OSISKO MINING INC.

WINDFALL LAKE MINE PROJECT

PRELIMINARY PROJECT INFORMATION

WINDFALL LAKE PROPERTY

Project No.: 151-11330-26

MAY 2017

WINDFALL LAKE MINE PROJECT

Preliminary Project Information

WINDFALL LAKE PROPERTY

Osisko Mining Inc.

Project No.: 151-11330-26
May 2017

WSP Canada Inc.
1600 René-Lévesque Blvd West, 16th floor
Montréal (Québec) H3H 1P9

Telephone: +1 514-340-0046
Fax: +1 514-340-1337
www.wsp-pb.com

SIGNATURES

PREPARED BY

Josée Marcoux, geographer
Coordonator – Preliminary Project Information

REVIEWED BY

Vanessa Millette, geographer, M.Sc.Env.
Project Manager

The original copy of the technological document that we are transmitting to you has been authenticated and will be preserved by WSP for a minimum of ten years. Given that the transmitted file is no longer under WSP's control and that its integrity is not guaranteed, no guarantees are given with regard to any subsequent changes made to the document.

This document is a translation of a document originally written in French.

Reference to be cited:

WSP 2017. *Windfall Lake Mine Project* | Preliminary Project Information, *Windfall Lake Property*. Report produced for Osisko Mining Inc. Project No.: 151-11330-26. 55 pages and appendices.

PRODUCTION TEAM

OSISKO MINING INC.

Vice-President Environment Services and Sustainable Development	Alexandra Drapack, P.Eng., MBA, PMP
Environmental Coordinator	Andrée Drolet, ing., PMP
Project Manager	Pierre H. Terreault, ing., MGP/P.Eng., MPM
Process Engineer	Kim Nguyên, ing.
Sustainable Development Coordinator	Èva Roy-Vigneault

WSP CANADA INC. (WSP)

Project Manager	Vanessa Millette, geographer, M.Sc.Env.
Project Lead	Jean Carreau, biologist, M.Sc.Env.
Coordonator	Josée Marcoux, geographer, M.Sc.
Mapping	Maude Boulanger, geographer, M.Sc.
Editing and layout	Julie Korell

TABLE OF CONTENTS

MAPS

TABLES

APPENDICES

1 GENERAL INFORMATION

This document contains preliminary information on the project in order to meet the requirements of the provincial environmental assessment process of the Ministère du Développement durable, de l'Environnement et de la Lutte contre les changement climatiques ("MDDELCC") under section 31.2 of the *Environment Quality Act* ("EQA"), and in order to meet the project description requirements of the Canadian Environmental Assessment Agency ("CEEA") as set out in the *Prescribed Information for the Description of a Designated Project Regulations* (SOR/2012-148).

1.1 NATURE OF THE PROJECT

Osisko Mining Inc. ("OSISKO"), a company focused on the exploration and development of precious metal resource properties in Canada, proposes to develop a new gold mine in the James Bay territory, extracting ore at a rate of 1,900 metric tons per day (tpd). Mining will be conducted underground with access to the ore provided by two ramps.

1.2 NAME OF THE PROJECT AND THE PROPONENT

1.2.1 NAME OF THE DESIGNATED PROJECT

The name of the project is the "**Windfall Lake Mine Project**".

The Windfall Lake Mine Project is a proposed underground gold mine, processing plant and associated facilities belonging to Eagle Hill, a wholly owned subsidiary of OSISKO.

1.2.2 NAMES AND CONTACT INFORMATION OF THE PROPONENT AND CONSULTANTS

Table 1-1 Proponent

Name of the proponent	Eagle Hill, a wholly owned subsidiary of Osisko Mining Inc.
Civic address	155, University Avenue, Suite 1440 Toronto, ON, M5H 3B7
Persons in charge of the project	Alexandra Drapack, P.Eng., MBA, PMP Vice-President Environment Services and Sustainable Development adrapack@osiskomining.com
Resource person	Andrée Drolet, ing., PMP Environmental Coordinator adrolet@osiskomining.com
Telephone	(416) 848-9504
Fax	(416) 363-7579
Website	www.osiskomining.com
Québec business number (NEQ) in the *Registraire des entreprises du Québec*	1172033616

CONSULTANTS

The mandate to produce the present preliminary information on the project and an environmental impact assessment (“EIA”) was entrusted to WSP Canada Inc. (“WSP”).

Table 1-2 WSP Canada Inc.

Name of the proponent	WSP Canada Inc.
Civic address	1600 René-Lévesque Blvd West, 16th floor Montréal QC H3H 1P9
Persons in charge of the project	Ms. Vanessa Millette Project Manager vanessa.millette@wspgroup.com Mr. Jean Carreau Project Lead jean.carreau@wspgroup.com
Telephone	514-343-0773
Fax	514-340-1337
Website	www.wspgroup.com
Québec business number (NEQ) in the *Registraire des entreprises du Québec*	1148357057

1.2.3 STAKEHOLDERS AND OTHER JURISDICTIONS

The proponent met with representatives from the MDDELCC and CEAA to present the project and to better guide the steps to take in the environmental assessment processes. The project is well known to the Aboriginal community of Waswanipi, through meetings, presentations, newsletters and other events. Various meetings and information sessions were also held with representatives and members of local communities. Other interested parties have been met or will be met over the coming months depending on the project requirements and the concerns raised. An entire section of this document is devoted to the methods of informing and consulting the public.

2 APPLICABLE LEGAL AND REGULATORY FRAMEWORK

2.1 PROVINCIAL PROCESS

The Windfall Lake mineral deposit is located on territory governed by the *James Bay and Northern Quebec Agreement* (JBNQA). Therefore, the proponent is obliged to follow the environmental impact assessment and review process as described in the *Regulation respecting the environmental and social impact assessment and review procedure applicable to the territory of James Bay and Northern Québec* (Q-2, r.25). All mining projects located in this territory are subject to the *Environment Quality Act* and the JBNQA.

For the processing plant, two options are being studied: 1) installation on the Windfall Lake mine site, therefore on JBNQA territory, or 2) installation in an area to the east of Lebel-sur-Quévillon. If option 1 is selected, the process described above will apply. If option 2 is selected, the underground mine and associated facilities at the Windfall Lake site will be subject to an impact assessment, whereas the processing plant will require an application for authorization under section 22.

2.2 FEDERAL PROCEDURE

In Canada, the Winddfall Lake project, pursuant to section 16(c) of the *Regulations Designating Physical Activities* (SOR/2012-147): the construction of a new gold mine with an ore production capacity of 600 tpd or moreis subject to screening under the *Canadian Environmental Assessment Act* (CEAA, SC 2012, c.19, s.52). The CEAA will act as the responsible authority for the application of the federal environmental process. This document is a description of the project within the meaning of section 8(1) of the CEAA and the *Prescribed Information for the Description of a Designated Project Regulations* (SOR/2012-148), subject to public consultation and prior screening. Under this process, the CEAA decides whether or not a comprehensive federal environmental assessment of the project is required.

To date, the Windfall Lake Project's proposed mining infrastructure does not directly encroach on fish habitat. The ore haulage route between the deposit and the processing plant (approximately 104 km), if it is located near Lebel-sur Quévillon, will use existing forest roads, but a stream crossing will require widening the existing bridge. As currently known on the project, there is no encroachment into fish habitat

Depending on the selected method of explosives management, either in situ or at an existing facility outside the mine site, an Explosives Manufacturing Licence from Natural Resources Canada may be required under the *Explosives Act*. In addition, a Transport Canada permit under the *Transportation of Dangerous Goods Regulations* may also be required. Finally, the Windfall Lake Project will also be subject to the *Canadian Environmental Protection Act*, a declaration to the National Pollutant Release Inventory (“NPRI”), the *Species at Risk Act*, the *Migratory Birds Convention Act of 1994*, the *Metal Mining Effluent Regulations*, the *Environmental Emergency Regulations*, and an authorization to store and handle chemicals.

At this time, it has not been determined whether permits for any shore lot will be required. However, there is every reason to believe this will not apply because the project will avoid bodies of water in the area.

2.3 LIST OF OTHER REQUIRED PERMITS

This project will also be subject to a number of provincial and federal regulations, permit applications and/or authorization certificates. The following table lists the requirements, based on information known to date.

2.4 OTHER REGIONAL ENVIRONMENTAL STUDIES

No regional environmental studies are reported for this area.

Table 2-1 List of other required permits to be obtained following authorization (order in council)

No.	MINING ACTIVITY	LEGAL REF.	TYPE OF PERMIT/CA
MDDELCC			
1	Environmental impact assessment	RSQ, c. Q.2 A-22 (EQA) A-154	OC
2	Foundation of major buildings (crusher, etc.)	RSQ, c. Q.2 A-22 (EQA)	CA
3	Ore processing plant (crusher)	RSQ, c. Q.2 A-22 (EQA) + DO19	CA
4	Polishing pond and mine water treatment system	RSQ, c. Q.2 A-22 (EQA) + DO19	CA
5	Tailings management facility, waste rock stockpile areas	RSQ, c. Q.2 A-22 (EQA) + DO19	CA
6	Water treatment plant – effluent from the tailings management facility and waste rock stockpiles	RSQ, c. Q.2 A-22 (EQA) + DO19	CA
7	Mining operations	RSQ, c. Q.2 A-22 (EQA) + DO19	CA
8	Groundwater catchment	GCR, c. Q.2 A-3 and 31	CA
9	Withdrawal of surface water or groundwater	RSQ, c. Q.2 A-31.75 (EQA)	CA
10	Installing apparatus or equipment (dust collector) intended to prevent, reduce or cease the issuance of contaminants into the atmosphere	RSQ, c. Q.2 A-48 (EQA)	CA
11	Sand and gravel extraction (operating a borrow pit)	EQA, Q-2, r.7 (RPQ) - A-2	CA
12	Industrial depollution for the plant	RSQ, c. Q.2 A-31.10-31.11 (EQA) + c. Q-2, r.5 (RIDA)	CA
13	Oil-wate separator, oily water treatment	RSQ, c. Q.2 A-32 (EQA)	CA
14	Road network / construction of a minor road	RSQ, c. Q.2 A-22 (EQA)	CA

No.	MINING ACTIVITY	LEGAL REF.	TYPE OF PERMIT/CA
15	Drinking water supply – service building, pipes and other requirements	RSQ, c. Q.2 A-32-32.1 (EQA)	CA
16	Sewage treatment – service building, pipes and other requirements	RSQ, c. Q.2 A-32-32.1 (EQA)	CA
17	Planned work under a fish habitat compensation program, if applicable	RSQ, c. Q.2 A-22 (EQA) + C-61.1 A-128.7 (ACDW)	CA
18	Storage of hazardous waste materials	RSQ, c. Q.2 A-70,9	CA
19	Storage of explosives	AE c. E-22, a. 22, A-7 + C. E-22, r.1 (RUAE)	L
20	Storage of chemical products	RSQ, c. Q.2, r. 32	included under the CA
21	Activities that could affect a threatened or vulnerable plant species or its habitat	ATVS, E-12.01, A-16	included under the CA
22	If an activity related to the mine affects cultural property	CPA, B-4 (2011)	included under the CA
MFFP / MERN			
23	Location of stockpiles, tailings management facility and ore processing plant	MA, M-13.1, A-240 – 241	CA
24	Mining lease	MA, M-13.1	A
25	Lease for lands of the domain of the State	MA, M-13.1	A
26	Tree cutting activities in forested areas	SFDA A-18.1 + CQLR	P
27	Rehabilitation plan	MA, M-13.1 – Section III, A-232.1 – 232.2	A
RBQ			
28	Storage of petroleum products	BA, c. B-1.1, Section 20 of the Safety Code	A
Federal			
29	Assess the environmental impacts of the mining project	SC 2012, c. 19, s. 52	OC
30	If serious damage to any fish or fish habitat	RSC, c. F-14, A-35	CA

No.	MINING ACTIVITY	LEGAL REF.	TYPE OF PERMIT/CA
31	Installation of water pipelines, water intake pipes and effluent discharge pipes	RSC, c. N-22 - A-3	CA
32	Impact on species at risk	LC 2002, c. 29 A-73	included under the CA
Municipal / Eeyou Istchee James Bay Regional Government			
33	Construction and operation		A
34	Infrastructure not covered under the Mining Act		A

CA: Certificate of authorization; A: Authorization: P: Permit; L: Licence; OC: Order in Council.

3 INFORMATION ON THE PROJECT

3.1 PROJECT OBJECTIVES AND JUSTIFICATION

The main objective of mining operations at Windfall Lake will be to extract gold ore and concentrate it at a processing plant located on the mine site or in an area 11 kilometres southeast of the town of Lebel-sur-Quévillon in Eeyou Istchee James Bay territory. Mill throughput at the Windfall Lake ore processing plant will be approximately 1,900 metric tons per day.

Factors supporting the realization of the Windfall Lake Project are as follows:

- the economic benefits for Québec, particularly for the James Bay region;
- year-round access via existing roads;
- the potential to install an ore processing plant and tailings management facility in a location that would benefit from the proximity of an existing, reliable power grid with available capacity;
- the potential to install an ore processing plant and tailings management facility in a location that would benefit from the proximity of available manpower; and
- a project developed according to the principles of sustainable development.

3.2 PROJECT LOCATION

The project is situated north of the 49th parallel in the Nord-du-Québec administrative region, in Eeyou Istchee James Bay territory, on Category III lands.

The mine site is roughly 285 km from the city of Val-d'Or and 115 km east of the town of Lebel-sur-Quévillon, a region known for its gold, copper and zinc deposits.

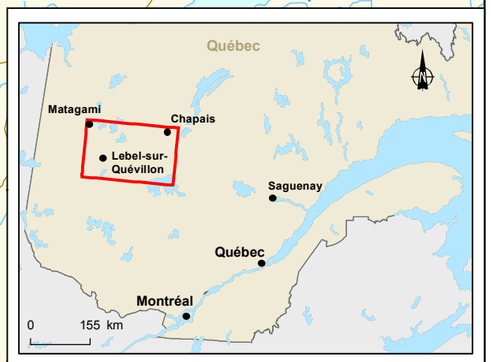
The ore processing plant would be located onsite or 11 kilometres southeast of the municipality of Lebel-sur-Quévillon in Eeyou Istchee James Bay territory. Discussions are underway with various stakeholders.

Map 1 shows the possible locations for the mine and related infrastructure.

The geographic coordinates for the planned mine area and the potential plant site are as follows:

MINE AREA	POTENTIAL PLANT SITE AT LEBEL-SUR-QUÉVILLON
49° 04' 10'' North	49° 00' 43'' North
75° 39' 14'' West	76° 51' 37'' West

Lac Matagami
Matagami
Lac Olga
Lac au Goéland
Rivière Bell
TERRITOIRE AUTOCHTONE DE WASWANIPI
Waswanipi
Chapais
113
Lac Waswanipi
Lac Opawica
Desmaraisville
Miquelon
Lac Nicobi
Lac Father
Lac Doda
Lac Surprise
Lac Pusticamica
TÉ Jamésie
MUNICIPALITÉ D'EEYOU ISTCHEE BAIE-JAMES
Lac Hébert
Lac Quévillon
Lebel-sur-Quévillon
km 12
km 112
km 99
km 66
Site de la mine Lac Windfall / Windfall Lake Mine Site
397
MRC de l'Abitibi
TNO LAC-DESPINASSY
Localisation potentielle de l'usine / Potential Plant Site
Lac Wetetnagami
Lac Barry
MUNICIPALITÉ DE LA MORANDIÈRE
MUNICIPALITÉ DE ROCHEBAUCOURT
MUNICIPALITÉ DE CHAMPNEUF
Lac Parent
MRC La Vallée-de-l'Or
MUNICIPALITÉ DE SENNETERRE
Territoire équivalent de La Tuque
MUNICIPALITÉ DE LA TUQUE



OSISKO

Avis de projet / Project Notification
Projet Lac Windfall / Windfall Lake Project,
Eeyou Istchee Baie-James (Québec)

Carte / Map 1

Localisation de la mine Lac Windfall / Location of Windfall Lake Mine

0 6 12 18 km
UTM, fuseau 18, NAD83

Sources :
- *BDGA, 1/ 1 000 000, MRN Québec*
- *SDA, 1/20 000, MERN Québec, 2013*

		Date
Dessiné par / Drawn by	*M. Boulanger*	*11-04-2017*
Vérifié par / Verified by	*J. Marcoux*	*11-04-2017*
Approuvé par / Approved by	*V. Millette*	*11-04-2017*
Fichier / File	151_11330_26_AP_c1_loc_wspq_170411.mxd	

WSP

Projet / Project: 151-11330-26

3.3 LAND OWNERSHIP

The study area for the mine and the potential location of the processing plant located southeast of Lebel-sur-Quévillon is entirely located on Crown land. No federal land is found within the Windfall Lake project area.

3.4 EXPLORATION HISTORY

Gold mineralization was discovered in the area in 1994 by Murgor Resources, specifically in the Barry Township located approximately 10 kilometres southeast of the Windfall Lake Property.

In 1996, the Alto Fault was discovered on the Windfall Lake Property by Alto Minerals Inc. and Noront Resources Ltd during an extensive mapping and trenching program. Exploration work was conducted on a continual basis after that by Inmet Mining Corporation and Fury Explorations Ltd.

In early 2007, a joint venture agreement was signed between Noront and Murgor Resources Inc. to develop a ramp for the purpose of advanced exploration to collect a bulk sample. At the portal site, the area was deforested and bedrock was stripped in several places to allow for the advanced exploration program.

It was only recently (August 2015) that OSISKO (then Oban Mining Corporation (Oban)) acquired Eagle Hill and commenced drilling at the Windfall Lake site.

3.5 MINERAL EXPLORATION RIGHTS

The Windfall Lake Project comprises 285 contiguous mining claims covering an area of 12,400 ha. The claims are held 100% by Eagle Hill. The map that follows (Map 2) shows all the claims belonging to OSISKO in the project area and Map 3 shows the claims in the potential location of the processing plant, southeast of Lebel-sur-Quévillon.

TÉ Jamésie

MUNICIPALITÉ D'EEYOU ISTCHEE BAIE-JAMES

Lac Hébert

Site de la mine Lac Windfall / Windfall Lake Mine Site

Lac Barry

Lac Wetetnagami

MRC La Vallée-de-l'Or

MUNICIPALITÉ DE SENNETERRE

Territoire équivalent de La Tuque

MUNICIPALITÉ DE LA TUQUE

OSISKO

Avis de projet / Project Notification
Projet Lac Windfall / Windfall Lake Project,
Eeyou Istchee Baie-James (Québec)

Carte / Map 2

Claims miniers appartenant à Osisko au site de la mine / Osisko Mining Claims at the Mine Site

0 2,6 5,2 7,8 km

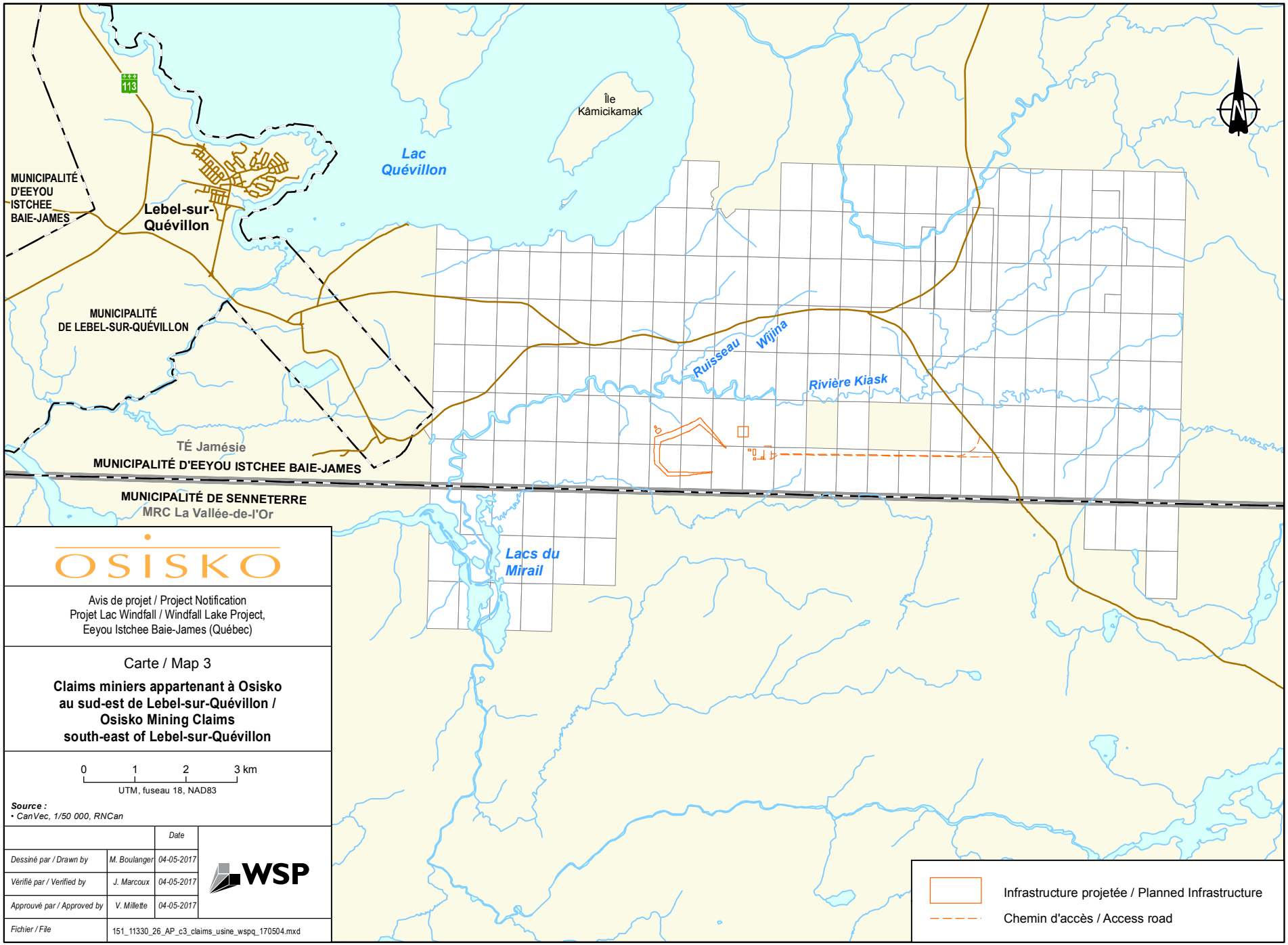
UTM, fuseau 18, NAD83

Sources :
- *BDGA, 1/ 1 000 000, MRN Québec*
- *SDA, 1/20 000, MERN Québec, 2013*

		Date
Dessiné par / Drawn by	*M. Boulanger*	*02-05-2017*
Vérifié par / Verified by	*J. Marcoux*	*02-05-2017*
Approuvé par / Approved by	*V. Millette*	*02-05-2017*
Fichier / File	151_11330_26_AP_c2_claims_mine_wspq_170502.mxd	

WSP

Projet / Project: 151-11330-26



OSISKO

Avis de projet / Project Notification
Projet Lac Windfall / Windfall Lake Project,
Eeyou Istchee Baie-James (Québec)

Carte / Map 3

Claims miniers appartenant à Osisko au sud-est de Lebel-sur-Quévillon / Osisko Mining Claims south-east of Lebel-sur-Quévillon

0 1 2 3 km

UTM, fuseau 18, NAD83

Source :
• CanVec, 1/50 000, RNCan

		Date
Dessiné par / Drawn by	*M. Boulanger*	*04-05-2017*
Vérifié par / Verified by	*J. Marcoux*	*04-05-2017*
Approuvé par / Approved by	*V. Millette*	*04-05-2017*
Fichier / File	151_11330_26_AP_c3_claims_usine_wspq_170504.mxd	

WSP

Projet / Project: 151-11330-26

4 DESCRIPTION OF THE WINDFALL LAKE PROJECT

4.1 EXISTING INFRASTRUCTURE

Several infrastructure components are still present on the mine site from past mining operations. These include a waste rock stockpile and two other lined stockpiles (one for ore and the other for waste rock). Also present are a ramp portal dating back to 2008, a sedimentation pond, a polishing pond and an overburden stockpile.

Further south is the Windfall exploration camp, which can accommodate 300 people.

4.2 GENERAL DESCRIPTION OF THE PROJECT

The Windfall Lake Project is situated in an area with a lake of the same name, roughly 115 kilometres from Lebel-sur-Quévillon (see Map 1). Access is afforded by forest roads 1000 (Km 12), 5000 (Km 66) and 6000 (Km 112).

The proposed Windfall Lake Project is an underground mine which will be accessed by two ramps. Ore will be extracted via drifts using conventional drilling (longhole), blasting, loading and haulage methods. The processing plant will have a capacity of roughly 1,900 tpd and the life-of-mine will be approximately 10 years.

To summarize, the main components of the Windfall Lake Project are as follows:

WINDFALL LAKE MINE SITE

- An underground mine served by two ramps; roughly 6.8 Mt of ore and 1.4 Mt of waste rock will be extracted from the mine;
  - A new production ramp;
  - The existing ramp (2008) will be used as an emergency exit and for auxiliary services;
- A waste rock stockpile with a capacity of approximately 1.4 Mt of rock[1];
- An overburden stockpile with a capacity of approximately 500,000 m^3;
- An ore storage area[1] with a capacity of approximately 10,000 tonnes;
- Water management structures for mine water and contact water (ditches, ponds);
- A water treatment plant;
- A warehouse and a maintenance garage;
- An explosive storage area and a storage site for petroleum products;
- A backfill preparation plant;

[1] The findings of geochemical studies will determine the acid-generating and leaching potential of the different lithologies (waste rock and ore). Once this information is known, it will be possible to establish the layout and footprint of the stockpiles in a manner that ensures surface and groundwater protection.

- A ventilation system located underground;
- A set of diesel generators (3 units: 2 in operation, one on stand-by) of roughly 2.1 MW each if the plant is southeast of Lebel-sur-Quévillon, or a set of diesel generators or liquefied natural gas generators of ~25 MW if the plant is in the mine area;
- Camp accommodations for employees;
- An administration building with a dry;
- A guardhouse and parking lot.

PROCESSING PLANT, LOCATED AT LEBEL-SUR-QUÉVILLON OR THE MINE SITE

- An ore processing plant;
- An ore storage area with a capacity of approximately 10,000 tonnes;
- An overburden stockpile with a capacity of approximately 250,000 m^3;
- A tailings management facility with a capacity of 6.8 Mt of tailings;
- A water intake;
- Water management structures for tailings water and contact water (ditches, ponds);
- A water treatment plant[2];
- Mechanical maintenance workshop[2];
- An electrical transformer station connected to the Hydro-Québec grid[3];
- Administration buildings[2] and a laboratory.

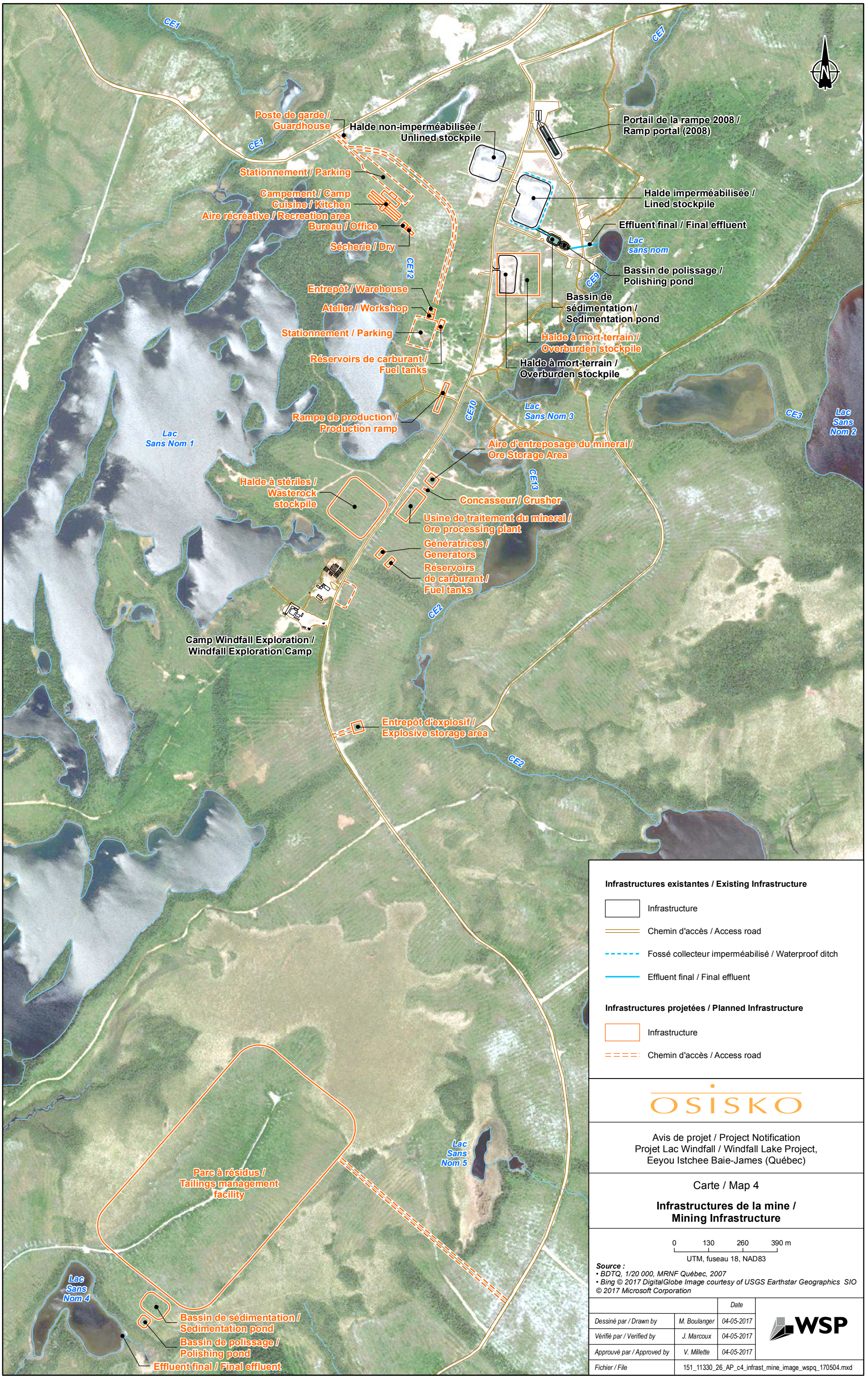
In the event the ore processing plant is located southeast of Lebel-sur-Quévillon, ore will be hauled by trucks from the mine to the processing plant (104 km) along existing forestry roads.

Map 4 shows the Windfall Lake mine infrastructure for the case in which the concentrator is located onsite, and Map 5 shows the infrastructure if it is located near Lebel-sur-Quévillon.

Table 4-1 indicates the approximate surface area covered by each of the project's infrastructure components. Of course, the dimensions of each component will be reviewed and adjusted based on the findings of the environmental impact assessment.

[2] This facility is necessary only if the ore processing plant is located 11 kilometres southeast of Lebel-sur-Quévillon. If the processing plant is at the mine site, this facility will be shared.

[3] Only if the ore processing plant is located 11 kilometres southeast of Lebel-sur-Quévillon.



Infrastructures existantes / Existing Infrastructure

- Infrastructure
- Chemin d'accès / Access road
- Fossé collecteur imperméabilisé / Waterproof ditch
- Effluent final / Final effluent

Infrastructures projetées / Planned Infrastructure

- Infrastructure
- Chemin d'accès / Access road

OSISKO

Avis de projet / Project Notification
Projet Lac Windfall / Windfall Lake Project,
Eeyou Istchee Baie-James (Québec)

Carte / Map 4

Infrastructures de la mine / Mining Infrastructure

0 130 260 390 m

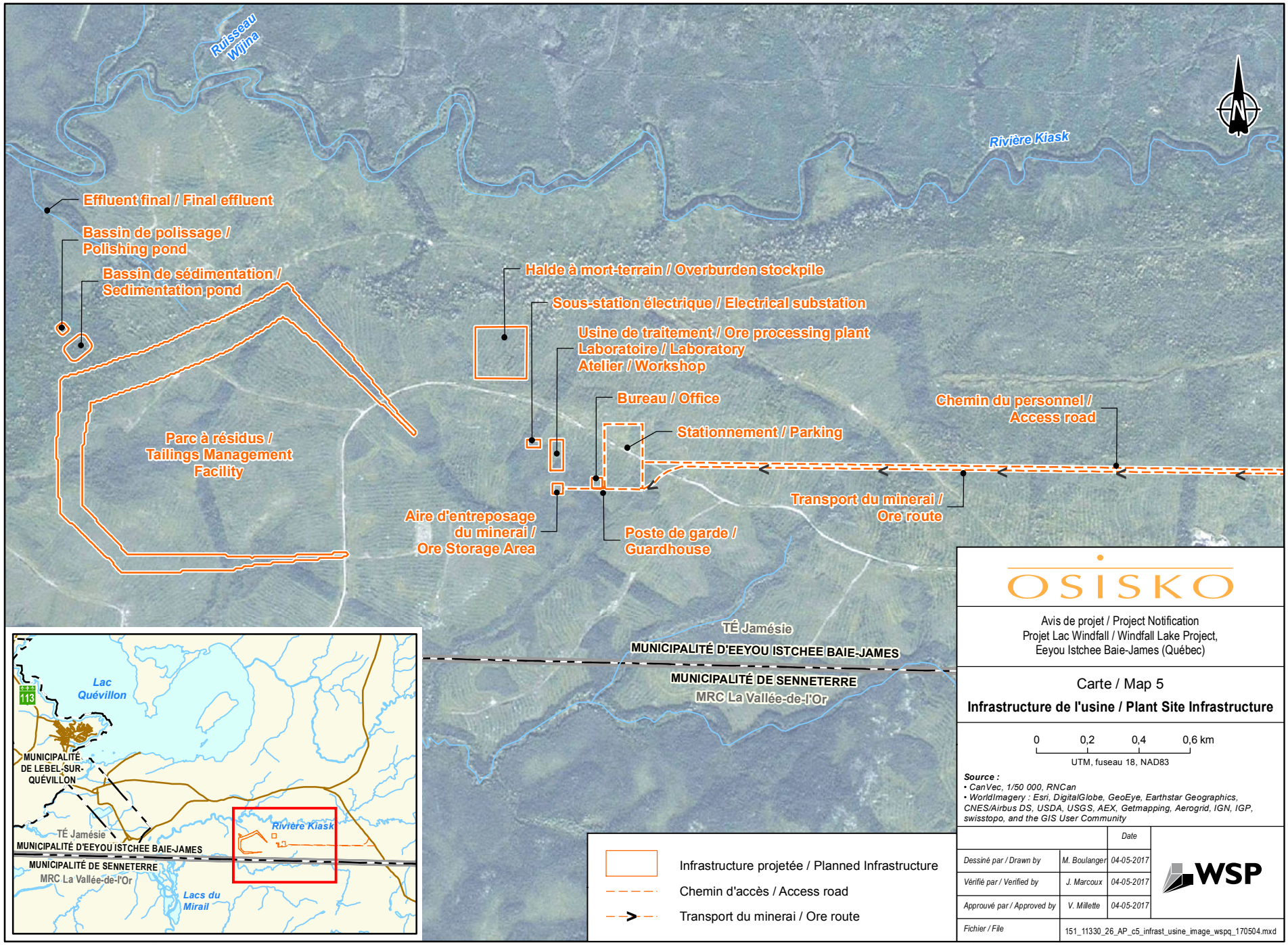
UTM, fuseau 18, NAD83

Source :
- *BDTQ, 1/20 000, MRNF Québec, 2007*
- *Bing © 2017 DigitalGlobe Image courtesy of USGS Earthstar Geographics SIO © 2017 Microsoft Corporation*

		Date
Dessiné par / Drawn by	*M. Boulanger*	*04-05-2017*
Vérifié par / Verified by	*J. Marcoux*	*04-05-2017*
Approuvé par / Approved by	*V. Millette*	*04-05-2017*
Fichier / File	151_11330_26_AP_c4_infrast_mine_image_wspq_170504.mxd	

WSP

Projet / Project: 151-11330-26



OSISKO

Avis de projet / Project Notification
Projet Lac Windfall / Windfall Lake Project,
Eeyou Istchee Baie-James (Québec)

Carte / Map 5

Infrastructure de l'usine / Plant Site Infrastructure

0 0,2 0,4 0,6 km

UTM, fuseau 18, NAD83

Source :
- *CanVec, 1/50 000, RNCan*
- *WorldImagery : Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community*

		Date
Dessiné par / Drawn by	M. Boulanger	04-05-2017
Vérifié par / Verified by	J. Marcoux	04-05-2017
Approuvé par / Approved by	V. Millette	04-05-2017
Fichier / File	151_11330_26_AP_c5_infrast_usine_image_wspq_170504.mxd	

WSP

Projet / Project: 151-11330-26

Table 4-1 Characteristics of the infrastructure components

COMPONENT	FOOTPRINT DIMENSIONS[1]
Processing plant + compressors + generator	120 m x 50 m
Electrical substation	30m X 50 m
Overburden stockpile (approx. size; final dimensions will depend on location)	13,000 m^2 to 26,000 m^2
Micro pits (possibly 2 or 3)	100 m x 300 m (maximum)
Ore storage area	40 m x 40 m
Waste rock stockpile	175 m x 175 m
Production ramp	120 m x 20 m
Tailings management facility (approx. size; final dimensions will depend on location)	500,000 m^2 to 1,000,000 m^2
Mechanical maintenance workshop and warehouse	40 m x 25 m
Administration office	20 m x 20 m
Camp accommodations	145 m x 80 m
Camp parking lot	225 m x 45 m
Guardhouse	10 m x 5 m
Fuel storage area	20 m x 40 m

[1] *Approximate size; dimensions will be finalized during the impact assessment.*

4.3 MINE OPERATING SCENARIOS

4.3.1 MINE OPERATING SCENARIO A

In November 2014, SRK (Canada) completed a mineral resource estimate update for the Windfall Lake Project, and in April 2015, Eagle Hill published the results of an independent preliminary economic assessment (PEA) on the gold project. The study envisioned an underground mine project with a production rate of 1,200 tpd over a mine life of 7.6 years for a total production of 3.3 Mt of ore. Details of the supporting resource estimate for this scenario are presented in the next section.

4.3.2 MINE OPERATING SCENARIO B

Following the publication of the PEA in April 2015, Oban (now Osisko Mining Inc.) proceeded with the acquisition of Eagle Hill. Since late October 2015, OSISKO has completed almost 180,000 metres of drilling on the Windfall Lake gold deposit and nearby exploration targets in the Urban and Barry townships. Highlights of the successful initial 180,000 metres of exploration drilling included the following:

- An updated geologic interpretation of the Windfall Lake deposit yielding a much larger and still expanding footprint compared to the previously defined mineralized area;
- The discovery of several new significant mineralized zones (including the Wolf Zone) and a recently announced high-grade zone at shallow depth (the Lynx Zone);
- The recently announced 600-metre northeast extension of the main mineralized corridors (Caribou, Zone 27, Wolf and Underdog); and
- Two new discoveries in adjacent areas (Fox and Black Dog).

On December 19, 2016, OSISKO announced it was adding another 250,000 of drilling to its program in order to better define the known mineralization in the main deposit area and the recently discovered northeast extension. OSISKO intends to include as much information as possible in its first resource update scheduled for late 2017.

The new information obtained from drilling has allowed OSISKO to envision a second mine operating scenario for the Windfall Lake Project. In this scenario, the underground mine will have a mill throughput of 1,900 tpd over a 10-year life span for a total production of 6.8 Mt of ore.

4.3.3 ALTERNATIVE SCENARIOS UNDER STUDY

ALTERNATIVE LOCATION FOR THE PLANT

Although it is typical to set up the ore processing plant at the mine site, several major benefits prompted OSISKO to consider building it 11 kilometres southeast of Lebel-sur-Quévillon. The motivating factors include the proximity of an electrical substation, which would avoid the use of generators or the construction of a power line greater than 100 kilometres in length, and the presence of a nearby labour force.

ALTERNATIVE LOCATION FOR THE TAILINGS MANAGEMENT FACILITY

Whether the processing plant is located at the mine site or near Lebel-sur-Quévillon, OSISKO will study different potential sites for the tailings management facility as well as different methods of tailings deposition (e.g., slurry, thickened tailings, paste tailings or filtered tailings). The evaluation of these options will ensure the most advantageous site and deposition method in terms of social, environmental, technical and economic considerations.

OTHER ALTERNATIVES

In addition to studying different options for the plant site, the tailings management facility and the tailings deposition method, the project development process will also examine alternatives for the following:

- the position of the main production ramp;
- the placement of the stockpiles (ore, waste rock and overburden);
- the type of truck to haul the ore[4] (75 to 90 metric tons; fueled by diesel, liquefied natural gas or propane).

[4] For the scenario in which the plant is located 11 kilometres from Lebel-sur-Quévillon.

4.4 MINERALIZATION, RESOURCES AND RESERVES

A mineral resource update completed by SRK (Canada) in November 2014 estimated 748,000 ounces of gold at a grade of 8.42 g/t gold in the indicated category, and 860,000 ounces of gold at a grade of 7.62 g/t gold in the inferred category.

The bulk of mineralization averages around 10 g/t over thicknesses of more than 5 metres, with very high-grade pockets up to 248 g/t over 12.4 metres in some areas. Drill results in the gold zones demonstrate good grade distribution along the entire mineralized interval.

Table 4-2 Mineral resources of the Windfall Lake Project*

RESOURCES	QUANTITY (TONNES)	METAL GRADE Au (g/t)	CONTAINED METAL Au (oz)
Indicated	2,762,000	8.42	748,000
Inferred	3,512,000	7.62	860,000

* *Reported at a cut-off grade of 3.0 g/t gold, assuming an underground mining scenario with an assumed gold price of $US1,200/oz and metallurgical recovery of 96%. Inferred resources have a great amount of uncertainty as to their existence and as to whether they can be mined legally or economically. It cannot be assumed that all or any part of the inferred resources will ever be upgraded to a higher category. Mineral resources are not mineral reserves and do not have demonstrated economic viability.*

4.5 ORE EXTRACTION

4.5.1 PRODUCTION CAPACITY

The total mining rate (ore and waste rock) will range between 2,400 tpd and 3,200 tpd, which will ensure a daily production of 1,900 tonnes of ore. The throughput for the processing plant will be 1,900 tpd.

4.5.2 MINING

The deposit will be mined using underground mining methods with the possibility of two to three micro pits having a depth of 50 meters, width of 100 meters and a length varying between 200 to 300 meters. The mine plan envisions the extraction of 6.8 Mt of ore and 1.4 Mt of waste rock over a life-of-mine of 10 years.

The ramp system, with an average grade of 15%, will allow mining operations to reach the deepest part of the deposit. Scooptrams and trucks will be used to load the ore and waste rock.

In 2008, bulk sampling was conducted at the Windfall Lake site, and development work consisted of driving 1.2 kilometres of ramp and 230 metres of drifts. The existing ramp and drifts can be extended to reach the production zone to provide ventilation, serve as an emergency exit and to provide access for various auxiliary services.

A new ramp will be developed as the main production access. The size of the ramp will be 5.5 metres high by 5.5 metres wide to accommodate wheeled equipment hauling out rock. The plan is to use trucks with a 50 to 60 tonne capacity. These trucks will be the largest pieces of equipment operating in the ramp,

and they require a width of 5.5 metres to comply with regulatory requirements. The height is 5.5 metres to provide sufficient space for the trucks and the ventilation ducts.

A preliminary assessment suggests mechanized longhole mining as the extraction method. This method has been used for many years by the mining industry in Québec and Canada, and is known to be very safe for workers. The longhole mining method is used for stopes with a minimum dip of 55 degrees. Stope dimensions will be determined by geomechanical studies. If mining includes micro pits, conventional ming methods will be used (drilling and blasting). Further details will be provided in the EIA.

If the processing plant is located at the Windfall mine site, some or all of the tailings will be used as paste backfill. On the other hand, if the processing plant is near Lebel-sur-Quevillon, then waste rock, to which cement will be added, will serve as the primary source of backfill. Another alternative that will be evaluated is to truck the tailings from the processing plant near Lebel-sur-Quevillon to the mine site to supplement the cemented waste rock as backfill.

4.5.3 EQUIPMENT

The table below presents the preliminary list of the equipment for the mine, along with their functions and capacities.

Table 4-3 Preliminary equipment list

EQUIPMENT	FUNCTION	VOLUME (CAPACITY)
Haul truck	Hauling material	50 – 60 tonnes
Scooptram	Loading material	6 – 10 m^3
Hydraulic Jumbo drill	Rock drilling	2 booms
Grader	Road maintenance	
Explosives truck	U/G transport of explosives	
Fuel truck	U/G refueling of vehicles	
Bolter	Installation of ground support	1 boom
Cement truck	U/G transport of cement	
Elevating platform	Installation of pipes and ground support	
Service vehicles	Personnel transportation, supervision	
Boom truck	Transport of materials	
Diesel generator	Power supply at the mine site	3 x 2.1 MW

4.6 STORAGE AREAS

4.6.1 OVERBURDEN

Overburden removed during stripping operations to prepare the ground for construction will be piled in dedicated areas on the mine site for later use during rehabilitation work. Based on a very preliminary estimate, the volume of overburden would be approximately 500,000 m^3.

4.6.2 WASTE ROCK

Waste rock generated during ramp and drift development will be stored in a stockpile and managed in a way that minimizes environmental impacts while taking into account technical and financial considerations. The geochemical characteristics of the waste rock will also determine how the stockpile will be managed in order to ensure surface water and groundwater protection. The stockpile will be located near the ramp portal and could accommodate a total of 1.4 Mt of rock.

In the event that the plant is not built at the mine site and tailings are not available for use as paste backfill, stopes will be backfilled using cemented rockfill (waste rock and cement). Thus, it is possible waste rock stockpiling will be temporary because all waste rock, or a large portion of it, will be returned underground as backfill.

4.6.3 ORE

PLANT LOCATED IN THE LEBEL-SUR-QUÉVILLON AREA

The ore will be temporarily stored in a stockpile near the ramp portal before being loaded into trucks and hauled to the ore processing plant. The capacity of this temporary stockpile will be equivalent to 5 days of production (in case the roads are closed due to bad weather), or approximately 10,000 tonnes. At the plant site (Lebel-sur-Quévillon), the ore will be temporarily stored in a stockpile before entering the plant. The geochemical characteristics of the ore will determine how these temporary stockpiles will be managed in order to ensure surface and groundwater protection. At the end of mine operations, there will not be any ore stockpiles, as the material will be processed.

PLANT LOCATED AT THE MINE SITE

The ore will be transported directly to a stockpile near the plant before processing.

4.7 ORE TRANSPORT

If locating the ore processing plant 11 kilometres southeast of Lebel-sur-Quévillon is chosen as the preferred option, the ore will be hauled by 70- to 90-tonne trucks from the mine site to the plant over a distance of slightly more than 100 kilometres. The trucks will use existing forest roads, making between 21 and 26 trips a day, 365 days a year, except when roads are closed. The maximum speed of the trucks will be limited to reduce the impacts. The roads currently comply with ore haulage requirements, except for a bridge that will need to be enlarged (Map 6).

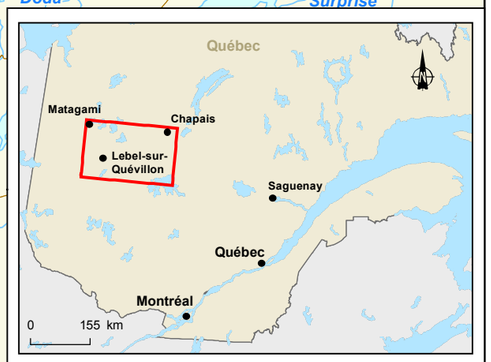
4.8 ORE PROCESSING

The ore processing plant will be modular, installed in an area roughly 11 kilometres southeast of Lebel-sur-Quévillon or at the mine site itself. The plant will have a processing capacity of 1,900 tpd of ore and an availability factor of 92%.

A metallurgical testing program will be conducted on a representative number of ore samples, subjecting them to a variety of physical and chemical processes. The objectives of these tests will be the following:

- → Develop a preliminary process flowsheet for the ore;
- → Evaluate metal recoveries;
- → Evaluate the mineralogical and geochemical characteristics of the ore; and

Lac Matagami
Matagami
Lac Olga
Lac au Goéland
Rivière Bell
TERRITOIRE AUTOCHTONE DE WASWANIPI
Waswanipi
Chapais
113
Lac Waswanipi
Desmaraisville
Lac Opawica
Miquelon
113
Lac Nicobi
Lac Father
Lac Doda
Lac Surprise
Lac Pusticamica
TÉ Jamésie
MUNICIPALITÉ D'EEYOU ISTCHEE BAIE-JAMES
Lac Hébert
Lac Quévillon
Lebel-sur-Quévillon
km 12
km 112
Distance : 101 km
km 99
Site de la mine Lac Windfall / Windfall Lake Mine Site
km 66
Localisation potentielle de l'usine / Potential Plant Site
Lac Wetetnagami
Lac Barry
397
MRC de l'Abitibi
TNO LAC-DESPINASSY
MUNICIPALITÉ DE LA MORANDIÈRE
MUNICIPALITÉ DE ROCHEBAUCOURT
MUNICIPALITÉ DE CHAMPNEUF
113
Lac Parent
MRC La Vallée-de-l'Or
MUNICIPALITÉ DE SENNETERRE
Territoire équivalent de La Tuque
MUNICIPALITÉ DE LA TUQUE



OSISKO

Avis de projet / Project Notification
Projet Lac Windfall / Windfall Lake Project,
Eeyou Istchee Baie-James (Québec)

Carte / Map 6

Trajet pour le transport du minerai vers l'usine / Route of Ore to Plant

0 6 12 18 km
UTM, fuseau 18, NAD83

Sources :
- *BDGA, 1/ 1 000 000, MRN Québec*
- *SDA, 1/20 000, MERN Québec, 2013*

		Date
Dessiné par / Drawn by	*M. Boulanger*	*02-05-2017*
Vérifié par / Verified by	*J. Marcoux*	*02-05-2017*
Approuvé par / Approved by	*V. Millette*	*02-05-2017*
Fichier / File	151_11330_26_AP_c6_acces_wspq_170502.mxd	

WSP

Projet / Project: 151-11330-26

→ Evaluate the initial composition of the tailings.

The preliminary ore process flowsheet consists of primary crushing followed by conventional grinding, the milled ore then enters a gravity circuit. The gravity circuit concentrate is sent to an intensive lixiviation circuit using a cyanide solution followed by electrolysis where gold is recovered and poured in doré bars. The rejects from the gravity circuit then enter a flotation circuit.

The concentrate and the rejects of the flotation circuit are both submitted to lixiviation using a cyanide solution. The resulting pulp goes through a CIP (carbon-in-pulp) circuit to recover the gold. The carbon charged with gold is then sent to carbon stripping followed by the electrolysis circuit. The gold sludge generated by electrolysis is finally metled and poured in doré bars. The preliminary recovery estimate is 96% of the gold contained in the ore. At the end of the ore treatment process, around 6.8 Mt of tailings will be produced over the life-of-mine.

The processing plant will include intermediate pulp thickening steps in order to maximise water reuse. Also, the rejects of the carbon-in-pulp circuit will go through a cyanide destruction treatment before going to the tailings management facility.

The principal reagents will be lime, a collector, a frothing agent, sodium cyanide, sodium hydroxide (caustic soda), sodium metabisulphite, hydrochloric acid, copper sulphate, a flocculant, calcium carbonate, and several others.

4.9 TAILINGS MANAGEMENT FACILITY

Options for the tailings management method will be evaluated.

The total quantity of tailings will be 6.8 Mt for a volume of approximately 4.5 Mm^3. The selected depositionmethod and the geochemical characteristics of the tailings will guide the design of the confinement and water management structures in order to optimize the technical and financial aspects while minimizing the environmental impacts, and ensuring the protection of groundwater.

The location of the tailings management facility will depend on the location of the ore processing plant. Once the plant site has been determined, all potential sites for the tailings facility will be identified and evaluated in order to select the most preferred site based onsocial, environmental, technical and economic considerations.

Finally, if the plant is located at the mine site, a large part of the tailings will be used to prepare paste backfill, which will be returned underground to mined-out stopes. This would significantly reduce the quantity of tailings requiring storage on surface.

4.10 WATER MANAGEMENT

Water management will consist of ditches and ponds that will collect contact water. Where possible and whenever advantageous to do so, runoff water will be diverted to avoid contamination.

Mine water generated by underground operations or micro pit operations will be collected, tested and treated to meet the appropriate effluent criteria prior to discharge.

As for process water, a portion will end up in the tailings at the tailings management facility, and the rest will be collected after being extracted from the tailings during the thickening and/or filtration process. Most of this water will be reused in ore processing. Any excess water will be tested and treated to meet the

appropriate criteria prior to discharge. As mentioned above, the liquid from the leaching circuit will be treated in a cyanide detoxification circuit.

Finally, if the process plant is located near Lebel-sur-Quévillon, the project will have one effluent at the process plant site and a second effluent at the mine site. If the process plant is located at the mine site and depending on the location of the tailings management facility, there could be two effluents at the mine site.

4.11 PROJECT EXECUTION PHASES

4.11.1 CONSTRUCTION PHASE

Stripping and clearing

In 2008, a bulk sampling program at Windfall Lake involved the stripping and clearing of a certain surface area. The use of this previously disturbed area will be prioritized but additional areas will also need to be stripped and cleared to provide sufficient space for buildings, mining equipment, the new production ramp, the waste rock stockpile, the ore stockpile, and the tailings management facility. Overburden will be stored in a pre-determined location and reused during the closure phase. In the event that the processing plant is installed southeast of Lebel-sur-Quévillon, stripping and clearing will still be required, although large expanses of land in this area have already been cleared by logging activities.

Work site organization

Work site organization will include procurement activities, implementation of an environmental monitoring program, upgradng existing roads and the bridge, renovating the existing exploration camp, and upgrading the generator sets and power distribution system.

Construction of the facilities

This work will include construction of the various buildings, namely the processing plant, laboratory, warehouses, maintenance workshop(s), administrative offices, camp for the production phase, backfill preparation plant and other ancillary buildings. Foundations for the stockpiles, water management infrastructure (ditches, ponds, water treatment plant) and tailings management facility will also be built during this phase.

4.11.2 PRODUCTION PHASE

Mining

Development of drifts leading to the various stopes where ore will be extracted will require drilling, blasting, and loading and hauling of ore and waste rock to the surface. Stoping of ore will be followed by backfilling of voids using paste backfill containing tailings or using cemented waste rock. During mining activities, drifts will be kept dry; mine water will be pumped to the water management facilities on surface. The same applies for the micro pits

Ore processing and tailings management

Once at surface, ore will be sent to the processing plant to recover gold. Tailings derived from ore processing will be stored in the tailings management facility. In the event that the plant is located

11 kilometres southeast of Lebel-sur-Quévillon, ore will be hauled to the processing plant over a distance of approximately 100 km.

Once at surface, waste rock will be stockpiled. Another possibility would be to use some of the newly excavated waste rock to backfill stopes without ever reaching the surface.

4.11.3 CLOSURE PHASE

As stipulated in the *Mining Act*, a rehabilitation plan will be submitted to the Ministère de l'Énergie et des Ressources Naturelles for approval. This plan will be prepared in compliance with applicable requirements from the *Guidelines for Preparing a Mining Site Rehabilitation Plan* and *General Mining Site Rehabilitation Requirements*, Directive 019 pertaining to the Mining Industry and any other applicable requirement such as those stipulated in the Policy for the Protection of Soils and Rehabilitation of Contaminated Lands and the *Land Protection and Rehabilitation Regulation* (c. Q-2, r. 37).

Once mining activities have ceased, OSISKO will carry out rehabilitation and restoration work according to the filed plan. This work includes removing equipment and machinery, sealing mine openings, dismantling buildings and surface infrastructure, revegetating the various footprints left by mining activities, and characterizing and excavating contaminated soils before disposing of them at an authorized site.

Geochemical studies will be conducted to assess the acid-generating and leaching potential of the various lithologies (waste rock and ore). With this information in hand, it will be possible to determine the appropriate rehabilitation design for waste rock stockpiles (if present) and the tailings management facility in order to ensure, among other things, surface and groundwater protection. Upon ceasing mining activities, the rehabilitation of waste rock stockpiles (if present) and the tailings management facility will proceed according to developed designs. As for ore stockpiles, once entirely processed, their footprints will be characterized and contaminated soils will be excavated as required. The footprints will then be revegetated.

For the micro pits, flooding will be considered along with waste rock backfill. Decisions will be taken when preparing the closure plan.

Post-rehabilitation monitoring and maintenance will be conducted in accordance with measures stipulated in Directive 019.

4.12 EMISSIONS, EFFLUENT AND WASTE

As an example, here is in Table 4-4, a list of project activities that will be monitored for emissions, effluent and waste product, along with the proposed management methods.

Table 4-4 Emission, effluent and waste product

ACTIVITY	COMPONENTS	MANAGEMENT METHOD
Equipment maintenance	▪ Used oil ▪ Used antifreeze ▪ Batteries ▪ Etc.	Recycling through companies that provide collection and final disposal services. A storage container that meets standards will be set up. Hazardous waste will be briefly stored on the site and a hazardous waste management procedure established.

ACTIVITY	COMPONENTS	MANAGEMENT METHOD
Handling of explosives	▪ Explosives and cap boxes ▪ Explosives container	An explosives waste management procedure will be established.
Crushing of material	▪ Dust generation ▪ Noise generation	Crushers will operate under a structure designed to reduce dust emissions and noise.
Operating the site	▪ Dust generated by machinery ▪ Spills caused by machinery	Water trucks will suppress dust generated by vehicles circulating on the site and access roads. A preventative maintenance plan will be implemented; contaminated soil management will follow a government-approved procedure.
Trucking (haulage)	▪ Dust ▪ Atmospheric contaminants (including GHG)[1]	Vehicle speed limit will be set and monitored to minimize dust A vehicle maintenance program will ensure proper functioning and reduced emissions
Plant operations	▪ Atmospheric contaminants (including GHG)[1] ▪ Generators	Pollution control measures will be implemented at the plant to minimize emissions. Good maintenance program and selection of efficient models
Water management at the mine and processing plant sites	▪ Contaminated water	Water quality control will be done at the effluent in order to meet the appropriate criteria prior to discharge
Other activities	▪ Domestic waste generated by workers ▪ Sewage	Domestic waste will be stored in animal-proof containers before entering the domestic waste disposal system. Domestic wastewater (sewage) will be stored in a tank before being picked up by a specialist company.

[1] GHG emissions will be evaluated during the upcoming impact assessment.

A preliminary GHG calculation is presented in Table 4-5 and are indicative only. Precisions on GHG will be submitted in the EIA.

An initial assessment of greenhouse gas (GHG) emissions was conducted as part of the project's preliminary information. The results of this preliminary calculation are presented in Table 4-5. GHG emissions are quantified in kilotonnes of CO_2 equivalent following the emission and conversion factors specified in the national GHG inventory issued by Environment and Climate Change Canada.
Note that no information is currently available to establish the GHG emissions that will be emitted for the years where the mine will operate. They are therefore constant throughout the life of the project (10 years). In this preliminary assessment, the GHG sources considered are direct emissions, with the exception of the Lebel-sur-Quévillon plant location alternative (LSQ-Option 2) since the plant will be connected to Hydro-Québec's network. The sources considered include the stationary diesel-powered equipment and the mobile gasoline and diesel-powered equipment, for both the construction and the

operation phases. The electrical energy source use was considered in the assessment of option 2. No GHG sinks or reservoirs, as defined in the ISO 14064 standard, are considered in this assessment.

Table 4-5 Windfall Lake Project's Preliminary Assessment of GHG Emissions

Sources, Construction Phase	**GHG Emissions, kilotonnes of CO_2eq/year**
Construction	9
Sources, Operation Phase	GHG Emissions, kilotonnes of CO_2eq/year
Mine	51
Plant (option 1)	50
Transportation (option 2)	4
Lebel-sur-Quevillon Plant (option 2)	0.4
Total, Option 1 (mine and plant)	101
Total, Option 2 (mine, Lebel-sur-Quévillon plant & transportation)	56

The following table compares the project's emissions with Canada's national GHG emissions for all sectors and specifically for industrial processes that is the sector associated with the Windfall Lake project.

Table 4-6 Comparison of GHG Emissions from the Windfall Lake Project with regards to Canadian Emissions

Project Component	Projected GHG Emissions[1] per year (Mt of CO_2eq/year)			
	Canada's Industrial Processes		All Canadian Sectors	
	2020	2030	2020	2030
	59	74	731	742
Construction	0.009			
	0.016%	0.013%	0.001%	0.001%
Mine + Plant (Option 1)	0.101			
	0.170%	0.136%	0.014%	0.014%
Mine (Option 2)	0.051			
	0.087%	0.069%	0.007%	0.007%
Transportation (Option 2)	0.004			
	0.008%	0.006%	0.001%	0.001%
Plant (LSQ - Option 2)	0.0004			
	0.001%	0.001%	0.0001%	0.0001%
Total Option 1	0.101			
	0.170%	0.136%	0.014%	0.014%
Total Option 2	0.056			
	0.095%	0.076%	0.008%	0.008%

4.13 JOBS

Construction work is expected to create 300 jobs, and mining operations will require 325 employees, 150 for the mine and 175 for the processing plant and administrative jobs. These jobs will be held for the ten-year life of the project. Some jobs will be reserved for members of the Aboriginal communities with an interest in the project.

Work at the mine site will be on a 7-7 rotation (7 days on, 7 days off) or a 14-14 rotation (14 days on, 14 days off). For plant workers, if the plant is installed near Lebel-sur-Quévillon, the rotation will be 5-4-4-5 (5 days on, 4 days off, 4 days on, 5 days off).

4.14 PROJECT SCHEDULE

The planned steps of the Windfall Lake Project are summarized below.

Table 4-7 Windfall Lake Project Schedule

ACTIVITY	SCHEDULE
Rehabilitation of the existing exploration ramp	Early Q3 2017
Extension of the exploration ramp and bulk sample	Late Q4 2017
Underground definition drilling	Early Q2 2018
Feasibility study	Early Q2 2017 – Late Q2 2018
Environmental impact assessment	Early Q3 2017 – Late Q3 2018
Environmental assessment process	2017–2019
Permitting	2019
Construction	2019
Production	2020–2030
Site closure	2030–2031

4.15 PROJECT INVESTMENT

The Windfall Lake Mine Project represents an investment estimated to be $350 to $400 million.

5 ENVIRONMENTAL COMPONENTS

5.1 STUDY AREA OF THE DESIGNATED PROJECT

For the purpose of assessing the impacts on the biophysical and human environments of the Windfall Lake Mine Project, two study areas were defined; local and regional. These study areas will allow the biophysical and human constraints to be taken into consideration as the project becomes better defined.

5.2 BIOPHYSICAL ENVIRONMENT

5.2.1 PLANT SITE – AREA EAST OF LEBEL-SUR-QUÉVILLON

Physiography and relief

The study area is situated in the James Bay physiographic region, in the Abitibi Uplands. This region is characterized by glacial deposits of silt and clay that promoted the formation of numerous vast peat bogs interspersed by tracts of forest (FAPAQ, 2003).

The topography is generally flat, rising slightly in the southeast part of the study area.

Hydrography

The study area is situated within the Bell River watershed. The largest water body is Quévillon Lake. The northern part of the study area borders Kiask Creek, a Bell River tributary. Finally, a small unnamed watercourse flows east to west in the southern part of the study area.

Vegetation

The spruce-moss bioclimatic domain dominates the vegetation landscape in the study area. However, large expanses of land in this area have been logged over the past few years. Wetlands are present in the western part of the study area.

Wildlife

As a result of logging in the study area and its proximity to Lebel-sur-Quévillon, there is limited potential for wildlife, whether it is mammals, birds, amphibians or reptiles. Water courses, which run along the edges of the study area, may contain fish populations.

Special status species/at risk

With regards to special-status plant or wildlife species, the information obtained from the *Centre de données sur le patrimoine naturel du Québec* (CDPNQ) of the MDDELCC et du MFFP indicate that no threatened or vulnerable species, or a species likely to be listed as such, is present in the study area. Furthermore, during the coming inventories, special attention will be paid to these species and those listed in the Species at Risk Public Registry of Canada.

5.2.2 WINDFALL LAKE MINE SITE

Physiography and relief

The study area is situated within the James Bay physiographic region, in the Abitibi Uplands. This region is characterized by glacial deposits of silt and clay that promoted the formation of numerous vast peat bogs interspersed by tracts of forest (FAPAQ, 2003).

More specifically, the topography of the study area is fairly flat with very gentle slopes. The elevation on the property is roughly 400 metres above sea level.

Hydrography

The study area is situated within in the Opawica River watershed. Most of the water bodies in the study area are small. Unnamed Lake 1 is the largest, covering 109 ha. The waters from Windfall Lake flow northward through a chain of lakes. The waters of Unnamed Lake 1 flow to the southeast. Two eskers, oriented northeast-southwest, are present between Windfall Lake and Unnamed Lake 1. Neither is used as a source of drinking water.

Vegetation

The spruce-moss bioclimatic domain dominates the vegetation landscape in the study area. The domain is composed of forests of variable density dominated by black spruce (*Picea mariana*). Ericaceous shrubs are found everywhere, forming a relatively dense shrub layer. The herbaceous stratum, however, shows little diversity. The moss layer, which is mainly composed of feather (hypnaceous) mosses, sphagnum and a few lichens, covers the entire ground (Hydro-Québec, 2004).

Significant wetlands have been documented in the vicinity of the Windfall Lake Property; the largest is 2 kilometres west of the property and covers more than 2,000 ha (GENIVAR, 2007).

Wildlife

The wildlife habitats of the Nord-du-Québec region are generally characterized by low productivity. As a result, most of the wildlife species present have relatively low population densities (Hydro-Québec, 2004).

Among the species of mammals that likely frequent the study area are the moose (*Alces alces*), the grey wolf (*Canis lupus*), the black bear (*Ursus americanus*), the Canada lynx (*Lynx canadensis*) and the snowshoe hare (*Lepus americanus*). Although woodland caribou (*Rangifer tarandus*) are present in the greater region, the Windfall Lake site lies beyond their official range, thus the potential to find this species in the study area is very low.

For birds, the most likely species to be present are those typically found in the spruce-moss domain, such as the swamp sparrow (*Zonotrichia georgiana*), the dark-eyed junco (*Junco hyemalis*), the grey jay or whisky jack (*Perisoreus canadensis*) and the rusty blackbird (*Euphagus carolinus*). Waterfowl species, such as the Canada goose (*Branta canadensis*), the American black duck (*Anas rubripes*) and the common merganser (*Mergus merganser*), along with the common loon (*Gavia immer*), may also frequent the lakes in the study area.

Amphibians and reptiles

For amphibians and reptiles, a search of the *Atlas des amphibiens et des reptiles du Québec* (“AARQ”) revealed eight species that may be found in the study area provided a suitable habitat is present. They

are the blue-spotted salamander (*Ambystoma laterale*), the spotted salamander (*Ambystoma maculatum*), the American toad (*Bufo americanus*), the spring peeper (Pseudacris crucifer), the northern green frog (*Rana clamitans malanota*), the mink (or North) frog (*Rana septentrionalis*), the wood frog (*Rana sylvaticus*) and the common garter snake (*Thamnophis sirtalis*) (AARQ, 2014).

Fish

Seven species of fish were caught during fishing programs in 2009 and 2016: the northern pike (*Esox lucius*), the mottled sculpin (*Cottus bairdii*), the cisco (*Coregonus artedii*), the burbot (*Lota lota*), the white sucker (*Catostomus commersoni*), the lake chub (*Couesius plumbeus*), the brook trout (*Salvelinus fontinalis*), the yellow perch (*Perca flavescens*) and the brook stickleback (*Culaea inconstans*). Northern pike was caught in both Windfall Lake and unnamed lakes 1 and 3. Yellow perch was most common in Windfall Lake. Brook trout was caught only in watercourse 7.

Among the species caught, northern pike, cisco, burbot, brook trout and yellow perch are of interest for recreational and traditional fishing.

Special status species/at risk

As mentioned for the plant location southeast of Lebel-sur-Quévillon, with regards to special-status plant species, the information obtained from the *Centre de données sur le patrimoine naturel du Québec* (CDPNQ) of the MDDELCC and the MFFP did not reveal any threatened or vulnerable plant species, or those likely to be listed as such, in the study area (CDPNQ, 2010a). The same was true for wildlife species (CDPNQ, 2010b). Furthermore, during the coming inventories, special attention will be paid to these species and those listed in the Species at Risk Public Registry of Canada.

5.3 HUMAN ENVIRONMENT

Socio-economic context

The project is in the Nord-du-Québec administrative region (Region 10), by far the largest region in Quebec (55% of the province's territory) with a surface area of 839,000 km^2, of which 121,000 km^2 are lakes and rivers. More precisely, the project is located on the territory of the Eeyou Istchee James Bay Regional Government. It should be noted that the municipality of Baie-James no longer exists since the creation of the Eeyou Istchee James Bay Regional Government on January 1, 2014. The latter is a municipal body governed by the *Cities and Towns Act* and its territory is composed of the territory of the municipality of Baie-James as it existed before, except for Category II lands.

The Eeyou Istchee James Bay territory includes the municipalities of Chibougamau, Chapais, Lebel-sur-Quévillon and Matagami, as well as the nine Cree communities of Nord-du-Québec: Chisasibi, Eastmain, Waskaganish, Wemindji, Whapmagoostui, Mistissini, Nemaska, Oujé-Bougoumou and Waswanipi. According to the most recent statistics, the James Bay territory counts 14,871 inhabitants and Eeyou Istchee, 14,131 inhabitants.

With 7,609 inhabitants, Chibougamau has the largest population in the region. Other towns include Lebel-sur-Quévillon with a population of 2,260 (2016).

Land use

As mentioned above, both study areas are located in the Nord-du-Québec administrative region. The legislative and legal context of Nord-du-Québec is notably governed by the James Bay and Northern Quebec Agreement (“JBNQA”), the Northeastern Quebec Agreement and the Agreement concerning a New Relationship between the Gouvernement du Québec and the Crees of Québec, also called the

"Peace of the Braves." The territorial regime introduced by the JBNQA is a determining factor in land use. It provides for the division of James Bay territory into Category I, II and III lands. The mine area intersects Category II and III lands. On Category II lands, the Crees namely have exclusive rights to hunting, fishing and trapping, while on Category III lands, they have the exclusive right to trap fur animals and some advantages in outfitting services, without exclusive rights. The Windfall Lake Project is located within Category III land boundaries, mostly on public lands dominated by forestry activities. As for the potential sector of the process plant near Lebel-sur-Quévillon, it is located on traditional land of the Algonquin Anishinabeg Nation of Lac Simon, on Category III lands.

Lebel-sur-Quévillon, located just over 115 km from the mine site, is an urbanized area that groups together residential, commercial, service, industrial, institutional and public works uses.

At the moment, field visits have not been able to establish with certainty whether or not there are seasonal or temporary camps in the area.

Infrastructure

Provincial highway 113 crosses the study area from east to west. It is the only road linking the Abitibi to Lac St-Jean. Numerous forest roads exist in the area.

Two high-voltage power lines cross the area from north to south.

Archaeological potential

The study area of the mine was the subject of an archaeological potential study in 2007 (Archéos08, 2007) on behalf of Noront Resources Ltd.

This study shows that the archaeological significance of the mine area is largely unknown and no documented site is present. According to the Archéos8 report, the only known archaeological manifestations in this area are two native prehistoric sites discovered in the late 1970s on the banks of the Saint-Cyr River, 6 km east of Barry Lake.

The same report also mentions that the banks of most rivers likely represent high archaeological potential (A). These areas would undoubtedly have been used by Native Americans for subsistence activities for several millennia.

It should also be mentioned that land had been disturbed where infrastructures have been erected in the sector.

The archaeological potential becomes less important (B) with greater distance from the river banks, particularly on elevated terraces. However, there are portage routes that cross these terraces to connect the bodies of water.

Special attention should be given to these sectors (A and B).

The remainder of the land, representing the majority of the study area, has no archaeological interest (C).

Ancestral rights

The Windfall Lake Project is located on the traditional lands of the Waswanipi Cree community, specifically on the traplines of Mr. Marshall Icebound (W25B) and Mr. Gary Cooper (W25A). The Cree village of Waswanipi is located about 75 km north-northwest of the Windfall Lake Project.

The processing plant is located on the traplines of the Algonquin community of Lac Simon. Three First Nation communities have been identified as having a potential interest in the project: the Cree First Nation of Waswanipi, the Algonquin community of Lac Simon and the Attikamekw community of Obedjiwan.

The photographs presented in Appendix A complete this description of the environment.

6 ENVIRONMENTAL EFFECTS

6.1 CONSTRUCTION PHASE

During the construction phase, the principal environmental impacts are expected to be the following:

- the potential local degradation of certain air quality parameters (GHG emissions);
- soil erosion and sediment transport;
- potential changes in the quality of water courses passing through the mine site and the ore haulage route;
- disturbances to wildlife (noise, dust and traffic) and higher death rates among less mobile species during construction work;
- disruptions or displacements of hunting and trapping activities (First Nation members and non-Aboriginals), possibly more pronounced than those experienced during exploration work.

6.2 PRODUCTION PHASE

During the production phase, the principal environmental impacts are expected to be the following:

- the potential local degradation of certain air quality parameters (GHG emissions);
- soil erosion and sediment transport;
- potential changes to the flow pattern in surface water on the mine site;
- potential changes in water quality downstream from the effluent discharge point;
- changes to the natural environment due to the encroachment of mining infrastructure in the territory;
- disturbances to First Nation members and non-Aboriginals during ore haulage from the mine site to Lebel-sur-Quévillon if the plant is installed there;
- disturbances to wildlife (noise, dust and traffic) and higher death rates among less mobile species during ore haulage from the mine site to Lebel-sur-Quévillon if the plant is installed there;
- a loss of wetlands due to encroachment;
- disruptions or displacements of hunting and trapping activities (First Nation and non-Aboriginal members), possibly more pronounced than those experienced during exploration work.

Given the absence of encroachment on fish habitats and threatened species, and migratory birds will not experience any significant harm following the implementation of mitigation measures during the work, no significant impact is expected on components of the biological environment.

6.3 CLOSURE PHASE

During the closure phase, the principal environmental impacts are expected to be the following:

- soil erosion and sediment transport;
- potential disturbances to wildlife (noise, dust and traffic) and higher death rates among less mobile species during closure construction work.

7 FUNDING FROM THE FEDERAL GOVERNMENT

The Windfall Lake Project of Osisko Mining will not receive any funding from federal authorities.

The project is not situated on federal lands.

8 INFORMATION AND PUBLIC CONSULTATION PROCEDURES

8.1 CONSULTATIONS HELD AND STAKEHOLDER CONSULTATION AND COMMITMENT PROGRAM

OSISKO held various meetings and information sessions with representatives and members of local communities. In addition, information letters on exploration activities were sent to municipalities. It should be noted that prior to the project being acquired by Oban, which changed its name to Osisko Mining Inc., in June 2016, representatives from Eagle Hill Exploration Corporation, the former owner of the Windfall Lake Project, met informally with representatives of Lebel-sur-Quévillon and participated in an information session organized by the Economic Development Corporation of Lebel-sur-Quévillon in November 2014.

The main concerns expressed by the citizens of Lebel-sur-Quévillon relate mainly to the potential economic benefits for the City and the project's timetable. For Senneterre, even though the Windfall Lake Project is not located on its territory, stakeholders felt that local entrepreneurs could benefit from business opportunities generated by the project.

No regional information sessions were held. However, the public has been made aware of the project through articles published in local and regional media.

The tables in Appendix B summarize all the meetings and information letters sent by OSISKO to the municipalities.

COMMUNICATIONS AND CONSULTATION PLAN

COMMUNITY ENGAGEMENT PLAN

OSISKO will develop a community engagement plan, including the project description, stakeholder list, local and regional study areas, detailed communication and engagement processes, and a schedule of activities. The community engagement plan will be explained and discussed with local authorities. The identified non-Aboriginal communities will be Lebel-sur-Quévillon, Chapais and Chibougamau as well as Senneterre and Val-d'Or. The plan will also serve to consolidate the relationship of trust OSISKO has built with the Aboriginal community of Waswanipi. OSISKO has recently initiated discussions with the Aboriginal communities of Lac Simon and Obedjiwan to present the project and to learn about their potential interest in the project. Community representatives will be consulted to determine the final form of the plan. This plan will facilitate the follow-up of the consultation and public participation processes required during the authorization process. It will also aim to develop effective channels of communication with key stakeholders and to foster community support and participation throughout the life of the project.

CONSULTATION ACTIVITIES

Information on the project and its technical specifications at all stages of development, from the beginning of the environmental assessment to the submission of recommendations by government authorities, will be produced and submitted in French and English using language that is clear and easily understandable. Some of the information may require translation into Cree, Attikamekw and Algonquine. Information on the environmental review process and project-specific authorization requirements will also be presented to stakeholders. Other types of information will require summaries of consultations, minutes of stakeholder and regulatory meetings, a summary of decisions and actions taken, correspondence with

directors, etc. In addition to meetings, open houses and presentations, various means can be used to inform stakeholders including visits to the site, newsletters, descriptive sheets published in local publications and on OSISKO's website, radio spots or videos and any other means deemed relevant.

The information component aims to ensure that stakeholders have access to fair, objective and relevant information to facilitate their understanding of the project, the approval process, the conditions for construction, operation and rehabilitation of the future mine.

Consultation will involve seeking stakeholder views on the project and on the consultation process itself. The objective will be to regularly engage local people in dialogue to identify, document and address potential concerns and expectations regarding the social, economic and environmental impacts of the project. Individual meetings, focus groups (local and Aboriginal organizations, elected officials, entrepreneurs, tallymen, interest groups, elders, etc.), general assemblies, community gatherings and regular information sessions with key local resources will be the main formats to achieve public participation objectives. Depending on each activity, OSISKO will implement a feedback and follow-up process. The consultation component aims to take into consideration the concerns and expectations of the stakeholders during the planning of all phases of the project.

Public hearings are not automatically required; the authorities analyzing the project will determine whether they are needed. If required, the hearings will allow for direct exchanges with the public. They will be held by the authorities involved in the file with the presence of OSISKO and local people at specific times during the environmental assessment process, in order to provide or gather information on the project.

8.2 COMMENTS AND CONCERNS RAISED BY ABORIGINAL GROUPS

OSISKO understands that First Nations people have protected constitutional rights and can offer a unique understanding of the environment based on their special connection to the land. The goal of the involvement of First Nations members in the project is to:

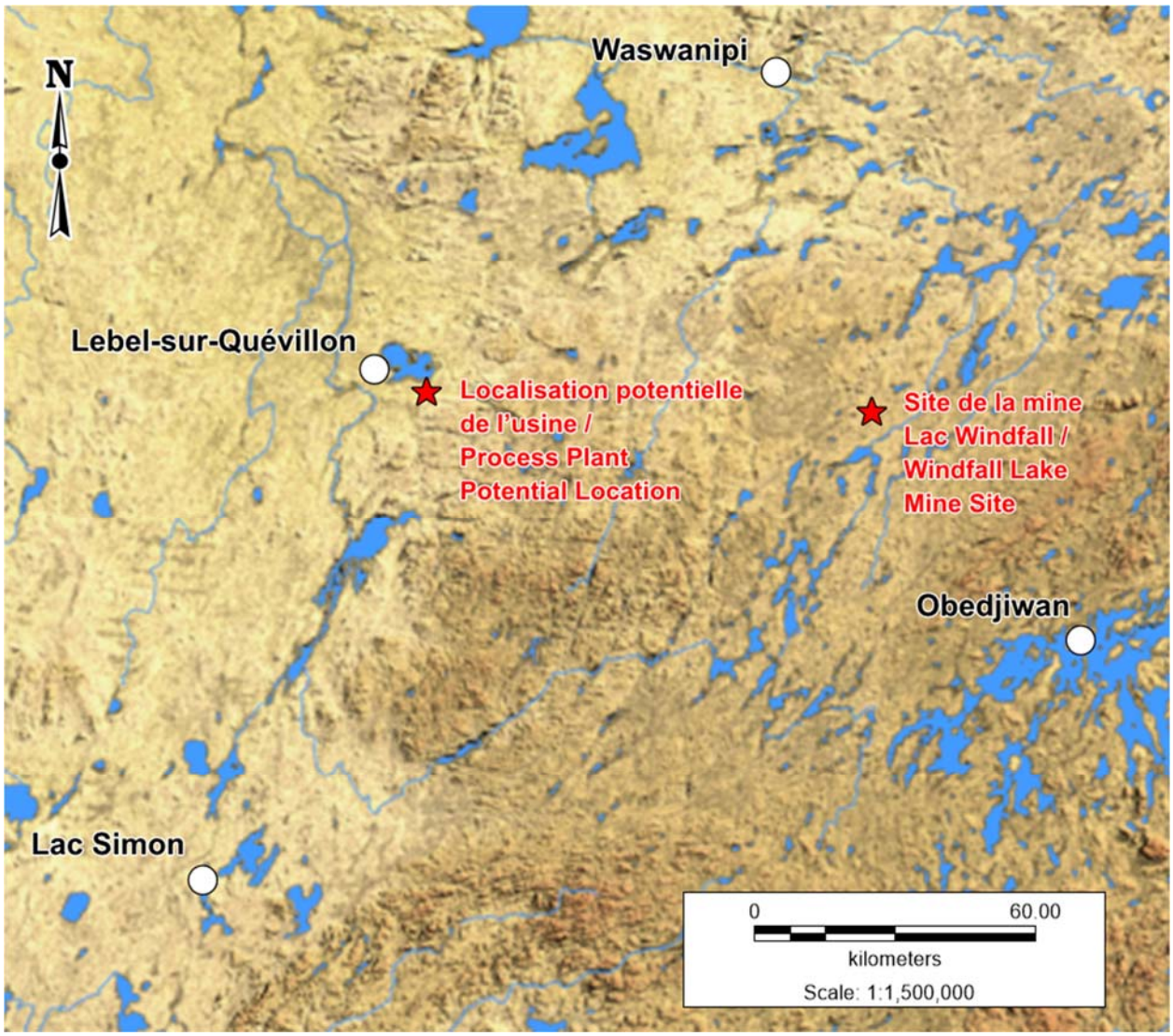
- Understand Aboriginal values and concerns;
- Meet government requirements;
- Build a long-term relationship.

The obligation to consult with Aboriginal people, when involved, rests with the Crown, and while the procedural aspects of the consultation process may be delegated to the proponents of the project, OSISKO understands that ultimate responsibility rests with the Crown. An initial audit of Aboriginal communities has been conducted with the Crown and the three communities of Waswanipi Cree First Nation, Lac Simon First Nation and Obedjiwan First Nation have been identified as having a potential interest in the project.

8.2.1 WASWANIPI CREE COMMUNITY

The Windfall Lake Project is located on the traditional lands of the Waswanipi Cree community, specifically on the trap lines of Mr. Marshall Icebound (W25B) and Mr. Gary Cooper (W25A). The Cree village of Waswanipi is located about 75 km north-northwest of the Windfall Lake Project (Map 7).

Map 7 Location of Aboriginal Communities



Information on the project was forwarded to the band council, the Deputy Chief, the Manager of Natural Resources, the tallymen and the Cree Trappers' Association and the Cree Human Resources Development through meetings, presentations and information letters. Meetings were held with the tallymen to explain the nature of the work and to know their use of the territory. OSISKO also presented the Windfall Lake Project to the entire community at the Waswanipi Mining Exposition in February 2017.

Prior to OSISKO's takeover of the project, several information meetings were held between representatives from Eagle Hill and representatives of the Waswanipi community, including former Chief Paul Gull. These meetings led to the signing in 2012 of an advanced exploration agreement with the Cree First Nation of Waswanipi, the Grand Council of the Crees and the Cree Regional Authority. OSISKO continues to honour the terms of the 2012 agreement.

The main concerns are described below. They focus on the importance of respecting the environment, the impact of exploration activities on water and wildlife, the economic benefits to the community, and the

respect of cultural sites. Furthermore, as a follow-up to the meetings with Waswanipi representatives and tallymen (W24D, W25A, W25B, W26 and Lot 19), additional meetings are being planned to share information and consult with community members.

Hunting, fishing and the forest

The tallymen and certain members of their families shared information about key areas for hunting, fishing and gathering.

The traditional lands of the community have been affected by the forestry industry, and certain members of the community are concerned about further disturbances to the territory and the cumulative effect of all activities, as well as the ways in which such activities may affect their own use of the land. In addition, intact parts of the forest hold great importance for the tallymen and they want to protect them.

Water

The tallymen have concerns about the drilling work, particularly about its effect on water quality and fish populations. The OSISKO team answered their questions by explaining the protocol that must be followed when setting up a drill hole, which involves respecting a buffer zone around lakes, rivers and watercourses. Also, drilling companies use a textile filter to ensure no mud particles reach the water. In the event of an oil or fuel spill, drilling companies have anti-spill kits on site and a protocol to follow. The OSISKO team offered to arrange for the tallymen to have a tour of the drill sites on their traplines, if they wish. Some tallymen also expressed concern about the quality of the water in the ramp. The quality of this water is being monitored through periodic sample collection, and a water quality management plan will be developed before the ramp is dewatered.

Economic benefits

Through Band Council members, OSISKO has learned there are people in Waswanipi who would like to be employed on the project. The Band Council is seeking job and training opportunities for community members.

Several of the tallymen with whom meetings were held, as well as members of their family, have relevant skills and prior experience in the exploration and mining industry as machinery operators or line cutters for example. Some tallymen would be interested in working at the proposed Windfall project. Other members of the community are contractors who would like the opportunity to bid on contracts throughout all phases of the project.

Currently, OSISKO has agreements with Waswanipi community members to perform jobs at the Windfall project including drill core sampling, equipment and building maintenance, health and safety, community liaison and administration. OSISKO continues to receive applications from community members for consideration. Meetings were also held with representatives of the Cree Human Resources Development Department to learn about the programs they offer.

In addition, OSISKO awarded a drilling contract to Miyaa Kaa Corporation – a joint venture partnership between the community of Waswanipi and Orbit Garant Drilling, which has a special training program for Waswanipi community members.

Cultural sites

The tallymen provided the location of certain cultural sites, and these sites will be avoided when planning work activities.

Other concerns

During a visit to the Windfall camp, community members raised concerns about the health and safety of workers and people nearby. They also asked if workers had the right to hunt and fish, and if the camp has established procedures in case of fire.

8.2.1 OTHER ABORIGINAL COMMUNITIES

Since the project has evolved from an exploration project with drilling as its principal activity to a development project that includes the selection of a new potential site for a processing plant near Lebel-sur-Quévillon, the Crown has identified two other Aboriginal communities in addition to the Cree First Nation of Waswanipi that may have an interest in the project. They are the Obedjiwan community of the Atikamekw Nation and the Lac Simon community of the Anishinabeg Nation.

As part of the EIA, OSISKO will contact representatives of both communities to better understand their potential interest in the project.

The tables in Appendix C summarize all the meetings that have been held and the information letters sent by OSISKO to the Waswanipi community.

9 SIGNATURE OF THE APPLICANT

I certify that all information contained in this preliminary project information document is accurate to the best of my knowledge.

Alexandra Drapack

Signed this 8 day of May 2017

by Alexandra Drapack, P.Eng., MBA, PMP
Vice-President
Environment Services and Sustainable Development

10 BIBLIOGRAPHY

Atlas des Amphibiens et des Reptiles du Québec (AARQ). 2014. Atlas des amphibiens et reptiles du Québec: banque de données active depuis 1988 alimentée par des bénévoles et professionnels de la faune. Société d'histoire naturelle de la vallée du Saint-Laurent.

ARCHÉO08. 2007. Étude de potentiel archéologique, projet Lac Windfall (Noront. Inc.). 15 p.

BUREAU DE LA STATISTIQUE DU QUÉBEC. 2016. http://diffusion.stat.gouv.qc.ca/pls/hcp/HCP

CENTRE DE DONNÉES SUR LE PATRIMOINE NATUREL DU QUÉBEC (CDPNQ). 2010a. Data retrieval from the special-status species database. Gouvernement du Québec, Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC) et Ministère des Forêts, de la Faune et des Parcs (MFFP), Québec.

CENTRE DE DONNÉES SUR LE PATRIMOINE NATUREL DU QUÉBEC (CDPNQ). 2010b. Data retrieval from the special-status species database. Gouvernement du Québec, Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC) et Ministère des Forêts, de la Faune et des Parcs (MFFP), Québec.

CENTRE DE DONNÉES SUR LE PATRIMOINE NATUREL DU QUÉBEC (CDPNQ). 2017. Data retrieval from the special-status species database. Gouvernement du Québec, Ministère du Développement durable, de l'Environnement et de la Lutte contre les changements climatiques (MDDELCC) et Ministère des Forêts, de la Faune et des Parcs (MFFP), Québec.

FAPAQ- Société de la faune et des parcs du Québec (2003). PDRRF -Plan de développement régional associé aux ressources fauniques du Nord-du-Québec. Chibougamau (Québec), Gouvernement du Québec, 115p.

GENIVAR, 2007. Plan de restauration du site Lac Windfall en vertu de l'article 232.2 de la Loi sur les mines – Échantillonnage en vrac sur le site Windfall Lake. Report prepared for Noront Resources Ltd., 71 p. and appendix (Ref. No.: AV106787).

MINISTÈRE DES AFFAIRES MUNICIPALES ET OCCUPATION DU TERRITOIRE. 2016. http://www.mamrot.gouv.qc.ca/organisation-municipale/organisation-territoriale/regions-administratives/nord-du-quebec/.

MRNF-Ministère des Ressources Naturelles et de la Faune. 2010. Portrait Territorial-Nord du Québec. Direction générale du développement et de la coordination des opérations régionales, Direction des affaires régionales et du soutien aux opérations, Énergie, Mines et Territoire. Québec. 105 p.

SRK Consulting Inc., 2014. Technical Report for the Windfall Lake Gold Project, Québec. Report prepared for Eagle Hill Exploration Corporation. 112 p.

Tetra Tech Inc. 2015. Preliminary Economic Assessment of the Windfall Lake Gold Property, Québec, Canada. Report prepared for Eagle Hill Exploration Corp. 325 p.

Appendix A

PHOTOGRAPHIC RECORD

Photo 1: Mine site – Windfall Lake, August 2016

Photo 2: Mine site – Fen at the outlet of Windfall Lake, August 2016

Photo 3: Mine site – Creek CE7, August 2016

Photo 4: Mine site – White birch, August 2016

Photo 5: Mine site – Bog, August 2016

Photo 6: Mine site – Beaver pond, August 2016

Photo 7: Mine site – Black spruce, August 2016

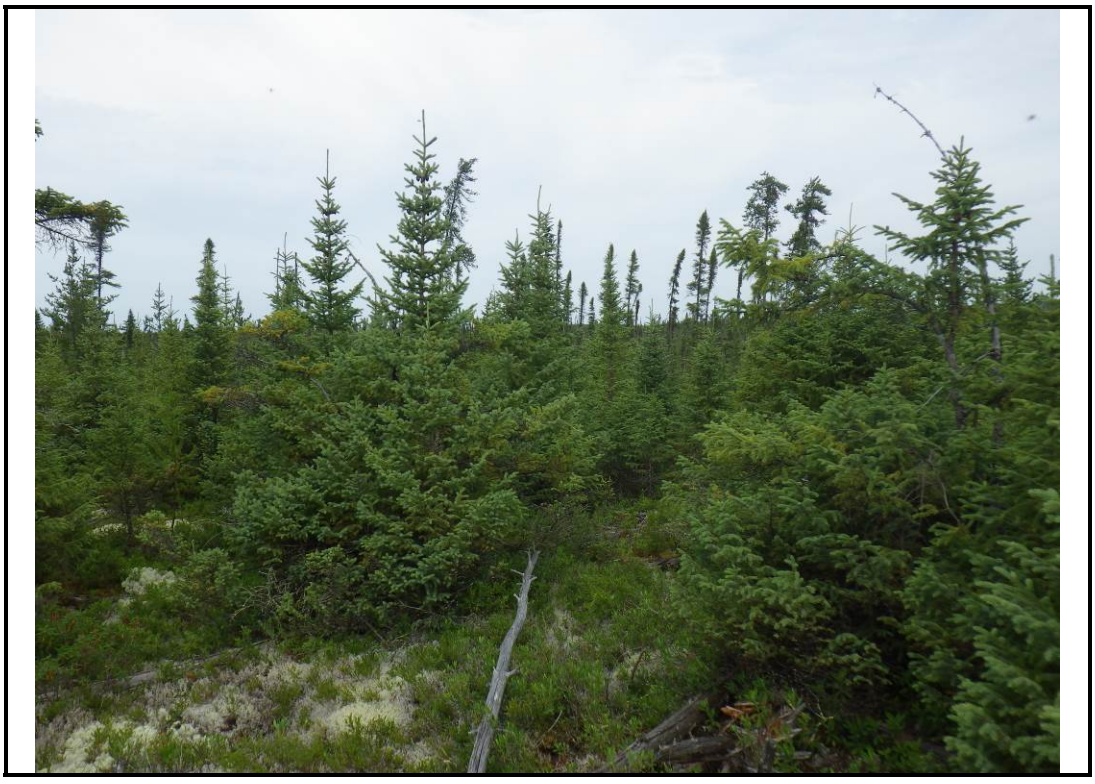


Photo 8: Mine site – Conifer regeneration

Appendix B

MEETINGS AND INFORMATION LETTERS: MUNCIPALITIES

Table 1– Communication activities with municipalities

Date	Objective	Location	Details
2017-01-19	Update on the Windfall Lake Project	Lebel-sur-Quévillon	Alain Poirier, Mayor, Lebel-sur-Quévillon François C. Gilbeault, Urban Planner, Lebel-sur-Quévillon Chantal Plante, Economic Development Corporation (*Société de développement économique*), Lebel-sur-Quévillon Luce Paradis, Administrative Assistant, Lebel-sur-Quévillon Luc Lessard, Senior Vice-President Technical Services, Osisko Gold Royalties Alix Drapack, VP Environment and Sustainable Development, Osisko Mining Pierre H. Terreault, Project Director, Osisko Mining Andrée Drolet, Environmental Coordinator, Osisko Mining
2016-11-29	Update on the Windfall Lake Project for the citizens of Lebel-sur-Quévillon	Lebel-sur-Quévillon	Jean-Philippe Desrochers, Windfall Project Manager, Osisko Mining About 70 people attended the event. The event was organized by the Economic Development Corporation (*Société de développement économique*) of Lebel-sur-Quévillon
2016-11-01	Introductory presentation on the Windfall Lake, Urban Barry and Black Dog projects	Senneterre	Sylvain Moreau, Director, Economic Development Corporation (CDE: *Corporation de développement économique*), and municipal counselor Réal Théberge, Director, CDE Luc Lafrenière, Director, CDE Patrick Rodrigue, General Manager, Senneterre Carolane Langlois, Urban Planner, Senneterre Marie-Andrée Mayrand, Manager – Local Development Branch, RCM Vallée de l'Or (*Service de développement local, MRC de la Vallée-de-l'Or)* Mario Sylvain, Manager – Land Management and Business Branch, RCM Vallée de l'Or (*Service de l'aménagement et entrepreneurial, MRC de la Vallée-de-l'Or*) Jean-Philippe Desrochers, Windfall Project Manager, Osisko Mining

Table 2– Letters notifying municipalities of work

Date	Document	Project – Activities	Details
2016-12-06	Information letter – Osisko Mining	Windfall Lake Project Additional drilling	The letter was sent to: Johanne Morasse, Eeyou Istchee James Bay Regional Government, Manager – Land and Natural Resources
2016-11-07	Information letter – Osisko Mining	Windfall Lake Project Additional drilling	The letter was sent to: Johanne Morasse, Eeyou Istchee James Bay Regional Government, Manager – Land and Natural Resources
2016-09-26	Written correspondence – Osisko Mining	Windfall Lake Project Additional drilling	The letter was sent to: Johanne Morasse, Eeyou Istchee James Bay Regional Government, Manager – Land and Natural Resources
2016-07-20	Information letter – Osisko Mining	Windfall Lake and Urban Barry Projects Additional drilling	The letter was sent to: Johanne Morasse, Eeyou Istchee James Bay Regional Government, Manager – Land and Natural Resources
2016-07-20	Information letter – Osisko Mining	Windfall Lake and Urban Barry Projects Additional drilling	The letter was sent to: Patrick Rodrigue, Town of Senneterre, General Manager
2016-02-22	Information letter – Oban Mining Corporation	Windfall Lake Project Additional drilling Line cutting Geophysical survey	The letter was sent to: Johanne Morasse, Eeyou Istchee James Bay Regional Government, Manager – Land and Natural Resources
2016-01-29	Information letter – Oban Mining Corporation	Windfall Lake and Urban Barry Projects Drilling program Airborne geophysical survey Till sampling	The letter was sent to: Johanne Morasse, Eeyou Istchee James Bay Regional Government, Manager – Land and Natural Resources

Appendix C

MEETINGS AND INFORMATION LETTERS: WASWANIPI COMMUNITY

Table 1– Communication activities with the municipality of Waswanipi

Date	Objective	Location	Details
2017-02-09	Waswanipi Mining Exposition Fact sheet on the Windfall Lake Project Presentation on the Windfall Lake Project	Waswanipi, Community Center	Participants from Osisko: Alix Drapack, Osisko Mining, VP Environment Services and Sustainable Development Eva Roy-Vigneault, Osisko Mining, Sustainable Development Coordinator Andrée Drolet, Osisko Mining, Environmental Coordinator Participants from the Windfall Lake Project: Mario Lord, Betsy Shecapio, Benoit Gull, Ronnie Nayassit More than 100 members of the Waswanipi community attended the exposition.
2017-02-09	Presentation of maps from the Forestry branch Signing of a confidentiality agreement regarding access to Cree land use maps	Waswanipi	Allan Saganash, Waswanipi, Director of Waswanipi Forest Authority Michel Arès, Waswanipi Forest Authority, Senior Forest Technician and GIS Project Manager Simon Britt, Mining Consultant for Waswanipi William Dixon, Waswanipi, Tallyman W26 Alix Drapack, Osisko Mining, VP Environment Services and Sustainable Development Eva Roy-Vigneault, Osisko Mining, Sustainable Development Coordinator
2017-02-09	Informal meeting to discuss the subject of Waswanipi community members working as employees at Osisko's sites, and to provide information about the ongoing planning of ramp development work	Waswanipi	Mandy Gull, Waswanipi, Deputy Chief Alix Drapack, Osisko Mining, VP Environment Services and Sustainable Development Eva Roy-Vigneault, Osisko Mining, Sustainable Development Coordinator Andrée Drolet, Osisko Mining, Environmental Coordinator

Date	Objective	Location	Details
2017-01-18	Community visit – Community Health and Fitness Center Discussions with tallymen about their use of the land and traditional knowledge Consultation plan Job interviews	Waswanipi	Mandy Gull, Waswanipi, Deputy Chief Betsy Shecapio, Windfall Lake , Administrative Assistant, Waswanipi community member Clarence Blacksmith, Waswanipi, Tallyman W24D William and Raymond Dixon, Waswanipi, Tallymen W26 Gary, Stanley and James Cooper, Waswanipi, Tallymen W25A Allan Saganash, Waswanipi, Director of Waswanipi Forest Authority
2017-01-17	Site visit Update on the Windfall Lake Project Discussion with tallyman about his use of the land and traditional knowledge (Marshall Icebound)	Windfall Lake Project	Mandy Gull, Waswanipi, Deputy Chief Allan L. Cooper, Waswanipi, Councillor Marlene I. Kitchen, Waswanipi, Councillor Paul Dixon, Waswanipi, Cree Trappers Association – Local Fur Officer Marshall Icebound, Waswanipi, Tallyman W25B Jean-Philippe Desrochers, Osisko Mining, Windfall Project Manager Louis Grenier, Osisko Mining, Windfall Project Manager Alix Drapack, Osisko Mining, VP Environment Services and Sustainable Development Eva Roy-Vigneault, Osisko Mining, Sustainable Development Coordinator Betsy Shecapio, Windfall Lake , Administrative Assistant, Waswanipi community member
2017-01-16	Community visit – Cultural Village, Sabtuan Regional Vocational Training Centre Job interviews	Waswanipi	Mandy Gull, Waswanipi, Deputy Chief Steven Blacksmith, Waswanipi, Director of Natural Resources Alix Drapack, Osisko Mining, VP Environment Services and Sustainable Development Louis Grenier, Osisko Mining, Windfall Project Manager Eva Roy-Vigneault, Osisko Mining, Sustainable Development Coordinator
2016-11-23	Involvement of Waswanipi community members as employees of the Windfall Lake Project	City of Québec / Québec Mines Convention	Mandy Gull, Waswanipi, Deputy Chief Steven Blacksmith, Waswanipi, Director of Natural Resources Jean-Philippe Desrochers, Osisko Mining, Windfall Project Manager Eva Roy-Vigneault, Osisko Mining, Sustainable Development Coordinator

Date	Objective	Location	Details
2016-11-16	Presentation of Cree Human Resources Development (CHRD) programs	Montreal / Osisko Office	Abel Trapper, CHRD, Coordinator – Territorial Programs Isaac Iserhoff, CHRD, Sectoral Officer – Mining & Construction Gillman Ottereyes, CHRD, Sectoral Officer – Territorial Programs Daniel Bland, CHRD, Consultant Mandy Gull, Waswanipi, Deputy Chief Steven Blacksmith, Waswanipi, Director of Natural Resources Alix Drapack, Osisko Mining, VP Environment Services and Sustainable Development Jean-Philippe Desrochers, Osisko Mining, Windfall Project Manager Eva Roy-Vigneault, Osisko Mining, Sustainable Development Coordinator
2016-11-14	Discussions with tallymen about their use of the land and traditional knowledge	Waswanipi / Band Office	Gary and Stanley Cooper, Tallymen W25A Catherine Lussier, Anthropologist Èva Roy-Vigneault, Osisko Mining, Sustainable Development Coordinator
2016-11-01	Orbit-Garant/ Miyuu Kaa Corp. Joint Venture Update on the Windfall Lake Project	Montreal / Osisko Office	Mandy Gull, Waswanipi, Deputy Chief Eric Alexandre, Orbit-Garant, President and CEO, Paul R. Carmel, Orbit-Garant, Chair of the Board of Directors Robert Wares, Osisko Mining, Executive Vice President Exploration & Resource Development Mathieu Savard, Osisko Mining, Vice President Exploration, Québec Alix Drapack, Osisko Mining, VP Environment Services and Sustainable Development Èva Roy-Vigneault, Osisko Mining, Sustainable Development Coordinator
2016-10-06	Update on the Windfall Lake Project	Montreal / Osisko Office	Mandy Gull, Waswanipi, Deputy Chief Simon Britt, Mining Consultant for Waswanipi Gernot Wober, Osisko Mining, VP Exploration Alix Drapack, Osisko Mining, VP Environment Services and Sustainable Development Jean-Philippe Desrochers, Osisko Mining, Windfall Project Manager Èva Roy-Vigneault, Osisko Mining, Sustainable Development Coordinator

Date	Objective	Location	Details
2016-09-12	Discussions with tallymen about their use of the land and traditional knowledge	Waswanipi / Band Office	Ronnie Nayassit and Yvette Wabanonik (Lot 19) Clarence Blacksmith, Tallymen W24D Marshall Icebound, Tallymen W25B William and Raymond Dixon, Tallymen W26 Catherine Lussier, Anthropologist Èva Roy-Vigneault, Osisko Exploration James Bay, Sustainable Development Coordinator
2016-07-22	Update on the Windfall Lake Project	Montreal	Mandy Gull, Waswanipi, Deputy Chief Steven Blacksmith, Waswanipi, Director of Natural Resources Jean-Philippe Desrochers, Osisko Mining, Windfall Project Manager Èva Roy-Vigneault, Osisko Exploration James Bay, Sustainable Development Coordinator
2015-12-07	Presentation of the Windfall Lake Project to Waswanipi Band Council members Job interviews	Waswanipi / Band Office	Marcel Happyjack, Waswanipi, Chief Mandy Gull, Waswanipi, Deputy Chief Bianca Albert, Waswanipi, Councillor Michael Grant, Waswanipi, Councillor John Jolly, Waswanipi, Councillor Marlene I. Kitchen, Waswanipi, Councillor Marcel Martin, Waswanipi, Councillor Cheryl Trapper, Waswanipi, Treasurer Anthony Icebound / Jackie Barney, Waswanipi, Corporate Secretary Jonathan Sutherland, Waswanipi, Director General (Interim) Jean-Philippe Desrochers, Oban Mining Corporation, Windfall Project Manager Èva Roy-Vigneault, Osisko Exploration James Bay, Sustainable Development Coordinator
2015-10-08	Introductory meeting: presentation of Waswanipi, Oban and Osisko representatives	Montreal / Osisko Office	Mandy Gull, Waswanipi, Deputy Chief Steven Blacksmith, Waswanipi, Director of Natural Resources Jose Vizquerra, Oban Mining Corporation, Executive Vice President of Strategic Development Gernot Wober, Oban Mining Corporation Jean-Philippe Desrochers, Oban Mining Corporation André Gaumond, Osisko Gold Royalties, Senior Vice-President, Northern Development Mathieu Savard, Osisko Exploration James Bay, Chief Geologist Èva Roy-Vigneault, Osisko Exploration James Bay, Sustainable Development Coordinator

Table 2– Information letters sent to Waswanipi

Date	Document	Project – Activities	Details
2016-12-06	Information letter – Osisko Mining	Windfall Lake Project Additional drilling	The letter was sent to: Marcel Happyjack, Waswanipi, Chief Mandy Gull, Waswanipi, Deputy Chief Steven Blacksmith, Waswanipi, Director of Natural Resources Sydney Ottereyes, Waswanipi, Cree Trappers' Association Marshall Icebound, Waswanipi, Tallyman W25B Henry Dixon, Cree Human Resources Development Youcef Larbi, Cree Mineral Exploration Board, Chief Geologist
2016-11-07	Information letter – Osisko Mining	Windfall Lake Project Additional drilling	The letter was sent to: Marcel Happyjack, Waswanipi, Chief Mandy Gull, Waswanipi, Deputy Chief Steven Blacksmith, Waswanipi, Director of Natural Resources Sydney Ottereyes, Waswanipi, Cree Trappers' Association Gary Cooper, Waswanipi, Tallyman W25A Henry Dixon, Cree Human Resources Development Youcef Larbi, Cree Mineral Exploration Board, Chief Geologist
2016-09-26	Information letter – Osisko Mining	Windfall Lake Project Additional drilling	The letter was sent to: Marcel Happyjack, Waswanipi, Chief Mandy Gull, Waswanipi, Deputy Chief Steven Blacksmith, Waswanipi, Director of Natural Resources Sydney Ottereyes, Waswanipi, Cree Trappers' Association Marshall Icebound, Waswanipi, Tallyman W25B Henry Dixon, Cree Human Resources Development Youcef Larbi, Cree Mineral Exploration Board, Chief Geologist

Date	Document	Project – Activities	Details
2016-07-20	Information letter – Osisko Mining	Windfall Lake and Urban Barry projects Additional drilling	The letter was sent to: Marcel Happyjack, Waswanipi, Chief Mandy Gull, Waswanipi, Deputy Chief Steven Blacksmith, Waswanipi, Director of Natural Resources Gary Cooper, Waswanipi, Tallyman W25A Marshall Icebound, Waswanipi, Tallyman W25B Youcef Larbi, Cree Mineral Exploration Board, Chief Geologist
2016-02-22	Information letter – Oban Mining Corporation	Windfall Lake Project Additional drilling Line cutting Geophysical survey	The letter was sent to: Marcel Happyjack, Waswanipi, Chief Mandy Gull, Waswanipi, Deputy Chief Steven Blacksmith, Waswanipi, Director of Natural Resources Gary Cooper, Waswanipi, Tallyman W25A Marshall Icebound, Waswanipi, Tallyman W25B Youcef Larbi, Cree Mineral Exploration Board, Chief Geologist
2015-09-24	Information letter – Oban Mining Corporation	Windfall Lake Project Drilling program	The letter was sent to: Marcel Happyjack, Waswanipi, Chief Mandy Gull, Waswanipi, Deputy Chief Steven Blacksmith, Waswanipi, Director of Natural Resources Marshall Icebound, Waswanipi, Tallyman W25B Youcef Larbi, Cree Mineral Exploration Board, Chief Geologist