



## **NIRB Application for Screening #125872 Pioneer High Arctic Bundle (HAB)Project**

**Application Type:** New

**Project Type:** Site Cleanup/Remediation

**Application Date:** 1/16/2024 12:29:39 AM

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

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

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## Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
coordinates of the Centre of Playfair Point	Site Cleanup/Remediation	Crown	Playfair point site is located about 160 km southeast of Resolute Bay. It was used from 1989 to 1995 to support caribou research at the CWS Walker River Camp on the east side of Bathurst Island. Wastes on the site are 3 drums with organic liquids. The liquids will be disposed by transferring it into sturdy containers and removing it off-site for final disposal. The 3 drums after emptying the content and venting, will be disposed by removing and transporting them to Resolute Bay and South.	Five (5) archaeological sites were identified near the 7 Project sites. At the Project locations, a total of eight archaeological sites were recorded, all at Pioneer Island. No archaeological sites were identified at Playfair Point, Stupart Island or Skybattle Bay.	Playfair point site is located about 160 km southeast of the nearest community of Resolute Bay
coordinates of the Centre of Pioneer Island	Site Cleanup/Remediation	Crown	Pioneer Island site is located about 250 km north-northwest of Resolute Bay. There is not sufficient information for previous uses but Pioneer Island would have been used as a historical camp and resort sites and/or resort facilities. The	Five (5) archaeological sites were identified near the 7 Project sites. At the Project locations, a total of eight archaeological sites were recorded, all at Pioneer Island.	The nearest community to Pioneer Island is Resolute Bay. Pioneer is located about 250 km north-northwest of Resolute Bay.

			wastes on the Pioneer site consists of drums, metal debris and clean wood. Clean wood and combustible wastes will be burnt and remains transported for disposal offsite. Metal and non-combustible wastes and drums will be transported and disposed off-site		
coordinates of the Centre of Skybattle Bay	Site Cleanup/Remediation	Crown	Skybattle Bay site is located on the southwest portion of Lougheed Island, about 410 km northwest of Resolute Bay. It is a former Panarctic Oils Ltd. site, where explorations for oil and gas reserves were carried out. There are 3 caches of over 100 drums (mostly empty) and scattered metal and wood debris. Clean and combustible wastes shall be incinerated, drums and non-combustibles shall be shipped offsite, contaminated soils shall be treated as described in the Waste tab.	Five (5) archaeological sites were identified near the 7 Project sites. At the Project locations, a total of eight archaeological sites were recorded, all at Pioneer Island. No archaeological sites were identified at Playfair Point, Stupart Island or Skybattle Bay.	The nearest community to Skybattle Bay is Resolute Bay. Skybattle Bay site is located at about 410 km northwest of Resolute Bay.
Coordinates of the Centre of Cape Ahnighito Site	Site Cleanup/Remediation	Crown	Cape Ahnighito is located about 480 km northwest of	Five (5) archaeological sites were identified near the	The nearest commjnity to Cape Ahnighito is Resolute. The

			<p>Resolute Bay at approximately 77° 43' 43.53" N latitude and 106° 03' 59.92" W longitude. Cape Ahnighito is a fuel cache site on the northern tip of Lougheed Island. According to the Phase I ESA report, the site was used as a supply and staging area by Panarctic Oils Ltd. to support their exploration to prove oil and gas reserves in the Canadian arctic islands.</p>	<p>7 Project sites. At the Project locations, a total of eight archaeological sites were recorded, all at Pioneer Island. No archaeological sites were identified at Playfair Point, Stupart Island, Skybattle Bay, Cape Ahnighito, Cape Isachsen, and Kristoffer Bay.</p>	<p>site is 480km northwest of the Resolute Bay.</p>
<p>coordinates of the Centre of Stupart Island</p>	<p>Site Cleanup/Remediation</p>	<p>Crown</p>	<p>Stupart is located about 400 km northwest of Resolute Bay. It consists of the remains of an Arctic research camp, including two old tent platforms, fuel drums piled in caches and scattered around the site, and debris piles. Clean and combustible wastes shall be incinerated, drums and non-combustibles shall be shipped offsite, contaminated soils shall be treated as described in the Waste tab.</p>	<p>Five (5) archaeological sites were identified near the 7 Project sites. At the Project locations, a total of eight archaeological sites were recorded, all at Pioneer Island. No archaeological sites were identified at Playfair Point, Stupart Island, Skybattle Bay, Cape Ahnighito, Cape Isachsen, and Kristoffer Bay.</p>	<p>The nearest community to Stupart Island is Resolute Bay. Stupart is located about 400 km northwest of Resolute Bay.</p>
<p>Coordinates of the Centre of Cape Isachsen Site</p>	<p>Site Cleanup/Remediation</p>	<p>Crown</p>	<p>Cape Isachsen is located at about 570 km northwest of Resolute Bay. It is a former</p>	<p>Five (5) archaeological sites were identified near the 7 Project sites. At the Project</p>	<p>The nearest community to Cape Isachsen is Resolute Bay. Cape Isachsen is located at</p>

			<p>Panarctic Oils Ltd. exploratory site. The site consists of a former exploration well, an airstrip, a suspected former camp area, at least two suspected sumps, at least three disturbed areas and a minor amount of partially buried metal debris. Clean and combustible wastes shall be incinerated, drums and non-combustibles shall be shipped offsite, contaminated soils shall be treated as described in the Waste tab.</p>	<p>locations, a total of eight archaeological sites were recorded, all at Pioneer Island. No archaeological sites were identified at Playfair Point, Stupart Island, Skybattle Bay, Cape Ahnighito, Cape Isachsen, and Kristoffer Bay.</p>	<p>about 570 km northwest of Resolute Bay.</p>
<p>Coordinates of the Centre of Kristofer Bay</p>	<p>Site Cleanup/Remediation</p>	<p>Crown</p>	<p>Kristoffer Bay site is located about 420 km west-northwest of Resolute Bay. It is a former Panarctic Oils Ltd. exploratory site. The site currently consists of the suspended exploration well, four abandoned test holes, trails, minor debris, a suspected sump area and disturbed ground. Clean and combustible wastes shall be incinerated, drums and non-combustibles shall be shipped offsite, contaminated soils shall be treated as</p>	<p>Five (5) archaeological sites were identified near the 7 Project sites. At the Project locations, a total of eight archaeological sites were recorded, all at Pioneer Island. No archaeological sites were identified at Playfair Point, Stupart Island, Skybattle Bay, Cape Ahnighito, Cape Isachsen, and Kristoffer Bay.</p>	<p>The nearest community to Kristofer Bay is Resolute Bay. Kristoffer Bay site is located about 420 km west-northwest of Resolute Bay.</p>

			described in the Waste tab.		
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**Community Involvement & Regional Benefits**

<b>Community</b>	<b>Name</b>	<b>Organization</b>	<b>Date Contacted</b>
Resolute Bay	Community Members of Resolute Bay	Community Members of Resolute Bay	2023-01-11

# Authorizations

Indicate the areas in which the project is located:

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Other	Nunavut Planning Commission Determination Check	Active	2023-12-12	
Aboriginal Affairs and Northern Development Canada	Land Use Permit	Not Yet Applied		
Nunavut Water Board	Water Use Licence Exemption	Not Yet Applied		

## Project transportation types

Transportation Type	Proposed Use	Length of Use
Air	Air travels by twin otter and similar planes from Resolute Bay to and from the 7 sites	

## Project accommodation types

Temporary Camp

Community

Other,

# Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Quadivator	2	weight 5 to 10 tons	To be used for construction, grading, regrading under both Stupart and Cape Isachsen Camp /Staging /Transfer Stations. Precise details to be provided by successful contractor.
ATV and other vehicles	4	weight 5 to 10 tons	Various site remediation uses including construction, grading, regrading, hauling and movement of personnel around sites. Precise details to provided by successful contractor.
Kubota (middle sized) with multiple attachments	1	Min Weight 10 T	To be used for loading waste into plane (under LUP Type A) at Cape Isachsen Camp /Staging /Transfer Station. Precise details to be provided by successful contractor.

## Detail Fuel and Hazardous Material Use

Detail fuel material use:	Fuel Type	Number of containers	Container Capacity	Total Amount	Units	Proposed Use
Diesel	fuel	2	10000	20000	Liters	run equipment, vehicles and camp heating
Gasoline	fuel	2	205	410	Liters	run vehicles and ATVS
None	hazardous	0	0	0	Liters	N/A

## Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
0	N/A	N/A

# Waste

## Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Site Cleanup/Remediation	Combustible wastes	10 m3	Wood/metal waste, charred debris (Pioneer Island) - Clean wood waste would be incinerated to reduce volume/weight. The ash, remaining metal waste and charred debris would be packaged for transport via aircraft for off-site disposal.	None
Site Cleanup/Remediation	Combustible wastes	12 m3	Metal & wood debris (Cape Ahnighito) - Incinerate clean wood on-site and dispose ash off-site; package metal debris and dispose off-site	None
Site Cleanup/Remediation	Combustible wastes	6 m3	Wood and Metal Wastes (Cape Isachsen) - Incinerate clean wood on-site and dispose ash off-site; package metal debris and dispose off-site	None
Site Cleanup/Remediation	Combustible wastes	24 m3	Unpainted wood waste (Skybattle Bay) - Incinerate clean wood on-site and dispose ash off-site; package metal debris and dispose off-site	None
Site Cleanup/Remediation	Combustible wastes	10 m3	Metal and wood debris piles, remains of historic camp, burn pit (s) (Stupart Island) - Incinerate clean wood on-site and dispose ash off-site; package metal debris and dispose off-site	None
Site Cleanup/Remediation	Hazardous	1,800 litres	Organic Liquids (waste fuel -	None

			unknown contents in some of the drums) - 1600 L gasoline and 200 L oil (Stupart Island) - Waste fuel would be removed from the site for disposal off-site at licenced facility.	
Site Cleanup/Remediation	Hazardous	615 litres	Organic Liquids (Waste fuel substances in the 3 drums) (Playfair Point)- Transferring the waste fuel into sturdy containers and removing it off-site for final disposal.	None
Site Cleanup/Remediation	Hazardous	1,300 L	Organic Liquids (Waste fuel liquid contents of the non-empty drums) (Cape Ahnighito) - would be collected in sturdy containers and transported off-site to Stupart Island by helicopter then to Resolute Bay by fixed-wing for either burning if facilities exist or sending out of Territory.	None
Site Cleanup/Remediation	Hazardous	2,000 m3	Organic Liquids (waste fuel of unknown contents in some of the drums) (Skybattle Bay) - Waste fuel and water from drums would be collected in sturdy containers and transported first to Stupart Island by helicopter, and then to Resolute Bay for possible decantation and burning of the fuel fraction or sending out of Territory the mixed fuel/water	None
Site Cleanup/Remediation	Hazardous	11 nos	Propane cylinders (considered hazardous waste) (Stupart Island) -	None

			Will be removed off-site by aircraft, then moved out of the Territory for disposal.	
Site Cleanup/Remediation	Hazardous waste	4 nos (at Pioneer Is)	The 4 lead-acid batteries at Pioneer Island will be packaged for transport via aircraft for off-site disposal at receiving licenced facility.	None
Site Cleanup/Remediation	Non-Combustible wastes	3 nos	3 empty drums after emptying the content and venting (Playfair Point) - Removing the 3 waste drums once emptied from site, without crushing, and transporting them to Resolute Bay and then out of the Territory for disposal.	None
Site Cleanup/Remediation	Non-Combustible wastes	2 nos	Two exposed waste drums (Kristoffer Bay) - Drums to be transported to Isachsen HAWS before sealift transport to south	None
Site Cleanup/Remediation	Non-Combustible wastes	10 m3	Metal drilling debris (Kristoffer Bay) - Collection of non-hazardous debris into 1 m3 soil bags. All of this waste would be transported to the Isachsen HAWS where a waste transfer station would be established and transport by sealift to south	None
Site Cleanup/Remediation	Non-Combustible wastes	63 items	~58 drums, 2 jerry cans and 3 oil stoves (Stupart Island) -Will be removed off-site by aircraft for processing/ disposal in Resolute Bay or out of the Territory for disposal by sealift	None

Site Cleanup/Remediation	Non-Combustible wastes	281 nos	Drums (three caches of drums (mostly empty) located at various points along the airstrip) (Skybattle Bay) - Will be removed from site, with over-packs used for drums with explosive vapours, first to Stupart Island by helicopter and then to Resolute Bay by fixed-wing aircraft, where they would be processed (cleaned and crushed), if it is advantageous to do so, then sent out of the Territory for recycling or disposal.	None
Site Cleanup/Remediation	Non-Combustible wastes	103 nos	Drums (Cape Ahnighito) - Will be removed off-site by aircraft for processing/disposal in Resolute Bay or out of the Territory for disposal by seafift	None
Site Cleanup/Remediation	Non-Combustible wastes	30 m3	Metal waste (not including drums) (Skybattle Bay) - Planned to be removed from site but still require further research as to the most cost effective means of removal.	None
Site Cleanup/Remediation	Overburden (organic soil, waste material, tailings)	4 m3	Contaminated soil waste (oily soil) from APEC 4 Tent Platform (maximum of 4m3 and 8T) (Stupart Island) - Will be excavated manually, placed in soil bags and removed by aircraft for off-site, out-of-Territory disposal.	None

### Environmental Impacts:

The predicted environmental impacts of this project and the proposed mitigations are contained in the attached Project Proposal Report (PPR). After the application of the mitigation measures proposed in the

PPR, the potential residual effects of the project are anticipated to be short-term in nature, The effects to all value components (VCs) are evaluated as low magnitude and will not threaten the sustainability of the VCs.

# **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**

Pioneer remediation project consists of seven sites: Pioneer Island, Playfair Point, Cape Ahnighito, Stupart Island, Skybattle Bay, Kristoffer Bay and Cape Isachsen. All the seven sites are located on Crown land at distances that range from 180 km to 570 km to Resolute Bay, the nearest Nunavut Community to the sites. The sites are located within the Parry Islands Plateau Ecoregion, which is part of the Northern Arctic Ecozone comprising of Bathurst Island, Cornwallis Island, the southern portion of Melville Island and several smaller islands. The Site has sparse vegetation and is dominated by cobble substrate. Please see more details in the attached EIA and other reports.

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

Ecologically, the Pioneer sites are located within the Northern Arctic Ecozone. The descriptions of the Biological Environment of each of the 7 sites are contained in the attached EIA report.

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

For the full descriptions of the socioeconomic environment of each of the 7 sites, please refer to the attached EIA report.

### **Miscellaneous Project Information**

The report and the RAP report are attached for other miscellaneous information on the project sites

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

Details of the identified impacts and proposed mitigation measures are contained in the attached EIA report.

### **Cumulative Effects**

Please see the attached EIA report.

# 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>																										
Site Cleanup/Remediation	-	P	P	-	P	P	-	P	P	-	P	P				P	P	P	P	P		P	P	P	P	P
<b>Operation</b>																										
Site Cleanup/Remediation	-	P	P	-	P	P	-	P	P	-	P	P				P	P	P	P	P		P	P	P	P	P
<b>Decommissioning</b>																										
Site Cleanup/Remediation	-	P	P	-	P	P	-	P	P	-	P	P				P	P	P	P	P		P	P	P	P	P

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

Project Location



List of Project Geometries

- |   |       |  |
|---|-------|--|
| 1 | point | coordinates of the Centre of Playfair Point      |
| 2 | point | coordinates of the Centre of Pioneer Island      |
| 3 | point | coordinates of the Centre of Skybattle Bay       |
| 4 | point | coordinates of the Centre of Stupart Island      |
| 5 | point | Coordinates of the Centre of Cape Ahnighito Site |
| 6 | point | Coordinates of the Centre of Cape Isachsen Site  |
| 7 | point | Coordinates of the Centre of Kristofer Bay       |