Dismantling of a Former Outfitter Camp - Transtaïga Sector

Form: Preliminary Information

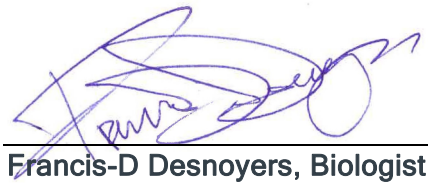
Ministry of Energy and Natural Resources (MERN)
Final Version
Reference No. 209863-2021-1

April 6, 2022
14-02111832.000-0100-EN-R-0004-00

ENGLOBE

Ministry of Energy and Natural Resources (MERN)
Reference No. 209863-2021-1

Prepared by:



Francis-D Desnoyers, Biologist, M.Env.
Environmental Professional
Environmental Studies & Climate Change

Reviewed by:

Catherine Lalumière, Biologiste, MBA
Project Manager and Adjunct Director
Environmental Studies & Climate Change

Approved by:

Katheryne Budd, B.A.
Project Manager
Site Remediation

Stéphane Cloutier, Eng., CESA
2022-04-07
MELCC-Certified Expert
Expert Member no.: 290

Production Team

Ministry of Energy and Natural Resources (MERN)

Territorial Affairs Advisor Northern Quebec Regional Office	Kelly Belisle, Geog., B.Sc.

Englobe Corp.

Project Manager	Katheryne Budd, Geog., B.A.
Collaborators	Catherine Lalumière, Biol., MBA Francis-D. Desnoyers, Biol., M.Sc.
Publishing	Florence Le Tourneux, B.A. ling.

Revision and Publication Register

REVISION NO.	DATE	DESCRIPTION
0A	March 10, 2022	Preliminary version published for comments (FR)
00	April 6, 2022	Final version (EN)

Property and Confidentiality

“This report can only be used for the purposes stated therein. Any use of the report must take into consideration the object and scope of the mandate by virtue of which the report was prepared, as well as the limitations and conditions specified therein and the state of scientific knowledge at the time the report was prepared. Englobe Corp. provides no warranty and makes no representations other than those expressly contained in the report.

This document is the work product of Englobe Corp. Any reproduction, distribution or adaptation, partial or total, is strictly forbidden without the prior written authorization of Englobe Corp. and its Client. For greater certainty, use of any and all extracts from the report is strictly forbidden without the written authorization of Englobe Corp. and its Client, given that the report must be read and considered in its entirety.

No information contained in this report can be used by any third party without the prior written authorization of Englobe Corp. and its Client. Englobe Corp. disclaims any responsibility or liability for any unauthorized reproduction, distribution, adaptation or use of the report.

If tests have been carried out, the results of these tests are valid only for the sample described in this report.

Englobe Corp.’s subcontractors who have carried out on-site or laboratory work are duly assessed according to the purchase procedure of our quality system. For further information, please contact your project manager.”

Table of Contents

TABLES

APPENDICES

1 Identification and Contact Information of the Proponent

1.1 Identification of the Proponent

Table 1 Identification of the proponent

Item	Description
Name:	Ministry of Energy and Natural Resources (MERN)
Civic address:	1121, boul. Industriel, C.P. 159 Lebel-sur-Quévillon (Québec) J0Y 1X0
Mailing Address (if different from street address):	N/A
Name and position of signing officer(s) authorized to submit the application:	Stéphanie Morin Directrice générale de la Direction générale du réseau régional
Name and title of contact person:	Kelly Belisle, Territorial Affairs Advisor Direction régionale du Nord-du-Québec
Telephone number:	819-755-4838, Ext. 279
Telephone number (other):	N/A
E-mail address:	kelly.belisle@mern.gouv.qc.ca

1.2 Québec Enterprise Number

No Quebec enterprise number (NEQ) is applicable.

1.3 Resolution of the Municipal Council, Band Council, Northern Village or Lead Agency

As the proponent is not a municipality, the preliminary information form does not contain a resolution from the municipal council, band council, northern village or lead agency.

1.4 Identification of the Consultant Mandated by the Proponent

Table 2 Identification of the mandated consultant

Item	Description
Name:	Englobe Corp.
Civic address:	1200 Saint-Martin West Boulevard, Suite 400 Laval, Québec H7S2E4
Mailing Address (if different from street address):	N/A
Name and position of signing officer(s) authorized to submit the application:	514-281 5151
Name and title of contact person:	N/A
Email address:	catherine.lalumiere@englobecorp.com
Description of the mandate:	Request for attestation of exemption to the environmental assessment process and review of the environmental and social impacts

2 General Presentation of the Project

2.1 Project Title

Dismantling of former outfitter camp facilities in the Transtaïga Road area, including a main camp site and eight (8) satellite sites.

2.2 Article of Subjection

This project is considered a "grey zone" project as it does not fall under Schedule A or B of the Environment Quality Act (EQA).

Considering the description of the environmental, social and economic impacts described in this document, MERN wishes to demonstrate to the Assessment Committee that it is not necessary to subject the project to the environmental assessment process as described in Chapter II of the EQA. Without wishing to evade its legal obligations related to industrial activities carried out in Northern Quebec, the proponent wishes to demonstrate that the negative environmental impacts are minor. The following sections provide sufficient detail on the project to allow the authorities to issue an “attestation of exemption” to Chapter II of the EQA.

2.3 Project Objectives and Justification

As manager of public land, mines, energy and innovation as well as land and geospatial information, the MERN's mission is to promote the development, conservation and knowledge of natural resources

and land, from a perspective of sustainable development and integrated management, for the benefit of citizens.

As the primary manager of natural resources in Quebec, the MERN's mission includes the following activities:

– To develop and disseminate the knowledge necessary for the management of the territory and natural resources;

– To manage the rights of use and development of the territory and natural resources; and,

– To ensure the management of public land, the protection and conservation of natural resources and their restoration in case of deterioration.

In this context, the MERN’s Direction régionale du Nord-du-Québec wishes to proceed with the dismantling and clean-up of abandoned outfitting facilities and a gas station along the Transtaïga Road, located in the Eeyou Istchee Baie-James Regional Government territory.

2.4 Project Summary and Implementation

The MERN intends to dismantle and clean up nine abandoned sites formerly occupied by the Nouchimi outfitting camp facilities. The work will be carried out by Mikuen Environmental Services (Mikuen), a contractor specializing in work in northern environments under the direction of Englobe Corp. (Englobe).

The dismantling mandate includes a main camp and seven satellite camps. An unauthorized barrel storage area located on the property adjacent to the main camp, the site of a former gas station, will be cleared out.

The project work consists of the demolition of the structures and facilities presently occupying the sites; the recovery, segregation, and off-site disposal of the equipment, materials, and debris present at each site; the management and off-site disposal of hazardous materials; and the restoration of the land to its natural state through backfilling, grading and revegetation of formerly occupied areas.

An environmental assessment of the former main camp site will be carried out to characterize potential areas of environmental concern on that site.

The major milestones of the project are as follows:

– Planning and site reconnaissance visit;

– Mobilization of equipment and material including the installation of a temporary camp for workers;

– Preparatory work, recovery and management of hazardous and non-hazardous debris;

– Demolition work, segregation and management of demolition debris and disposal to authorized facilities; and,

– Land restoration (backfilling, grading and revegetation).

The structures and materials involved in the demolition, cleanup and land restoration work are listed in Table 3.

Table 3 Main installations scheduled for demolition and clean-up work

Site	Targeted Installations
Main Camp 20963-00-000	– 8 buildings (3 m x 3 m to 14.7 m x 15.9 m) and 32 site trailers (3.7 m x 18.4 m) – Septic tanks and other minor underground installations (pipes, electrical conduits, and others) – Facilities and equipment specific to the campground – Dock and shoreline waste – Other residual materials – Estimated volume of material: 3,530 m^3
Former gas station 0600-2021-104	– Recovery of approximately 150 barrels of petroleum hydrocarbons – Recovery of approximately 100 propane tanks
Satellite Camps 212691-00-001 A and B	– Two buildings (cottages) (7.2 m x 9.6 m) – Other residual materials – Total estimated volume: 148 m^3
Satellite Camp 207014-00-000	– One building (cottage) (7.3 m x 3.7 m) – Other residual materials – Total estimated volume: 42 m^3
Satellite Camp 212692-00-001	– Two buildings (cottages) (8.6 m x 5.4 m) – Other residual materials – Total estimated volume: 46 m^3
Satellite Camp 215131-00-000	– One building (cottage) (7.3 m x 9.8 m) – Other residual materials – Total estimated volume: 113 m^3
Satellite Camp 001357-10-000	– One building (cottage) (6.2 m x 7.4 m) – Other residual materials – Total estimated volume: 51 m^3
Satellite Camp 202963-00-000	– Two buildings (cottage and site trailer) (7.4 m x 8.7 m and 12.2 m x 3.7 m) – Other residual materials – Total estimated volume: 153 m^3

A figure presenting the various site locations is presented in Appendix A. Fact sheets produced by the MERN that detail the characteristics of the various sites and present photos of the facilities to be dismantled are available in Appendix B (the fact sheets are available in French only).

2.5 Related Activities

The objective of the project is to restore the land to its natural state by removing abandoned anthropogenic structures and managing the potential sources of contamination identified on the targeted sites. Access roads to the sites are already present and functional and no road construction is planned. A large vacant and unvegetated area is present at the location of the structures on each site. This area will allow the work to be carried out on disturbed areas of the sites, hence no clearing, grubbing or stripping is planned.

2.5.1 Protection of Wildlife Species Inhabiting the Site

A colony of bats has been observed living in two of the buildings at the main camp site. The MERN has collaborated with the Ministry of Forests, Wildlife and Parks (MFFP) to identify and provide an alternate roosting habitat. A bat house will be installed in accordance with MFFP guidelines during the site reconnaissance visit in April 2022. The provision of the roost is intended to limit the potential

establishment of bat populations in the buildings prior to their breeding period, which is between May and August. An adapted demolition procedure will be used for buildings inhabited by bats if necessary.

2.5.2 Installation and Operation of Temporary Site Facilities

A temporary camp to house workers will be installed on the main camp site. The camp will be set up in a cleared area of the site, such as the site's camping area. The preliminary location of the temporary accommodation facilities is shown on Figure 2 in Appendix A.

The camp will have a capacity of 10 to 20 people to accommodate workers from this project and potentially the workforce from the remediation project on the adjacent property. The temporary accommodation facilities will consist of five to six units. The camp will be supplied by a clean water tank and two wastewater tanks, as well as a generator (electrical power). The generator will be powered by a built-in 400-liter capacity tank. A spill kit and fire extinguishers will be stored near the generator.

The water supply for the camp's sanitary module will be available from Katatipawasakamaw Lake. Daily water consumption is not expected to exceed 30,000 liters, based on a projected consumption of 1,500 liters per person per day for a maximum of 20 occupants. The volume of water expected to be withdrawn is below the limits established by Section 22 of the EQA and hence a request for a water withdrawal authorization will not be required. Wastewater generated at the camp will be stored in tanks of up to 5,000 L. The disposal of grey water at an authorized site will be done by a vacuum truck.

The temporary camp will be installed and operated in accordance with the requirements of all applicable regulations.

2.5.3 Non-mandated Projects to be carried out in the Vicinity

This project is part of a larger objective, which is the restoration of lands occupied by abandoned facilities along the Transtaïga Road. The environmental remediation of the former gas station adjacent to the main camp is the subject of a separate mandate and will be carried out during 2022.

The proponent of the remediation project is submitting separate applications for an exemption from the environmental assessment procedure under Section 154 of the EQA and for Ministerial authorization for the remediation work.

3 Project Location and Schedule

3.1 Project Identification, Location and Activities

Project activities will be completed on nine distinct sites between Kilometers 284 and 509 of the Transtaïga Road. All sites are located on Category III lands owed by the MERN and in the jurisdiction of the Regional Government of Eeyou Istchee James Bay.

The geographic coordinates in decimal degrees of the center points of the targeted sites are presented in Table 4 and displayed on Figure 1 presented in Appendix A.

Table 4 Geographic coordinates of the center points of the project's target sites

Site	SCR	North	East	KM mark Transtaïga Road
Main Camp 20963-00-000	UTM 18	5 951 292	584 568	284
Former gas station	UTM 18	5 951 229	584 650	284
Satellite Camps 212691-00-001 A	UTM 18	6 032 844	351 755	440
Satellite Camps 212691-00-001 B	UTM 18	5 990 255	313 874	440
Satellite Camp 207014-00-000	UTM 18	5 977 842	666 637	305
Satellite Camp 212692-00-001	UTM 18	6 032 845	351 755	509
Satellite Camp 215131-00-000	UTM 18	5 978 118	667 271	395
Satellite Camp 001357-10-000	UTM 18	5 977 842	666 637	395
Satellite Camp 202963-00-000	UTM 18	5 966 267	594 615	305

3.2 Project Site Description

The work will be executed on properties currently owned by the MERN. The general landscape is open, the topography is mostly flat, and access is possible from roads connected to the Transtaiga

Road. With the exception of the former gas station, each site is occupied by at least one structure with the historical land use of a recreational tourism facility. The buildings presently occupying the sites are abandoned and several locations have been vandalized.

The land is zoned for mixed use (code: 53-12-R) allowing for dispersed resort uses, low impact commercial, service and industrial uses, public utilities, parks and open space, recreation, extensive recreational uses, intensive recreational uses, hunting and fishing camps, public and institutional uses, non-livestock agriculture, and resource operations.

Due to the nature and former use of the sites, few potential sources of contamination exist. The presence of an unauthorized barrel stockpile on the former gas station site, i.e. barrels and cylinders, and a drum storage area at the main camp site pose a high risk for environmental contamination. The presence of heating oil tanks and potential small quantities of household hazardous wastes (neon lights, refrigerants, paints and solvents, among others) was also noted at various camp sites.

According to publicly available data (e.g., satellite imagery, river system mapping, and ecoforestry data), no wetlands or hydric environments are located directly on the work sites based on analysis; however, several sites are located on the edge of Katatipawasakamaw Lake or La Grande River.

No protected areas are located on the sites.

3.3 Timeframe for Project Completion

Englobe will commence the mobilization and installation of the temporary work camp in May 2022. The dismantling and site clean-up work is expected to be conducted over a five-week period, between May and July. The project schedule is available in Appendix C of this document.

3.4 Location Map

Location plans for the project are presented in Appendix A. Data sheets presenting the site locations, infrastructures, waste streams, descriptions and site photographs produced by the MERN, are available in Appendix B (French only).

4 Information and Consultation Activities with the Public, Indigenous Communities and Land Users

4.1 Previously Conducted Information and Consultation Activities

The Cree Nation Government (CNG) was informed of the proposed demolition of the former Nouchimi Outfitter camps by the Nord-du-Québec Regional Directorate in 2020. Targeted communications regarding the beneficiaries' concerns about the project began in 2020. The CNG also informed the community of Chisasibi of the project in 2021.

Collaboration with the CNG made it possible to identify the tallymen, who were all contacted individually by either the CNG or the Regional Directorate (Table 5).

The tallymen shared their concerns, but also their knowledge about the use of the buildings by beneficiaries.

The main elements that emerged from the communications were:

– Two camps are used by beneficiaries (KM 516). They have been removed from the dismantling project.

– One tallyman has asked to keep a stove for his personal use.

– The CNG and the Regional Directorate were unable to contact a tallyman whose trapline contains two buildings. However, based on several visits by MERN inspectors, the two buildings do not appear to be used by any beneficiaries.

– The Regional Directorate informed the CNG of the expected start date of the work. Regional Management maintains active communication with the CNG.

Table 5 Summary of communications made by the Regional Directorate

Site	Tallyman	Kilometer mark of the Transtaïga	
001357-10-000	Georges L. Bearskin (CH26)	KM 395	CNG was informed in 2020. There have been several email exchanges between the CNG and the MERN. Neither the CNG nor the MERN have been able to speak to the tallyman.
202963-00-000	Paul Ratt (CH39)	KM 305	The tallyman confirmed that he does not use the building. He has agreed by email to the demolition of both facilities. He has requested to keep the stove for his personal use.
209863-00-000 (Main Camp)	Eddy Pash	KM 284	The tallyman has been informed of the intention to demolish the site facilities. No communication was made to Eddy Pash due to the size of the site and the condition of the facilities.
212691-00-001	Eddy Pash (CH29)	KM 440	The tallyman confirmed that he is not using the building. He has given permission via email for the demolition of the camps.
212692-00-001	Bobby Neaccopo (CH31)	KM 509	The tallyman confirmed that he does not use the building. He gave his authorization for the demolition of the camp by phone.
215131-00-000	George L. Bearskin (CH26)	KM 395	CNG was informed in 2020. There have been several email exchanges between the CNG and the MERN. Neither the CNG nor the MERN has been able to speak to the tallyman.
207014-00-000	Paul Ratt	KM 305	Inclusion in the present mandate is the result of a legal process, this site was not part of the satellite camps of the former Nouchimi Outfitters. The tallyman was informed of the demolition work.

4.2 Information and Consultation Activities planned during the Environmental and Social Impact Study

No additional public consultation is planned in the context of this project.

5 Description of the Main Issues and Apprehended Impacts of the Project on the Receiving Environment

5.1 Description of Key Project Concerns

The project has no apprehended negative impact on the environment. On the contrary, the execution of the proposed works will improve the environmental quality of the sites. The social impacts of the project lie in the creation of opportunities for local entrepreneurs and workers.

The primary technical issues of the project are summarized in the following sections.

5.1.1 Hazardous Waste Management and Disposal

All hazardous wastes will be managed in accordance with current regulations. Drums containing hazardous liquids will be inspected prior to any treatment. Full drums in good condition will be expedited for off site disposal while drums in poor condition will be consolidated with partially full drums. A drum washing station may be constructed. Propane cylinders will be segregated on the site of the former gas station and excess propane will be evacuated from the tanks using a flaring procedure before being disposed of off-site. Domestic dangerous goods will be packaged in lab-packs.

Waste management procedures and off-site disposal facilities are presented in the Work Execution Plan in Appendix D.

5.1.2 Identification of Areas of Potential Environmental Concerns

A comprehensive site inspection will be conducted after the collection of debris from around the site and prior to the start of demolition. The purpose of this inspection will be to identify environmental hazards that may impact the site under study.

The assessment will evaluate the environmental concerns identified on the main camp site. Englobe will excavate test pits to evaluate the quality of soils in the areas of potential environmental concern identified in Figure 3, presented in Appendix A. A monitoring well situated on the neighbouring site, upstream from the main camp site, will be sampled to assess the impact this potential source may have on the main camp site.

The methodology used for the characterization of soil and groundwater as well as the sampling methods recommended by Englobe will comply with the requirements of the MELCC's Guide d'intervention - Protection des sols et réhabilitation des terrains contaminés (Guide d'intervention) (2021)[1].

The identification of areas of potential environmental concern will be conducted at each site prior to dismantling work. The MERN will be informed of all potential environmental concerns observed.

5.1.3 Demolition of Buildings and Facilities

The buildings and facilities will be dismantled, and the demolition materials will be segregated and stockpiled for elimination offsite. Due to the age of construction, no hazardous materials (asbestos, lead paint, PCBs, formaldehyde) are presumed to be found within the construction materials in the buildings on the subject properties.

According to the information provided by the MFFP, bats will potentially be present in two buildings at the main camp site. Bat houses will be installed in April to provide an alternative habitat prior to their reproduction period. The presence of bats within the buildings will be verified prior to dismantling operations and an adapted demolition procedure will be used to demolish buildings still occupied by bats.

5.1.4 Non-hazardous Waste Recovery and Disposal

Non-hazardous debris will be collected from all sites and transported back to the main camp site for sorting and off-site disposal. When possible, the contents of buildings will be recovered and offered for reuse, including the distribution of functional equipment (refrigerators, furniture, etc.) to the surrounding communities, the recycling of metals, the recycling of wood debris, and the disposal of non-recyclable wastes in a landfill.

5.1.5 Restoration of the Sites

There are no wetlands or hydric environments on the lands affected by the work or on the access roads to the sites. Moreover, this land is mostly cleared, and no tree cutting is planned to access the various sites. The work carried out within the scope of the project will avoid, as much as possible, disturbing the existing vegetation and preserve the natural aspect.

Where necessary, backfilling of the sites will be done with clean soil in accordance with the requirements of the Land Protection and Rehabilitation Regulation (LPRR). Fill will be sourced from local active borrow pits.

The footprints of the demolished buildings will be graded to match the local topography. Once the dismantling work is complete, an excavator will reshape the area to match the local topography to

[1] MELCC. 2021. *Guide d'intervention - Protection des sols et réhabilitation des terrains contaminés*.

prevent standing water from accumulating and prevent erosion. The soil surface will be lightly reworked to make the land suitable for seeding.

The main camp site will be revegetated by manually sowing predominantly native seeds.

5.1.6 Presence of Wetlands and Removal of Docks and Debris from the Katatipawasakamaw Lake Shoreline

No wetlands have been observed on the project sites nor on their access roads.

Several sites are located on the waterfront, however, other than the main camp site, no work is planned in proximity to the shoreline. A beached dock on the main camp site will be dismantled and the debris scattered along the shoreline will be collected. Debris will be collected manually where possible and transported to the main work area for treatment and eventual disposal.

No in water work will be executed. Efforts will be made to limit the impact of the work on these sensitive environments.

5.1.7 Working in Northern Locations

The remote nature of the mandate will require significant planning and coordination, particularly with local resources (airport, LET, neighbouring communities, first aid, etc).

5.2 Description of the Main Apprehended Impacts of the Project on the Receiving Environment

The project has no apprehended negative impact on the environment. On the contrary, the execution of the proposed works will improve the environmental quality of the sites. The social impacts of the project lie in the creation of opportunities for local entrepreneurs and workers.

The work is expected to take place over a five-week period. The temporary camp facilities and some of the equipment mobilized for the project will be used for the remediation mandate of the gas station, which will save on transport and greenhouse gas emissions for the two projects.

To minimize the potential negative impacts of the project on the receiving environment, the main mitigation measures are proposed as follows:

- Refueling and maintenance of the machinery will be done in a dedicated area on the main camp site, outside of sensitive areas, notably outside of the 30-m high-water mark perimeter; a spill kit will be present at all times on the sites;
- Spill trays will be placed under parked vehicles and used to contain all small gas-powered machinery and their gas tanks;
- Work will be completed manually on the shoreline to avoid rutting by machinery;
- Silt fences may be installed along the boundary of areas adjacent to water environments on the man camp site in order to limit the potential release of sediment towards the environment;
- Use of clean soils for backfilling sourced from local borrow pits;
- Segregation and consolidation of the hazardous wastes on the former gas station site, combustion of the residual pressurized gases from the small propane tanks, before transporting and disposing of the tanks and barrels off site; and,
- Revegetation of disturbed areas on the main camp.

The social impacts of the project lie in the creation of opportunities for local Cree entrepreneurs and workers. These impacts will be reflected in employment and staff development opportunities.

6 Greenhouse Gas Emissions

The main GHG-generating activities under the project are as follows:

- Transportation of materials and equipment by truck (mobilization and demobilization);
- Use of heavy machinery (mechanical shovels and others) at various stages of the project;
- Trucking of the various wastes; and,
- Safe combustion of the residual propane in the cylinders, if any.

7 Other Relevant Information

There is no other relevant information to enhance the understanding of the mandate.

8 Declaration and Signature

I declare that:

1. the documents and information provided in this Preliminary Information Form are accurate to the best of my knowledge.

Any false statements may result in penalties under EQA. All information provided will form part of the application and will be published on the websites of the Assessment Committee (COMEV) or the Kativik Environmental Quality Commission (KEQC) and in the Environmental Assessment Registry.

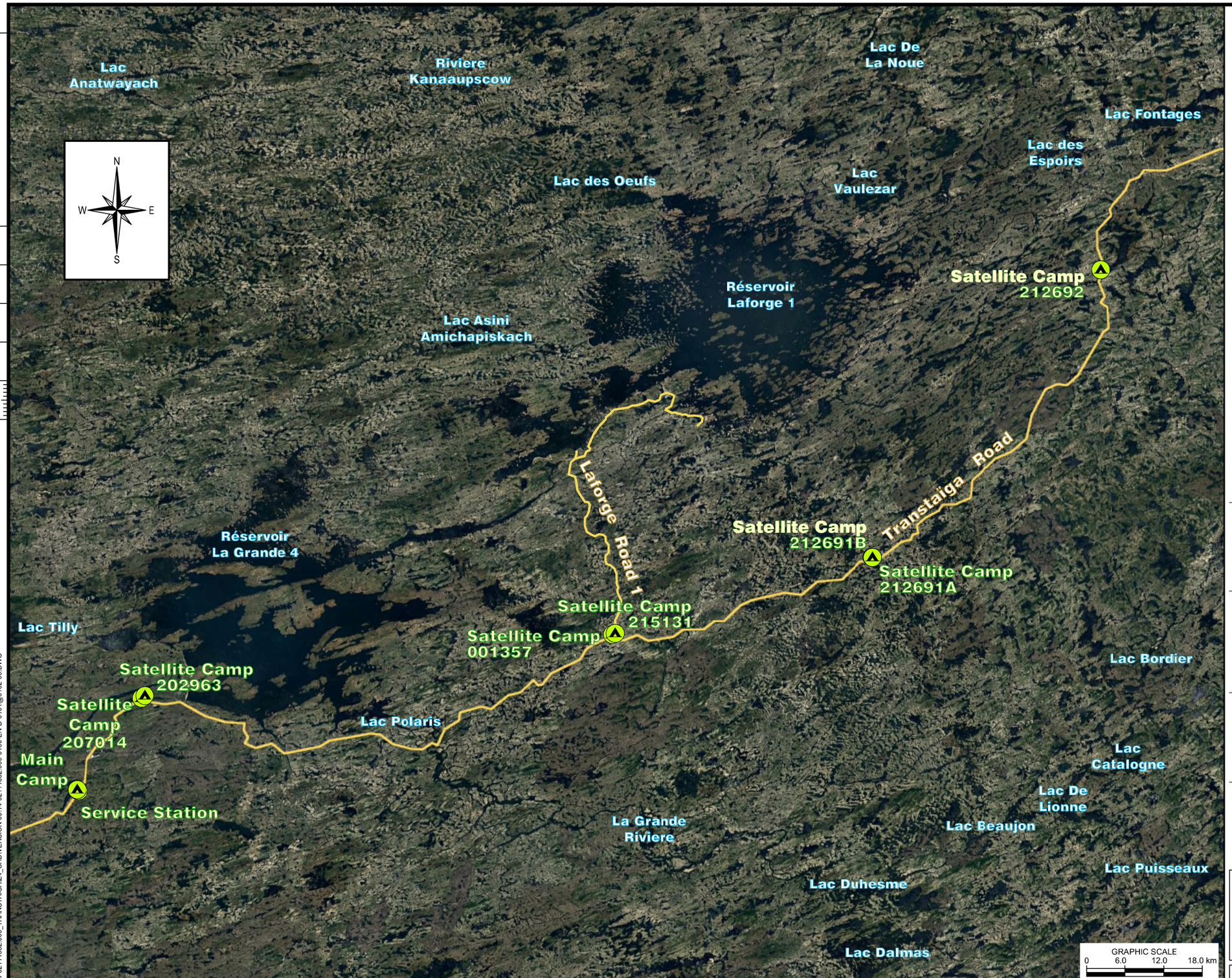
First and last name:

Signature:

Date:

Appendix A
Figures

ENGLOBE



Legend

Camp Site

Inset Map: Not to Scale

Source: (Aerial Photograph) GoogleEarth / Landsat, March 2022 - (Inset Map) OnTheWorldMap.com March 2022

Client

Ministry of Energy and Natural Resources

Project

Dismantling of an Abandoned Outfitting Camp - Transtäiga Sector

209863-00-000 Main Camp of the Nouchimi Outfitter
Km 284, Trans-Taïga Road, MRC Eeyou Istchee, James Bay, Québec

Title

Figure 1
General Location of Items of Interest

Englobe Corp.
1200, bcul. Saint-Martin O, bur. 400
Laval, QC H7S 2E4
T 514 281-5151
F 450 668-5532

Discipline: Geoenvironment		Prepared by: K. Budd	Checked by: G. Brunner
Scale: 1:600,000		Drawn by: D. Wilson	Approved by: S. Cloutier
Date: 2022-03-25		Figure No: 1 of 3	
Page setup: LS-EN	Paper Format: Tabloid	Register No:	

Resp.	Project	Phase	Disc.	Type	Drawing No.	Rev.
14	02101832.000-0100	---	EN	D	0102	00

10 cm 0 1 2 3 4 5

Legend

- Prcpane Flaring Area
- Temporary Work Camp Area
- Non-Hazardous Waste Storage and Treatment Area
- Hazardous Waste Storage and Treatment Area
- Barrel Washing and Consolidation Area

Scurce : FatMap, February 2022

Client

Ministry of Energy and Natural Resources

Project

Dismantling of an Abandoned Outfitting Camp - Transtäiga Sector

209863-00-000 Main Camp of the Nouchimi Outfitter
Km 284, Trans-Taïga Rcad, MRC Eeyou Istchee, James Bay, Québec

Title

Figure 2
Preliminary Site Facility Locations

ENGLOBE

Englobe Corp.
1200, bcul. Saint-Martin O, bur. 400
Laval, QC H7S 2E4
T 514 281-5151
F 450 668-5532

Discipline: Geoenvironment		Prepared by: K. Budd	Checked by: G. Brunner
Scale: 1:1,000		Drawn by: P. Légaré	Approved by: S. Cloutier
Date: 2022-03-25		Figure No: 2 of 3	
Page setup: 0102-EN	Paper Format: Tabloid	Register No:	

Resp.	Project	Phase	Disc.	Type	Drawing No.	Rev.
14	02200000.000-0100	---	EN	D	0102	00

Q:\043\014-02111832.000_TRANSTAIGA\Z4_CAD\VERSION 00\14-02111832.000-0100-EN-D-0101@0102-00.DWG

10 cm 0 1 2 3 4 5

Legend

Prcposed Test Pit

Monitoring Well

Area of Potential Environmental Concern (APEC)

1 Barrel Storage Area

2 Garage Area

3 Southeast Porton of Property

Scurce : FatMap, February 2022

Client

Ministry of Energy and Natural Resources

Project

Dismantling of an Abandoned Outfitting Camp - Transtäiga Sector

209863-00-000 Main Camp of the Nouchimi Outfitter
Km 284, Trans-Taïga Rcad, MRC Eeyou Istchee, James Bay, Québec

Title

Figure 3
Location of the Primary Areas of Potential Environmental Concern (APECs) and Proposed Sounding Locations

Englobe Corp.
1200, bcul. Saint-Martin O, bur. 400
Laval, QC H7S 2E4
T 514 281-5151
F 450 668-5532

Discipline: Geoenvironment		Prepared by: K. Budd	Checked by: G. Brunner
Scale:		Drawn by: P. Légaré	Approved by: S. Cloutier
Date: 2022-03-25		Figure No: 3 of 3	
Page setup: 0101-EN	Paper Format: Tabloid	Register No:	

Resp.	Project	Phase	Disc.	Type	Drawing No.	Rev.
14	02200000.000-0100	---	EN	D	0101	00

Q:\043\014-02111832.000_TRANSTAIGA\ZA_CAD\VERSION 00\14-02111832.000-0100-EN-D-0101@0102-00.DWG

Appendix B
Site Fact Sheets (MERN)

ENGLOBE

Fiche technique 0600-2021-104

A - Localisation

MRC/Municipalité	Gouvernement régional Eeyou-Istchee-Baie-James
Coordonnées	UTM 18 Nord 5951229 Est 584650 Km 284 route de la Transtaïga, accessible par camionnette, camion et machinerie.
Informations supplémentaires	Le dépôt de barils et bombonnes de propane se situe à environ 100 mètres du bord de la route.

B- Types de matières présentes sur le site

Bâtiments	☐	Électroménagers	☐
Roulottes	☐	Meubles	☐
Autres	☒	Ferraille	☒

C - Matières potentiellement dangereuses

Baril (45 gallons)	☒	Peinture, diluant	☐
Réservoir (essence, huile)	☒	Produit chimique	☐
Batterie	☐	Autres	

D - Quantités estimées

Nombre de barils estimé : 150

Nombre de bombonnes de propane estimé : 100

E - Description

Dépôts de barils et de bombonne de propane

- Environ 150 barils, certains répartis en lot éparts. Les barils doivent être retirés de façon sécuritaire et disposés dans un centre autorisé. Une preuve de disposition doit être fournie au ministre.
- Des morceaux de bois et de métaux
- Des débris autres doivent également être ramassé si présent sur le site


20.10.2020


20.10.2020

Affiche publicitaire

Fiche technique 209863-00-000 Camp principal

A - Localisation

MRC/Municipalité	Gouvernement régional Eeyou-Istchee-Baie-James
Coordonnées	UTM 18 Nord 5951292 Est 584568 Km 284 route de la Transtaïga, accessible par camionnette, camion et machinerie.
Informations supplémentaires	

B- Types de matières présentes sur le site

Bâtiments	☒	Électroménagers	
Roulottes	☒	Meubles	
Autres	☒	Ferraille	

C - Matières potentiellement dangereuses

Baril (45 gallons)	☒	Peinture, diluant	
Réservoir (essence, huile)	☒	Produit chimique	
Batterie	☐	Autres	

D - Quantités estimées

Volume estimé des matières (m^3) : 3 533, 52m^3

E - Description

Démantèlement de l'ensemble des infrastructures (bâtiments, lampadaires, débris épart, fosses septiques, etc.)
Couper les poteaux présents sur le terrain de camping.
Retrait sécuritaire des matières dangereuses et disposition dans un centre autorisé. Une preuve de la disposition doit être fournie au ministre.
Remisse en état du site (nivelage du terrain) et installation des nichoirs à chauve-souris.

Vue aérienne du site :

Emplacement de camping avec électricité et eau :

- Comprend une dizaine d’emplacement, peut-être plus.

Quai sur le bord de l'eau :

- Petit bâtiment à mi-chemin d'environ 6pi X 6 pi
- Débris sur le bord de l'eau : structure de quai environ 24 pi, pneus, baril d'eau, 2 chaises et autres.




Loisir (emplacement numéro 1 sur la carte vue aérienne)

- Bâtiment 14,7m x 15,9m


18/03/2020 14:44


18/03/2020 14:45


18/03/2020 14:45


18/03/2020 14:46


18/03/2020 14:46


18/03/2020 14:47

Bâtiment avec équipements électriques (emplacement numéro 12 sur la carte vue aérienne)

- Bâtiment 2m x3m avec installation électrique non-raccordé

Installation sanitaire

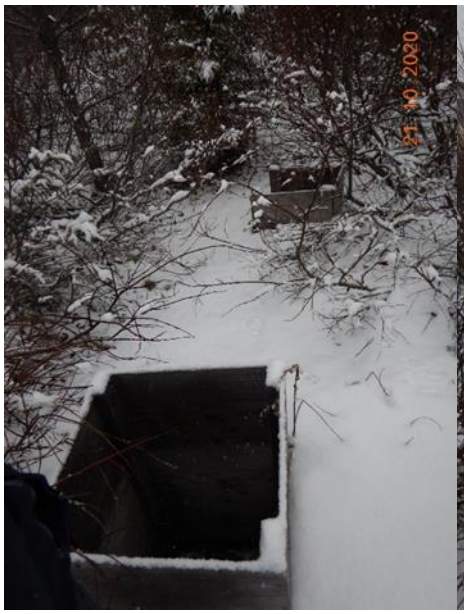
- Emplacement qui semble être un champ d'épuration (4 sorties de tuyau en PVC)
- Environ 2 emplacements de fosse septique par bloc de roulotte.


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020

Débris à l'extérieur des bâtiments

- plaques de tôles
- 1 camion et une boite de camion style pickup
- Restant de bâtiment de style Tipi
- Conduits de ventilation
- Divers morceaux de fer
- Réfrigérateurs et congélateurs
- Plusieurs débris autres


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020


21.10.2020

Réservoirs de gaz propane

- 2 réservoirs et station de remplissage
- La zone est clôturée

Roulottes dortoirs (emplacement numéro 2, 6, 7, 9, 11 et 12 sur la carte vue aérienne)

- 2 bâtiments 6,2 m x 6,2m et 9,8m x 8,10m.
- 24 roulottes de chantier
- Chaque roulotte a des structures de fer en dessous
- Plusieurs meubles et matériaux présents dans les roulottes


18/03/2020 15:26


18/03/2020 15:27


700
21.10.2020


600
21.10.2020


21.10.2020


21.10.2020


500
21.10.2020


21.10.2020


21.10.2020

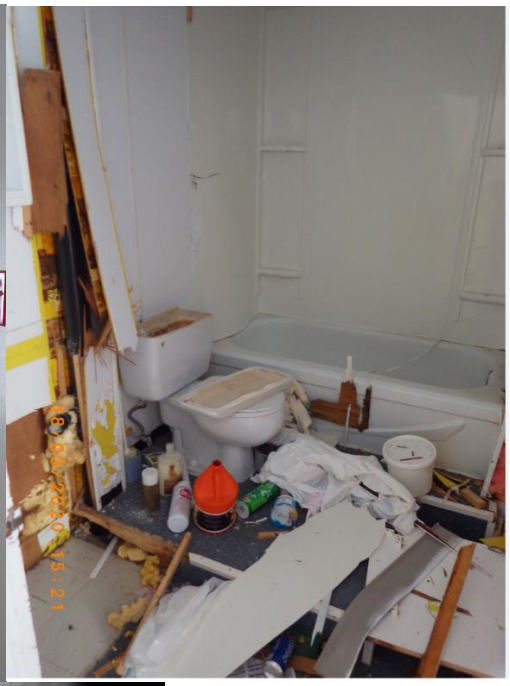

21.10.2020


21.10.2020


18/03/2020 14:55


18/03/2020 14:55


18/03/2020 15:20



Bâtiment principal

- Sous-sol style vide sanitaire sur la moitié de la superficie du bâtiment (section droite du bâtiment)


18/03/2020 15:37


18/03/2020 15:38


18/03/2020 15:42


COMPAQ
18/03/2020 15:43

Garage (emplacement numéro 3 et 4 sur la carte vue aérienne)

- Deux bâtiments servant de garage 3,6m x 18,6m et 17,5m x 9,4m.
- Plusieurs matériaux (électroménagers, meubles, outils, étagères etc.) dans les garages et autour des garages.


18/03/2020 15:01


18/03/2020 15:01

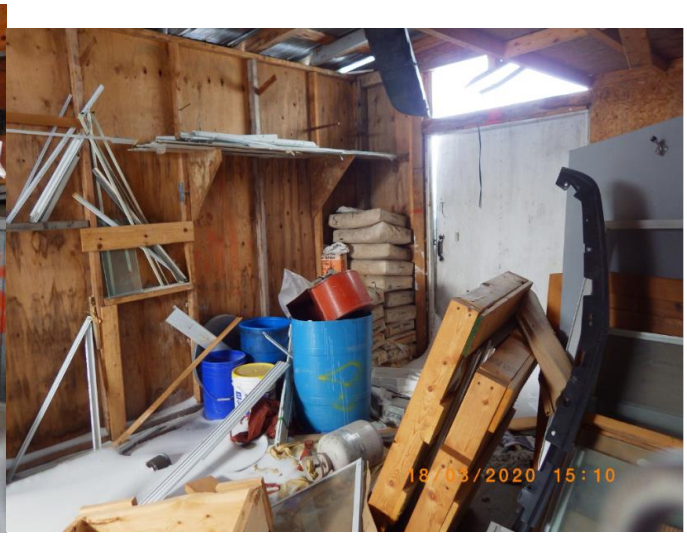

18/03/2020 15:01


18/03/2020 15:02


18/03/2020 15:03


SORTIE
UTILISER EN CAS D'URGENCE SEULEMENT
18/03/2020 15:04


18/03/2020 15:09



Boucherie (emplacement numéro 5 sur la carte vue aérienne)

- Bâtiment de 4,9m x 9,8m
- Boite de camion 45 pied

Cuisine et cafétéria (emplacement numéro 8 sur la carte vue aérienne)

- Bâtiment attenant au bâtiment principal


18/03/2020 15:35


18/03/2020 15:38


18/03/2020 15:39


18/03/2020 15:49


VEUILLEZ
GARDER CETTE
PORTE FERMEE
18/03/2020 15:40

Plan de localisation

Camp principal 209863-00-000 et 0600-2021-104

Camp 209863-00-000 et 0600-2021-104

Route de la Transtaïga

Projection cartographique
Québec Lambert Conformal Conic

Sources
Base de données géographiques, MERN

Réalisation

Ministère de l'Énergie et des Ressources naturelles
Direction régionale du Nord-du-Québec

Note : Le présent document n'a aucune portée légale.

Énergie et Ressources naturelles
Québec

Échelle: 1:15 000

Fiche technique 202963-00-000

A - Localisation

MRC/Municipalité	Gouvernement régional Eeyou-Istchee-Baie-James
Coordonnées	UTM 18 Nord 5966267 Est 594615
Informations supplémentaires	Km 305 route de la Transtaïga, accessible par camionnette, camion et machinerie. Au km 305 prendre à gauche. Continuer sur 200 m et prendre encore à gauche. Le camp se trouve à 250 m.

B- Types de matières présentes sur le site

Bâtiments	☒	Électroménagers	☒
Roulottes	☒	Meubles	☒
Autres	☐	Ferraille	☒

C - Matières potentiellement dangereuses

Baril (45 gallons)	☐	Peinture, diluant	☐
Réservoir (essence, huile)	☐	Produit chimique	☐
Batterie	☐	Autres	

D - Quantités estimées

Volume estimé pour le bâtiment (m^3): **125.94 m3**
Volume estimé pour les installations intérieures (m^3): **27 m3**
Volume total : **152.94 m3**

E - Description

Bâtiments de 7.4 m x 8.7 m à démanteler.
Roulotte de chantier de 12.2 m x 3.7 m à démanteler.

Bâtiment principale avec revêtement extérieur en tôle, avec entrée électrique, fosse septique et champ d'épuration. meubles (lits superposés, poêle, frigidaire, divan, table et chaises)

Roulotte de chantier avec revêtement extérieur en tôle, meuble à l'intérieur (lits superposés, poêle, frigidaire, divan, table et toilette.

Le foyer du camp 202963-00-000 doit être retiré et laissé sur le site pour récupération par un utilisateur désigné.

Plan de localisation

Camp satellite 202963-00-000

Camp 202963-00-000

Route de la Transtaïga

Échelle: 1:2 000

Projection cartographique
Québec Lambert Conformal Conic

Sources
Base de données géographiques, MERN

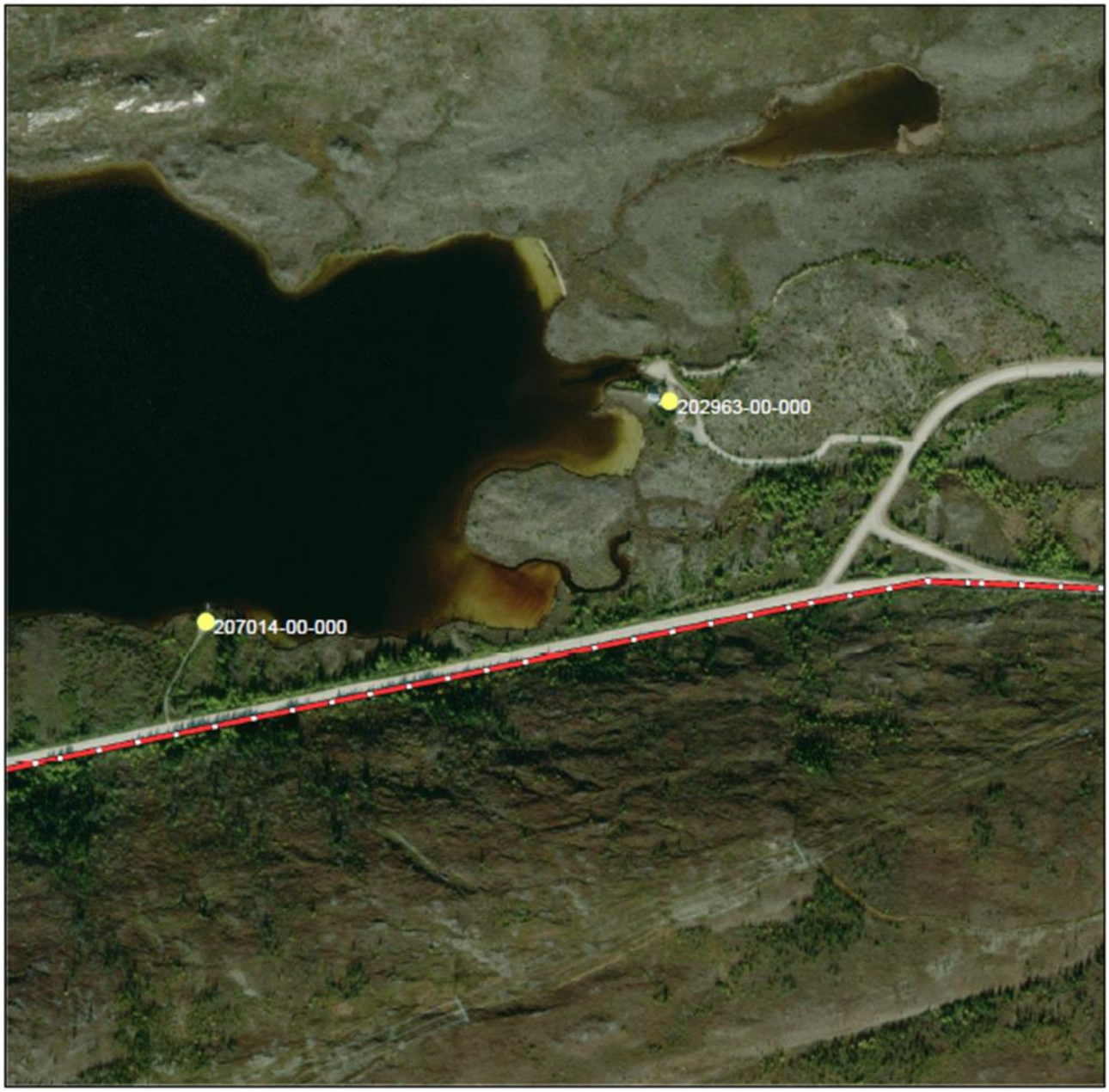
Réalisation

Ministère de l'Énergie et des Ressources naturelles
Direction régionale du Nord-du-Québec

Énergie et Ressources naturelles
Québec

Plan de localisation

Camp satellite 202963-00-000 et 207014-00-000



Camp 202963-00-000 et 207014-00-000

Route de la Transtaïga

Échelle: 1:6 500

Projection cartographique
Quebec Lambert Conformal Conic

Sources
Base de données géographiques, MERN

Réalisation

Ministère de l'Énergie et des Ressources naturelles
Direction régionale du Nord-du-Québec

Énergie et Ressources naturelles
Québec










Fiche technique 001357-10-000

A - Localisation

MRC/Municipalité	Gouvernement régional Eeyou-Istchee-Baie-James
Coordonnées	UTM 18 Nord 5977842 Est 666637 Km 395 route de la Transtaïga, accessible par camionnette, camion et machinerie.
Informations supplémentaires	Le camp est situé à droite à environ 70 mètres du chemin.

B- Types de matières présentes sur le site

Bâtiments	☒	Électroménagers	☒
Roulottes	☐	Meubles	☒
Autres	☐	Ferraille	☐

C - Matières potentiellement dangereuses

Baril (45 gallons)	☐	Peinture, diluant	☐
Réservoir (essence, huile)	☐	Produit chimique	☐
Batterie	☐	Autres	

D - Quantités estimées

Volume estimé pour le bâtiment (m^3): **35.51 m3**
Volume estimé pour les installations intérieures (m^3): **15 m3**
Volume total : **50.51 m3**

E - Description

Bâtiments de 6.2 m x 7.4 m à démanteler.

Bâtiment avec revêtement extérieur en bois, Meuble à l'intérieur (lits superposés, matelas, foyer, divan, table et chaises)

Plan de localisation
Camps satellites
001357-10-000
215131-00-000

Localisation

Camps 001357-10-000
et 215131-00-000
Route de la Transtaïga

Échelle: 1:1 500

Projection cartographique
Quebec Lambert Conformal Conic

Sources
Base de données géographiques, MERN

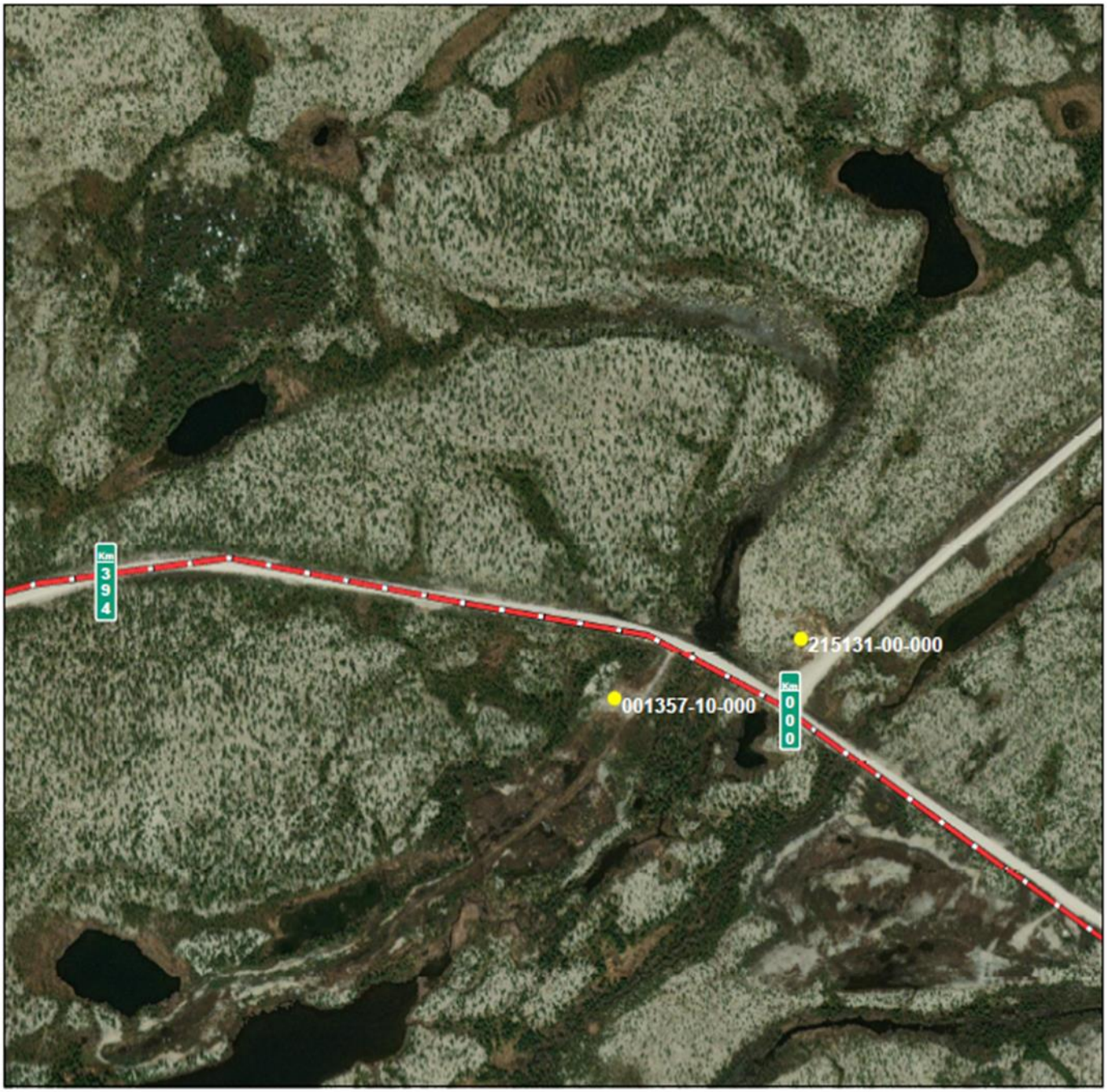
Réalisation

Ministère de l'Énergie et des Ressources naturelles
Direction regionale du Nord-du-Quebec

Note : Le présent document n'a aucune portée légale.

Énergie et Ressources naturelles
Québec

Plan de localisation
Camps satellites
001357-10-000
215131-00-000



Localisation

Camps 001357-10-000
et 215131-00-000
Route de la Transtaïga

Échelle: 1:6 000

Projection cartographique
Québec Lambert Conformal Conic

Sources
Base de données géographiques, MERN

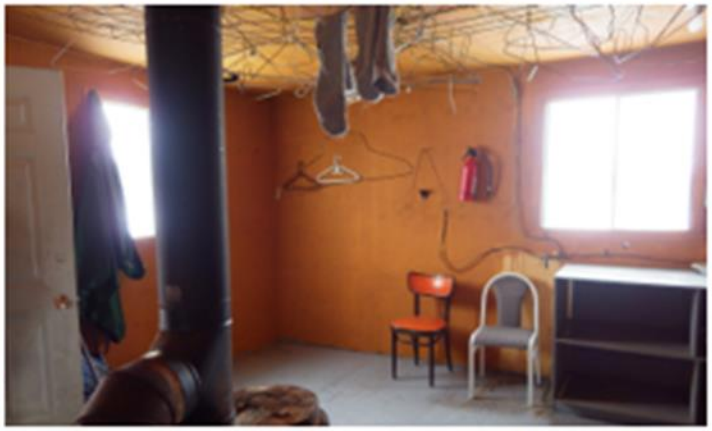
Réalisation

Ministère de l'Énergie et des Ressources naturelles
Direction régionale du Nord-du-Québec

Note : Le présent document n'a aucune portée légale.

Énergie et Ressources naturelles
Québec


395 B



Fiche technique 207014-00-000

A - Localisation

MRC/Municipalité	Gouvernement régional Eeyou-Istchee-Baie-James
Coordonnées	UTM 18 Nord 5965866 Est 594131
Informations supplémentaires	Km 305 route de la Transtaïga, accessible par camionnette, camion et machinerie. Le camp est situé à environ 100 m de route par un chemin avec légère pente.

B- Types de matières présentes sur le site

Bâtiments	☒	Électroménagers	☒
Roulottes	☐	Meubles	☒
Autres	☐	Ferraille	☒

C - Matières potentiellement dangereuses

Baril (45 gallons)	☐	Peinture, diluant	☐
Réservoir (essence, huile)	☒	Produit chimique	☐
Batterie	☐	Autres	

D - Quantités estimées

Volume estimé pour le bâtiment (m^3): **34.10 m3**
Volume estimé pour les installations intérieures (m^3): **8 m3**
Volume total : **42.10 m3**

E - Description

Bâtiments de 7.3 m x 3.7 m à démanteler.

Bâtiment principale avec revêtement extérieur en bois. meubles (lits superposés, poêle, frigidaire, divan, table et chaises)

Retrait sécuritaire du réservoir et disposition dans un lieu autorisé. Une preuve de la disposition doit être fournie au ministre.

Plan de localisation

Camp satellite 207014-00-000

Camp 207014-00-000

Route de la Transtaïga

Échelle: 1:1 500

Projection cartographique
Quebec Lambert Conformal Conic

Sources
Base de données géographiques, MERN

Réalisation

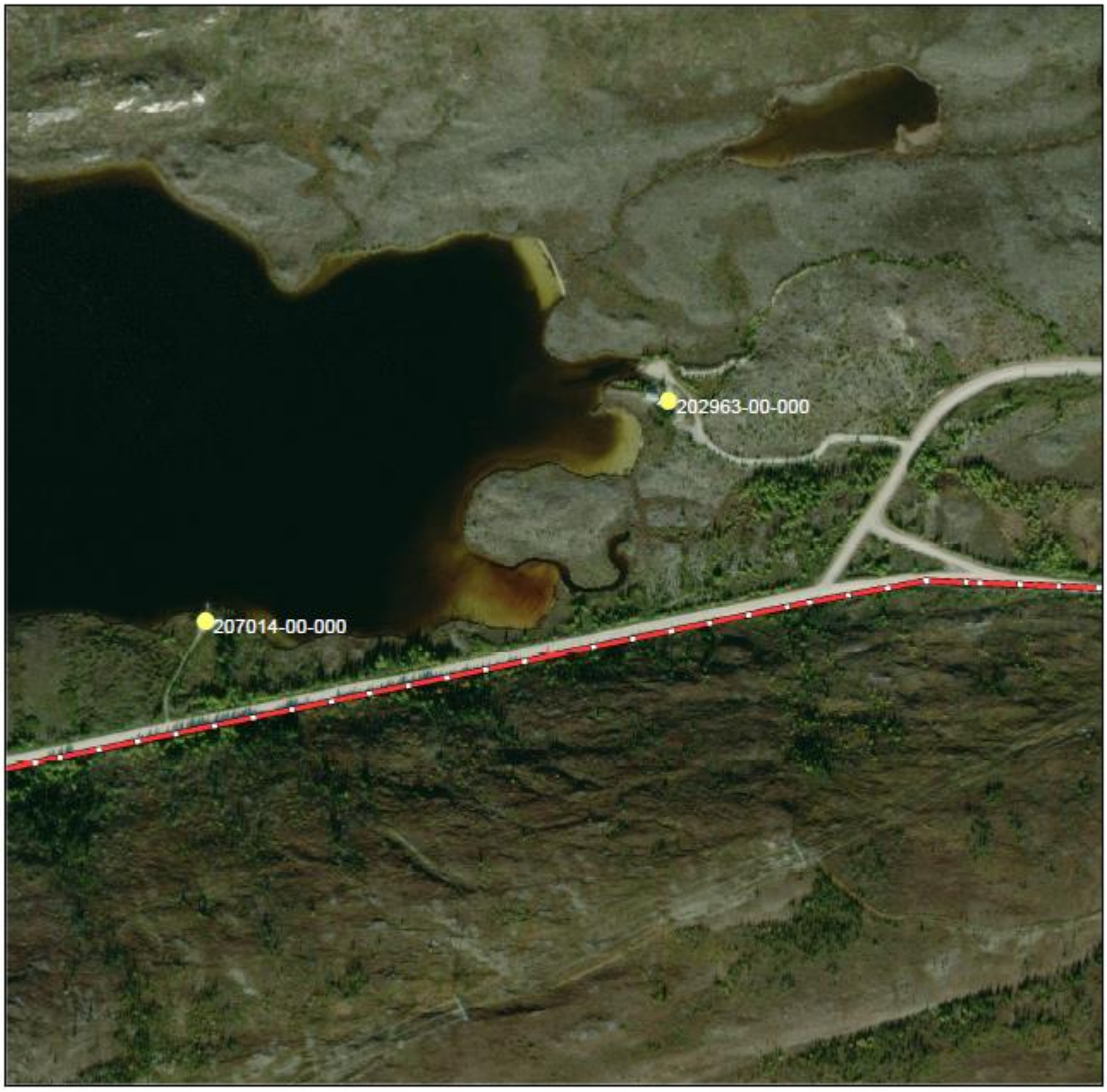
Ministère de l'Énergie et des Ressources naturelles
Direction régionale du Nord-du-Québec

Note : Le présent document n'a aucune portée légale.

Énergie et Ressources naturelles
Québec

Plan de localisation

Camp satellite 202963-00-000 et 207014-00-000



Camp 202963-00-000 et 207014-00-000

Route de la Transtaïga

Échelle: 1:6 500

Projection cartographique
Québec Lambert Conformal Conic

Sources
Base de données géographiques, MERN

Réalisation

Ministère de l'Énergie et des Ressources naturelles
Direction régionale du Nord-du-Québec

Énergie et Ressources naturelles
Québec

Fiche technique 212691-00-001 – Bâtiment A

A - Localisation

MRC/Municipalité	Gouvernement régional Eeyou-Istchee-Baie-James
Coordonnées	UTM 18 Nord 6032844 Est 351755 Km 440 route de la Transtaïga, accessible par camionnette, camion et machinerie.
Informations supplémentaires	Le camp est situé à moins de 50 m de la route par un chemin. Le 2e bâtiment est à environ 200m.

B- Types de matières présentes sur le site

Bâtiments	☒	Électroménagers	☒
Roulottes	☐	Meubles	☒
Autres	☐	Ferraille	☒

C - Matières potentiellement dangereuses

Baril (45 gallons)	☐	Peinture, diluant	☐
Réservoir (essence, huile)	☒	Produit chimique	☐
Batterie	☐	Autres	

D - Quantités estimées

Volume estimé pour le bâtiment (m³):
Volume estimé pour les installations intérieures (m³): **VOIR VOLUME BATIMENT B**
Volume total :

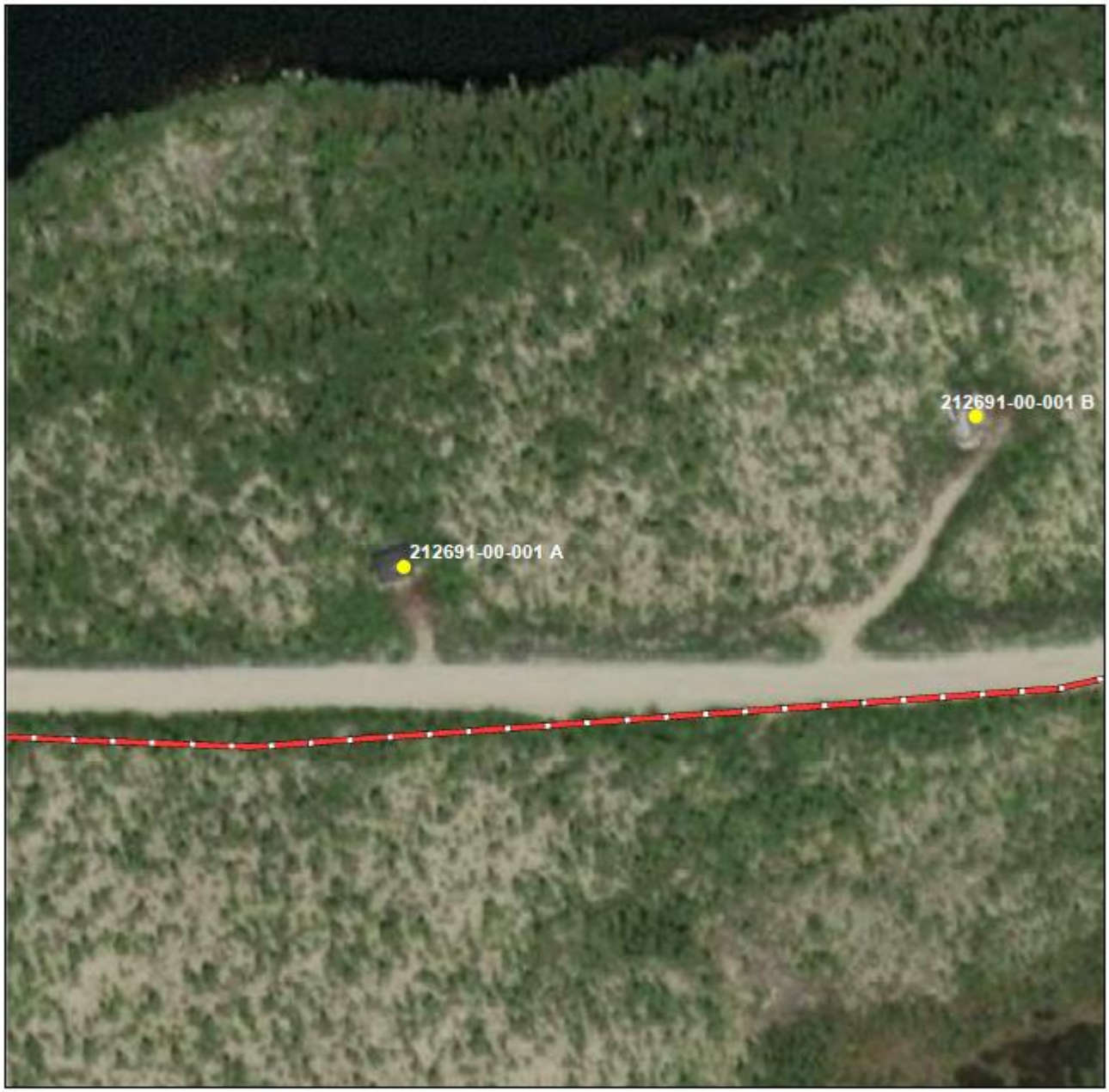
E - Description

Bâtiments de 7.2 m x 9.6 m à démanteler.

Bâtiment A avec revêtement extérieur en bois. meubles (lits superposés, poêle, frigidaire, divan, table et chaises)

Plan de localisation

Camps satellites
212691-00-001
A et B



Localisation

Camps 212691-00-001 A et B

Route de la Transtaïga

Échelle: 1:1 500

Projection cartographique
Québec Lambert Conformal Conic

Sources
Base de données géographiques, MERN

Réalisation

Ministère de l'Énergie et des Ressources naturelles
Direction régionale du Nord-du-Québec

Note : Le présent document n'a aucune portée légale.

Énergie et Ressources naturelles
Québec


440 A

Fiche technique 212691-00-001 – Bâtiment B

A - Localisation

MRC/Municipalité	Gouvernement régional Eeyou-Istchee-Baie-James
Coordonnées	UTM 18 Nord 5990255 Est 313874
Informations supplémentaires	Km 440 route de la Transtaïga, accessible par camionnette, camion et machinerie. Le camp est situé à environ 100 m de la route par un chemin. Le 2e bâtiment est à environ 200m.

B- Types de matières présentes sur le site

Bâtiments	☒	Électroménagers	☒
Roulottes	☐	Meubles	☒
Autres	☐	Ferraille	☒

C - Matières potentiellement dangereuses

Baril (45 gallons)	☐	Peinture, diluant	☐
Réservoir (essence, huile)	☒	Produit chimique	☐
Batterie	☐	Autres	

D - Quantités estimées

Volume estimé pour le bâtiment (m^3): **127.65 m3**
Volume estimé pour les installations intérieures (m^3): **20 m3**
Volume total : **147.65 m3**

E - Description

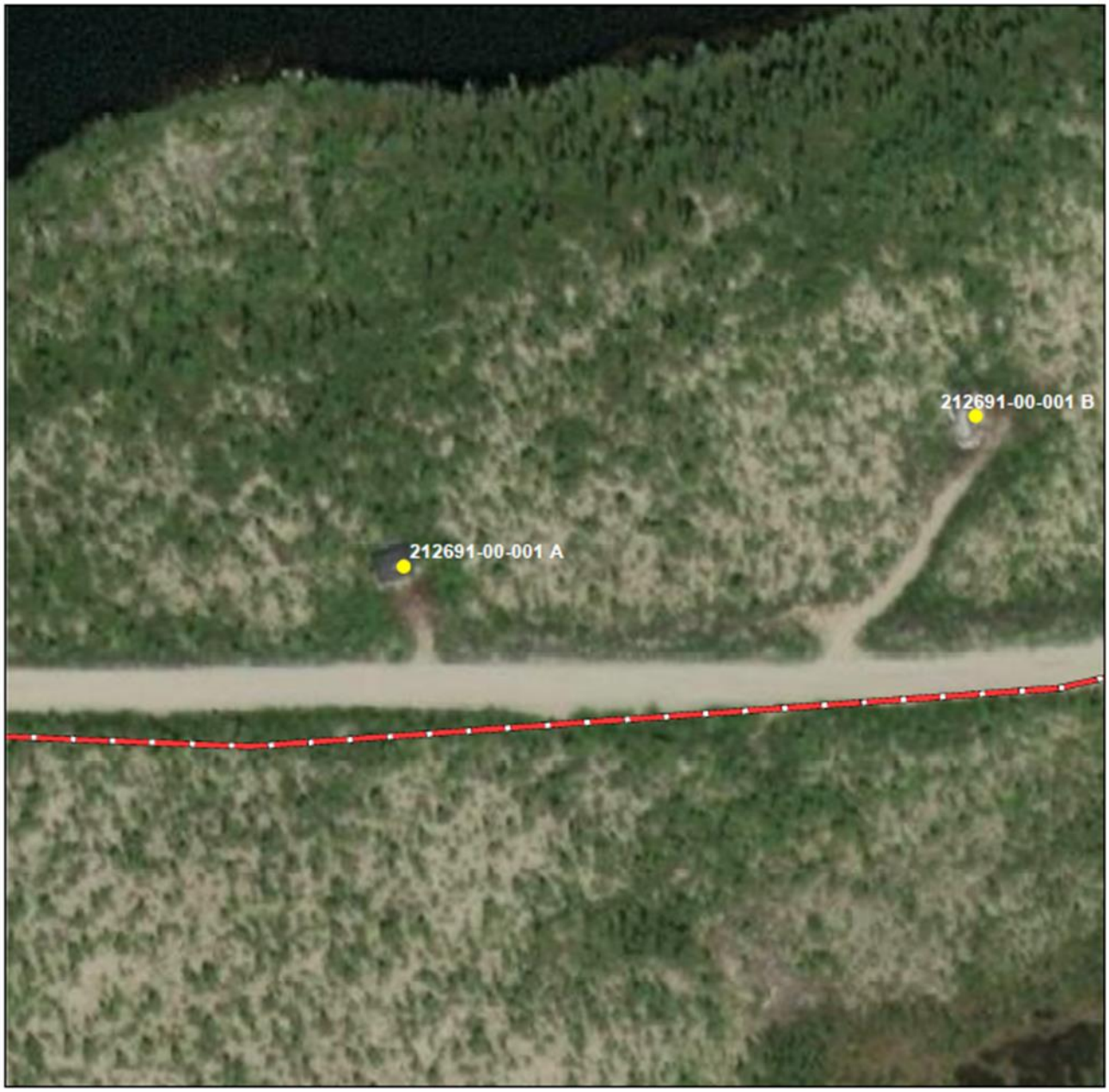
Bâtiments de 7.2 m x 9.6 m à démanteler.

Bâtiment B avec revêtement extérieur en bois. meubles (lits superposés, poêle, frigidaire, divan, table et chaises)

Le réservoir doit être retiré de façon sécuritaire et disposé dans un centre autorisé. Une preuve de la disposition doit être fournie au ministre.

Plan de localisation

Camps satellites
212691-00-001
A et B



Localisation

Camps 212691-00-001 A et B

Route de la Transtaïga

Échelle: 1:1 500

Projection cartographique
Québec Lambert Conformal Conic

Sources
Base de données géographiques, MERN

Réalisation

Ministère de l'Énergie et des Ressources naturelles
Direction régionale du Nord-du-Québec

Énergie et Ressources naturelles
Québec






Fiche technique 212692-00-001

A - Localisation

MRC/Municipalité	Gouvernement régional Eeyou-Istchee-Baie-James
Coordonnées	UTM 18 Nord 6032845 Est 351755
	Km 509 route de la Transtaïga, accessible par camionnette, camion et machinerie.
Informations supplémentaires	
	Le camp est situé à 200 m du chemin.

B- Types de matières présentes sur le site

Bâtiments	☒	Électroménagers	☒
Roulottes	☐	Meubles	☒
Autres	☐	Ferraille	☒

C - Matières potentiellement dangereuses

Baril (45 gallons)	☐	Peinture, diluant	☐
Réservoir (essence, huile)	☐	Produit chimique	☐
Batterie	☐	Autres	

D - Quantités estimées

Volume estimé pour le bâtiment (m^3): **38.23 m3**
Volume estimé pour les installations intérieures (m^3): **8 m3**
Volume total : **46.23 m3**

E - Description

Bâtiments de 8.6 m x 5.4 m à démanteler avec petit bâtiment pour toilette.
Les deux bâtiments doivent être démantelés

Bâtiment avec revêtement extérieur en bois. meubles (lits, poêle, divan, table et chaises)

Plan de localisation

Camp satellite
212692-00-001

Camps 212692-00-001

Route de la Transtaïga

Échelle: 1:1 500

Projection cartographique
Québec Lambert Conformal Conic

Sources
Base de données géographiques, MERN

Réalisation

Ministère de l'Énergie et des Ressources naturelles
Direction régionale du Nord-du-Québec

Note : Le présent document n'a aucune portée légale.

Énergie et Ressources naturelles
Québec

Fiche technique 215131-00-000

A - Localisation

MRC/Municipalité	Gouvernement régional Eeyou-Istchee-Baie-James
Coordonnées	UTM 18 Nord 5978118 Est 667271 Km 395 route de la Transtaïga, accessible par camionnette, camion et machinerie.
Informations supplémentaires	Le camp est situé à gauche à environ 70 m du chemin.

B- Types de matières présentes sur le site

Bâtiments	☒	Électroménagers	☒
Roulottes	☐	Meubles	☒
Autres	☐	Ferraille	☒

C - Matières potentiellement dangereuses

Baril (45 gallons)	☐	Peinture, diluant	☐
Réservoir (essence, huile)	☒	Produit chimique	☐
Batterie	☐	Autres	

D - Quantités estimées

Volume estimé pour le bâtiment (m^3): **101.38 m3**
Volume estimé pour les installations intérieures (m^3): **12 m3**
Volume total : **113.38 m3**

E - Description

Bâtiments de 7.3 m x 9.8 m à démanteler et petit bâtiment pour toilette.

Bâtiment avec revêtement extérieur en bois. meubles (lits, poêle, divan, matelas, réfrigérateur, table et chaises)

Le réservoir doit être retiré de façon sécuritaire et disposé dans un centre autorisé. Une preuve de la disposition doit être remise au ministre.

Plan de localisation

Camps satellites
001357-10-000
215131-00-000

Camps 001357-10-000
et 215131-00-000
Route de la Transtaïga

Échelle: 1:1 500

Projection cartographique
Québec Lambert Conformal Conic

Sources
Base de données géographiques, MERN

Réalisation

Ministère de l'Énergie et des Ressources naturelles
Direction régionale du Nord-du-Québec

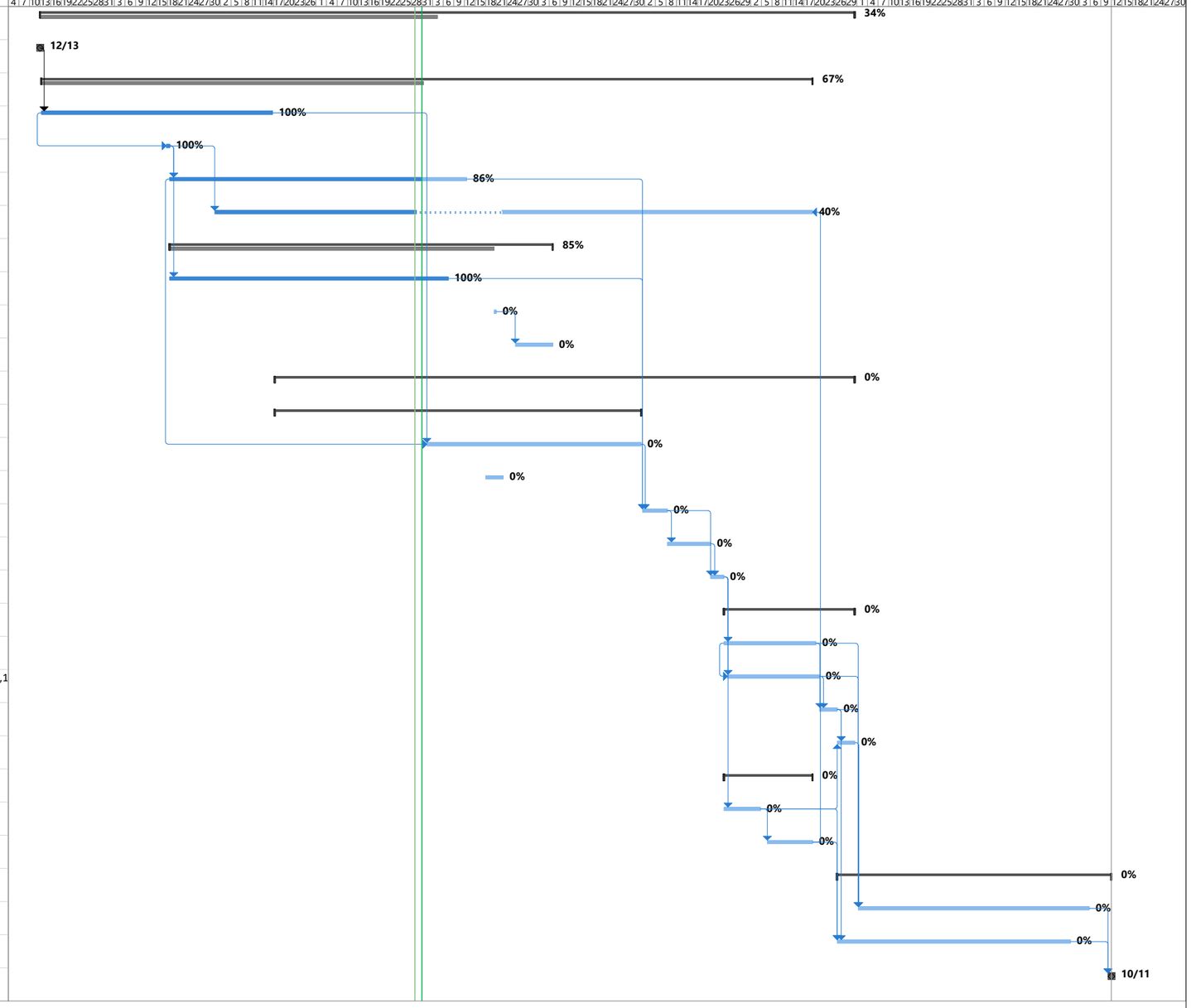
Énergie et Ressources naturelles
Québec

Appendix C
Preliminary Project Schedule

ENGLOBE

Démantèlement d'une ancienne pourvoirie Secteur Transtaïga - Échéancier préliminaire

ID	Task Mode	Nom de la tâche	Duration	Start	Finish	Predecessors
1		**Dismantling of abandoned outfitter camps in the Transtaïga sector**	**96.25 days**	**Mon 12/13/21**	**Sun 7/31/22**	
2		Granting of the mandate	0 days	Mon 12/13/21	Mon 12/13/21	
3		**Project management**	**91.17 days**	**Mon 12/13/21**	**Tue 7/19/22**	
4		Project planning	28 days	Mon 12/13/21	Wed 2/16/22	2
5		Kick-off meeting	0.5 days	Mon 1/17/22	Tue 1/18/22	4SS+15 days
6		Preparation of pre-project deliverables	35 days	Tue 1/18/22	Tue 4/12/22	5
7		Project management and direction	60 days	Mon 1/31/22	Tue 7/19/22	5,26FF
8		**Application for a certificate of non-subjugation**	**45.75 days**	**Tue 1/18/22**	**Fri 5/6/22**	
9		Preparation and submission of the application	33 days	Tue 1/18/22	Thu 4/7/22	5
10		COMEV Meeting	0.58 days	Wed 4/20/22	Wed 4/20/22	
11		Follow up on request and respond to questions	5.25 days	Tue 4/26/22	Fri 5/6/22	10
12		**Field work**	**68.25 days**	**Thu 2/17/22**	**Sun 7/31/22**	
13		**Planning and mobilization**	**43.25 days**	**Thu 2/17/22**	**Tue 5/31/22**	
14		Planning of work	25 days	Fri 4/1/22	Tue 5/31/22	4,6SS
15		Site reconnaissance visit	5 edays	Mon 4/18/22	Sat 4/23/22	
16		Mobilization to site	3 days	Wed 6/1/22	Wed 6/8/22	14,9,6
17		Site preparation	5 days	Wed 6/8/22	Mon 6/20/22	16
18		Temporary facilities installation	2 days	Mon 6/20/22	Fri 6/24/22	16,17
19		**Demolition work**	**15.08 days**	**Fri 6/24/22**	**Sun 7/31/22**	
20		Demolition of 209863-00-000 (Main camp)	26 edays	Fri 6/24/22	Wed 7/20/22	18
21		Demolition of satellite camps	26 edays	Sat 6/25/22	Thu 7/21/22	20SS+1 eday,1
22		Demolition work contingency	5 edays	Thu 7/21/22	Tue 7/26/22	20,21
23		Demobilization	5 edays	Tue 7/26/22	Sun 7/31/22	22,25
24		**Environmental assessment**	**10 days**	**Fri 6/24/22**	**Tue 7/19/22**	
25		Forwarding of soundings	4 days	Fri 6/24/22	Mon 7/4/22	18
26		Chemical analysis of samples	5 days	Wed 7/6/22	Tue 7/19/22	25FS+1 day
27		**Project completion**	**32.58 days**	**Tue 7/26/22**	**Tue 10/11/22**	
28		Report summarizing demolition work	28 days	Mon 8/1/22	Wed 10/5/22	20,21,22,23
29		Report summarizing environmental assessment results	28 days	Tue 7/26/22	Fri 9/30/22	25,26,22
30		End of project	0.5 edays	Tue 10/11/22	Tue 10/11/22	29,28



Tue 3/29/22

Critique	Tâche	Tâche manuelle	Durée uniquement	Jalon de référence	Récapitulative	Tâches externes	Jalon inactif
Fractionnement critique	Fractionnement	Début uniquement	Planning de référence	Jalon	Récapitulatif manuel	Jalons externes	Récapitulatif inactif
Avancement de la tâche critique	Avancement de la tâche	Fin uniquement	Fractionnement de référence	Récapitulation de l'avancement	Récapitulatif du projet	Tâche inactive	Échéance

Appendix D
Work Execution Plan

ENGLOBE

Work Execution Plan

Dismantling of a Former Outfitter Camp - Transtaïga Sector

Ministry of Energy and Natural Resources (MERN)
Pre-final report
Reference no. 209863-2021-1

April 6, 2022
14-02111832.000-0100-EN-R-0004-0B

ENGLOBE

Ministry of Energy and Natural Resources (MERN)
209863-2021-1

Prepared by:

Katheryne Budd, B.A.
Project Manager
Site Remediation

Reviewed by:

Alexandre Leclair, ing.
Team Lead
OIQ Member Nº: 130848
Site Remediation

Catherine Lalumière, biol., MBA
Project Manager and Adjunct Director
Environmental Studies & Climate Change

Approved by:

Geronimo Brunner
Certified Environmental Site Assessor
CESM ™ Member Nº : 745
Geoenvironment

Production team

Ministry of Energy and Natural Resources (MERN)

Territorial Affairs Advisor Northern Quebec Regional Office	Kelly Bélisle, Geog., B.Sc.

Englobe Corp.

Project manager	Katheryne Budd, Geog., B.A.
Collaborators	Sylvain Gendron, M.Sc. Alexandre Leclair, ing. Stéphane Cloutier, ing.
Mapping/GIS	Pierre Legaré, DAO Drew Wilson, B.Com
Publishing	Amanda Bruneski

Revisions and publications log

REVISION No.	DATE	DESCRIPTION
0A	February 15, 2022	Preliminary version published for comments (FR)
0B	April 6, 2022	Pre-final version

Distribution

1 PDF copy	Kelly Bélisle

Property and Confidentiality

“This report can only be used for the purposes stated therein. Any use of the report must take into consideration the object and scope of the mandate by virtue of which the report was prepared, as well as the limitations and conditions specified therein and the state of scientific knowledge at the time the report was prepared. Englobe Corp. provides no warranty and makes no representations other than those expressly contained in the report.

This document is the work product of Englobe Corp. Any reproduction, distribution or adaptation, partial or total, is strictly forbidden without the prior written authorization of Englobe Corp. and its Client. For greater certainty, use of any and all extracts from the report is strictly forbidden without the written authorization of Englobe Corp. and its Client, given that the report must be read and considered in its entirety.

No information contained in this report can be used by any third party without the prior written authorization of Englobe Corp. and its Client. Englobe Corp. disclaims any responsibility or liability for any unauthorized reproduction, distribution, adaptation or use of the report.

If tests have been carried out, the results of these tests are valid only for the sample described in this report.

Englobe Corp.’s subcontractors who have carried out on-site or laboratory work are duly assessed according to the purchase procedure of our quality system. For further information, please contact your project manager.”

Table of Contents

TABLES

APPENDICES

1 Introduction

Quebec's Ministry of Energy and Natural Resources (MERN) mandated Englobe in December 2021 to carry out dismantling work of the former outfitting camps, including eight separate sites located between Kilometers 284 and 509 of the Transtaïga Road in the municipality of Eeyou Istchee Baie-James, Quebec. The services to be performed for the project include the following:

- The drafting of a request for certificate of non-subjection to the environmental assessment process and review of the environmental and social impacts;
- The drafting of a Work Execution Plan and an Environmental Sampling plan;
- Mobilization of technical personnel, equipment and machinery;
- The installation and management of a temporary camp;
- The installation of a bat house;
- The identification of potential areas of environmental concern on the main camp site;
- Soil sampling for environmental purposes within the identified risk areas on the main camp site;
- Dismantling of structures including buildings and oil and propane tanks;
- Removal of septic tanks;
- Waste management, including the consolidation, stockpiling, segregation, transportation, reuse, recycling and off-site disposal of site wastes and demolition debris;
- Management and disposal of hazardous waste in accordance with applicable regulations;
- Restoration of the site;

— The drafting of a report presenting the work completed during the environmental site assessment of the main camp site, including presenting the analytical results, their interpretation, the conclusion and the recommendations; and,

— The drafting of a report on the execution of the work including the submission of all transport manifests, and certificates of disposal and a photographic report.

This document presents Englobe's work methodology for the execution of all work within the scope of the project.

This document is intended to complement the other work plans prepared for this project. The following should be consulted in conjunction with this document:

— Project Schedule (N/Ref: 014-02111832.000.0100-EN-L-0001-0A);

— Environmental Sampling Plan (Ref: 014-02111832.000-0100-EN-R-0002-00);

— Specific HSE Management Plan - Mikuen Environmental Services (available in French) (Appendix A);

— Englobe's specific prevention program (Ref. No.: 014-02111832.000-0100-EN-R-0005-00); and,

— Preliminary Information Form : Request for certificate of non-subjection to the environmental assessment process and review of the environmental and social impacts (Ref. No.: 014-02111832.000-0100-EN-R-0004-00).

1.1 Work Site Identification

Site 209863-00-000, the main camp, has the following general characteristics:

Address:	Km 284, Transtaïga Road, Eeyou Istchee Baie-James (Québec)
Geographic coordinates:	53,7032° N., -73,7187° O.
Lot(s) and cadastre:	Undivided area
Area of the site:	50 800 m^2
Current owner:	Ministry of Energy and Natural Resources, Quebec
Occupant(s):	Unoccupied
Land use:	Abandoned outfitter
Zoning:	Mixed (code: 53-12-R) allowing dispersed cottage, commercial, low impact services and industries, public utilities, parks and open space, recreation, extensive recreational uses, intensive recreational uses, hunting and fishing camps, public and institutional uses, non-livestock agriculture, and resource harvesting

The satellite camp details are presented in Table 1.

Table 1: Satellite sites

Site	Address	Geographic coordinates
0600-2021-104	Km 284, Transtaïga Road, Eeyou Istchee Baie-James (QC)	53,7027 N, -73,7179 O
207014-00-000	Km 305, Transtaïga Road, Eeyou Istchee Baie-James (QC)	53,8336 N, -73,5699 O
202963-00-000	Km 305, Transtaïga Road, Eeyou Istchee Baie-James (QC)	53,8363 N, -73,5624 O
215131-00-000	Km 395, Transtaïga Road, Eeyou Istchee Baie-James (QC)	53,9235 N, -72,4520 O
001357-10-000	Km 395, Transtaïga Road, Eeyou Istchee Baie-James (QC)	53,9229 N, -72,4550 O
212691-00-001	Km 440, Transtaïga Road, Eeyou Istchee Baie-James (QC)	54.0278 N -71.8431 O
212692-00-001	Km 509, Transtaïga Road, Eeyou Istchee Baie-James (QC)	54,4212 N, -71,2830 O

2 Mobilization and Site Preparation

Mobilization to the former outfitter sites (the "work site") will be completed by road. All equipment, materials and tools necessary to conduct the work will also be transported by road during the first days of the work. The mobilization phase of the equipment and temporary accommodation facilities is expected to begin following the issuing of an exemption from the assessment process from the Minister.

The main camp (209863-00-000) will be the base of operations. All equipment, supplies, and temporary housing facilities will be located at this site. The preliminary location plan for the temporary facilities is shown on the figure in Appendix B. The location of these facilities will be assessed during the site reconnaissance visit, which will take place a few weeks prior to mobilization.

Work at the satellite sites will be completed successively. Workers and equipment will mobilize to the sites to begin dismantling and site clean-up work Wastes generated during dismantling of the satellite sites will be brought back to the main base of operations daily for processing and shipping to disposal sites. Reconnaissance Visit

A reconnaissance visit of all the sites will be conducted a few weeks prior to mobilization. The visit is planned for mid-April.

The purpose of this visit is to verify the condition of the sites and to evaluate the proposed work methods. Each site will be evaluated to verify the presence of hydric environments, the extent of vegetated areas, and any other elements sensitive to the planned work. An audit of uncertain items, such as the contents of heating oil tanks, certification, and volume of propane in liquefied petroleum gas tanks, and the condition of barrels and cylinders will be conducted.

The recovery and installation of a bat roosts will be conducted during this visit.

2.1 Evaluation of Work Methods

The methods for dismantling the buildings and structures presented in this document will be reviewed during the reconnaissance visit as well as at the work site during site preparation following mobilization. If adjustments are needed, Englobe will revise the Work Execution Plan after reviewing the site. Changes will be communicated to MERN immediately.

2.2 Installation of a Bat Roost

The bat house will be installed in accordance with the instructions of the Ministère des Forêts, de la Faune et des Parcs (MFFP) (email communications from Kelly Belisle dated January 19, 2022 and January 21, 2022).

The bat house will be installed on site during the reconnaissance visit in April 2022. A biologist will be onsite to evaluate locations favorable to bat migration and will be responsible for installing the roost. Instructions provided by the *Centre de la science de la biodiversité du Québec* will be followed during installation and migration monitoring, for example:

- The roost will be installed before the spring migration of bats;
- The roost will be installed so that they face south, southeast or east;
- The roost will be installed at a height of 3 m; and,
- The roost will be installed on poles.

Measures to encourage the relocation of bats to the bat house will be implemented during both the site preparation and dismantling phases of the project. The measures are discussed in Section 4.2.

2.3 Environmental Protection

The following measures will be implemented to mitigate potential adverse impacts to the environment of each site during the dismantling activities of the outfitter camps:

- Refueling and maintenance of machinery will be conducted in a dedicated area on the main camp site, outside of sensitive environments; a spill kit will be present at all times on the sites;
- Use of spill trays under parked vehicles and for the storage of small gasoline-powered equipment and their gasoline tanks;
- Work executed near the shoreline will be done manually to avoid encroachment by machinery;
- Potential installation of sediment barriers in work areas adjacent to water bodies (main camp and satellite camps 207014-00-000, 212692-00-001 and 202963-00-000) in order to limit the potential discharge of sediments towards these environments;
- Use of clean soil for backfill;
- Procurement of backfill from active borrow pits in the vicinity of the site;
- Segregation of hazardous wastes on the site of the former gas station and flaring of the residual pressurized gases (propane) still present before transport and off-site disposal;
- Grading of the demolished building pads to make the site suitable for the local topography;
- Revegetation of disturbed soil areas.

3 Pre-Demolition Work

Before proceeding with the dismantling work, several steps will be carried out in order to properly prepare the site and the workers. The work completed to prepare the site includes:

- The installation of fences to delimit the work area and of health and safety signs;
- Clearing vegetation infringing on work areas and establishing traffic corridors;
- Identifying the location of septic tanks;
- Inspection and securing of building structures;
- Installation of work zones, including the non-hazardous and hazardous waste storage and processing areas, barrel washing area and propane burning area; and,
- Installation of the temporary accommodation facilities.

3.1 Temporary Facilities

3.1.1 Temporary Accommodation Facilities

Temporary accommodation facilities with a capacity of 10 to 20 residents will be available to house the Englobe work crew. Camp facilities may provide accommodation to the workforce completing the remediation of the former gas station project.

The temporary camp will be installed and operated in accordance with all applicable regulations. The camp will be installed in a cleared area of the work site, such as the site's camping area, in an area offset from the work zones. The preliminary location of the temporary workforce camp is demonstrated on the figure in Appendix B.

The camp will consist of five to six units, which will include dormitories, work offices with internet and satellite phone service, a kitchen and a sanitary module. Camp facilities will include a clean water tank and wastewater tanks and a generator. The generator is equipped with a built-in 400-litre diesel tank.

A spill kit and fire extinguishers will be stored near the generator. Waste and wastewater management is discussed in Section 5.1.

3.1.1.1 Water Supply

Commercial bottled water will be used for all drinking and cooking operations for the duration of operations. The water supply for the camp's sanitary module will be sourced from Katatipawasakamaw Lake. Daily water consumption is not expected to exceed 30,000 liters, based on a maximum occupancy of 20 workers and an estimated consumption of 1,500 liters per person per day. Thus, the volume of water to be withdrawn daily is less than the limits established by Section 22 of the Environment Quality Act (EQA) and an application for a water withdrawal authorization will not be required.

Wastewater generated at the camp will be stored in tanks up to 5,000 L in size. Disposal of wastewater at an authorized site will be completed by vacuum truck.

3.1.2 Work Areas

The preliminary locations of the temporary work areas are presented in the figure in Appendix B. The work areas will support the sorting and proper management of the various debris generated during the site clean-up and demolition operations. The following four distinct work areas will be created during the site preparation phase of the mandate to the work site:

- A non-hazardous debris storage and processing area;
- A hazardous debris storage area;
- A hazardous liquids processing and washing area; and,
- A propane flaring area.

NON-HAZARDOUS WASTE STORAGE AND PROCESSING AREA

Dry materials such as construction, renovation and demolition (CRD) debris, scrap metal, tires, appliances and end-of-life vehicles (drained of their fluids) will be stored in the waste storage area. A shredder will be installed in this area and used to reduce the volume of certain wastes. This area will stockpile wastes for further processing, and those awaiting final shipment to the off-site disposal site.

HAZARDOUS WASTE STORAGE AREA

The hazardous waste storage area will be clearly defined at the site. The wastes will be stored in marine containers specifically adapted for the storage of hazardous materials and flammable liquids.

Heavy equipment and gas powered tools will be parked near this area. Spill trays will be provided in the tool/equipment storage area for the storage of petroleum products, and the refueling of small tools (generators, saws, etc.).

Heavy equipment and the generator will be refueled from a 400 L transfer tank installed in a pickup truck; no additional fuel storage is planned onsite. The heavy equipment and small gas powered tools will be refueled in the equipment parking and hazardous liquids storage area.

Spill kits and fire extinguishers will be placed adjacent to the hazardous waste storage site. Warning signs will also be posted at locations storing hazardous materials that pose a health and safety risk.

HAZARDOUS LIQUID MANAGEMENT AND WASHING AREA

A processing and washing area will be installed in the vicinity of the unauthorized barrel storage area on the former gas station site (0600-2021-104). Consolidation of products and washing of barrels and tanks will be performed in this area.

The washing area will be constructed as follows: the soils located at the treatment and washing area will be graded. They will then be covered with a geomembrane followed by a geotextile. A low point will be created to allow for the pumping of water that has accumulated in the area into watertight containers for off-site disposal.

The washing area will be large enough to capture splashes and allow for drainage of drums following pumping of contents to minimize the risk of contaminant spills. A spill kit and absorbent pads will be placed adjacent to the area.

Barrels filled with consolidated product will be moved to the Hazardous Waste Storage Area.

Washed barrels with no residue will be certified as cleaned and moved to the hazardous waste storage area.

PROPANE FLARING AREA

A propane destruction area will be set up at a safe distance from the unauthorized barrel storage area. The location of the flaring area will be determined after verifying site conditions, including the direction of prevailing winds, the presence of vegetation and proximity to occupied spaces. A physical security perimeter will be installed to delimit in this area during the burning operations.

3.2 Clearing, Grubbing and Stripping

Clearing, grubbing and stripping of vegetation will be limited to the extent practicable. Areas requiring clearing will be verified during the reconnaissance visit, areas requiring cleaning of any kind will be identified and photographed. Englobe will notify the MERN of areas requiring pruning after the site visit and prior to mobilization.

Clearing, grubbing and stripping remnants, if any, will be stockpiled on the site. If necessary, this debris may be shredded and stored for reuse. If on-site reuse is not required, the plant waste will be disposed of off-site at a licensed disposal facility.

3.3 Removal of Waste Materials

A site clean-up will be conducted after the installation of the various site facilities. The clean-up will include recovering and sorting the debris scattered on the site, as well as emptying the contents of the buildings. The debris will be sorted according to its potential for revalorisation, reuse and hazardousness. Section 5 outlines the various waste streams identified in the tender document, the methodologies employed for their removal and processing, and the intended disposal facilities.

The dock at the main camp will be recovered in this step, as discussed in section 4.5.

3.4 Identification of Areas of Potential Environmental Concerns

A comprehensive site inspection will be conducted after the collection of debris from around the site and prior to the start of demolition. The purpose of this visit will be to identify environmental hazards that may impact the site under study. The inventory will include items related to the terrain, including ground stains, presence of contaminants; and items that relate primarily to the buildings, including equipment and building materials.

The visit will assess the environmental concerns identified in the Environmental Sampling Plan (Ref. No.: 14-02111832.000.0100-EN-L-0002-00), prepared by Englobe, and ensure that all existing areas of potential environmental concern on the site are addressed in the plan and future assessment.

In addition, buildings will be inspected to confirm the absence of hazardous materials such as asbestos, PCBs and lead.

The identification of areas of potential environmental concern will be conducted at each site prior to dismantling work. The MERN will be informed of all potential environmental concerns observed.

3.5 Environmental Sampling

The work proposed in the Environmental Sampling Plan (Ref. No.: 14-02111832.000-0100-EN-L-0002-00) will be completed prior to the commencement of the demolition work on the main camp site.

Englobe will excavate test pits in the areas presented by the sampling plan. The methodology used for the characterization of soil and groundwater as well as the sampling methods recommended by Englobe are described in the plan in question. The work performed during the soil sampling will comply with the requirements of the MELCC's Guide d'intervention - Protection des sols et réhabilitation des terrains contaminés (Guide d'intervention) (2021)[1].

Any areas of potential environmental concern not accessible during the pre-demolition phase will be characterized after the dismantling of the structures.

[1] [1] MELCC. 2021. *Guide d'intervention – Protection des sols et réhabilitation des terrains contaminés*.

4 Dismantling Work

Demolition procedures will be reviewed by the site superintendent prior to undertaking structural demolition of the buildings, to ensure that no additional measures are required to ensure worker safety and that the established procedure is optimal. The Radisson landfill's requirements regarding debris dimensions and composition will be taken into consideration during dismantling and segregation of the construction wastes generated by the demolition.

4.1 Structural Demolition of Buildings

Demolition of the buildings will begin with the removal of the metal roofing sheets using a hydraulic shear. The sheets, along with the metal structures of the trailers, will be segregated for recycling with the recovered scrap metal. The buildings will be flattened/crushed.

The non-hazardous wastes generated during the demolition will be transferred to the waste processing area as the buildings are demolished. The debris will be shredded to reduce the volumetric quantity. Whenever possible, materials will be shredded immediately prior to their off-site transport to limit the presence of small waste that can blow away, shredding operations will be postponed when winds are high.

4.1.1 Bat Management

Buildings inhabited by bats will have been identified during the preparatory phase of the project. An adapted work plan has been developed to address the demolition of buildings roosting bats. To encourage any remaining bats from residing in these buildings the roof panels will be removed at the end of the day, at the beginning of the demolition phase of the operations. Other buildings will then be demolished to provide time for the bats to migrate to the nesting box installed during the site reconnaissance visit. A canvas (tarp) may be installed sporadically, i.e. for half an hour, from 10:00 to 10:30 p.m. for example, to block the entrance for a short time and thus encourage the bats to leave the buildings.

4.2 Dismantling of the Foundations

All but one of the structures present on the various sites are constructed on grade or are portable trailers. The main camp is the only site with a building constructed with a foundation. The foundation appears to be constructed of wood.

The foundation removal will be accomplished by excavation of subgrade structures following the dismantling and removal of the building and its debris. The debris will be segregated from the soils and managed as construction debris. Once completed, the excavation will be backfilled with Class 2 material and graded.

4.2.1 Borrow Pit

The volume of soils imported for this project is expected to be minimal. Class 2 soils will be sourced from a, active local borrow pit. Englobe will inform the MERN of the site once it has been selected and will only source from sites authorized by the MERN. The import of soils may be done in conjunction with the ongoing remediation of the former gas station project.

4.3 Dismantling of Septic Tanks

Several septic tanks have been identified at the main camp (209863-00-000) and one satellite site (202963-00-000). A septic system inspection will be conducted to determine the condition of the sludge from each septic tank during site preparation work. Sludge will be managed according to its dryness rate: solid sludge with a dryness rate above 25% will be excavated while sludge with a dryness rate below 25% will be emptied by a vacuum truck.

The pit infrastructure, assumed to be plastic tanks or constructed of wood, will be demolished. The excavations will be backfilled with imported Class 2 material. Upon completion, the land will be graded to regain the natural slope of the area.

The dismantling of septic tanks and disposal of wastewater and sewage will be completed in accordance with the applicable regulation

4.4 Dismantling of Petroleum, Oil and Lubricant Storage Equipment

All petroleum, oil and lubricant (POL) equipment will be dismantled by the qualified personnel from the hazmat team, and under the supervision of Englobe's Superintendent. Spill control equipment such as spill kits, absorbents, spill trays and UN certified receptacles will be used to contain all potential liquid leaks.

Decommissioning work will be carried out in accordance with applicable regulations.

4.4.1 Heating Oil Tanks

Heating oil tanks were identified at sites 209863-00-000, 212691-00-001, 207014-00-000, and 215131-00-000. Photographs of the tanks are provided in the Site Fact Sheets produced by the MERN.

The heating oil tanks will be inspected during the reconnaissance visit. The contents of the tanks will be pumped into containers designed for the transportation of liquids, meeting the requirements of the Transportation of Dangerous Goods by Road Regulations during the dismantling phase of the satellite

sites. Once emptied, the tanks and their piping will be dismantled by the hazmat team and transported to the Hazardous Liquid Management and Washing Area, located at the main camp, for decontamination. A certificate of decontamination will be produced for all cleaned reservoirs.

A decontaminated tank, i.e. an empty tank with no residue that has been triple washed, will be considered non-hazardous and will be treated as scrap metal. Contaminated tanks will be managed as hazardous waste and disposed of at a licenced facility, and a disposal certificate will be provided.

4.4.2 Dismantling of Propane Tanks

The site visit is the critical point for making decisions about tank dismantling. The following verifications will dictate the means of dismantling the large propane tanks:

— Verification of the gauges indicating the level of liquid gas that may remain in the tanks

— Verification of the integrity of the connection piping

— Date of certification of the tanks

The first two verifications will validate the presence of pressurized gas and determine if the connection piping is damaged. In addition, these checks will confirm the partial or complete purging of the tanks. After these validations, it will be possible to manage the two tanks according to the flaring procedure.

Following the controlled combustion of the residual gasses, the scrap metals will be cut down and sent for recycling.

Although the presence of pressurized gas and the reuse of the tanks is unlikely, it is necessary to foresee it. In this case, the presence of a certified contractor (RBQ) will be required to purge the tanks and to dismantle the connections. In the case of a reuse, it will be necessary to take charge of the transport according to the laws governing the transport of pressure tanks.

If it is determined that the tanks do not contain pressurized gas it will be possible to manage the two tanks according to the flaring or controlled combustion procedure, as described in section 5.3.2.2 . Following a process venting, the recovery of metals can be done by the principle of hydraulic shearing.

4.5 Dock Removal

The removal of the abandoned dock and the collection of debris from the main camp site will be completed in a manner that avoids impacts to the land and vegetation. Manual collection and the use of small equipment will be encouraged.

No work will be performed by heavy machinery below the high water mark. Docks below the high water mark or on the water's edge will be dismantled only if they are abandoned or degraded and if there is no environmental risk due to clearing.

Functional docks in good condition will be left in place.

Equipment refueling will be at least 30 m from the water body. A spill kit equipped with absorbent pads and absorbent booms will be available in case of oil or fuel spills.

The same procedures will be followed at each site with a dock to be dismantled. All work conducted in proximity to wetlands and hydric environmental will be conducted in accordance with the applicable regulations.

5 Waste Management

All materials and wastes presently occupying the outfitter sites are planned for off-site disposal. No wastes will be buried or burned on site. Existing wastes will be assessed during the reconnaissance site visit and management and disposal methods will be adjusted as required.

The various waste streams identified include:

— Metal, wood, and concrete debris from buildings;

— Wood poles;

— Furniture;

— Appliances, refrigerators, computer and electronic equipment;

— Household hazardous materials;

— Electrical wiring;

— Propane tanks;

— Barrels;

— Liquid/solid waste found in barrels and small tanks;

— Heating oil tanks;

— Propane reservoirs;

— Liquid/solid waste found in propane and heating oil reservoirs (aboveground storage tanks [ASTs]);

— Septic tank sludge;

— Lead-containing materials (car batteries);

— Abandoned vehicles; and,

— Tires.

5.1 Management of Residual Materials Generated by the Operation of a Construction Site

The waste generated by the workforce will mainly include domestic waste from the temporary camp and the materials used to carry out the fieldwork. This waste will be collected, stored in a container and shipped to the Radisson landfill for disposal.

All hazardous wastes generated during the operation of the temporary camp will be packaged in lab packs by the hazmat team and sent to Amnor's Transfer Center located in Malartic, Qc.

Wastewater generated at the camp will be stored in tanks of up to 5,000 L. Waste water will be transported to an authorized facility by vacuum truck throughout the operations.

5.2 Non-hazardous Waste Management

A waste management system will be put in place upon mobilization. A storage area will be designed to accommodate the sorting, storage and processing of the various non-hazardous wastes generated during the dismantling operations. Wastes will be grouped according to the required treatment, the potential of revalorization and their final destination.

The various waste streams anticipated for this project are as follows:

- Construction debris;
- Scrap metal;
- Tires;
- Residual fragmented wood; and,
- Sewage.

5.2.1 General Methodology

The removal of non-hazardous waste will be conducted according to the following procedure:

- Debris outside buildings and building contents will be collected during the site preparation phase. This debris will be sorted and stored in the waste storage area;
- Hazardous materials will be sorted and packaged as the work progresses;
- Satellite site facilities will be dismantled and shipped to the main camp for segregation and processing before final disposal;
- Shredding of construction wastes and scrap metal. Shredding will be completed shortly before off-site shipping; and,
- Larger debris and waste materials like building sheeting and metal structures from trailers will be cut into pieces less than 3 m long, or as directed by the reclamation/disposal centers.

Hazardous liquids will be removed from abandoned vehicles, barrels, tanks, and ASTs, and the containers will be decontaminated and certified as non-hazardous material or managed as a hazardous material.

Whenever possible, wastes that can be diverted from the landfill will be, this includes the recycling of metals and tires and other recoverable items.

5.2.2 Waste Disposal Sites

Disposal of non-hazardous waste is planned at the following facilities:

— Recyclage de métaux intégré (RMI), located at 2 Bourgeois Road in Trécesson, Quebec; and,

— The tires will be sent to RECYC-QUÉBEC according to the "End-of-life tire program";

— Radisson landfill, located at Km 578 of the James Bay Highway in Radisson, Quebec.

5.3 Management of Hazardous Wastes

The management of hazardous wastes will be under the supervision and direction of the hazmat team and Englobes site superintendent, who trained and certified to work with hazardous wastes. All workers involved in the removal of hazardous wastes will wear personal protective equipment (PPE) in accordance with current regulations. The EQA (Q-2), the Regulation respecting hazardous materials (Q-2, r. 32), the Transportation of Dangerous Goods Act, 1992 (S.C. 1992, c. 34) and all other applicable regulations will be respected during the handling of hazardous wastes.

Various potentially environmentally harmful wastes such as drums, ASTs, propane tanks, automotive maintenance products, household hazardous waste, refrigerant products, fluorescent light bulbs, and mercury and lead-containing equipment will be treated as hazardous waste, until otherwise determined.

The hazmat team will verify the containers for identifying markings that may indicate their contents during the inventory and assess the condition of the various means of containment for signs of deterioration, evidence of spills, and verify if containers are pressurized. Hazardous waste will be sorted, packaged, labeled, and added to the disposal log prior to being stored in the hazardous waste storage area. Containers such as empty drums with no residue will only be classified as non-hazardous after this verification step during the preparatory phase of the project.

5.3.1 Septic Tank Sludge Management

Septic tank sludge will be managed according to applicable regulations and Bylaw No. 109.3 concerning the collection, transportation, treatment and disposal of septic tank sludge that apply to resort sites in the territory of the Regional Government of Eeyou Istchee Baie-James (GREIBJ).

Sludge with a dryness rate of more than 25% will be disposed of at an engineered landfill site (LET) and/or composting center that is authorized to receive it; the disposal site is currently under evaluation. Sludge with a dryness rate of less than 25% will be emptied by a vacuum truck and disposed of in an aerated pond in Val d'Or, Qc.

5.3.2 Liquids and Solids found in Barrels, Tanks and Cylinders

The presence of barrels, heating oil ASTs, propane tanks and reservoirs at the main camp, site 209863-00-000, and at the unauthorized barrel storage area, site 0600-2021-104, was noted by the MERN during site visits. Phase I and Phase II site assessments were completed on the former gas station site, Site 0600-2021-104, where the unauthorised barrel dump is located (Englobe, 2021). These inspections included the identification of 150 barrels and between 40 and 100 propane tanks at the unauthorized barrel depot location; and approximately 10 barrels and two large propane reservoirs of unknown capacity at the main camp site. The contents of the barrels are suspected to be aviation gasoline, kerosene, gasoline and/or diesel.

Heating oil tanks were identified at sites 209863-00-000, 212691-00-001, 207014-00-000, and 215131-00-000. Photographs were taken by MERN and are provided in the Fact Sheets.

5.3.2.1 Barrel and Heating Oil Tank Management

The management of barrels and heating oil tanks will be carried out by the hazmat team who hold certificates of competency in the management of hazardous wastes.

The immediate area around the drums and tanks will be visually inspected prior to performing any work. If signs of leakage or spillage are found, the work will be conducted with the appropriate spill containment equipment and PPE and in accordance with applicable regulations. Precautions will be taken to avoid spills and further impact on the environment.

5.3.2.1.1 HEATING OIL TANKS

Several heating oil tanks have been identified at the satellite camps. These tanks will be inspected during the site visit as well as the planning phase of the project. The contents of the tanks will be pumped into containers designed for the transportation of liquids, such as 1,000 L tote tanks that meet the requirements of the Transportation of Dangerous Goods Regulations. Absorbent pads will be used to absorb any remaining liquid. Used absorbent pads will be packaged as hazardous waste in plastic containers.

Once emptied, the tanks and their piping will be dismantled and transported to the washing area located at the main camp.

5.3.2.1.2 BARRELS CONTAINING LIQUIDS

To avoid spills when moving drums, if it is determined that a drum is too hazardous to move, the hazmat team will pump the contents into containers designed for transporting hazardous liquids. Absorbent pads will be used to absorb any remaining liquid. Used absorbent pads will be packaged as hazardous waste in UN approved means of containment. Subsequently, the empty barrel will be transferred to the wash area.

Items that are transferred to the on-site wash area will be segregated. For example, barrels that contain hazardous materials will be separated from barrels/tanks that do not contain hazardous materials. Barrels may be separated as follows: barrels with product, barrels with aqueous product, barrels with residue, and empty barrels.

Barrels will be opened for inspection. Any pressurized drums will be opened with extreme caution and vented if necessary. The contents of the drums will be consolidated by product type in appropriate receptables, such as 1,000 L intermediate bulk containers that meet the requirements of the Transportation of Dangerous Goods by Road Regulations. Please note that no drum washing will take place at the main camp site; all drums with residue will be transported to the designated drum washing area for treatment in accordance with MELCC requirements and all other applicable regulations.

5.3.2.1.3 WASHING OF DRUMS AND TANKS

Barrels and tanks will be triple washed with steam in the wash area to limit the amount of water generated. Drum and tank washing will be done in accordance with MELCC requirements. The drums and tanks will then be transferred to the scrap metal storage area for shredding and reclamation.

The oily water generated by the washing operations will be captured and containerized. It will be collected by Amnor Industries for disposal at their Malartic QC Site, along with all other hazardous wastes collected during the project.

5.3.2.2 Management of Residual Propane from Tanks and Cylinders

The residual contents of the propane cylinders and tanks will be destroyed by controlled combustion (flaring). The flaring will be performed under the supervision of the hazmat team in an isolated area of the former gas station site.

Following the venting process, the tank valves will be opened and condemned. The tanks will be certified as decommissioned by the hazmat specialist and the tanks will be managed as scrap metal.If

pressurized gas is found in the propane tanks, the purging and decommissioning of the tanks will be carried out in accordance with the laws in force, in compliance with the CSA B149.2 Propane Storage and Handling Code and the RBQ regulations, by personnel trained in the management of liquefied petroleum gases who hold the qualification certificates from Emploi-Québec and a contractor's license issued by the RBQ.

5.3.3 Management of Abandoned Vehicles and Auto Parts

Abandoned vehicles will be dismantled and environmental contaminants removed from them, including fluid changes (fuels, lubricating and hydraulic oils, antifreeze, windshield washer), oil filters, mercury containing components, batteries, refrigerants, electronic components and airbags.

Once the vehicles have been purged of their hazardous liquids and components, the wastes will be managed as follows:

— The body of the vehicles will be shredded and the metals will be recycled;

— Tires will be managed by RECYC-QUÉBEC according to the "Scrap Tire Program";

— “Fluff" type waste will be disposed of with construction waste in a landfill; and,

Electronic components will be recycled with other waste electrical and electronic equipment in an ecocenter.

The management of abandoned vehicles will be completed in accordance with all applicable regulations.

5.3.4 Management of Appliances containing Refrigerants

Refrigerants will be removed from appliances. Appliances will be shredded with the metals for recycling.

Components containing refrigerants will be transferred to Amnor along with other hazardous wastes.

5.3.5 Management of Computer and Electrical Equipment

Waste electrical and electronic equipment will be consolidated and recycled in an ecocentre.

5.3.6 Management of Domestic Hazardous Materials

Household hazardous materials will be consolidated by the hazmat team. Products will be segregated and packaged in « lab packs » based on the type of product (acids, bases, corrosives, flammables, etc.). Domestic hazardous materials will be sent to the Amnor transfer center.

5.4 Hazardous Waste Disposal Sites

Table 2: Hazardous waste streams and proposed disposal facilities

Waste	Disposal facility
Septic tank sludge	– Aerated Pond de Val-d’Or – Landfill (TBD) – Composting site (TBD)

Waste	Disposal facility
Chemicals, petroleum products, oily water, heavy metals, refrigerants	**Amnor Industries** 501, chemin Jolicoeur-et-Ste-Croix, Malartic (QC) J0Y 1Z0
Propane	TBD
Waste electrical and electronic equipment	Éco-centre (TBD)

6 Site Restoration

Operations will be coordinated such that disturbances to existing vegetation will be avoided.

Where necessary, clean soil sourced from an active local borrow pit will be used to backfill excavations, in accordance with the requirements of the Land Protection and Rehabilitation Regulation (LPRR).

The footings of the demolished buildings will be graded to match the local topography. Once the dismantling work is complete, an excavator will be used to grade the temporary camp site and work areas to reshape the area to match the local topography. This will prevent standing water from accumulating and prevent erosion. If needed, the soil surface will be slightly reworked to make the land suitable for seeding.

The main camp area will be revegetated by hand spreading predominantly native seed.

.

7 Demobilization

Final demobilization will take place in the summer of 2022. The equipment, temporary facilities and all waste materials resulting from the demolition work will be demobilized by road transport. It is anticipated that demobilization activities will take approximately five days.

Final demobilization will commence after the provisional acceptance of the work and inspection of the site by MERN representatives.

The site closure/demobilization process will include the following:

– Work areas will be assessed and cleaned up;
– Temporary infrastructure placed on the site for the completion of the mandate (i.e. new accommodation facilities and fuel/hazardous materials storage and washing areas) will be removed from the site;
– The remaining waste will be packaged for off-site disposal; and,

Access roads will be decommissioned, and the site will be remodeled as required.

Appendix A
Specific Health Safety and Environment Management Plan - Mikuen Environmental Services

French only

ENGLOBE

MIKUEN
SERVICES
ENVIRONNEMENTAUX

Plan Spécifique de gestion SSE
Projet Ancienne Pourvoirie NOUMICHI
Ref # 209863-2021-1

Soumise :

Mme Katheryne Budd. Géogr
Chargée de projet
Réhabilitation de site ,
ENGLOBE Corp,
1200 Blv St-Martin Ouest
Laval, Qc H7S 2E4

Préparée par :

Sylvain Gendron M sc Env /PMP
Mikuen Services Environnementaux
(11749765 Canada inc)
45 Pashin
Uashat mak Mani-Utenam
418-350-5993

2022-01-30

1. Mise en contexte

Le présent « Plan Spécifique SSE » sera l'outil d'encadrement des travaux prévus sur le projet *« Démantèlement d'une ancienne Pourvoirie- Secteur Transtaïga # 209863-2021-1 »* qui consiste au nettoyage, démantèlement de bâtiments et d'infrastructures, la disposition des matériaux et remise en état après une campagne de caractérisation des cibles potentielles de risque d'impact comme le site d'entreposage non conforme de barils.

Autres que le camp principal de l'ancienne Pourvoirie NOUCHIMI, les travaux se transporteront sur 6 sites du long de la route définis comme des « sites satellites ».

Le projet étant dans une zone isolée des centres urbains, ce plan visera à la fois, l'ensemble de la sécurité des parties prenantes du projet et voir aussi à leurs conforts pour la période des travaux basés sur des horaires de 12h/ jours selon une mobilisation unique de 30 jours, dans un campement de type forestier temporaire, le plan d'urgence, les différentes procédures de gestion des travaux de démolition, la gestion conforme des MR et MDR, le respect de l'environnement et au final le plan de restauration du site.

Bref, une vision d'ensemble du projet couvrant les différentes phases des travaux à être réalisés dans le mandat de *ICANTEC/MIKUEN* sous la supervision de l'équipe *ENGLOBE Corp*.

La rédaction de ce plan est basée sur l'analyse des risques potentiels définis lors de l'estimation des couts du projet et sur des analyses plus approfondies en début de phase de planification.

Les phases principales du projet sont;

- Planification / repérage sur le site / installation des nichoirs pour chauffe souris ;
- Mobilisation des équipements et matériel / installation des infrastructures du campement temporaire;
- Travaux préparatoires / récupération / gestion des MDR;
- Travaux de démolition / gestion des CRD / disposition vers des sites conformes;
- Nettoyage / remis en végétation;
- Démobilisation.

Durant ces phases, l'équipe de caractérisation de *ENGLOBE* fera des travaux en parallèle de forage et/ou de tranchées et selon les résultats de l'échantillonnage, l'émission de recommandations sur de possibles travaux de gestion de sols.

2. Gestion du plan spécifique SSE

Pour le projet *ICANTEC /MIKUEN* sera assujettie au « Plan cadre SST » de son client *ENGLOBE* pour le respect des politiques et des directives normalisés pour ce type de travaux ainsi que du code *ASP Construction* donc l'ensemble des travailleurs sont détenteur de carte de compétence.

Autre que le respect du « Plan Cadre SST » le présent « Plan Spécifique SSE » vise la gestion des risques potentiels sur le chantier à la fois dans le respect de la santé et de l'intégrité des travailleurs que le respect de conformité des lois environnementales.

Pour ce faire, l'équipe chantier comptera sur un responsable SSE qui sera secondé par un évaluateur environnemental agréé (EESA) qui tous les deux seront sous la supervision de du Directeur de projet détenant un titre d'Expert et le tout encadré par une coordonnatrice de projet qui sera responsable des communications.

3. Plan spécifique SSE

Phase de planification

Dans la phase de planification, nous travaillerons avec les différentes parties prenantes à la définition des sous-phases afin de faire l'ensemble des validations de scénarios projetés lord de l'estimation et d'établir les procédures à mettre en place pour limiter les risques d'improvisation lors de la réalisation des travaux et/ou de définir des plans alternatifs en gestion de situations contenue les contraintes d'un chantier en région éloignée.

De cet énoncé, l'ensemble des fournisseurs de services seront analysés soient pour la qualité et leur capacité de réalisation de travaux et/ou le respect des conformités environnementales.

Cela vise principalement la gestion pour la disposition des CRD et les MDR.

La validation finale de la phase de planification sera un repérage dans la région de Radisson et des sites afin d'établir les derniers points de procédure et/ou signature des contrats d'approvisionnement et/ou ententes avec les sites de disposition des MR.

Lors de ce repérage dans la période du mois d'avril l'installation des nichoirs pour les chauffes souris sera faite afin de répondre aux directives reçues du *MFFP* et documentées par le site web du *CSBQ* fournis par le *MERN*.

Durant cette visite de repérage une évaluation des ressources locales sera faite question de développement sociétale avec les membres de la *Municipalité de Radisson* de la *Communauté Cree de Chisasibi* et des pourvoyeurs avoisinants ainsi qu'avec le responsable du chantier voisin de restauration de la station-service mandatée à la firme *Géninovation*.

Visite qui permettra la définition des besoins d'approvisionnement du projet, tel que les procédures de ravitaillement en carburant via les installations de PétroNord face au campement de *l'Aéroport LG-4*

Dans la visite de repérage, la validation des mesures d'urgence sera validée via les services d'infirmerie de *l'Aéroport LG-4* d'*Hydro-Québec* qui se situe à environ 8-10 km du site du camp principal de la pourvoirie.

Lors de la phase de planification, l'ensemble des besoins identification (panneau avec logo des entreprises mandatées / # de tel des responsables) du chantier seront produits afin que l'installation puisse se faire lors de la visite de repérage. Il en sera de même pour les campements satellites.

4. Phase de mobilisation

Suite à la visite de repérage et l'obtention de précisions sur les ressources disponibles régionalement, l'équipe *ICANTEC/MIKUEN* sera en mesure de définir les différents besoins spécifiques au projet tant en équipement / outillage / matériel pour à la fois le maintien opérationnel du campement que pour la réalisation des travaux

Campement

Le campement de type forestier sera fourni par une entreprise ayant une expérience de mobilisation et installation à la Baie James et sur la Transtaïga qui comprendra;

- Module cuisine totalement équipée et conforme à réglementation du *MAPAC* qui permettra le couvert pour 10-20 résidents et/ou de passage au chantier.
    - 2-3 modules-dortoirs de 5 chambres doubles pouvant accueillir les travailleurs et passant au chantier. Module incluant toilette / douche / buanderie contenue le raccordement sous les modules de réservoirs d'eau propre et d'eau usée. Il est entendu qu'un module sera réservé au personnel féminin et/ou pour les visiteurs de supervision;
    - Groupe électrogène pour l'alimentation électrique pour la cuisine / modules-dortoirs et les besoins éclairage et l'alimentation des appareils de communication via l'internet satellite;
    - Parc à carburant selon les solutions d'approvisionnement via les services de PétroNord à l'Aéroport LG-4;

- Les autres infrastructures viseront la gestion des déchets générés par le campement ainsi que les besoins d'installation diverse besoin de protection environnementale, des aires de stationnement des équipements et camions, pad d'entreposage CDR et MDR qui seront définis dans la phase des travaux.

La gestion du campement sera faite par un « Chef de camp » qui aura la responsabilité de la préparation des repas / l'approvisionnement des vivres et du maintien de l'hygiène selon les normes en vigueur. Il sera secondé par l'équipe chantier pour ce qui est d'un maintien opérationnel du groupe électrogène et installation en approvisionnement d'eau. (Pompage de l'eau propre au lac / disposition des eaux sanitaire par une firme spécialisée).

Il est entendu de l'eau potable sera fournis par des fontaines et eau embouteillée.

Les vivres seront livrés par le transporteur régional (remorque réfrigérée) suite à la commande dans les fournisseurs locaux de *Radisson* et de la *Communauté de Chisasibi.*

Il est entendu que les procédures de gestion de la COVID-19 seront en force selon les seuils de risques et en particulier pour les visiteurs.

Plan d'urgence

Dans un projet en région éloignée tel que celui défini dans ce plan est basé que la moindre blessure devient un danger éminent, si un plan d'urgence n'est pas mis en place et connu de tous. Autre que les blessures à un travailleur les risques de feu de forêt peut être aussi un besoin de gestion majeur à la fois par la fermeture des routes d'accès, mais aussi pour des risques pour les installations.

Donc, voici les mesures qui seront prises pour limiter les improvisations,

- Information et discussions avec la SOPFEU de l'installation d'un campement temporaire et information sur les activités prévues;

- Information et discussions avec le département de surveillance des chemins de la SEBJ de l'activité au campement et au trafic engendré par les camions sur le tronçon entre le chantier et le site du LEET de la Municipalité de Radisson;

- Information et discussions avec les responsables de l'Aéroport LG-4 et du personnel de l'infirmerie et de premiers répondants qui pourront répondre à des urgences majeures.

- Rencontre avec le maitre-trappe du secteur pour la gestion des animaux sauvages.

Liste d'intervenant donc les coordonnées seront affichées à différents points sur le campement.

Autres que les blessures, nous vivons présentement dans une période de pandémie mondiale qui peut si des procédures ne sont appliquées générer des besoins d'évacuation de l'ensemble du personnel présents au chantier.

Le plan devra aussi comprendre les mesures de possible évènement lors des travaux sur les sites satellites qui sont à des distances éloignées du campement principal.

De l'ensemble de ces faits;

- L'hygiène sur le campement sera un point majeur de supervision;
- Dans le module de la cuisine, des trousses de premiers soins complètes seront mises en place avec équipement de mobilisation qui sera disponible pour les détenteurs de cartes de secouriste de chantier;
- L'ensemble des équipements auront une trousse de premiers soins et extincteurs ainsi que trousse de déversement conforme à la réglementation;
- Les équipements de communication à haute fréquence seront reliés aux canaux des premiers intervenants d'Hydro-Québec LG-4;
- Un téléphone satellite sera disponible pour communication avec l'organisme Hélico-Secourt donc ICANTEC/MIKUEN est membre.
- Les membres de l'équipe porteront en tout temps des mesures d'éloignement des animaux sauvages.

Bref, en ensemble de précautions qui seront incluses dans un plan d'urgence spécifique définie et valider après la visite de repérage et qui par la suite sera présenté aux travailleurs et visiteurs lors d'une séance d'intro au chantier et il en sera de même pour les camionneurs.

Le plan d'urgence inclura les mesures de gestion d'évènements environnementaux qui seront gérées par l'équipe hautement qualifiée étant membre de soutien d'intervention du SIMEC et de notre partenaire AMNOR Industries.

De ce fait, il est prévu que des trousses de gestion de déversement complète seront présentes au chantier au point stratégique et de la formation du personnel présent sera faite.

5. Phase de travaux préparatoires

La phase de travaux préparatoires commencera lors de la phase de mobilisation par l'arrivée des travailleurs qui inclura l'information du processus SEE et l'installation des différents besoins opérationnels et du chantier tel que;

Rencontre intro au chantier

- Présentation des différentes procédures de gestion du campement et plan d'urgence;
- Procédures de gestion du chantier qui se fera chaque matin sous forme de définition des tâches et rencontre sécurité;
- L'ensemble de mise en place de sécurisation sur le site et matériel de gestion environnementale;

Nettoyage de débris extérieur

Dans le devis, il nous a été possible de remarquer la présence de débris à proximité des bâtiments qui sont à la fois sources de risques et qui peuvent dissimulé de possible impact à l'environnement, de ce fait un ménage sera entrepris et une ségrégation des matières sera faite ce qui permettra à la fois la bonne tenu du chantier et de définir les aires d'entreposage temporaire des piles (déchets ultimes / métaux /…) et l'installation du broyeur qui permettra la réduction volumétrique des CRD et des métaux comme exemple les meubles, électroménager que nous définirons comme des encombrants.

Il est entendu que lors de ce nettoyage une validation de risque de présence de fluide sera faite avant le broyage comme en exemple les huiles contenu dans des mécanismes et/ou autres matières dangereuses.

Dans cette phase de travaux, une attention particulière sera prise en compte pour la mise en place de mesure de protection des zones de végétation (définition des périmètres de travaux et de déplacement des équipements)

L'autre point qui sera défini sera le repérage de l'emplacement de fosses septiques et délimitation des périmètres de sécurité pour les travailleurs et déplacement d'équipements.

Inspection des bâtiments

Dans la phase précédente de nettoyage les accès aux bâtiments seront inspectés et sécurisés qui permettra;

- Inspection sécuritaire de la structure des bâtiments et identification des risques potentiels;
- Gestion des MDD et MDR / entreposage temporaire selon l'identification des produits;
- Récupération des réutilisables qui pourront être offerts aux Communauté et/ou organisme régionaux;
- Récupération de matière valorisable.
- Définition de la procédure de démolition et de gestion des MR.

Contenu que cette étape généra des MDD et MDR, l'utilisation de conteneurs marins équipés de bassins de rétention selon les besoins servirons d'entreposage temporaire jusqu'à l'expédition vers le centre de transfert de Malartic. Les matières seront placées selon un empaquetage et identification conformes à leur expédition et selon les recommandations contenues dans les fiches d'identification (SIMDUT) et selon une catégorisation conforme aux règles de l'art en gestion d'inventaire de MDR.

Aux fins de documentation, un inventaire à jour sera tenu qui permettra à la fois la conformité réglementaire d'entreposage et la préparation des manifestes d'expédition.

Gestion des chauffes souris

Suite à l'installation des nichoirs lors de la visite de repérage, des observations seront faites par un biologiste afin d'évaluer l'efficacité des mesures mises en place et de prendre des mesures spécifiques pour favoriser leurs déménagements.

De ce fait, lors des travaux de préparation des bâtiments abritant des populations encore en place, l'équipe de de démolition fera l'enlèvement de tôles de couverture des entre toits en période fin de journée qui deviendra un incitatif à leurs déménagements durant la période de lever du soleil.

Gestion des barils et réservoirs de propane.

Dans les informations reçues au devis, il est fait mention d'un entreposage de barils qui ont possiblement servies au ravitaillement des avions par le passé qui laisse croire à la présence à des fluides volatiles (jet fuel / kérosène / essence), de ce fait et selon le scénario que les barils sont vides, l'équipe de gestion des MDR pourra;

- Construction d'une aire de travail, soit l'installation d'une membrane imperméable en diguée comportant un point bas d'une surface relativement assez grande pour la captation des éclaboussures et permettre l'égouttement des barils suite au rinçage;
- Faire l'ouverture des barils afin de permettre une ventilation des gaz et valider la présence de fluide excédentaire et dans faire le rinçage à la vapeur;
- Égouttement des eaux huileuses dans un bassin de rétentions adéquat;
- Pompage des eaux huileuses et acheminement vers un centre de traitement accrédité et selon une émission de manifeste de transport;
- Broyage de baril pour valorisation des métaux.

Advenant la présence de fluide résiduel;

- Les fluides seront pompés dans des têtes de transport de 1000 litres adéquates selon les produits (métallique / plastique) suivis d'un égouttement afin de permettre le rinçage subséquent et permettre la valorisation des barils;
- Les têtes de récupération seront acheminées vers un centre de disposition via le centre de transfert de AMNOR Industries à Malartic qui est accrédité et selon une émission de manifeste de transport.

Pour ce qui est des réservoirs de propane, l'équipe de gestion des MDR fera la validation de que les réservoirs sont vide de présence de gaz liquéfié ce qui permettra la gestion suivante;

- Ouverture de la valve et après un temps de ventilation enlèvement complet qui deviendront la validation de purge des gaz;
-

- Broyage pour valorisation des métaux et/ou découpage à l'aide d'une cisaille hydraulique en attachement sur une excavatrice.

Advenant la présence de gaz liquéfié dans les bombonnes la procédure sera;

- Les bombonnes seront branchées sur une torchère afin que les gaz présents soient comburés adéquatement avant d'être libérés dans l'atmosphère.

Cette méthode est largement utilisée dans la gestion des gaz résiduels que nous définirons comme gaz de synthèse et qui permet à la fois une destruction et l'élimination possible de GES.

Il est entendu que la torchère sera installée de façon sécuritaire dans un périmètre libre de toute matière inflammable contenue les possibles risques d'indice de feu élever dans cette période de l'année.

Parc de remplissage des bombonnes

Pour ce qui est des réservoirs dans le parc d'entreposage de propane et de remplissage de bombonne, une attention particulière sera faite sur les possibilités de réutilisation et avenant cette possibilité, une firme spécialisée sera demandée pour faire le démantèlement et l'émission de certificat de disposition conforme selon la réglementation du RBQ.

Advenant que la date de certification soit expirée, les débranchements de tuyauterie seront faits par une équipe certifiée pour ce genre de travail et la purge des réservoirs sera validée dans la même opération.

Pour ces items (barils et bombonne de propane) l'opération sera largement documentée avec reportage photo pour que la gestion soit incluse par l'expert dans le rapport final.

6. Phase de travaux de démolition / gestion MR

Cette étape est le principal but du projet qui est de raser les bâtiments au sol et de faire la disposition des débris (CRD) selon la conformité environnementale afin à la fois de permettre la restauration du site et la limitation des risques de responsabilités d'une propriété rétrocédée à l'état.

Comme nombreuse pourvoirie, la « Pourvoirie NOUCHIMI » à bénéficier de la fermeture des chantiers d'envergures pour faire l'acquisition de modules-dortoirs que nous retrouvons sur le site dont l'équipe ICANTEC/MIKUEN à l'expertise de genre de démolition pour avoir participé aux démantèlements / démolition des campements « HQ-Sarcelles » et HQ-Des Murailles et de nombreux projets de restauration de site minier.

Faits, qui nous permettent à la fois la disponibilité d'un parc d'équipement adéquat et la planification logistique d'une telle opération en régions éloignées.

Démolition des bâtiments (campement)

Comme mentionné dans la définition de la phase de travaux préparatoires, les bâtiments avant d'être démolis auront vider de matière de type MDD et MDR, des produits réutilisable et valorisable question de limiter les besoins de ségrégation lors de la gestion des CRD.

De ce fait, lors des travaux l'élément des tôles de recouvrement métallique seront enlevées de façon mécanique (cisaille hydraulique) afin d'être disposées séparément et être gérées ultérieurement et en va de même pour par la suite des structures métalliques.

Suite à cette étape, l'écrasement et mise en piles des MR ultime sera fait en prévision d'un broyage pour permettre l'optimisation volumétrique du chargement des camions et par le fait même la limitation d'impact au LEET de la Municipalité de Radisson qui selon nos informations est en fin de vie.

Information qui selon notre vision de développement d'économie circulaire, nous permettra lors de la visite de repérage l'évaluation des besoins de ségrégation plus pointus des CRD pour fournir des BFR (bois fragmenté résiduel) pour le projet de restauration du site.

La disposition à la fois des MR ultimes acheminés vers le LEET de la Municipalité de Radisson sera coordonnée vs les travaux générateurs et il en sera de même avec les métaux résiduels afin de ne pas créer des volumes importants d'entreposage temporaire au site.

Pour ce qui des structures métalliques le coupage se fera selon les standards des marchés du recyclage à l'aide de la cisaille hydraulique.

Broyage de MR

L'opération broyage sera fait broyeur lent de type HAMMEL 650 DK qui a pour but comme déjà mentionner la réduction volumétrique des déchets ultimes provenant de la démolition et des encombrants tel que les meubles et/ou débris de toute sorte facilitant le chargement des camions de type plancher mobile qui seront acheminés au LEET.

Le broyage aurait un effet bénéfique dans la l'opération d'enfouissement et décomposition au LEET.

Il en sera de même pour les métaux résiduels légers de type tôles / électroménager / barils décontaminés ainsi que les bombonnes purgées.

Le chargement de ces résiduels métalliques se fera à l'aide d'une excavatrice munie d'un électroaimant et le transport vers le recycleur RMI d'Amos se fera par camion de type plancher mobile et/ou vrac.

Une attention particulière lors de travaux de nettoyage et de démolition sera faite pour faire une ségrégation des matières organiques afin qu'elle puisse être broyée séparément et conservée pour les besoins de remise en végétation à la fin des travaux et/ou utilisée pour le projet voisin.

Comme mentionner auparavant, nous regardons les besoins possibles de matière de recouvrement et de structurant pour la fermeture du LEET afin de faire une ségrégation adéquate selon le besoin.

Selon le besoin de gestion des poussières, le broyeur est équipé d'un système de pulvérisations d'eau pouvant atténuer cette problématique. Il est entendu que l'eau pourra être pompée directement du lac et que le faible volume d'eau utilisé ne comporte pas un besoin de gestion des eaux de ruissellement.

Site satellite

_Dans le projet à ce jour, 6 sites satellites sont à être démolis et restaurés. Ces sites sont à distances éloignées du campement principal qui fait que la procédure sera différente.

Dans un premier temps l'équipe de préparation fera un repérage et l'inventaire des besoins contenus que sur les fiches des sites nous ayons remarqué la présence de réservoirs de mazouts et comme dans les autres bâtiments la présence de MDD et MDR.

Si la présence de MDR nécessite d'intervention spécifique, les responsables du client en seront informés et l'opération sera documenté au rapport final.

Lors de cette visite de repérage, la définition des travaux de démolition sera faite afin de coordonner la mobilisation des équipements et des transporteurs en considérant que ces travaux seront réalisés en parallèle aux opérations au campement principal.

Les CRD générés lors de la démolition seront chargés directement dans les camions qui seront par la suite dirigés vers le site de ségrégation et broyage du campement principal.

Les fosses septiques

À notre compréhension du devis le site du campement principal comporte plusieurs installations de gestion des eaux sanitaires qui devront être gérées conformément à la réglementation selon l'état d'installation non utilisé depuis de nombres années.

Effet des années qui fait que les boues se sont décomposées et qu'une précipitation devrait avoir eu lieu, fait qui selon le besoin lors de l'excavation permettra la définition des volumes à être pompés et à être disposée selon le taux de siccité.

Soit une disposition d'eaux sanitaire vers le LET de Val-d'Or ayant des étangs aérés pour ce besoin et/ou vers un LEET régional ayant les autorisations nécessaires et/ou finalement vers des plateformes de compostages et/ou projet de restauration ayant les autorisations.

Ces différentes avenues seront évaluées suite à la prise d'observation de l'état des boues et pour la prise de décision nous baserons sur le guide de valorisation des MRF.

Suite à la gestion conforme des boues, les installations des fausses seront démolies et les excavations seront remblayées avec matériaux de type classe 2 provenant de banc d'emprunt qui reste à être défini à ce jour.

Remblaiement du caveau du chalet principal

Lors de la démolition du chalet principale, nous satisferons le besoin de remblaiement d'une partie d'un caveau qui selon les informations ne comprend pas de fondations de retenue autre de murs de soutènement en bois.

De ce fait, les débris CRD seront retirés de l'excavation et par la suite remblayés avec des matériaux de type 2 provenant d'un banc d'emprunt qui reste à être défini à ce jour. Cependant nous regarderons les possibilités de partenariat avec le projet voisin tant pour le transport que l'opération de chargement dans le banc d'emprunt.

Il est très fort probable que ce besoin soit comblé par un mandat donné à des entrepreneurs locaux.

7. Phase de nettoyage du site

De façon progressive de l'avancement des travaux de démolition, le nettoyage du site sera fait à un état de remise en végétation selon les directives qui ne sont pas définies à ce jour.

Nettoyage qui comporte l'élèvement de la présence de résiduels et/ou d'installations autres que les nichoirs pour l'habitat des chauffes souris.

Dans cette phase le régalage du site sera fait qui comporte la compaction des excavations et le nivellement des monticules si présent.

8. Phase de démobilisation

La dernière phase du projet sera la démobilisation du campement temporaire qui se fera soit à la fin des travaux du présent projet et/ou à la fin des travaux du projet voisin contenu qu'il est possible à ce jour que le campement serve aux deux projets selon des échéanciers en parallèle.

Il n'en va pas de moins que la démobilisation sera faite dans le respect de laisser le site apte à la restauration finale et la mise en végétation.

9. Conclusions

Sans en avoir parlé directement, le respect de l'intégrité et de la santé des travailleurs et des visiteurs sera la priorité majeure de ce projet, qui fait en sorte que chaque matin, les parties prenantes au projet seront informées des risques et des mesures à prendre pour leurs sécurités et de leur compagnon sur les tâches planifiées, contenues que le travail en région éloignée soit un risque majeur.

Les équipements requis pour des travaux spécifiques seront à la disposition de tous selon leurs compétences à leurs utilisations. La gestion des matières dangereuses sera sous supervision et selon les directives de notre partenaire AMNOR Industries qui est un leader dans ce domaine au Québec et dont notre personnel détient les certificats de compétences émis par l'Académie AMNOR classifier sur COGNIBOX qu'est la référence de suivi de compétence dans le secteur minier.

De plus comme les travaux sur ce projet sont relativement simples vs les projets de démantèlement et démolition dans les secteurs industriel et minier faits en sorte presque que l'ensemble des travaux se feront de façon mécanique avec équipement adéquat limitant la présence simultanée travailleur / équipement lors des travaux de démolitions.

Comme plusieurs mesures seront prises pour la gestion, des risques ponctuels feront en sorte que le chantier sera sécuritaire.

Comme le créneau de ICANTEC/MIKUEN est la gestion de projets environnementaux fait aussi en sorte que la conformité environnementale est un point majeur de vitrine des Communautés des Premières Nations.

Bref à ce document nous sommes à tous moments disposés aux discussions et d'apporter des précisions et/ou définir des phases non couvertes.

Sylvain Gendron M sc Env / PMP
Directeur de projets
ICANTEC (3514030 Canada inc)
Directeur Général
MIKUEN (11749765 Canada inc)

Appendix B
Temporary Installations Figure

ENGLOBE

10 cm 0 1 2 3 4 5

Legend

- Prcpane Flaring Area
- Temporary Work Camp Area
- Non-Hazardous Waste Storage and Treatment Area
- Hazardous Waste Storage and Treatment Area
- Barrel Washing and Consolidation Area

Scurce : FatMap, February 2022

Client

Ministry of Energy and Natural Resources

Project

Dismantling of an Abandoned Outfitting Camp - Transtäiga Sector

209863-00-000 Main Camp of the Nouchimi Outfitter
Km 284, Trans-Taïga Rcad, MRC Eeyou Istchee, James Bay, Québec

Title

Figure 2
Preliminary Site Facility Locations

ENGLOBE

Englobe Corp.
1200, bcul. Saint-Martin O, bur. 400
Laval, QC H7S 2E4
T 514 281-5151
F 450 668-5532

Discipline: Geoenvironment		Prepared by: K. Budd	Checked by: G. Brunner
Scale: 1:1,000		Drawn by: P. Légaré	Approved by: S. Cloutier
Date: 2022-03-25		Figure No: 2 of 3	
Page setup: 0102-EN	Paper Format: Tabloid	Register No:	

Resp.	Project	Phase	Disc.	Type	Drawing No.	Rev.
14	02200000.000-0100	---	EN	D	0102	00

Q:\043\014-02111832.000_TRANSTAIGA\Z4_CAD\VERSION 00\14-02111832.000-0100-EN-D-0101@0102-00.DWG

englobecorp.com