



NIRB Application for Screening #125632

3BM-COR1521 Municipal Water Licence Renewal

Application Type: New

Project Type: Municipal and Industrial Development

Application Date: 8/12/2021 3:01:35 PM

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

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

Project Proponent: Elan Chalmers
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DETAILS

Non-technical project proposal description

English: This application is being submitted for the renewal and amendment of water licence 3BM-COR1521. All licence requirements will remain the same, except for the change to a Type A water licence to reflect that Coral Harbour relies on a raw water reservoir that must be resupplied annually at a water pumping rate that exceeds the Type B licence limit of 300. Resupply of up to 45,000 m3 from Post River must take place during open water season, in approximately 25 days to ensure there is sufficient water in the reservoir for the year. The maximum daily volume could be up to approximately 2,000 cubic meters/day. There are no changes in operations for the Coral Harbour water resupply and treatment plant, but the withdrawal rate from Post River will be considered for the licence rather than the water consumption rate from the reservoir. The municipal water supply is drawn from Post River and consists of a movable water intake, overland pipeline, and storage reservoir. Resupply occurs over a period of approximately 25 days during the period of open water. There are no changes to the other licenced facilities, Sewage is deposited in a permeable lagoon from which effluent passively flows into a wetland treatment area. The solid waste site is a fenced and bermed area that accepts municipal, bulky metal, and hazardous waste.

French: La présente demande est soumise pour le renouvellement et la modification du permis d'utilisation des eaux 3BM-COR1521. Toutes les exigences du permis resteront les mêmes, à l'exception du changement au permis d'eau de type A, changement visant à tenir compte du fait que Coral Harbour dépend d'un réservoir d'eau brute qui doit être réapprovisionné annuellement à un taux de pompage excédant la limite de 300 du permis de type B. Le réapprovisionnement d'au plus 45 000 m³ à même la Post River doit se dérouler durant la saison des eaux libres, en 25 jours environ afin qu'il y ait suffisamment d'eau dans le réservoir pour l'année. Le volume quotidien maximal pourrait être d'environ 2 000 m³ par jour. Il n'y a aucun changement quant à l'exploitation de l'usine de réapprovisionnement et de traitement de l'eau de Coral Harbour, mais c'est le taux de prélèvement d'eau dans la Post River qui sera évalué pour le permis plutôt que le taux de consommation d'eau dans le réservoir. L'approvisionnement en eau de la localité se fait à même la Post River, au moyen d'une prise d'eau mobile, d'un pipeline de surface et d'un réservoir d'accumulation. Le réapprovisionnement se fait sur une période d'environ 25 jours durant la saison des eaux libres. Il n'y a aucun changement aux autres installations détentrices de permis. Les eaux usées sont déversées dans un étang perméable, traversé de façon passive par les effluents jusqu'à une zone de traitement des eaux usées par milieux humides. Le site des déchets solides est une zone entourée d'une clôture et d'une berme, où l'on accepte les déchets municipaux, les métaux encombrants et les déchets dangereux.

[illegible]

Inuinnaqtun: Taanna tutsirauti tunijaujuq nutaanngutitsinirmut aaqqigiarinirmullu imarmut ajungijjutimu 3BM-COR1521. Iluunnatik ajungijjutinut aturialiit asijijjaangittut, piqataunngittut asijjirniujumut qanuittuuninga A imarmut ajungijjuti attuanikaqtuq Salliqmi tunngaviqaqtut imirtaqvimmi immiqtaukanniqaattarialik arraagulimaat imarmi miluaqsiqattaqtut qatsiuninga ungataanut qanuittuuninga B ajungijjuti killiqaqtuq 300-mi. Immiqtaukannirnirmut 45,000 kuunganit imauninganit, immaqa 25 ulluit nalunaiqsinirmut amiganngittumi imaqarnirmut imirtaqvinga arraagumut. Angilaa qautamaat unurniit immaqa 2,000 kippaariksiliqsimajunut miitanut/qautamaat. Asijjirniqtaqangittuq aulaniujunit Salliqmi imiqarnirmut imarmillu kamagijaqarnirmut, kisiani atuqtaajunnaqtut qatsiuninga kuunganit isumagijauniaqpuq ajungijjutimu qanutigiungittuq imaqturininga imirtaqvimmi. Haammalakkut imiqtaukannirniq kuungani nuutaujunaqtumu imarmik

immiqpalliavattuq, nunakkut sullulikkut, sunakkutaakkuvillu imirtaqvimmi. Imiqtaukannirniq immaqa ullunut 25-nu imauninganit. Asijjirniqtaqangittuq asinginnut ajungijjutinut inigijaujunut, kinaaluk kuvijauqattaqtuq kinaaluqarvimmut kuuqattaqsunilu nunami imaqarnirmik piliriaguviujumut. Tangilinnut aturunniiqtunut attivik avalusimajuq killialu pijunnaqtut haammalakkut, savirajaalunnit, ulurianaqtunillu sanirnit.

Personnel

Personnel on site: 2

Days on site: 365

Total Person days: 730

Operations Phase: from 2021-09-30 to 2031-09-29

Activities

Location	Activity Type	Land Status	Site history	Site archaeological or paleontological value	Proximity to the nearest communities and any protected areas
Coral Harbour	Municipal and Industrial Development	Municipal	Municipality of Coral Harbour	Only the areas currently licensed under 3BM-COR1521 will continue to be used, no areas of archeological value will be impacted.	The activities under this licence are for Coral Harbour municipal water use and waste disposal.

Community Involvement & Regional Benefits

Community	Name	Organization	Date Contacted
Coral Harbour	Leonie Pameolik	Municipality of Coral Harbour	2021-05-10

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	A type B renewal application was submitted to NWB for the 3BM-COR1521 water licence for municipal water use and waste disposal. An additional application to amend the licence to Type A will be submitted.	Applied, Decision Pending		

Project transportation types

Transportation Type	Proposed Use	Length of Use
Land	Wastewater and solid waste is transported by truck from municipal buildings to disposal areas.	

Project accomodation types

Community

Material Use

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

Equipment Type	Quantity	Size - Dimensions	Proposed Use
Pump	N/A	N/A	Pumps used to draw raw water from source into water reservoir for storage until moving to the treatment plant for chlorination/disinfection, then moved into discharge arm for filling of the water trucks.

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	0	0	Liters	Fuel used to heat the water treatment plant. *Container capacity unknown*
Chlorine	hazardous	1	0	0	Liters	Chlorine used for disinfection of RAW water at the water treatment plant. *Container capacity unknown

Water Consumption

Daily amount (m3)	Proposed water retrieval methods	Proposed water retrieval location
2000	Pump for approx. 25 days to resupply the raw water reservoir to sustain the municipality each year.	Post River. This location is already the licensed resupply location and water source. This application is with regards to the quantity.

Waste

Waste Management

Project Activity	Type of Waste	Projected Amount Generated	Method of Disposal	Additional treatment procedures
Waste disposal	Combustible wastes	6 cubic meters/capita/yr	Landfill	Burning combustible waste
Waste disposal	Hazardous waste	0.6 cubic meters/capita/yr	Segregated and contained at landfill	Backhaul
Waste disposal	Sewage (human waste)	45,000 cubic meters	Trucked disposal into a sewage lagoon	Wetland treatment area

Environmental Impacts:

The activities under the existing Coral Harbour water licence are essential municipal activities. The lagoon wetland system provides treatment for wastewater prior to effluent entering the final receiving environment. The solid waste site provides containment for waste generated by the municipality. The water use is not expected to increase beyond the volume previously licensed, in the next 10 years. This application is for the licence to reflect that up to 45,000 m³ is pumped annually in approximately 25 days from Post River to the water treatment plant reservoir for the municipal water supply for the year.

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

Description of Existing Environment: Biological Environment

Description of Existing Environment: Socio-economic Environment

Miscellaneous Project Information

Water is pumped annually from Post River to fill the water reservoirs to provide municipal water service for the year. This annual resupply has taken place since at least 1980 when the first reservoir was constructed. This water licence amendment and renewal to a Type-A water licence is to reflect this resupply method.

Identification of Impacts and Proposed Mitigation Measures

While this licence is proposed to change from a type-B water licence, which only allowed up to 300 cubic meters per day, to a type-A water licence with 2,000 cubic meters per day, there is actually no change in practice occurring. This has been how this system has operated since 1980, and is required to function in this fashion to provide the essential service of a potable water supply to the Community of Coral Harbour for the year.

Cumulative Effects

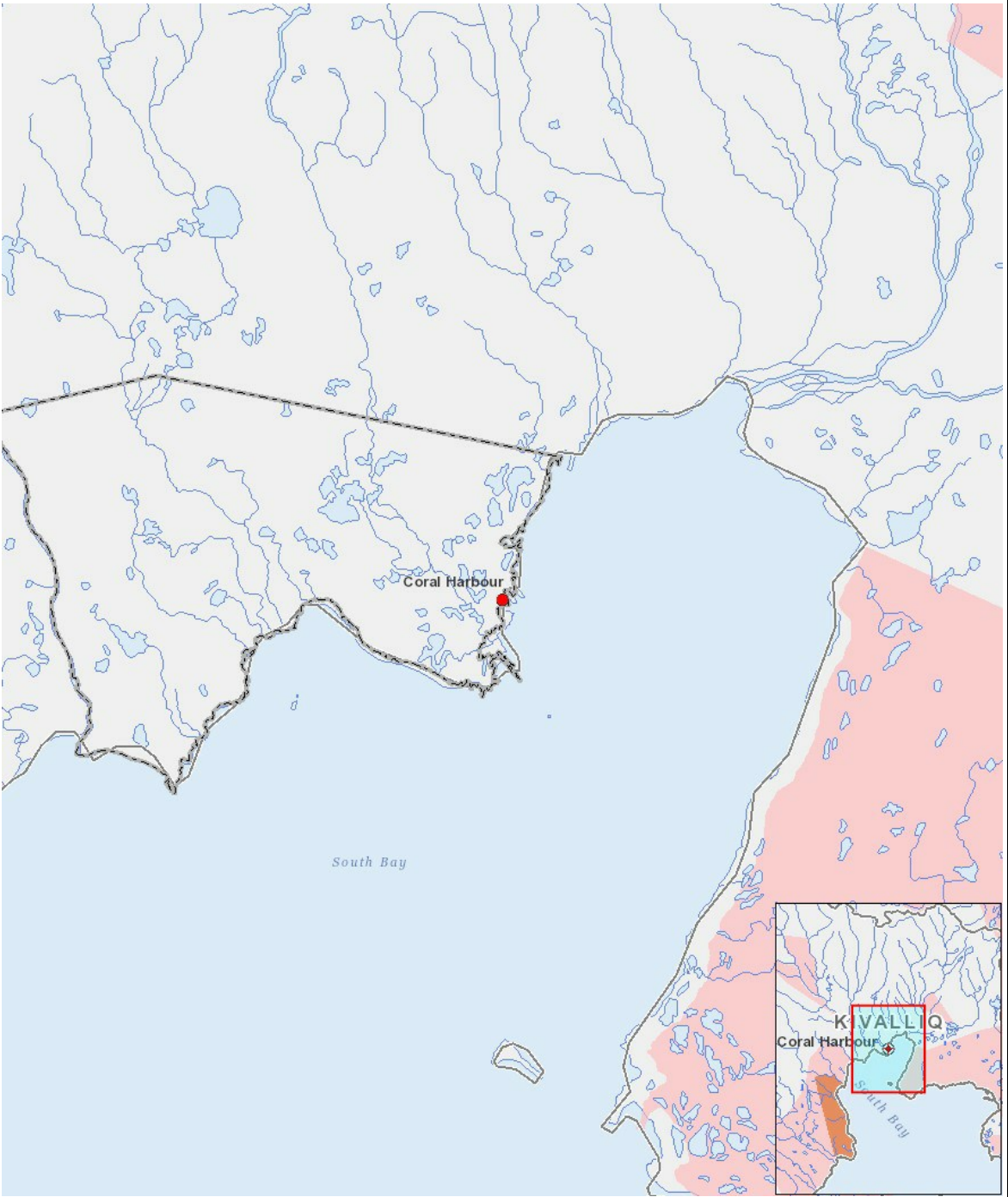
Impacts

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																										
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Operation																										
Municipal and Industrial Development		-	-	-	-	P	-	-	-	-	-	-	-	-		-	-	-	-	-		-	P	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	Coral Harbour
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