



Submission Transmittal Cover

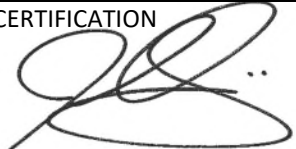
To:	Claudia Simonato	Phone:	1-403-613-6328
Company:	PSPC	Fax:	
E-mail Address:	Claudia.Simonato@tpsgc-pwgsc.gc.ca		
From:	Jonathan Markiewicz	Phone:	1-514-984-6405
Company:	Sudliq Developments Ltd.	Fax:	867.925.8190
Date:	October 17, 2024	Pages: (incl. cover)	21
Project Title:	Coral Harbour Remediation Project		
Client Project No.:	R.112158.017		
Submittal Title:	Abandonment and Reclamation Plan		
Submittal No.:	032	Specification:	SOW, CO-01

Issued For:

- | | |
|--|---------------------------------------|
| <input type="checkbox"/> Information | <input type="checkbox"/> Tender |
| <input checked="" type="checkbox"/> As Requested | <input type="checkbox"/> Construction |
| <input type="checkbox"/> Review | <input type="checkbox"/> Other |

Delivered By:

- | |
|--|
| <input type="checkbox"/> Courier |
| <input type="checkbox"/> Hand |
| <input checked="" type="checkbox"/> E-Mail |
| <input type="checkbox"/> Other (i.e. Pickup) |

<p>CONTRACTOR CERTIFICATION</p> 	<p>CONTRACTOR COMMENTS</p> <p>Submitted as FINAL Revision 2.</p>
<p>ENGINEER CERTIFICATION</p>	<p>ENGINEER COMMENTS</p>



Abandonment and Reclamation Plan

Prepared For:



Public Works and
Government Services
Canada

Travaux publics et
Services gouvernementaux
Canada

Public Works and Government Services Canada

9700 Jasper Avenue, Suite 1000

[Edmonton](#), Alberta T5J 4C3

Project:

EW699-222278/001 – Coral Harbour Remediation Project

Coral Harbour, Nunavut

Document History:

The Document Author is authorized to make the following types of changes to the document without requiring that the document be re-approved:

- Editorial, formatting, and spelling
- Clarification

To request a change to this document, contact the Document Author or Owner.

Changes to this document are summarized in the following table in reverse chronological order (latest version first).

Revision	Date	Created by	Short Description of Changes
1	September 19, 2024	Jonathan Markiewicz	Editorial changes, Addition of Remediation closure requirements
2	October 17, 2024	Jonathan Markiewicz	Inclusion of Actual Borrow Source Volumes

Signature Sheet

Prepared By:

Jonathan Markiewicz, Senior Project Manager

October 17, 2024



Name and Title

Date

Signature

(please print)

Reviewed By:

Paul Bandler, Project Manager

October 17, 2024



Name and Title

Date

Signature

(please print)

Approved By:

Dino Bruce, SDL Director

October 17, 2024



Name and Title

Date

Signature

(please print)

Client Acceptance:

Claudia Simonato, PSPC Project Manager

October 17, 2024

Name and Title

Date

Signature

(please print)

Table of Contents

1	Background Information	1
1.1	Customer	1
1.2	Project Name	1
1.3	Project Numbers.....	1
1.4	Project Location.....	1
1.5	Overall Project Description.....	1
1.6	Contractor Scope of Work.....	1
2	Pertinent Scope of Work sections.....	2
3	Execution.....	3
3.1	Preliminary Inspection.....	3
3.2	Description of the environment.....	4
3.3	Site Mobilization.....	4
3.3.1	Mobilization Dates	4
3.3.2	Equipment and Materials List	4
3.4	Description of site development, facilities and operations	6
3.4.1	Borrow Development.....	6
3.4.2	Camp Facility	7
3.4.3	Non-Hazardous Landfill Construction	10
3.4.4	AEC 2 Temporary Hazardous Materials Processing Area.....	11
3.4.5	AEC 4 Vault Access	12
3.4.6	AEC 6 Land Treatment Units	13
3.5	Method of fuel storage.....	13
3.6	Reclamation objectives and closure criteria	14
3.7	Reclamation Activities	14
3.8	Demobilization Activities.....	14
3.8.1	Demobilization Dates	14
3.8.2	Equipment and Materials List	15

1 BACKGROUND INFORMATION

1.1 Customer

Public Works and Government Services Canada (PWGSC).

1.2 Project Name

Coral Harbour Site – Remediation Project

1.3 Project Numbers

03230272

PWGSC – R.112158.017

1.4 Project Location

Coral Harbour Site

Coral Harbour, NU

The project Site is located approximately 10 kilometers (km) northwest of the Hamlet of Coral Harbour, Nunavut, on Southampton Island.

1.5 Overall Project Description

The former military base in Coral Harbour was used by Canadian and American forces during the construction of the Distant Early Warning (DEW) Line in Northern Canada during the Second World War and for various other northern projects. The Site was active from the 1940s until the 1970s and the on-site infrastructure included an airstrip, hospital, and housing for military personnel. When the Site was decommissioned in the 1970s, most buildings were decommissioned, and remaining equipment was abandoned.

Several areas of environmental concern (AECs) including physical hazards related to unconsolidated surface debris and aged structures, and environmental impacts associated with soil contamination, remain on-site. These AECs and physical hazards are proposed for a future site remediation. In preparation for this proposed remediation, local (Site) borrow sources have been identified at the Site.

1.6 Contractor Scope of Work

The primary components of the Works to be carried out by Sudliq Development Limited (SDL) and Milestone Environmental Contracting Inc. (Milestone), herein referred to as *The Project Team* are highlighted in this section and primarily consist of Borrow Development and Excavation including the following items:

- Baseline topographic survey.
- Site Access Development and Borrow Source Reclamation.
 - o Strip and clear surface shrubs and loose materials at the borrow source location. Strip and stockpile topsoil separately. Surficial topsoil, organics, and unutilized overburden will be stockpiled for later use during reclamation of the borrow area.

- Minimize the flow of water into and out the borrow pits to enhance the efficiency of operations, limit the effects of sedimentation on water quality and prevent permafrost degradation.
- Borrow Extraction, Processing and Stockpiling.
- Abatement, packaging, and proper off-site disposal of hazardous liquids and solids.
- Incineration of acceptable liquid and solid waste on site.
- Demolition, segregation, and proper disposal of remaining buildings.
- Sorting and proper disposal of surface debris.
- Excavation, sorting and proper disposal of buried debris.
- Excavation and treatment or disposal of contaminated soil:
 - Type B soil to be treated in on-site land treatment unit (LTU).
 - Type A soil to be disposed in non-hazardous waste landfill (NHW) on site.
 - Tier II Soil to be properly packaged and disposed off-site.
- Construction, filling, and operation of the on-site LTU.
- Construction, filling, and closure of the on-site NHW.
- Backfilling of excavated areas with clean fill.
- Reclamation of Borrow Source.

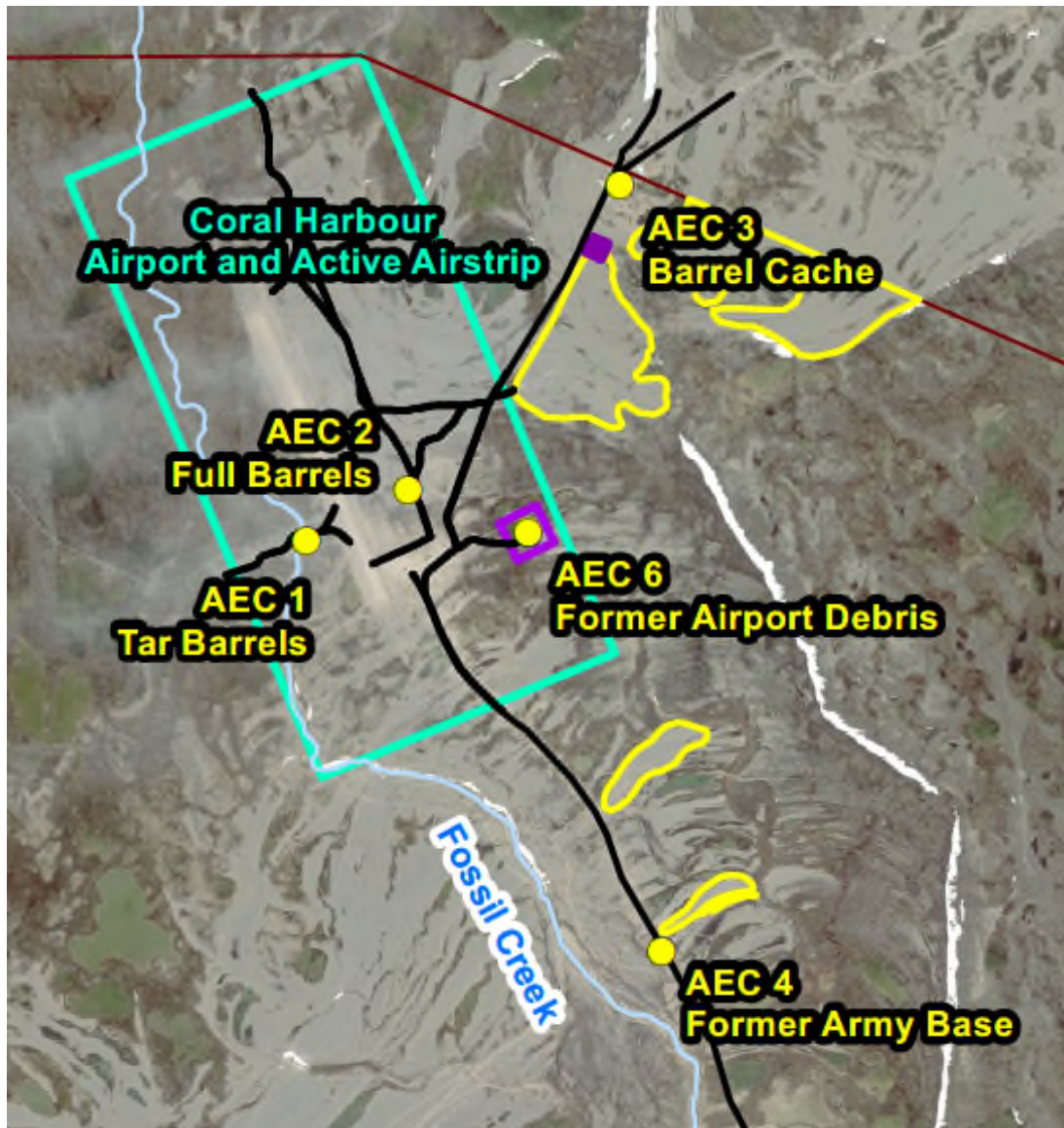
2 PERTINENT SCOPE OF WORK SECTIONS

Milestone prepared the following document in accordance with the requirements specified within the contract documents (RFP, Statement of Work (SOW), Drawings, etc.). With respect to the implementation of work and the definition of the scope of work, the following Specifications provide the direction and basis for this Abandonment and Reclamation Plan:

Section	Detail
01 14 00	Work Restrictions
01 35 15	Special Project Procedures for Contaminated Sites
01 35 29.13	Health, Safety, and Emergency Response Procedures for Contaminated Sites
01 35 43	Environmental Procedures
01 52 00	Construction Facilities
01 53 00	Mobilization and Demobilization
01 54 00	Camp Facilities
02 41 16	Structure Demolition
02 41 23	Debris and Miscellaneous Removal
02 81 01	Hazardous Materials
31 05 16	Aggregate Materials
31 22 13	Grading
31 23 33.01	Excavating, Trenching and Backfilling

3 EXECUTION

At the end of the project life cycle Sudliq Developments Ltd. (SDL) is required to abandon the construction facilities and borrow development efforts and perform reclamation efforts to reinstate the affected areas to a more natural state. Prior to breaking ground CIRNAC obtained two Quarry Permits (2023 - #01-600-31; 2024 - #01-600-33), a Land Use Permit (01-600-24) and a Water License (1BR-COR2325) for various borrow sources and work areas as seen in the below figure :



The following outlines the planned efforts to close and reinstate the areas that were affected during borrow development and through-out the main remediation contract.

3.1 Preliminary Inspection

Prior to site development *The Project Team* surveyed to establish control points and to undertake a baseline topographic survey of the work and borrow areas, as well as the proposed location of the NHW landfill. This established existing grades and was used to define the borrow areas, work areas and provided a baseline for quantity measurements.

In September 2022, a general site layout and precursory topographic assessment was performed utilizing a Total Station tied to local reference benchmarks.

In July 2023 *The Project Team* completed a comprehensive baseline survey utilizing a DGPS Real Time Kinetic (RTK) system with a base station setup and tied to pre-existing project coordinates. When connected to the base station and satellites the DGPS unit can be processed to provide a 3-dimensional accuracy of +/- 0.01 m.

The baseline horizontal and vertical survey elevation data were submitted to the PWGSC Construction Representative (PCR) upon completion of the on-site efforts (per SOW 2.1 and 01 71 00 – 1.4.3). Intermittent surveys will be conducted throughout the project using established controls for verification of material volumes. Data derived from the intermittent topographic surveys will be submitted to the PCR on a regular basis (per SOW 2.1 and 01 71 00 – 1.8.7)

3.2 Description of the environment

Southampton Island is the largest island in Hudson Bay, near the confluence of Hudson Bay and Foxe Basin waters; making it an area of high marine productivity. The area is important for key marine and terrestrial species.

The dominant surface deposits are glacio-marine lag. These areas are covered with materials ranging from sand (or finer materials) to gravel and cobble-size materials, all of glacial origin developed during marine submergence. They cover nearly the whole western third of the island along Roes Welcome Sound, much of the peninsula north of Cape Low between the Boas River and South Bay, all the lowlands between East Bay and Native Bay, and over half of the southern portion of the Bell Peninsula.

3.3 Site Mobilization

The site is considered remote in location and access; however, it is fully accessible from Coral Harbour and there are established roads servicing the site area from Coral Harbour. Local pickup trucks and transport trucks were utilized to mobilize crew and equipment from Coral Harbour. *The Project Team* relied heavily on the Sealift for the mobilization of additional equipment, the camp, camp supplies, geosynthetics, equipment parts, lubricants, hazardous materials containers, liner and nutrients. As required, smaller supplies and materials were mobilized to the site via Calm Air Cargo. Shipments mobilized/demobilized through Winnipeg, MB via air include sample containers, fresh foods, contractor, and PCR samples.

3.3.1 Mobilization Dates

Project mobilization dates :

- June 2023 – Local equipment and supplies from Coral Harbour to the Site
- July 2023 – Sealift – Major Equipment, Ancillary Equipment and Materials
- August – September 2023 – Calm Air resupply flights
- June 2024 – Local equipment return to the Site
- July 2024 – Sealift – Additional Major Equipment, Ancillary Equipment and Materials
- July – September 2024 – Calm Air resupply flights

3.3.2 Equipment and Materials List

The following is a list of equipment and materials mobilized to the site :

Coral Harbour Equipment Summary

Large Equipment			
Equipment Type	Equipment Details	Year and Condition	Supplier
Site Truck - Consultants	Ford F-150 Supercrew	2023 - 0km	Milestone / New
Site Truck	Toyota Tundra	2019 - 150,000km	Milestone
Site Truck	Toyota Tundra	2019 - 150,000km	Milestone
Service Truck	Ford F-250	2008 - 95,000km	SDL / New
Excavator	Komatsu PC 238USLC-11 (with Piping) ZERO SWING	2023 - 0hrs	SMS / Lease
Excavator Attachments (PC238)	Shears, multi-processor, hammer	2023 - 0hrs	SMS / Lease
Excavator	Komatsu 400 - Onsite	2008 - Good Condition	SDL
Loader	Volvo L110H	2001 - Good Condition	Strongco
Dozer	Onsite	1990s - Good Condition	SDL
Loader	Komatsu Wheel Loader WA380-8	2023 - 0hrs	SMS / Lease
Ride-on Compactor	Hamm H7i - 66in drum	2023 - 0hrs	Brandt Equipment / Lease
6x6 ATV	Defender Pro Limited	2023 - 0hrs	SDL / New
Skidsteer	Kubota SVL95	2019 - 900-hrs	Milestone
Skidsteer Attachments	Forks, bucket, drum handler	2019 - Good Condition	Milestone
Tandem	2010 International S 1900	2008 - 85,000km	SDL
Rock Truck	Tarex 25MT Rock Truck	1960s - Fair Condition	SDL
Tandem	2023 Kenworth T480	2023 - <1000km	Integrity Leasing
Site Truck	Toyota Tundra	2019 - 150,000km	Milestone
Site Truck	Ford F150 Supercrew F150 SWB-XLT	2023 - 37205km	Milestone
Tandem	2024 Kenworth T480	2024 - <1000km	Integrity Leasing
Excavator	Komatsu PC238USCL-11	2024 - 123.9	Nice Guy Heavy Equipment Rental
Mini-Excavator	Kubota U35-4	810.7h	Marbelle Group
Skidsteer	Kubota SVL97	2024 - 0hrs	Milestone / New

Ancillary equipment / supplies			
Equipment Type	Equipment Details	Year and Condition	Supplier
Pressure washer	EZO4035G-K-GP-12	2023 - New	Easy-Kleen
Incinerators - 2 units	CY-50	2023 - New	Ketec
Negative air unit with HEPA filters	500cfm	2023 - New	TBD
air compressor	135-180 cfm	2023 - New	TBD
Venturi unit (tank cleaning protocol)	owned	2023 - New	Milestone
Abatement enclosure	(20' x 8' x 16') 3 enclosures	2023 - New	Milestone
trash pumps / hoses	trash pumps owned (2), buying hoses	2020 - Good Condition	Rubberline
oxy-acetylene tanks/torches	med/heavy duty cutting torch	2023 - New	Linde/Air-Liquide
flatdeck trailer	20'	2023 - New	Milestone
AOD pump/hoses	15 gallon/m	2023 - New	Rubberline
Fuel Cube 1000L	owned	2023 - New	Milestone
Radios	8 two-way radios	2023 - New	MRC
Air monitors	owned	2021 - Good Condition	Milestone
Generators	WACKER Neuson G25 19.5 KW Mobile Generator	2015- Good Condition	Milestone
quick cut saw and blades	Stihl quick cut saw and blades	2023 - New	Zdeno Cycle
Drum Openners	Pneumatic or electric and manual	2023 - New	Milestone
fuel transfer pumps / hoses (barrel)		2023 - New	Rubberline
Oil Water Sperator		2020 - Good Condition	Milestone
Super Sack Racks - 2 Units		2024 - New	Milestone

Materials		
Material Type	Material Details	Supplier
Camp (11 - 20' sea-cans, 2.5- 40' sea-cans)	Camp equipment, supplies, maintenance	Matrix
Geotextile	73 rolls	Titan
Geomembrane	14 rolls	Titan
LTU liner	poly liner	Titan
Insta Berms (2)		Milestone
Pacto Toilets	Owned	Milestone
1 - 40' sea-cans (PPE, materials/supplies)	Owned	Milestone
4 - 20' sea-cans (drums, over packs)	Drums and overpacks	Milestone
47 - 1 m3 plastic totes	(haz liquid storage / haulage)	Brubacher
Water tankage / storage	(Pressure washer)	Milestone
Water tankage / storage utilize on-site tanks	(fuels/water treatment)	on-site
Water treatment system	carbon filter barrels	Continental Carbon
Fall Arrest	vest, harness, lanyards	AF
Silt fence	Owned	Milestone
Grade stakes 2ft	wooden stakes	Milestone
Orange spray paint	4 packs of 25	Milestone
Drums (locking tops, 40)	205L Drums	Brubacher
Overpacks (40)	55 Gal Overpacks	Brubacher
Water Treatment Supplies (Pb)	Activated Carbon, Activated Amunia, Modified Clay	Continental Carbon and Newterra

3.4 Description of site development, facilities and operations

The Coral Harbour Remediation Program consists of three contracts cover numerous on-site activities. The following section describes the general usage and modification of the land to carry-out the works.

3.4.1 Borrow Development

The Project Team delivered stockpiles of the required amounts of granular material as defined in the scope of work. The following table indicates that actual volumes (rounded to the nearest 5-m³) of granular materials that were developed during the Borrow Production project :

Borrow Type/Area	GMD-A	GMD-B	GMD-D	GMD-E	Totals
Type 1	515-m ³		3,145-m ³	4,890-m ³	8,550-m ³
Type 2		4,440-m ³			4,440-m ³
Type 3	775-m ³	3,300-m ³			4,075-m ³
Type 4		11,320-m ³			11,320-m ³
Totals	1,290-m ³	19,060-m ³	3,145-m ³	4,890-m ³	28,385-m³

Type 1 and Type 4 volumes were developed as pit-run aggregates in 2023, with the exception of the additional Type-4 materials added to the contract. Approximately 30,000-m³ of material was stockpiled to be screened and/or used as pit run aggregates which is well below the 2023 Quarry Permit (01-600-31) maximum quantity of 747,600-m³.

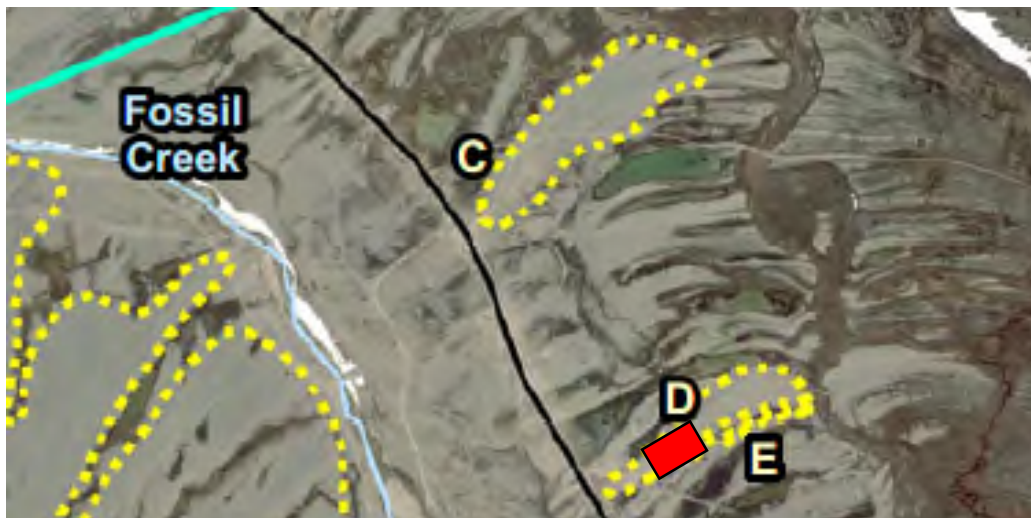
In 2024 the Type 2 and Type 3 materials were developed with an approximate 25% wastage (too fine for Type 3 or too coarse for Type 2). As such, the source excavation efforts remaining for 2024 was approximately 15,000-m³ to produce the necessary aggregates quantities, which is well below the 2024 Quarry Permit (01-600-33) maximum quantity of 24,950-m³.

Screening plants were located in Borrow Source GMD-B and GMD-D. This will allowed for excavated materials to be stockpiled in close proximity to the screening plants while providing adequate space to manage and stockpile the process streams. The following Figures illustrates the locations of Type 2 and Type 3 borrow productions areas relative to GMD-B and GMD-D. No access ramps were constructed.

Type 3 - Production Area (Green)



Type 2 - Production Area (Red)



All construction materials were stockpiled at the production area, as illustrated above, and within the borrow area.

3.4.2 Camp Facility

The Project Team delivered, installed and maintained a temporary camp at Coral Harbour supplied by subcontractor Matrix Camps, Logistics and Aviation Management. The camp was capable of supporting 18 people at any time, including camp workers.

The camp was equipped with dedicated potable water holding tanks that were filled regularly by the Hamlet’s drinking water facility. The camp was fed with treated water using an Ultra-Violet treatment system.

Greywater from the camp was stored in bladder bags or poly holding tanks and then directed to a discharge pit. As permitted by the Water License (1BR-COR2325) greywater was managed using a discharge pit. Like at other remote sites, an infiltration pit was excavated 30-m from the camp or any open water or water course; then the greywater

allowed to drain into the ground. The pit was protected and covered during use and will be backfilled at the end of the project.

The camp utilized portable toilets which will allow for the incineration of black water and solid human waste via the camp incinerator. All food waste was incinerated as well. The incinerator for the disposal of solid wastes was an A200X by Fire Lake. The incinerator was offset (downwind) from the camp to reduce interaction with emissions. The incinerator was operational throughout the day, periodically burning solid waste and garbage as required. Burning took place on days when winds were light and blowing away from the camp and operators in accordance to the Burning and Incineration of Solid Waste guideline (Department of Environment, Government of Nunavut).

The following table summarizes the quantity and type of building comprising the Coral Harbour campsite.

Facility	Quantity	Size and Type	Description
2-Person Sleeper Units	4	10' by 12' Fly Unit	2 beds per unit
Single Sleepers	3	10' by 12' Fly Unit	1 bed and 1 desk per unit. Occasional use of 2 nd bed.
4-Person Sleeper	1	14' by 16' Weatherhaven Unit	4 beds and 2 desks
Kitchen / Dining / Showers / Laundry / Water Treatment	1	20' by 50' Weatherhaven Unit	Kitchen and dining separated by divider wall from showers and laundry facilities.
Rec Room	1	20' by 20' Weatherhaven Unit	Complete with TV, DVDs, video games, board games, couches and refreshment station
First Aid	1	10' by 12' Fly Unit	One side sleeper for medic. Other side medical treatment area with bed, oxygen station, level 3 first aid kit, AED, lockable filing and prescription cabinets, etc.
Laboratory	1	16' by 16' Weatherhaven Unit	Work area for lab crew with fridge, freezer, lab equipment, etc.
Office	2	10' by 12' Fly Unit	Will contain desks, chairs, filing cabinets, printer/scanner/copier, etc.
Controlled Access Unit	1	20' by 32' Weatherhaven Unit	Complete with heater for drying work clothes, benches, baskets and hangers.
Toilet Block	1	14' by 16' Weatherhaven Unit	Separate male and female washroom facilities.
Generator Building	1	8' by 16' Stick-built building	Housing for generator, main electrical panels, and small tool crib.

The as-built layout for the camp is shown below. All structures were at minimum spaced 3-m apart to adhere to the fire code. The camp was surrounded by an electric bear fence to protect occupants from polar bears and other wildlife. The camp footprint was approximately 70m by 55m, including the bear fence. With the exception of general grading of the camp area, the only two constructed features associated with the camp are indicated on the following figure: the greywater pit (blue square) and the access ramp (red circle).



3.4.3 Non-Hazardous Landfill Construction

Only minor ancillary upgrades were completed to facilitate construction of the Non-Hazardous Landfill (NHWL) and the installation of three permanent monitoring wells.

Two single lane access ramps (red circle) were constructed west of the NHW Landfill to provide direct access to the seasonal access road north-east of the Airport. The access ramps were constructed with a nominal grade no steeper than 3h:1v. The access ramps required the installation of a 300-mm diameter culvert at its base to permit surface water flow. The overall length of each ramp’s culvert was 6-m. The access ramps were constructed using Type 4 aggregates.

A temporary haul road (purple lines) was constructed between GMD-B and the NHWL, as well as around the perimeter of the NHWL. These access roads were constructed in a cut/fill manner using a D6 Dozer, no borrow material was placed. Access to GMD-B pre-existed the project.



3.4.4 AEC 2 Temporary Hazardous Materials Processing Area

A Temporary Hazardous Materials Processing Area (HMPA) was constructed in AEC-2 to facilitate the consolidation and incineration of incinerable liquids as well as a barrel washing station. The HMPA, as seen in the below figure, was constructed using Type 1 aggregates, poly liner and a trafficable surface (pallets, type 1 granular).



3.4.5 AEC 4 Vault Access

A single lane access ramp (red circle) was constructed west of the AEC 4 concrete vault to provide direct access to the Coral Harbour Airport Road. The access ramp was constructed with a nominal grade no steeper than 3h:1v. Based on site observations no culverts were required in this location. The access ramp was constructed using Type 4 aggregates.



3.4.6 AEC 6 Land Treatment Units

Three Temporary Land Treatment Units (LTUs) were constructed in AEC-6 to facilitate the treatment of hydrocarbon impacted soils to meet the applicable guidelines. The LTUs, as seen in the below figure, was constructed using Type 1 aggregates, poly liner and a sump to collect contact water. Additionally, three monitoring wells (Blue Xs) were constructed to collect baseline and closure water samples.



3.5 Method of fuel storage

All fuels required to complete the on-site remediation activities were locally sourced through the community fuel reserves governed by the territory of Nunavut. Fuel for the heavy equipment was delivered directly to the equipment by the community fuel services. Small trucks refilled in the Hamlet at the community fuel service.

Spill kits containing absorbent pads, socks and powders were located at all work areas and inside all pick-up trucks. A Fuel Management Plan was included with the HASP.

3.6 Reclamation objectives and closure criteria

Reclamation efforts are described within sections 41 to 45 within the Quarry Permit (01-600-33), Water License Borrow Source Development SOW as well as Main Remediation Change Order 1 Section 3.2 and generally require the following:

- All equipment, materials (except placed borrow materials under the remediation contract) and waste are to be removed from site at the completion of the program.
- All pits and sumps will be backfilled and the associated infrastructure removed
- All roads will be re-graded to match re-graded to match natural contours
- Restore and stabilize areas disturbed during the project
- Borrow pits are to be contoured and reclaimed following resource extraction. Excess material that does not meet design specification are to be used in the reshaping of the borrow pit. Upon completion of final grading, the contractor will leave all slopes in a stable condition, no steeper than 3H:1V.

3.7 Reclamation Activities

The following infrastructure constructed to facilitate site works will be decommissioned :

- Access Ramps (NHWL, Camp, AEC-4) will be excavated with the aggregates relocated and spread within a borrow location. The culverts will be removed and stored for future use at the SDL yard in Coral Harbour
- The Camp greywater sump will be backfilled
- The HMPA berms will be removed and placed within the NHWL
- The LTU berms will be spread in place to promote positive drainage
- The LTU Monitoring Wells will be decommissioned and disposed of at a southern waste facility

Any debris, wastes or miscellaneous materials (screens, spill kit, etc) will be removed from the borrow source areas. Debris and wastes will be disposed of within the Non-Hazardous Waste Landfill or transported south for disposal, as applicable. Miscellaneous materials will be moved to the SDL yard in Coral Harbour.

Borrow reclamation will include contouring the borrow areas following resource extraction. Excess material that does not meet design specification will be used in the reshaping of the borrow pit. Upon completion of final grading, we will leave all slopes in a stable condition, no steeper than 3H:1V. Once site contouring is completed and the ground surface is stabilized. SDL will primarily use the WA380 Loader and D6 Dozer to carryout the reclamation efforts. The PC400 Excavator and Tandem trucks will only be used to haul materials should there be insufficient space directly adjacent to the stockpiles.

A final survey of each of the quarry and disturbed areas areas will be conducted and the final topographic surveys will be included in the project file.

3.8 Demobilization Activities

3.8.1 Demobilization Dates

The Project will have the following sequential demobilization dates :

- October 2023 – Sealift – Hazardous Materials
- September 2024 – Sealift – Waste Oil, Geotextiles
- October 2024 – Sealift –Major Equipment, Ancillary Equipment and Hazardous Wastes

3.8.2 Equipment and Materials List

The following is a list of equipment and wastes planned to be demobilized from the site. The southern demobilization and disposal year associated with wastes are also included. All equipment and materials will be demobilized in 2024 :

Coral Harbour Equipment Summary

Large Equipment			
Equipment Type	Equipment Details	Year and Condition	Receiver
Site Truck - Consultants	Ford F-150 Supercrew	2023 - 0km	SDL - Coral Harbour
Site Truck	Toyota Tundra	2019 - 150,000km	SDL - Coral Harbour
Site Truck	Toyota Tundra	2019 - 150,000km	SDL - Coral Harbour
Service Truck	Ford F-250	2008 - 95,000km	SDL - Coral Harbour
Excavator	Komatsu PC 238USLC-11 (with Piping) ZERO SWING	2023 - 0hrs	SMS / Lease Return
Excavator Attachments (PC238)	Shears, multi-processor, hammer	2023 - 0hrs	SMS / Lease Return
Excavator	Komatsu 400 - Onsite	2008 - Good Condition	SDL - Coral Harbour
Loader	Volvo L110H	2001 - Good Condition	Milestone - Ontario
Dozer	Onsite	1990s - Good Condition	SDL - Coral Harbour
Loader	Komatsu Wheel Loader WA380-8	2023 - 0hrs	SMS / Lease Return
Ride-on Compactor	Hamm H7i - 66in drum	2023 - 0hrs	Brandt Equipment / Lease Return
6x6 ATV	Defender Pro Limited	2023 - 0hrs	SDL - Coral Harbour
Skidsteer	Kubota SVL95	2019 - 900-hrs	Milestone - Ontario
Skidsteer Attachments	Forks, bucket, drum handler	2019 - Good Condition	Milestone - Ontario
Tandem	2010 International S 1900	2008 - 85,000km	SDL - Coral Harbour
Rock Truck	Tarex 25MT Rock Truck	1960s - Fair Condition	SDL - Coral Harbour
Tandem	2023 Kenworth T480	2023 - <1000km	SDL - Coral Harbour
Site Truck	Toyota Tundra	2019 - 150,000km	SDL - Coral Harbour
Site Truck	Ford F150 Supercrew F150 SWB-XLT	2023 -37205km	Milestone - Ontario
Tandem	2024 Kenworth T480	2024 - <1000km	Milestone - Ontario
Excavator	Komatsu PC238USCL-11	2024 - 123.9	Nice Guy Heavy Equipment Rental
Mini-Excavator	Kubota U35-4	810.7h	Marbelle Group Return Renturn
Skidsteer	Kubota SVL97	2024 - 0hrs	SDL - Coral Harbour

Ancillary equipment / supplies			
Equipment Type	Equipment Details	Year and Condition	Receiver
Pressure washer	EZO4035G-K-GP-12	2023 - New	Milestone - Ontario
Incinerators - 2 units	CY-50	2023 - New	Milestone - Ontario
Negative air unit with HEPA filters	500cfm	2023 - New	Milestone - Ontario
air compressor	135-180 cfm	2023 - New	Milestone - Ontario
Venturi unit (tank cleaning protocol)	owned	2023 - New	Milestone - Ontario
Abatement enclosure	(20' x 8' x 16') 3 enclosures	2023 - New	Milestone - Ontario
trash pumps / hoses	trash pumps owned (2), buying hoses	2020 - Good Condition	Milestone - Ontario
oxy-acetylene tanks/torches	med/heavy duty cutting torch	2023 - New	Milestone - Ontario
flatdeck trailer	20'	2023 - New	Milestone - Ontario
AOD pump/hoses	15 gallon/m	2023 - New	Milestone - Ontario
Fuel Cube 1000L	owned	2023 - New	Milestone - Ontario
Radios	8 two-way radios	2023 - New	Milestone - Ontario
Air monitors	owned	2021 - Good Condition	Milestone - Ontario
Generators	WACKER Neuson G25 19.5 KW Mobile Generator	2015 - Good Condition	Milestone - Ontario
quick cut saw and blades	Stihl quick cut saw and blades	2023 - New	Milestone - Ontario
Drum Openners	Pneumatic or electric and manual	2023 - New	Milestone - Ontario
fuel transfer pumps / hoses (barrel)		2023 - New	Milestone - Ontario
Oil Water Seperator		2020 - Good Condition	Milestone - Ontario
Super Sack Racks - 2 Units		2024 - New	Milestone - Ontario

Materials		
Material Type	Material Details	Receiver
Camp (7 - 20' sea-cans, 2- 40' sea-cans)	Camp equipment, supplies, maintenance	Matrix - Ontario
1 - 40' sea-cans (PPE, materials/supplies)	Owned	Milestone - Ontario
Water treatment system	carbon filter barrels, alumina, modified clay, etc	Milestone - Ontario

Wastes		
Waste Type	Waste Details	Receiver
Tar Barrels	205 barrels - 2023	CRI Environmental Quebec
	13 barrels - 2024	
Oil Barrels	109 barrels - 2023	
	450 barrels, 1 Tote - 2024	
Asbestos Wastes	22 smegabags - Transite boards with Pb Paint - 2023	
Pb Wastes	11 megabags - Gravel with Pb Paint flakes - 2024	
	4 megabags - Paint Flakes, PPE, etc	
Flourscent Light Tubes	10-kg - 2023	
Light Ballasts - PCB possible	20 units - 2024	
Mercury Switches	0.8-Kg - 2023	
Lead Acid Batteries	24 Batteries - 2024	
Compressed Gas Cylinders	7 units - 2024	
Conatminated Water	15 barrels, 15-Totes - 18,000-L - 2024	
FSTS Sludge	1 barrel, 4 totes - 4,200-L - 2024	
AEC-4 Bunker Sludge	1 Tote - 1000-L - 2024	
1 - 20' sea-cans (miscellaneous Non-Haz)	FSTS Tank, LTU MWs, Construction Debris, etc	
Petroleum Hydrocarbon impacted Soils	749 megabags - 2024	Signaterre - Quebec
Metal impacted Soils	1 megabag - 2024	