area

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

The Inuit name for Chesterfield Inlet is Igluligaarjuk – "place with few houses." For thousands of years, the Thule ancestors of modern Inuit lived around Chesterfield Inlet. Over time, they established large settlements of sod houses, one of which still stands just outside Chesterfield Inlet today. From the mid 1800s to the beginning of this century, whalers visited the area regularly and often overwintered here. They counted on local Inuit to hunt for them and to man their whale boats. Today, the Hamlet of Chesterfield Inlet is a predominantly Inuit speaking Hamlet where approximately 93% (2006 Census of Population - Statistics Canada), of the population is Inuit. Only seven (7%) percent of the population claim English as

their mother tongue.

### **Miscellaneous Project Information**

### **Identification of Impacts and Proposed Mitigation Measures**

No environmental impacts are anticipated to occur as a result of this short term and immediately reversible project.

### **Cumulative Effects**

No environmental impacts are anticipated to occur as a result of this short term and immediately reversible project.

# 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	
<b>Construction</b>																																																		
Sampling sites		M	M	M	-	M	-	-	-	-	-	-	-	-	-	M	-	-	-	-	-	-	-	M												M	P	P	P	P										
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<b>Decommissioning</b>																																																		
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(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

## Project Location



## List of Project Geometries

1	polygon	General_Sealift_Laydown_Expansion_Area
2	polygon	General_Sealift_Laydown_Expansion_Area
3	polygon	General_Sealift_Laydown_Expansion_Area
4	polygon	ESRI Shapefile
5	polygon	ESRI Shapefile
6	polygon	ESRI shapefiles
7	point	Point 1 - Latitude: 63.34035 Longitude: 90.697982
8	point	Point 2 - Latitude: 63.3403 Longitude: 90.694888
9	point	Point 3 - Latitude: 63.339538 Longitude: 90.694949
10	point	Point 4 - Latitude: 463.339588 Longitude: 90.698043

11 point complete