Demande de la CNER faisant l’objet d’un examen préalable #125545
Baker Lake Hotspot Remediation Landfarm and Interceptor Trench

Type de demande :	New
Type de projet:	Mesures correctives
Date de la demande :	7/8/2020 3:31:52 PM
Period of operation:	from 0001-01-01 to 0001-01-01
Autorisations proposées:	from 0001-01-01 to 0001-01-01
Promoteur du projet:	NIRB info Nunavut Impact Review Board Box 1360 (20 Mitik) Cambridge Bay Nunavut X0B 0C0 Canada Téléphone :: (867) 983-4600, Télécopieur :: (867) 983-2594

DÉTAILS

Description non technique de la proposition de projet

Anglais: Build and operate a landfarm to address historically contaminated soil in Baker Lake. The Hamlet of Baker Lake experienced several diesel fuel spills in the 70s and 80s that had never gotten cleaned up. Northern Canada Power Commission (NCPC) and the Ministry of Transport (MOT) occupied that area at the time. Fuel storage infrastructure and fuel handling practices were not to the standard we see today. QEC inherited the land and along with it the contaminated soil at the site. After several ESAs QEC conducted a Human Health Risk Assessment of the site and the results identified one spot (Hotspot) that contained levels and contaminants which would put humans at risk. We decided to address it immediately by the recommended method of landfarming the impacted material. The landfarm was constructed in September 2016. Additionally to prevent contamination from entering Baker Lake QEC proposes to install a barrier from the perma-frost to surface along the lake shoreline. There would be groundwater extraction wells where contaminated water could be drawn and filtered before decanting to the environment. QEC owns and maintains a land-farm cell in Baker Lake. The land-farm is currently on the old Power Plant site and due to the proximity the site is an odour nuisance. For this reason, the hamlet has asked that we move the cell to a new site north, near the landfill far from the hamlet. The preferred site is adjacent to the landfill and is un-surveyed. QEC will ensure that the proper heavy equipment is secured so the contractor can carry out the work safely. The proponent will haul clean fill to the site to build the new berm walls. Then the liner shall be laid out evenly and tucked into the berm walls to prevent movement. The existing contaminated soil in the cell will be hauled to the new site and fill the newly constructed cell. The soil shall be placed loosely to facilitate aeration. The soil will be mixed with a fertilization agent to further facilitate remediation. •Cell size in new location must be at least 20m X 40m including berm walls •Space required in total to allow for fence, access and surrounding monitoring 30m X 50m •There is clean fill to re-use for partial rebuild at existing site (Berm walls) •Earth movers to provide heavy equipment and operators to facilitate the move •QEC to provide all new materials required for rebuild

Français: N/A

Inuktitut: N/A

Inuinnaqtun: N/A

Personnel

Personnel on site: 3

Days on site: 6

Total Person days: 18

Operations Phase: from 2020-06-29 to 2020-09-29

Operations Phase: from 2020-09-29 to 2025-07-29

Post-Closure Phase: from to

Activités

Emplacement	Type d’activité	Statut des terres	Historique du site	Site à valeur archéologique ou paléontologique	Proximité des collectivités les plus proches et de toute zone protégée
Hotspot	Landfarm	Municipal	N/A	N/A	Baker Lake
Landfarm	Landfarm	Municipal	N/A	N/A	Baker Lake
Interceptor_Trench	Other	Municipal	N/A	N/A	Baker Lake

Engagement de la collectivité et avantages pour la région

Collectivité	Nom	Organisme	Date de la prise de contact
Information is not available			

Autorisations

Indiquez les zones dans lesquelles le projet est situé:

Kivalliq

Autorisations

Organisme de régulation	Description des autorisations	État actuel	Date de l'émission/de la demande	Date d'échéance
Information is not available				

Project transportation types

Transportation Type	Utilisation proposée	Length of Use
Land		

Project accomodation types

Collectivité

Utilisation de matériel

Équipement à utiliser (y compris les perceuses, les pompes, les aéronefs, les véhicules, etc.)

Type d'équipement	Quantité	Taille – Dimensions	Utilisation proposée
Excavator	1	1 meter bucket	Removal of contaminated soil, placement of clean backfill
30 mil HDPE liner	1000 M2	26 M X 18.6 M	Containment cell impervious liner and contaminated soil cover
2.4 M high chain link fence	1	26 M X 18. 6 M	Security fence to restrict access to landfarm cell
Rototiller	1	small hand driven	To till and aerate contained soil within cell during summer
40 mil HDPE liner	600 M2	300 M X 2 M	Liner for interceptor trench
Water filter system	1	3 M X 2.5 M X 2 M	Filter contaminated ground water

Décrivez l'utilisation du carburant et des marchandises dangereuses

Décrivez l'utilisation de carburant :	Type de carburant	Nombre de conteneurs	Capacité du conteneur	Quantité totale	Unités	Utilisation proposée
Gasoline	fuel	1	23	23	Liters	rototiller operation

Consommation d'eau

Quantité quotidienne (m3)	Méthodes de récupération de l'eau proposées	Emplacement de récupération de l'eau proposé
0		

Déchets

Gestion des déchets

Activités du projet	Type des déchets	Quantité prévue	Méthode d'élimination	Procédures de traitement supplémentaires
Site Cleanup/Remediation	Mort-terrain (sol organique, déchets, résidus)	350M3	Removal of oil impacted soil and replacement with clean fill	Nutrients to be added to impacted soil at construction time

Répercussions environnementales :

Positive impacts will be realized since the hotspot was identified as being potentially hazardous to human health. The contaminated soil in the area has been removed placed in an impervious containment cell and covered. Remediation of the soil will begin shorly after spring melt and continue throughout the summer. Attenuation of the contamination is predicted to last over a 3 year period bringing the level to below criteria for soil to be used industrially.

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 de l'environnement existant : Environnement physique

Description de l'environnement existant : Environnement biologique

Description de l'environnement existant : Environnement socio-économique

Miscellaneous Project Information

Identification des répercussions et mesures d'atténuation proposées

Répercussions cumulatives

Impacts

Identification des répercussions environnementales

	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																									
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Exploitation																									
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Désaffectation																									
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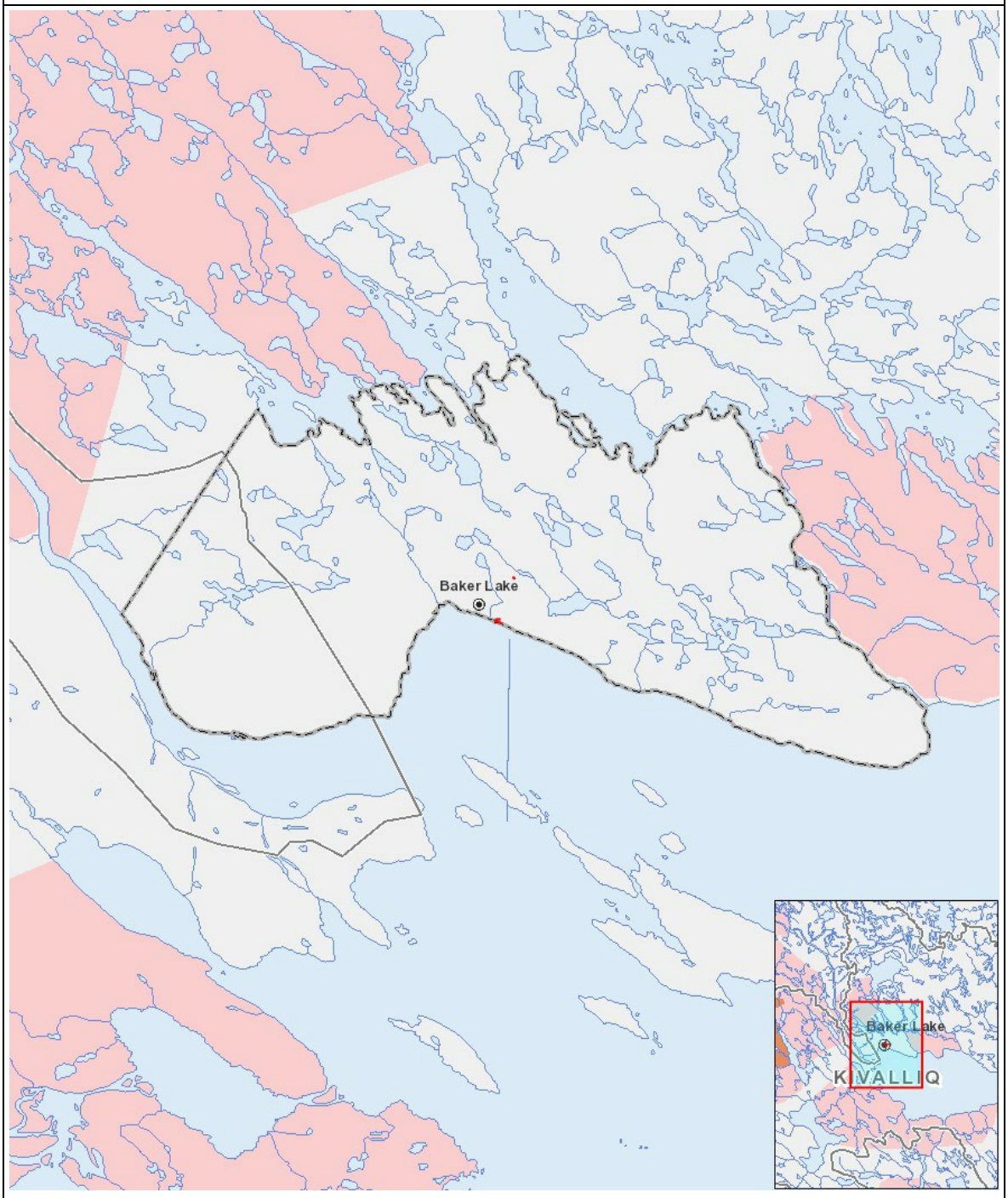
(P = Positive, N = Négative et non gérable, M = Négative et gérable, U = Inconnue)

Site du projet



Liste des géométries de projet

1	polygon	Hotspot
2	polygon	Landfarm
3	polygon	Interceptor_Trench
4	polygon	New project geometry