



NIRB Application for Screening #125677

Baker Lake Landfarm

Application Type: New

Project Type: Site Cleanup/Remediation

Application Date: 3/28/2022 11:01:57 AM

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

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

Project Proponent: Sulaimon Ayilara
Petroleum Products Division
PO Box 590, Rankin Inlet, NU X0C 0G0
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Canada
Phone Number:: 8676458444, Fax Number::

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
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.

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Baker Lake	Richard Aksawnee	Mayor of the Baker lake Hamlet	2021-07-08

Authorizations

Indicate the areas in which the project is located:

Kivalliq

Authorizations

Regulatory Authority	Authorization Description	Current Status	Date Issued / Applied	Expiry Date
Nunavut Water Board	Water License	Applied, Decision Pending	2022-02-24	
Other	Nunavut Planning Commission	Applied, Decision Pending	2022-02-24	

Project transportation types

Transportation Type	Proposed Use	Length of Use
Land		

Project accomodation types

Community

Other,

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Loader	2	N/A	For excavating gravel for the landfarm construction.

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	200	200	Liters	200
Contaminated soil	hazardous	2	3000	6000	Cubic Meters	3000

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
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.

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Landfarm	Hazardous	6000	Soil remediation inside the landfarm	Addition of fertilizer to impacted soils for remediation process.

Environmental Impacts:

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

Description of Existing Environment: Physical Environment

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

Description of Existing Environment: Biological Environment

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

Description of Existing Environment: Socio-economic Environment

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

Identification of Impacts and Proposed Mitigation Measures

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).

Cumulative Effects

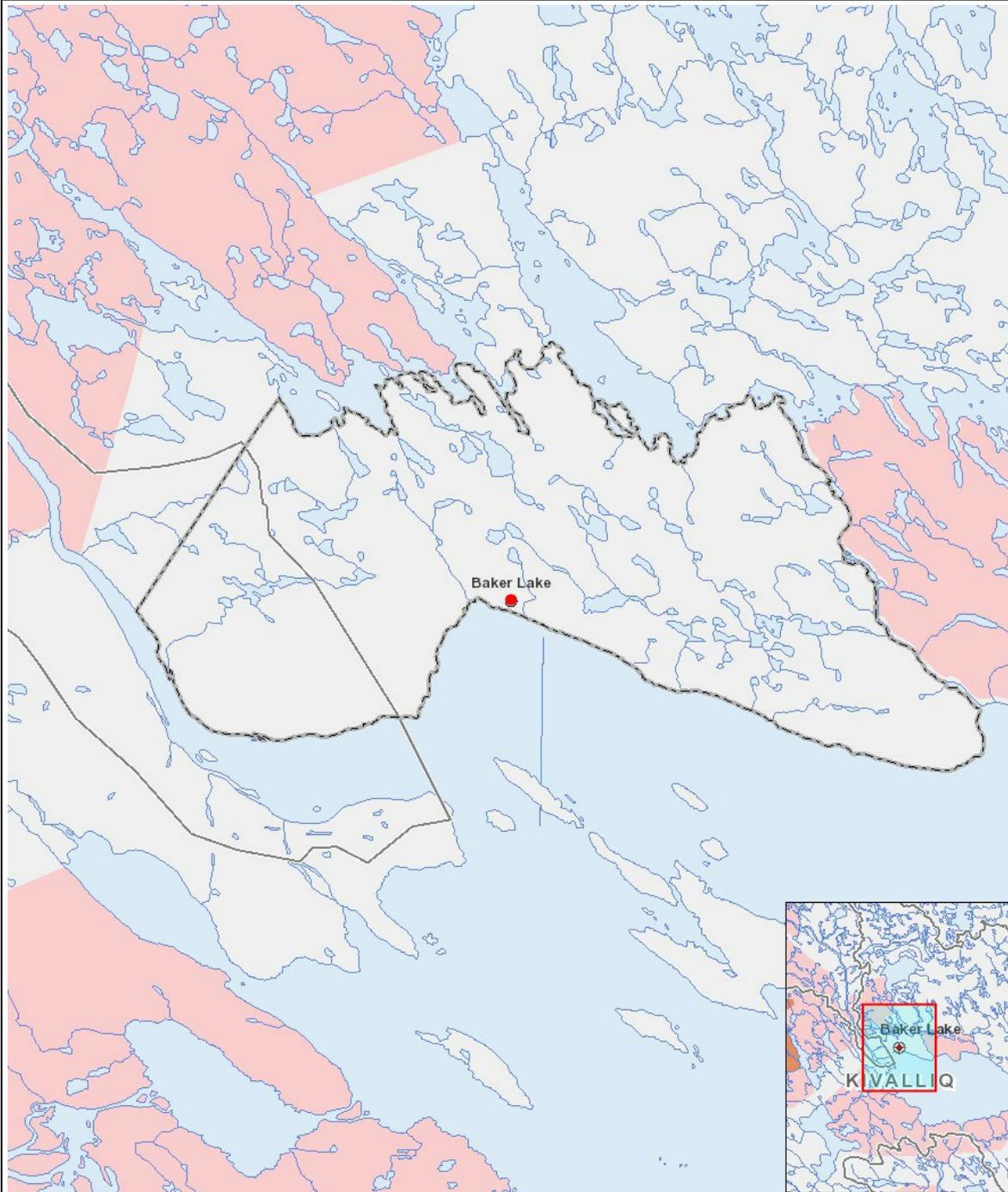
Impacts

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																									
Site Cleanup/Remediation	N	P	U	-	P	N	N	N	U	N	U	U	N		P	N	N	N	P		M	U	P	P	P
Operation																									
Site Cleanup/Remediation	N	P	U	-	P	U	U	U	U	U	U	P	U		P	N	N	N	P		M	U	P	P	P
Decommissioning																									
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Project Location



List of Project Geometries

1	point	Baker lake Landfarm
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