



Demande de la CNER faisant l'objet d'un examen préalable #125728 CORAL HARBOUR REMEDIATION PROJECT

Type de demande : New
Type de projet: Site Cleanup/Remediation
Date de la demande : 7/7/2022 9:34:40 AM
Period of operation: from 0001-01-01 to 0001-01-01
Autorisations proposées: from 0001-01-01 to 0001-01-01
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DÉTAILS

Description non technique de la proposition de projet

Anglais: CORAL HARBOUR SITE REMEDIATION PROJECT NON-TECHNICAL EXECUTIVE SUMMARY

1. BACKGROUND The Government of Canada has implemented the Federal Contaminated Sites Action Plan (FCSAP) to clean up federally owned contaminated sites which pose risks to human health and the environment. Coral Harbour Site, Nunavut, is one of those sites. Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) is the custodian of several such sites and sometimes the contamination of some of those sites could be linked to the past years of military operations by CIRNAC or Crown. Past legal opinions suggest that the Crown might have caused the bulk of the contamination on Coral Harbour Site. Consequently, CIRNAC applied for, and received funding approval under FCSAP, to clean up the Coral Harbour Site. Coral Harbour Site consists of areas around the Hamlet of Coral Harbour used between the 1940s to the mid 1950s as training areas and base for Northern operations by the US and Canadian Militaries. These areas were used as staging areas support operations (including the construction of DEW Line Sites) across Northern Canada. In the 1970s, military operations ceased in these areas, the airfield became the municipal airport and the rest of the site was abandoned. Coral Harbour Site is about 10 km northwest of the Hamlet of Coral Harbour. Past legal studies indicated that, though the Land regimes around the Coral Harbour Site belong to a number of organizations, a large amount of contamination on the site could be traced to Crown's military operations on the site between 1940s to 1970s. The areas of environmental concerns identified at the site are: area of Tar Barrels, area of Full Barrels, a Barrel Cache, a Former Amy Base, area of the debris of the Former Airport and the Former Farm Tank area. These areas contain non-hazardous wastes (barrels, structures and surface debris); hazardous wastes (batteries, asbestos, lead paint, gas cylinders and contents of barrels); contaminated soils (soil exceeding human health and ecological risk assessment targets and petroleum hydrocarbon stained surficial soils); and Waste Disposal Areas (containing buried debris). Works started on the site with site investigation conducted in 2020 followed by a supplemental site assessment in 2021. Based on the reports of the site assessment and the supplemental site assessment, an human health and ecological risk assessment report was developed together with the remedial action plan for the clean up of the site. Also developed was the project proposal report to identify the effects of the proposed remediation plan on the Coral Harbour site and its environs. The site remediation field work is planned to commence in October 2022 and will be completed about September/October 2024.

2. SITE LOCATION/ACCESS Coral Harbour site is located at approximate latitude, 64 11' 30.257" N; and Longitude, 83 21' 0" W and it is at about 10 km northwest of Coral Harbour (the nearest Nunavut community to the site). The site is accessible by ATV, snowmobile, airplanes, helicopter, and CAT train. Heavy equipment and materials can be moved to and out of the site by sealift or a combination of sealift and CAT train while personnel movement and supplies/resupplies can be done by helicopter, airplanes, or ATV. The proximity of the site to the Hamlet of Coral Harbour is an asset with regards to accessing the site.

3. PROJECT ACTIVITIES & SCHEDULE Environmental site assessment (ESA) activities were carried out to identify and estimate the quantities and extents of contaminants of concerns on Coral Harbour site. Reports of these assessment studies were produced by Earth Tech (2008); WESA (2012); and by Stantec (2020 and 2021). Based on these site assessment studies, a site clean plan was developed for the cleanup of Coral Harbour site. Following the development of the draft of the plan, a community consultation, in the form of public meeting, was held in Coral Harbour on March 2, 2021. The meeting was well attended by members of the communities and feedbacks from the meetings were considered when the plan was finalized. The cleanup of the Coral Harbour site is planned for the years 2022 to 2024. Summary of tasks to be completed at the site include: mobilization to site; improvement of site access routes, site internal roads and airstrips; Camp set-up and operation; and the actual remediation of the site. Full details of works to be completed are contained in the remedial action plan (RAP) previously submitted to the regulatory bodies via Nunavut Planning Commission (NPC) with a copy attached to this application. Final demobilization from the site will take place by September/October 2024. Prior to the start of the remedial works, authorizations will be obtained from the following regulatory bodies: Nunavut Planning Commission NPC (Conformity Check – already granted); Nunavut Impact Review Board (Screening); CIRNAC Land Administration for the Land Use Permit and Quarrying Permits; and Nunavut Water Board (NWB) for Water Use Licence. Following the completion of site remediation at Coral Harbour site, CIRNAC will embark on up to 25 years of long term monitoring of the site to ensure the stability of the non-hazardous landfill facility that will be built on the site. Any problems discovered during the post-remediation monitoring shall be fixed. This monitoring procedure is in accordance to CIRNAC's Abandoned Military Sites Remediation Protocol (AMSRP).

4. SOCIAL IMPACT OF THE PROJECT As much as possible, the project has adopted and will continue to adopt solutions tailored to the northern environment and its inhabitants, by using local knowledge and including the unique needs of northerners and their environments in the remediation work plan. Public community consultation meetings will continue to be held in Coral Harbour as the site cleanup activities progress to discuss employment and sub-contracting opportunities and the progress of site works from time to time. The meetings will invite community members, members of the Hamlet Council and local Inuit organizations. The contracting/procurement procedure that will be adopted for this

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
Coral Harbour Site	Site Cleanup/Remediation	Crown	Coral Harbour Site consists of areas around the Hamlet of Coral Harbour operated between the 1940s to the mid 1950s as training areas and base (staging area) for operations (including the DEW Line Sites) by the US and Canadian Militaries. In the 1970s, the airfield became the municipal airport and the rest of the site was abandoned. Site contains non-hazardous and hazardous wastes, waste disposal areas and contaminated soils	3 archaeological sites were identified on Coral . 2 of the sites are pre-contact stone feature that may represent a cache or collapsed inuksuk, and a historic tent ring. The third site not within proximity of Project components and consists of multiple stone features, both pre-contact and historic. During remediation the 3 sites will be avoided. Fencing may be used to ensure avoidance.	Coral Harbour Site is about 10 km northwest of the hamlet of Coral Harbour, Nunavut,

Engagement de la collectivité et avantages pour la région

Collectivité	Nom	Organisme	Date de la prise de contact
Coral Harbour	Hamlet and Community Members	Community of Coral Harbour	2022-03-02

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
Affaires autochtones et Développement du Nord Canada	Land Use Permit (LUP)	Not Yet Applied		
Office des eaux du Nunavut	Water Use License (WUL))	Not Yet Applied		
Affaires autochtones et Développement du Nord Canada	Quarrying Permits (QPs)	Not Yet Applied		
Government of Nunavut, Community Government & Services	Land Use Permit / Authorization certificate	Not Yet Applied		
Transports Canada	Authorization Letter for Lot 541 and 542 (previously lot 8)	Not Yet Applied		
Pêches et Océans Canada	Authorization Letter for Lot 1001 which is under the administration and control of DFO	Not Yet Applied		
Autre	Authorization Letter from the Municipality of Coral Harbour for Lot 384 which is a municipal land, occupied by DFO without interest	Not Yet Applied		

Project transportation types

Transportation Type	Utilisation proposée	Length of Use
Air		

Project accomodation types

Temporary Camp

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
Backhole	2	> minimum weight 10 tons	excavation, demolition, moving materials, grading and regrading
Excavators	2	> minimum weight 10 tons	excavation, bigger demolition, lifting heavy objects, grading and regrading
Bulldozers	2	> minimum weight 10 tons	shallow excavation and ditching; short-range movement of material; spreading soil dumped from trucks; rough grading; removing trees, stumps, and boulders; and cleaning and leveling around loading equipment
Grader	2	> minimum weight 10 tons	construction and maintenance of dirt and gravel to create flat surfaces
Wheel Loaders	2	> minimum weight 10 tons	For lifting basically anything such as debris, gravel, soil, dirt, pallets.
Rock trucks	2	> minimum weight 10 tons	To carry and haul rocks or borrowed materials from borrow material locations to the points of using the materials
All Terrain Vehicles (ATVs).	4	unknown	For transportation of people around the site and from the site to the Hamlet of Coral Harbour
Pick-up trucks	2	unknown	Transportation of people and equipment around the site and to the Hamlet of Coral Harbour

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
Diesel	fuel	10	10000	100000	Liters	run equipment, vehicles and camp heating
Gasoline	fuel	10	205	2050	Liters	run vehicles and ATVS
None	hazardous	0	0	0	Liters	N/A

Consommation d'eau

Quantité quotidienne (m3)	Méthodes de récupération de l'eau proposées	Emplacement de récupération de l'eau proposé
13	Pumping, on-site treatment and	On-site freshwater source to be

trucking to camp. Details of treatment and polishing unit to be provided by successful contractor, after contract award.

determined by the successful remediation contractor

Déchets

Gestion des déchets

Activités du projet	Type des déchets	Quantité prévue	Méthode d'élimination	Procédures de traitement supplémentaires
Site Cleanup/Remediation	Déchets combustibles	To be determined (TBD)	On-site incineration in an enclosed container	None
Site Cleanup/Remediation	Eaux grises	5000 L/day	Disposed of with sewage	None
Site Cleanup/Remediation	Déchet dangereux	TBD	Shipped off-site to a licensed southern facility	None
Site Cleanup/Remediation	Déchets non combustibles	TBD	Shipped off-site for disposal	None
Site Cleanup/Remediation	Mort-terrain (sol organique, déchets, résidus)	TBD	Shipped off-site for disposal	None
Site Cleanup/Remediation	Eaux usées (matières de vidange)	2000 L/day	On-site Lagoon or other approach that may be suggested by the contractor	None

Répercussions environnementales :

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 with the exception of potential effects to groundwater associated with the NHW facility; to occur occasionally throughout the Project; and to be limited to areas directly disturbed by the Project (footprint) and areas within 500 m of the footprint because the Project will use areas of existing disturbance as much as possible to mitigate potential residual effects. The effects to all value components (VCs) are evaluated as low magnitude and will not threaten the sustainability of 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

- <10 m3 Batteries - Removal of batteries from vehicles and equipment, if present, and off-site disposal at a registered hazardous waste facility. ~134,100 L Liquid - To be sampled and incinerated on-site if they meet incineration criteria. Residual ashes disposed of in the recommended on-site NWH facility following leachate analysis. Barrel contents unfit for incineration will be amalgamated and shipped off-site to a licensed facility for treatment and/or disposal. For incinerated remains disposed of in NWH, the NWH will undergo long term monitoring (LTM) post remediation- >5 m3 Asbestos - Abate, double bag and dispose of in the recommended on-site NWH facility. The NWH will undergo long term monitoring (LTM) post remediation.>100 m2 Lead Amended Paint - Partial abatement on-site of poorly adhered paint and off-site disposal of removed paint at hazardous waste facility. Following partial abatement, materials with remaining well adhered paint may be treated with Lead Defender® and disposed of in the on-site NWH facility. The NWH will undergo long term monitoring (LTM) post remediation.-16000L Aqueous Liquid - To be sampled and incinerated on-site if they meet incineration criteria. Residual ashes disposed of in the recommended on-site NWH facility following leachate analysis. Barrel contents unfit for incineration will be amalgamated and shipped off-site to a licensed facility for treatment and/or disposal. For incinerated remains disposed of in NWH, the NWH will undergo long term monitoring (LTM) post remediation- unknown volume (m3) of Hazardous Buried Debris - Classification of the WDAs in accordance with the AMSRP to designate each as a Class A, B or C and determine the appropriate remedial action prior to the remedial program. Dispose of as HW if indicated by results. For wastes disposed offsite, no further treatment required. For wastes disposed in the NWH, the facility will undergo LTM post remediation.- 60 m3 (vol. after crushing) - The non-hazardous waste (empty barrels) will be emptied, cleaned, crushed, and disposed of in a non-hazardous waste (NHW) facility constructed at the Site. The NWH will undergo long term monitoring (LTM) post remediation- 6815 m3 (in waste disposal areas (WDAs)) - The WDAs will be classified in accordance with the Abandoned Military Site Remediation Protocol (AMSRP) (INAC, 2008) to designate each as a Class A, B or C and determine the appropriate remedial action prior to the remedial program. Any excavated hazardous materials shall be segregated and disposed off-site, while excavated NHW will be disposed of in the on-site NWH facility. The NWH and any WDA left in place will undergo long term monitoring (LTM) post remediation- 80 m3 (may contain some combustible wood) - The Infrastructure (Tank Farm and Wooden Shed) will be dismantled, incinerated or compacted, and non-combustibles will be disposed of in the on-site NWH facility. Tank farm will require an assessment prior to remedial program to determine if/what contents are present and if the paint on tanks is amended paint. The NWH will undergo long term monitoring (LTM) post remediation.- 3430 m3 The surface solid debris will be collected, segregated, shredded, compacted and disposed of in the on-site NWH facility. Combustibles such as inert wooden materials will be segregated and incinerated on-site. The NWH will undergo long term monitoring (LTM) post remediation.- 1950 m3 Soil (PHC) - surface staining - Areas of surficial staining to be excavated to an assumed depth of 1 m and disposed of in the on-site NWH facility. Excavated areas to be filled with borrow material and regraded to match surrounding landscape.

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

Please refer to the attached Phase III ESA, RAP and PPR

Description de l'environnement existant : Environnement biologique

Please refer to the attached Phase III ESA, RAP and PPR

Description de l'environnement existant : Environnement socio-économique

Please refer to the attached Phase III ESA, RAP and PPR

Miscellaneous Project Information

Additional Information on the Potential Camp: Based on the limited availability of accommodations in the Hamlet of Coral Harbour and the COVID-19 pandemic, a camp is anticipated to be required to facilitate remediation. The camp is anticipated to have a capacity for up to 18 on-site workers and associated camp staff. Resident workers from Coral Harbour would not require camp accommodations. Workers from outside of Coral Harbour would be anticipated to work in rotations of up to three weeks, requiring air transport from one or more designated pick up locations, to be determined by the contractor. The camp will be constructed with suitable infrastructure to meet Nunavut guidelines and community land use zoning restrictions for this type of temporary camp as applicable, including the WSCC's Camp Set Up and Management (WSCC, 2017a), and will be constructed and prepared for weather and/or emergency situations. The camp will reduce contact between the workers and the local community. Specific locations for the camp have not yet been identified but will be assessed and discussed with the Hamlet during the pre-remedial activities. Facilities that may be required to operate the temporary camp include the following: • Sleeping quarters • Offices • Kitchen and dining areas • Bathrooms and showers • Laundry facilities • First aid facilities • Mechanic and equipment area that would also have a petroleum and lubricant containment area • Geotechnical laboratory • Diesel-powered generators • Emergency shelter • Quarantine building (for on-site workers who exhibit symptoms of COVID-19). Potable water will be obtained from the municipal supply. Sewage, greywater and domestic wastes will be collected and disposed to municipal solid waste and wastewater facilities in the Hamlet. All other wastes will be disposed of in accordance with the methods in the RAP. Additional details on the potential camp are contained in the Project Proposal Report (PPR)

Identification des répercussions et mesures d'atténuation proposées

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 with the exception of potential effects to groundwater associated with the NHW facility; to occur occasionally throughout the Project; and to be limited to areas directly disturbed by the Project (footprint) and areas within 500 m of the footprint because the Project will use areas of existing disturbance as much as possible to mitigate potential residual effects. The effects to all value components (VCs) are evaluated as low magnitude and will not threaten the sustainability of VCs.

Répercussions cumulatives

Reference to the attached PPR

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																									
Site Cleanup/Remediation	-	P	P	-	P	P	P	P	P	M	-	M	-		P	P	P	P	-		M	P	P	P	P
Exploitation																									
Site Cleanup/Remediation	-	P	P	-	P	P	P	P	P	P	-	P	-		P	P	P	P	-		P	P	P	P	P
Désaffectation																									
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Site du projet



Liste des géométries de projet

1	point	Coral Harbour Site
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