



## NIRB Uktuutinga Ihivriuqhihamut #126171

### Isachsen High Arctic Weather Station Waste Fuel Reduction Program

**Uktuutinga Qanurittuq:** New

**Havaap Qanurittunia:** Site Cleanup/Remediation

**Uktuutinga Ublua:** Wednesday, April 16, 2025

**Period of operation:** from 2025-06-30 to 2025-08-30

**Havauhikhaq** Owen Wade

**Ikayuqtinga:** ECCC

351 Boulevard Saint-Jospeh

Gatineau Quebec J8Y 3Z5

Canada

Hivayautit Nampanga:: 613-981-8652, Kayumiktukkut Nampanga::

# QANURITTUT

## **Tukihiannaqtunik havaariyauyumayumik uqauhiuyun**

**Qablunaatitut:** Who: Environment and Climate Change Canada as owner of the Isachsen High Arctic Weather Station, through Public Services and Procurement Canada as contracting managers, have retained an experienced and qualified team of consultants and contractors for the proposed undertaking. What: The proposed undertaking is the incineration of the waste fuel at Isachsen which is presently contained in many storage tanks and in many hundreds of drums. The fuel will be incinerated in two forced air incinerators that have remained on-site from an earlier fuel incineration program. The incinerators were reconditioned, tested and certified on-site by their manufacturer in 2024. The volume of waste fuel planned for incineration is on the order of 76,000 litres and includes old diesel, Jet fuels, kerosene and gasoline. Fuel reduction by incineration is an initial step in the overall decommissioning and remediation work planned for the Isachsen Weather Station and was presented at the Community Engagement session held in Resolute Bay in January 2025. Why: The fuel is up to 30 years old, and cannot reliably be used in motive equipment. Keeping it in storage is an environmental risk due to the advanced age of the storage tanks and their obvious weathering in a harsh environment. Relocating the waste fuel to facilities that may be able to use it for space heating would incur risks of leaks and spills due to multiple transfers and handling, and the airstrip is not currently in a condition to accept large cargo planes. On-site incineration has been identified as the safest and most efficient means of removing this environmental risk. Where: The incineration area will be set up with appropriate spill containment facilities at the west end of the runway near the runway tank farm, at reasonable proximity to the seasonal work camp. The runway tanks contain about 55% of the fuel that is to be incinerated. The remainder of the fuel is in drums and small tanks along the runway and in buildings at the station. When: The fuel incineration program is planned to require 42 days and start in late June 2025 and be completed in early August 2025.

Qui: Environnement et Changement climatique Canada, en tant que propriétaire de la station météorologique d'Isachsen dans l'Extrême-Arctique, par l'intermédiaire de Services publics et Approvisionnement Canada, a retenu les services d'une équipe expérimentée et qualifiée de consultants et d'entrepreneurs pour l'entreprise proposée. Quoi: L'entreprise proposée consiste à incinérer le combustible usé d'Isachsen qui est actuellement contenu dans de nombreux réservoirs de stockage et dans plusieurs centaines de fûts. Le carburant sera incinéré dans deux incinérateurs à air forcé qui sont restés sur place à Isachsen grâce à un programme d'incinération de combustible antérieur. Les incinérateurs ont été reconditionnés, testés et certifiés sur place par leur fabricant en 2024. Le volume de combustible usagé prévu pour l'incinération est de l'ordre de 76 000 litres et comprend du vieux diesel, du carburéacteur, du kerosène et de l'essence. La réduction du combustible par incinération est une première étape des travaux globaux de déclassement et d'assainissement prévus pour la station météorologique d'Isachsen et a été présentée lors de la séance de mobilisation communautaire tenue à Resolute Bay en janvier 2025. Pourquoi: Le carburant a jusqu'à 30 ans et ne peut pas être utilisé de manière fiable dans l'équipement motorisé. Son entreposage présente un risque environnemental en raison de l'âge avancé des réservoirs de stockage et de leur résistance évidente aux intempéries dans un environnement difficile. Le déplacement du combustible usé vers des installations qui pourraient être en mesure de l'utiliser pour le chauffage des locaux entraînerait des risques de fuites et de déversements en raison de multiples transferts et manutentions qui serait impliqué dans le transport, et la piste d'atterrissement n'est pas actuellement en état d'accepter de gros avions-cargos. L'incinération sur place a été identifiée comme le moyen le plus sûr et le plus efficace d'éliminer ce risque environnemental. Où: L'aire d'incinération sera aménagée avec des installations appropriées de confinement des déversements à l'extrémité ouest de la piste, près du parc de stockage de la piste, à une proximité raisonnable du camp de travail saisonnier. Les réservoirs de piste contiennent environ 55% du carburant qui doit être incinéré. Le reste du carburant se trouve dans des fûts et de petits réservoirs le long de la piste et dans les bâtiments de la station. Quand: Le programme d'incinération de combustible devrait durer 42 jours et commencer à la fin de juin 2025 et se terminer au début d'août 2025.

## **Personnel**

Personnel on site: 5

Days on site: 42

Total Person days: 210

Operations Phase: from 2025-06-30 to 2025-08-30

## Hulilukaarutit

Inigiyá	Hulilukaarut Qanurittuq	Nunanngá Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannuguqtut akhuurninnga	Qanitqiayuuq qanitqiamut nunallaat kitulluuniit ahiruqtailiyainnit nuna
P2023-16 LUP(250228)	Site Cleanup/Remediation	Crown	The site is a former High Artic Weather station which closed in 1978	An archeological impact assessment found no archeological value at the site	Approximately 500km

### Nunaliin Ilauyun, Aviktuqhimayuniitunullu Ikayuuhiarunguyun

Nunauyuq	Atia	Timiuyuq	Upluani Uqaqatigyaungmata
Qausuittuq	Community members and elders from Resolute Bay	Held community meeting to discuss planned remediation at Isachsen	2025-01-29

# **Angiuttauvaktunik**

**Naunaiqlugu nunanga talvani havauhikhaq ittuq:**

Angiuttauvaktunik

Munariniqmut Ayuittiaqtuq	Angirutinga Qanurittuq	Tadja Qanurittaakhaanik	Ublua Tuniyauyuq/Uuktuqtuq	Umikvikhaa Ublua
Alaanut	CIRNAC Land use permit	Applied, Decision Pending		
Nunavut Imaligiyit Katimayit	Water license	Not Yet Applied		

## **Project transportation types**

Transportation Type	Qanuq Atuqtauniarmangaa	Length of Use
Air	Transport to site via twin otter	

## **Project accomodation types**

Temporary Camp

## Ihuaqutivaluin Atuqtauyukhan

Hanalrutit atuqtaunahuat (ukuallu ikuutat, pampiutainnik, tingmitinik, akhaluutinik, hunaluuniit)

Hanalrutit Qanurittuq	Qaffiuyut	Aktikkulaanga – Qanurittullu	Qanuq Atuqtauniarmangaa
Forced-air incinerators	2	n/a	Two Ketek brand forced air incinerators will be used to incinerate the combustible waste fuel that is present at Isachsen. The units were used in 1996 for the same purpose and have been reconditioned and recertified by their manufacturer. They burn at the rate of about 110 L/hour. Test burns were conducted on diesel, jet A & B fuel and kerosene. Gasoline will be mixed at a ratio of 1 parts gasoline to 10 parts diesel or jet to be incinerated.

### Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturninnga

Qanurittuq urhuqyuaq hunavaluit aturninnga:	Urhuqyuaq Qanurittuq	Qaffiuyut qattaryut	Qattaryuk Aktikkulaanga	Atauttimut Qaffiuyut	Ilanga	Qanuq Atuqtauniarmangaa
Diesel	fuel	20	205	4100	Liters	To pre-heat the incinerators
Aviation fuel	fuel	10	205	2050	Liters	To refuel the Twin Otter
Gasoline	fuel	10	205	2050	Liters	To refuel the generators

### Imaqmik Aturninnga

Ubluq qanuraaluk (m <sup>3</sup> )	Aturumayain imavaluin utiqtittagaani qanuq	Atulirumayain imavaluin utiqtittagani humi
2	Pump from meltwater pond	North of the site's runway

# Iqqakuq

## Ikkakunik Munakgiyauyunik

Havauhikhaq Hulilukaarut	Qanurittuq Iqqakut	Ihumagiyaayuq Qanuraaluktut Atuqtait	Qanuq Iqqakuurniarmangaa	Halummaqtirarnirutikan piyutin
Site Cleanup/Remediation	Ikulalaqtun iqqakuuvaluin	76,000L	Combustible waste fuels will be incinerated on-site in two forced-air incinerators that were reconditioned and tested in 2024.	N/A
Site Cleanup/Remediation	Ikulalimannngittun iqqakuuvaluin	100L	This waste stream is antifreeze and will be taken off-site for disposal.	Non-combustible fluids from inoperable vehicles will be pumped out of the motors and collected into one or more sturdy 205L drums and taken off-site for disposal.

### Avatiliriniqmut Ayurhautingit:

Waste fuel will be reduced and eliminated via on-site incineration at Isachsen. Aside from combustion gasses no environmental impacts are expected. The incineration area will be bermed to contain any spillage of fuel. A spill protection plan and spill cleanup equipment will be implemented. The work will be led by an appropriately licensed contractor. In addition, non-combustible liquids will be collected from approximately 11 inoperable vehicles and will be put in drums and taken off site for disposal.

# **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**

See attached fuel reduction plan

#### **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**

##### **Qanurittuq Ittunik Avatinga: Avatingalluanga**

See attached fuel reduction plan

##### **Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga**

See attached fuel reduction plan

##### **Qanurittuq Ittunik Avatinga: Inungit-maniliurutingit Avatinga**

The nearest community is 500km away and the site is not near any protected areas. An archeological impact assessment was conducted and no archeologically significant site were found at Isachsen

#### **Miscellaneous Project Information**

See attached fuel reduction plan

##### **Naunaiyainiq ukuninnga Ayurhautingit unalu Piumayaat Ikikliyuumiutinahuarutit**

See attached fuel reduction plan

##### **Tamatkiumayunik Ihuikgutivaktunik**

N/A

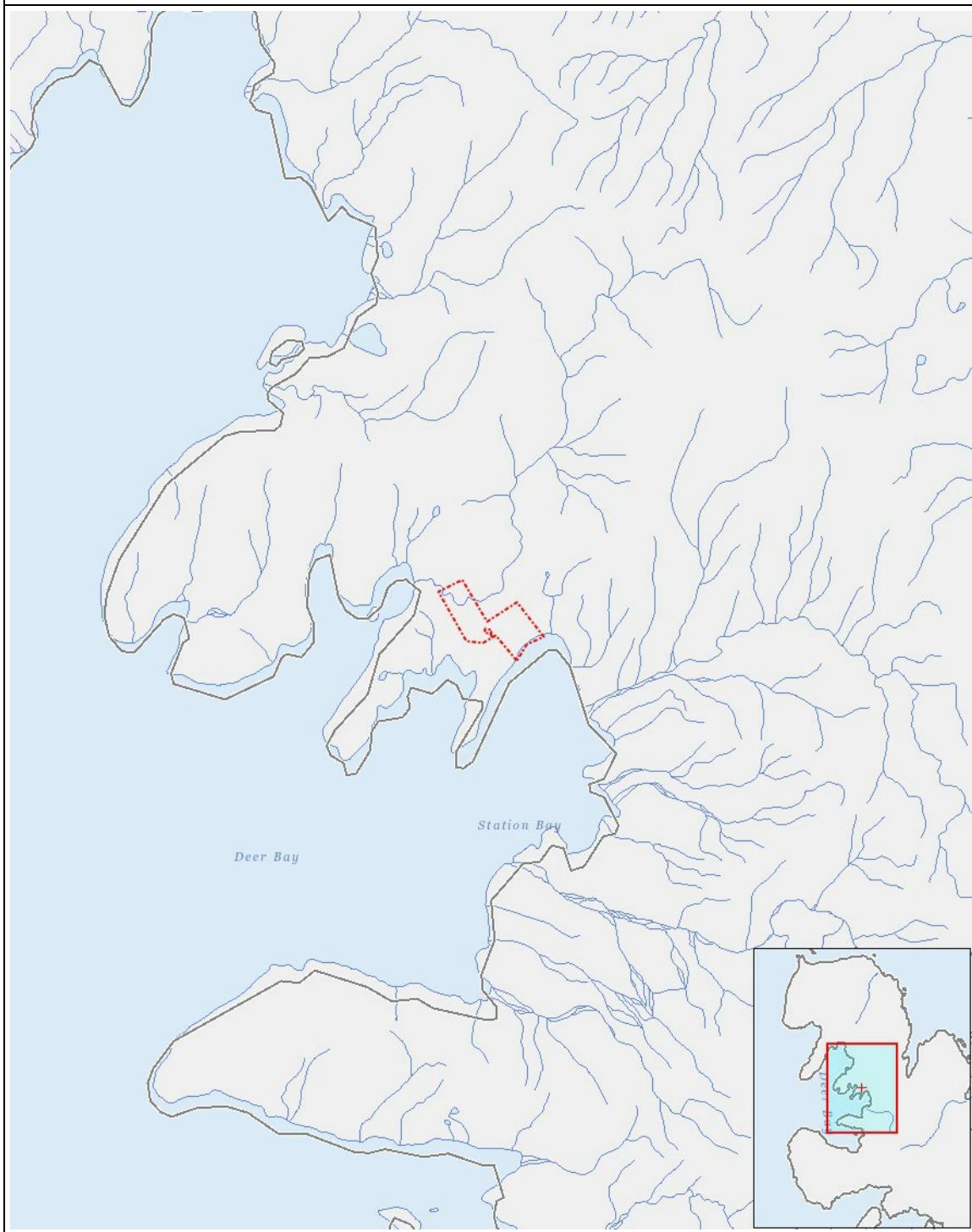
# Impacts

## Ilitariyauniq Avatiliriniqmut Ayurhautingit

PHYSICAL										BIOLOGICAL										SOCIO-ECONOMIC										
Designated environmental areas					Eskers and other unique or fragile landscapes					Tidal processes and bathymetry					Wildlife, including habitat and migration patterns					Aquatic species, incl. habitat and migration/spawning					Archaeological and cultural historic sites					
Ground stability		Permafrost		Hydrology / Limnology	Water quality		Climate conditions		Surface and bedrock geology		Sediment and soil quality		Air quality		Noise levels		Vegetation		Birds, including habitat and migration patterns		Wildlife protected areas		Employment		Community wellness		Community infrastructure		Human health	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<b>Havakvinga</b>																														
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<b>Aulapkaininnga</b>																														
Site Cleanup/Remediation	-	-	-	-	-	-	-	-	-	-	-	-	-	N	-	-	-	-	-	-	-	-	-	P	-	-	-	-		
<b>Piqauniq</b>																														
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

(P = Nakuuyuq, N = Nakuungittut unalu mikhilimaittuq, M = Nakuungittut unalu mikhittaaqtuq, U = Naluyauyuq)

Havaariyaukhamut Nayugaa



List of Project Geometries

1	polyline	P2023-16 LUP(250228)
---	----------	----------------------