



NIRB Application for Screening #125971

An Updated View of the Oceanographic Conditions in the northern Canadian Arctic.

Application Type: New

Project Type: Scientific Research

Application Date: 5/30/2024 2:25:19 PM

Period of operation: from 2024-07-31 to 2025-08-24

Project Proponent: David Babb
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DETAILS

Non-technical project proposal description

English: Uploaded.

French: Not applicable - this project is taking place in Northern Baffin.

Inuktitut: Uploaded.

Inuinnaqtun: Not applicable - this project is taking place in Northern Baffin.

Personnel

Personnel on site: 4

Days on site: 40

Total Person days: 160

Operations Phase: from 2024-07-31 to 2025-08-24

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Nansen Sound, Eureka Sound, Greely Fiord and D'berville Fiord.	Scientific/International Polar Year Research	Marine	N/A	NA - working in the marine environment.	Grise Fiord and Resolute are the nearest communities, but are several hundred kilometres away.

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Grise Fiord	Jarloo	N/A	2024-04-15
Grise Fiord	Terry Noah	N/A	2024-04-15

Authorizations

Indicate the areas in which the project is located:

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Nunavut Research Institute	We have submitted our application for the physical/natural sciences research license.	Applied, Decision Pending		
Nunavut Water Board	We are currently attempting to contact the NWB to apply for an exemption, but their website is not working and they have yet to answer our emails. We will keep trying.	Not Yet Applied		

Project transportation types

Transportation Type	Proposed Use	Length of Use
Water	Canadian Coast Guard vessel, snowmobiles and helicopters.	

Project accomodation types

Other,

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Snowmobiles	4	200 x 100 x 80 cm	Access to sampling sites around the study area during winter and spring field programs on the landfast ice.
Coast Guard Ice Breaker	1	Large	We plan to work from the CCGS Des Groseilliers during its annual re-supply to Eureka. We are not expanding the travel of the ship but rather operating during its planned voyage.
Helicopter	1	Large	Access to sampling sites during spring, particularly near the glacier termini. This will be coordinated with PCSP.
Ice Augers	1	100 x 50 x 50 cm	Ice Augers will be used during winter and spring to both sample the ice and sample the underlying ocean. WE use ION electric augers to avoid the use of gasoline.

Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Aviation fuel	fuel	4	200	800	Liters	Use for fuelling helicopters during the spring program. Will be arranged with PCSP.
Gasoline	fuel	5	200	1000	Liters	Use for fuelling snowmobiles during the winter and spring programs.

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0	A small volume of water samples will be collected by Nissan sampling bottles during winter and spring programs.	A few sites across the study area.

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Scientific/International Polar Year Research	Combustible wastes	<1 m3	All waste will be discarded following the guidance of the Canadian Coast Guard and Eureka Weather Station. This includes combusting, transporting back south and human waste.	N/A

Environmental Impacts:

This project will lead to very minimal environmental impacts. We are operating onboard the CCGS Des Groseilliers during summer and from Eureka during winter/spring and will follow their lead on disposing of waste. Really the only risk stems from refuelling snowmobiles, but care is taken during this procedure and an appropriate spill kit will be readily available should a small amount of fuel spill.

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																									
Scientific/International Polar Year Research		P	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	
Decommissioning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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