NIRB Uuktuutinga Ihivriuqhikhamut #125677
Baker Lake Landfarm

Uuktuutinga Qanurittuq: New

Havaap Qanurittunia: Site Cleanup/Remediation

Uuktuutinga Ublua: 3/28/2022 11:01:57 AM

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

Piumayaat Angirutinga: from 0001-01-01 to 0001-01-01

Havauhikhaq Ikayuqtinga: Sulaimon Ayilara
Petroleum Products Division
PO Box 590, Rankin Inlet, NU X0C 0G0
Rankin Inlet, NU Nunavut X0C 0G0
Canada
Hivayautit Nampanga:: 8676458444, Kayumiktukkut Nampanga::

QANURITTUT

Tukihiannaqtunik havaariyauyumayumik uqauhiuyun

Qablunaatitut: The proposed site for the landfarm is in Latitude 64.315, Longitude -96.020912 and (UTM) Zone 15 (Lot 1, Block 55, Plan 3512) at the back of PPD existing Oil Facility, away from the Hamlet of Baker Lake environmental pollution. The landfarm will be designed to hold 5000 CU.M. of contaminated soil for a maximum period of 4 years and decommission thereafter within the five years period allotted.

Uiviititut: Le site proposé pour la ferme est à la latitude 64.315, longitude -96.020912 et (UTM) zone 15 (lot 1, bloc 55, plan 3512) à l'arrière de l'installation pétrolière existante de PPD, loin de la pollution environnementale du hameau de Baker Lake. Le landfarm sera conçu pour contenir 5000 CU.M. des sols contaminés pendant une période maximale de 4 ans et déclassement par la suite dans le délai de cinq ans imparti.

Inuktitut: ᐃᓕᑭᕆᐅᔨᒪᔨᖅ ᓄᓇᐅᑦ ᑕᐅᑐᐊᓂᑦ ᓴᓕᒍᑦ 64.315, ᑐᑭᒍᑦ -96.020912 ᐊᒪᒪ (UTM) Zone 15 (ᓄᓇ 1, ᓄᓇᖏᑦ 55, ᕿᖏᐅᑎ 3512) ᑐᓄᐊᓕ ᐅᖅᓯᐊᓗᓕᓴᐅᑦ ᐅᖅᓯᐊᓗᖏᑐᐅᓯᐲᖅᓱᓕ, ᐅᖅᑲᓯᑎᓪᓗᓕᐅᑦ ᐄᐊᒪᒪᓕᒃᑦ ᖁᒪᓕᑐᑐᐊᖏᑦ ᐊᐸᑎᒍᑦ ᓯᑭᖏᖅᑐᓄᑦ. ᓄᓇᖅᑲ ᓴᓇᔨᐅᓕᐊᖅᑐᖅ 5000 CU.M.−ᒥᑦ ᓯᑭᖅᓯᒪᔨᒥᑦ ᐃᔨᔨᖏᑦ ᐊᖏᖃᔪᑦ ᑎᓴᒪᑦ ᐃᓗᐊᓕ ᐊᒪᒪᑭᓐᓂᖅᑎᑕᐅᓗᓕ ᐊᖏᖃᔪᑦ ᑕᑦᓕᒪᑦ ᐃᓗᐊᓕ.

Inuinnaqtun: ᐃᓕᑭᕆᐅᔨᒪᔨᖅ ᓄᓇᐅᑦ ᑕᐅᑐᐊᓂᑦ ᓴᓕᒍᑦ 64.315, ᑐᑭᒍᑦ -96.020912 ᐊᒪᒪ (UTM) Zone 15 (ᓄᓇ 1, ᓄᓇᖏᑦ 55, ᕿᖏᐅᑎ 3512) ᑐᓄᐊᓕ ᐅᖅᓯᐊᓗᓕᓴᐅᑦ ᐅᖅᓯᐊᓗᖏᑐᐅᓯᐲᖅᓱᓕ, ᐅᖅᑲᓯᑎᓪᓗᓕᐅᑦ ᐄᐊᒪᒪᓕᒃᑦ ᖁᒪᓕᑐᑐᐊᖏᑦ ᐊᐸᑎᒍᑦ ᓯᑭᖏᖅᑐᓄᑦ. ᓄᓇᖅᑲ ᓴᓇᔨᐅᓕᐊᖅᑐᖅ 5000 CU.M.−ᒥᑦ ᓯᑭᖅᓯᒪᔨᒥᑦ ᐃᔨᔨᖏᑦ ᐊᖏᖃᔪᑦ ᑎᓴᒪᑦ ᐃᓗᐊᓕ ᐊᒪᒪᑭᓐᓂᖅᑎᑕᐅᓗᓕ ᐊᖏᖃᔪᑦ ᑕᑦᓕᒪᑦ ᐃᓗᐊᓕ.

Personnel

Personnel on site: 10

Days on site: 30

Total Person days: 300

Operations Phase: from 2022-08-31 to 2026-08-31

Hulilukaarutit

Inigiya	Hulilukaarut Qanurittuq	Nunannga Qanurittaakhaanik	Initurlinga qanuritpa	Initurlinga utuqqarnitat unaluuniit Ingilraaqnitat Uyarannguqtut akhuurninnga	Qanitqiyauyuq qanitqiamut nunallaat kitulluuniit ahiruqtailiyainnit nuna
Baker lake Landfarm	Site Cleanup/Remediation	Commissioners	Propose landfarm will be at back of Existing PPD Oil Facility in Baker Lake where all contaminated soil will be remediated for environmental protection against hydrocarbon.	The location is not an archeological site, no history of physical remains of past human activities.	Site is protected and away from the Hamlet of Baker Lake environmental pollution and hazard.

Nunaliin Ilauyun, Aviktuqhimayuniitunullu Ikayuuhiarunguyun

Nunauyuq	Atia	Timiuyuq	Upluani Uqaqatigiyaungmata
Qamaniittuaq	Richard Aksawnee	Mayor of the Baker lake Hamlet	2021-07-08

Angiuttauvaktunik

Naunaiqlugu nunanga talvani havauhikhaq ittuq:

Kivalliq

Angiuttauvaktunik

Munariniqmut Ayuittiaqtuq	Angirutinga Qanurittuq	Tadja Qanurittaakhaanik	Ublua Tuniyauyuq/Uuktuqtuq	Umikvikhaa Ublua
Nunavut Imaligiyit Katimayit	Water License	Applied, Decision Pending	2022-02-24	
Alaanut	Nunavut Planning Commission	Applied, Decision Pending	2022-02-24	

Project transportation types

Transportation Type	Qanuq Atuqtauniarmangaa	Length of Use
Air	Flights into Baker Lake by personel	
Water	By sealift (NEAS)	
Land	Move materials to site	

Project accomodation types

Nunauyuq

Alaanut,

Ihuaqutivaluin Atuqtauyukhan

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

Hanalrutit Qanurittuq	Qaffiuyut	Aktikkulaanga – Qanurittullu	Qanuq Atuqtauniarmangaa
Loader	2	N/A	For excavating gravel for the landfarm construction.
Excavator	1	N/A	For moving gravel
Dump truck	1	N/A	To move soil into landfarm
ZoomBoom	1	N/A	To move heavy materials to site

Qanurittuq Urhuqyuaq unalu Qayangnaqtut Hunavaluit Aturninnga

Qanurittuq urhuqyuaq hunavaluit aturninnga:	Urhuqyuaq Qanurittuq	Qaffiuyut qattaryut	Qattaryuk Aktikkulaanga	Atauttimut Qaffiuyut	Ilanga	Qanuq Atuqtauniarmangaa
Diesel	fuel	1	200	200	Liters	200
Contaminated soil	hazardous	2	3000	6000	Cubic Meters	3000

Imaqmik Aturninnga

Ubluq qanuraaluk (m3)	Aturumayain imavaluin utiqtittagaani qanuq	Atulirumayain imavaluin utiqtittagani humi
200	All contaminated water will be treated with our water treatment plant already on the Baker Lake site.	All water will be discharge after meeting all discharge criteria as per Environment Canada and Nunavut Water Act before discharge after treatment.

Iqqakuq

Ikkakunik Munakgiyauyunik

Havauhikhaq Hulilukaarut	Qanurittuq Iqqakut	Ihumagiyauyuq Qanuraaluktut Atuqtait	Qanuq Iqqakuurniarmangaa	Halummaqtirarnirutikhan piyutin
Landfarm	Qayangnaqtut	6000	Soil remediation inside the landfarm	Addition of fertilizer to impacted soils for remediation process.
Landfarm	Qayangnaqtut	6000	Fertilizer will be added into soil for treatment. Estimated 4tons of fertilizer will be use for treatment.	All gravel will be supply by Baker Lake Construction Limited.Gravel types are Class A, 3/4 sizes,

Avatiliriniqmut Ayurhautingit:

ENVIRONMENTAL CONSIDERATIONS - PPD have a working water treatment plant on site of Baker Lake and all impacted water generated from the contaminated area around the landfarm will be treated and proper discharge criteria before release to the environment. Materials are in place to appropriately contain all contaminated water from leaching the landfarm which include the diversion of water and leachate to a suitable lined retention pond where it can be recycled over the landfarm materials to maintain moisture content. It should be noted that PPD initiated this control system during summer operations.

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

Qanurittuq Ittunik Avatinga: Avatingalluanga

PPD Tank Farm Baker Lake, NU with Location GPS - (Lat./Long) = Latitude 64.315, Longitude -96.020912

Qanurittuq Ittunik Avatinga: Inuuhimayunut Avatinga

Landfarm will be constructed with a strong HDPE liner engineered with gravel and fence gate around for human and wildlife interference protection.

Qanurittuq Ittunik Avatinga: Inungit-maniliurutingit Avatinga

Existing PPD Oil facility presently provides fuel (Diesel and gasoline) to the Baker Lake community for energy to homes and offices.Soil contamination during gasoline spill of 2021 must be remediated inside the landfarm and thereby became necessary.

Miscellaneous Project Information

Baker Lake Landfarm Construction Material, Equipment All material needed includes – liner HDPE, Geotextile cloth for underneath the liner.All equipment needed includes – Loader, Excavator, Zoom Boom, Dump truck and Packer.Where to get gravel to build this landfarm? If so, how are you going to get the material to the site; Answer - All gravel will be supply by Baker Lake Construction Limited in the Hamlet. They are al readily available in the community and will be supply by the local contractor Baker Lake Construction Limited.List all the heavy equipment you will be using for this project; Answer – Heavy equipment needed includes Loader, Excavator, Zoom Boom, Dump truck and Packer.Materials to be used to build the landfarm can be filled in the Material Use for example:Answer - All material needed includes liner HDPE, Geotextile cloth for underneath the liner.•Types of gravel and how much approximately - Answer - Class A gravel type, ¾ size and approximately 5000 cubic meters of gravel to be use.•List all materials to construct the lined landfarm; - Answer - All material needed includes liner HDPE, Geotextile cloth for underneath the liner.•Fence for the land farm; - Answer - Yes, the landfarm will be fence round to avoid wildlife and unauthorized person inside the landfarm.•Fertilizer is going to be used, how much are you going to be using approximately -Answer - Fertilizer usage is presently on sealift with NEAS and we will use estimated 4 tons of fertilizer.

Naunaiyainiq ukuninnga Ayurhautingit unalu Piumayaat Ikikliyuumiutinahuarutit

Baker Lake Landfarm requires the appropriate safeguards for the protection of human health and fence will be built around it. The potential for uncontrolled emissions, such as volatile organic compounds (VOCs), leachates and odours and any other adverse effects from treatment, needs to be considered on a site-specific basis according to the nature of the contamination and the conditions of the site. The landfarm will be located 2.5km from the Hamlet of Baker Lake, therefore no emissions reaching the general population. All operational procedures including Personal Protective Equipment (PPE) and methodology are outlined within the Operation and Maintenance Plan associated with this

landfarm. If properly operated every year, the risk of emissions affecting the general population or landfarm personnel is significantly decreased (EPA 2014).

Tamatkiumayunik Ihuikgutivaktunik

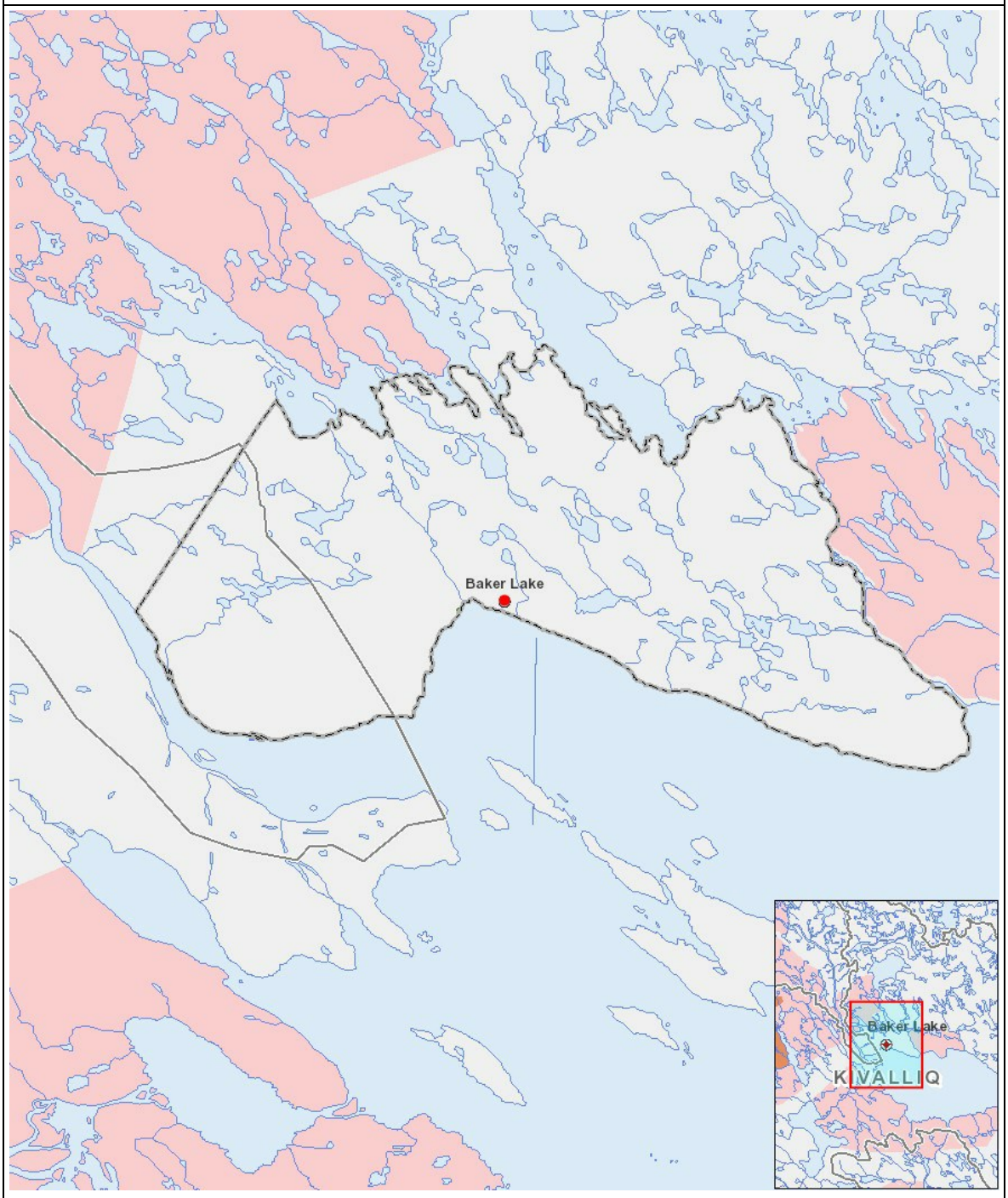
Impacts

Ilitariyauniq Avatiliriniqmut Ayurhautingit

	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
Havakvinga																									
-			-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-
Aulapkaininnga																									
Site Cleanup/Remediation			M	P	U	-	P	U	U	U	U	U	P	U		P	M	M	M	P		N	U	P	P	P
Piiqtauniq																									
-			-	-	-	-	-	-	-	-	-	-	-	-		-	-	-	-	-		-	-	-	-	-

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

Havaariyauyukhamut Nayugaa



List of Project Geometries

1	point	Baker lake Landfarm