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 Tetra Tech Canada Inc. 1000, 885 Dunsmuir Street Vancouver British Columbia V6C 1NS Canada Phone Number:: 604 813 4952, Fax Number::

DETAILS

Non-technical project proposal description

English: Tetra Tech has been retained by the community of Chesterfield Inlet, NU, to conduct a geotechnical investigation of the intertidal beach area proposed for the future development of an expanded sea lift laydown area for the community. The Subsurface geotechnical information will be a required input to the design of the proposed new sealift laydown expansion program. Tetra Tech will conduct a field and laboratory program consisting of: Subsurface investigations (4 to 6 test pits)will be completed at low tide at the existing sealift ramp and proposed expanded laydown area to assess the subsurface conditions and collect representative samples of marine sediments for laboratory testing. The Community will provide the equipment and operator (i.e., backhoe) to complete the test pit program. Visual assessment of the in-situ materials. Will be conducted and Laboratory testing of soil samples, including classification and grain size distribution. will be undertaken.Project TimelineThe proposed Geotechnical program is expected to be conducted during the period September 30 to October 30, 2023. If NIRB Screening has not be completed, the sampling program will be delayed until July 2024

French: Tetra Tech a été retenu par la communauté de Chesterfield Inlet, au Nunavut, pour mener une étude géotechnique de la zone de plage intertidale proposée pour le développement futur d'une zone de dépôt de transport maritime élargie pour la communauté. Les informations géotechniques souterraines seront un apport nécessaire à la conception du nouveau programme d'expansion du dépôt de transport maritime proposé. Tetra Tech mènera un programme sur le terrain et en laboratoire comprenant les éléments suivants : Des études souterraines (4 à 6 fosses d'essai) seront réalisées à marée basse à la rampe de transport maritime existante et à la zone de dépôt élargie proposée pour évaluer les conditions souterraines et recueillir des échantillons représentatifs de sédiments marins pour tests en laboratoire. La Communauté fournira l'équipement et l'opérateur (c'est-à-dire une pelle rétrocaveuse) pour mener à bien le programme de fosses d'essai. Évaluation visuelle des matériaux in situ. Seront effectués des tests en laboratoire d'échantillons de sol, y compris la classification et la distribution granulométrique. sera entrepris.Calendrier du projetLe programme géotechnique proposé devrait être mené entre le 30 septembre et le 30 octobre 2023. Si l'examen préalable du CNER n'est pas terminé, le programme d'échantillonnage sera retardé jusqu'en juillet 2024.

Inuktitut: Inuktitut Translation to be provided ASAP

Personnel

Personnel on site: 3

Days on site: 5

Total Person days: 15

Operations Phase: from 2023-09-30 to 2023-10-30

Operations Phase: from 2024-07-15 to 2050-09-30

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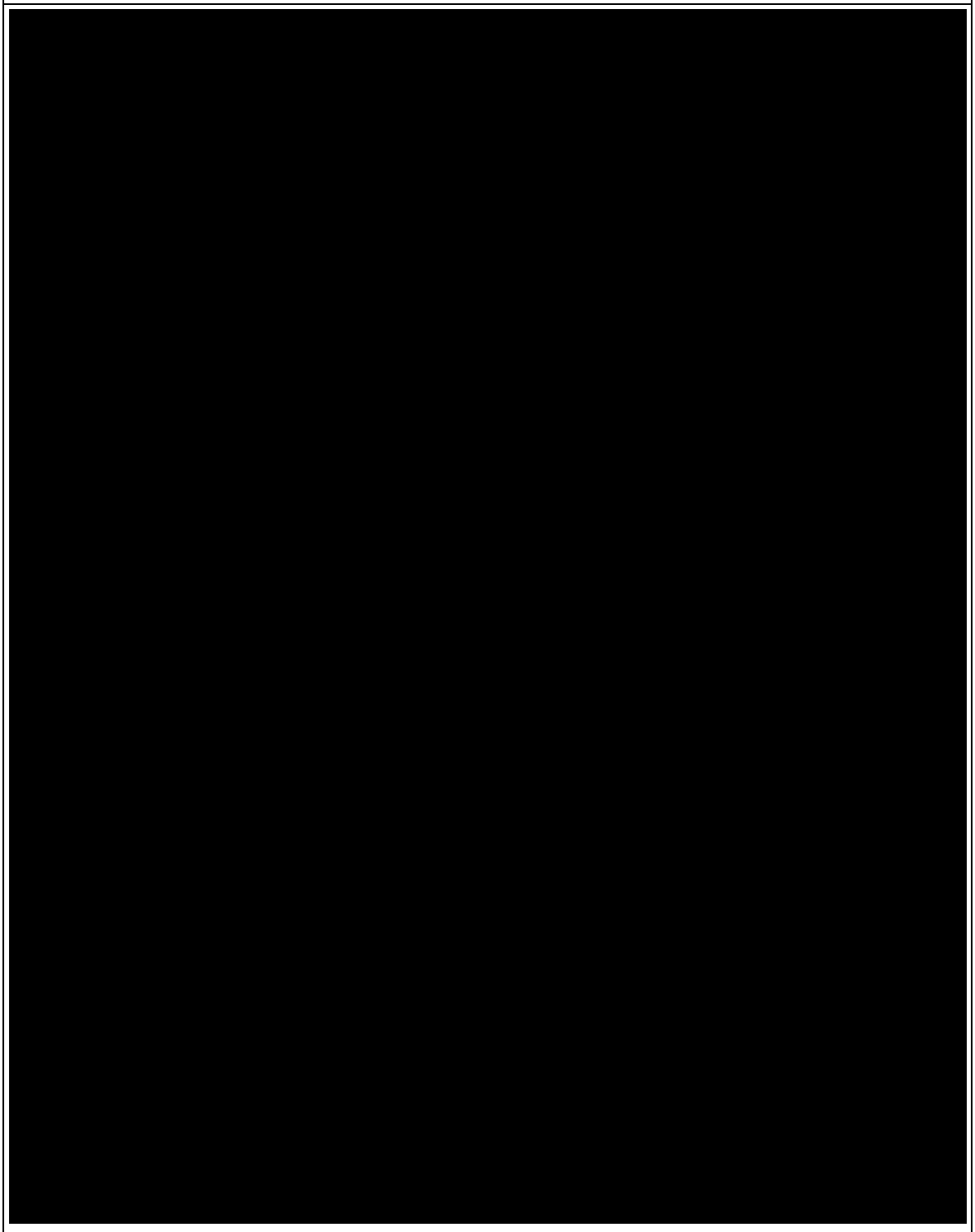
(P = Positive, N = Negative and non-mitigatable, M = Negative and mitigatable, U = Unknown)

Project Location



List of Project Geometries

1	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: 63.339538Longitude: 90.694949
10	point	Point 4 - Latitude: 463.339588 Longitude: 90.698043

11	point	complete