

O3 MINING

MARBAN MINING PROJECT

SUMMARY OF THE INITIAL PROJECT DESCRIPTION

NOVEMBER 2022





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O3 MINING

FINAL VERSION

PROJECT N°: 221-11330-03
DATE: NOVEMBER 2022


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FOREWORD

O3 Mining, an Osisko Group company, is a gold explorer on its way to producing gold from its highly prospective gold camps in Quebec, Canada. As it grows to become a gold producer in Quebec, O3 Mining benefits from the support and past successes of the Osisko team in mine construction.

O3 Mining is well capitalized and holds a 100% interest in all its properties (66,000 ha) in Quebec. O3 Mining is traded on the TSX Venture Exchange (TSX.V: OIII) and on the OTC markets (OTCQX: OIIF).

An Initial Project Description (IPD) has been prepared to present, in a simplified and synthetic manner, the important preliminary contextual and descriptive information related to the Marban Engineering Project (Marban Project), located approximately 15 km northwest of Val-d'Or, in the Abitibi-Témiscamingue administrative region.

Briefly, the Marban Project includes:

- the operation of an open-pit mine with a 10-year life span;
- the installation of surface infrastructures dedicated to the transportation of ore and waste rock;
- the implementation of an ore processing plant;
- the accumulation areas for mine waste rock, tailings and overburden;
- the implementation of related infrastructures (electrical power, telecommunications, heating, ventilation, water treatment, etc.);
- the detour of an existing road and the creation of a new access road to the project from Highway 117;
- the deviation of a permanent watercourse currently flowing over the project deposits.

This IPD is submitted pursuant to the new *Impact Assessment Act* (IA) (S. C. 2019, c. 28) effective August 28, 2019 and contains the information required in Schedule 1 of the *Information and Management of Time Limits Regulations* (SOR/2019-283). The project description has been prepared in a clear and concise manner, limiting it to elements relevant to a clear understanding of the project and its potential effects, while relying on the *Guide to Preparing an Initial Project Description and a Detailed Project Description*.

The summary of this IPD presented below summarizes the main elements presented in the IPD.

PART A – GENERAL INFORMATION

1 PROJECT'S NAME, SECTOR AND PROPOSED LOCATION

The project is called the Marban Engineering Project (Marban Project). This project aims to produce gold. It is located halfway between the cities of Val-d'Or and Malartic, in the administrative region of Abitibi-Témiscamingue, in the province of Quebec.

2 PROPONENT'S INFORMATION

The proponent of the project is O3 Mining, a company based in Toronto, Ontario. The principal representative of the proponent is Ms. Myrzah Tavares Bello.

3 ENGAGEMENT ACTIVITIES

The available statistics were used to better understand the demographic and social characteristics of the host communities of the Marban project and to initiate a gender-based analysis plus (GBA+). The Regional County Municipality (RCM) of La Vallée-de-l'Or has a population of 44,406 inhabitants divided into six municipalities, four unorganized territories and two indigenous reserves. The municipalities affected by the Marban project are Malartic and Val-d'Or. In 2021, the population of the MRC was 21,341 women and 22,424 men, mainly in the 25 to 64 age group. The proportion of people in the MRC with a college diploma is 17.1%, with a university degree 11.1% and with a diploma or other certificate 71.8%. The rates for male and female workers aged 25-64 were 78% and 72.2% respectively. In October 2022, the unemployment rate for the Abitibi-Témiscamingue region was 3.1%. The description of the health and social context of the region will be further developed during the impact assessment process. O3 Mining has prepared a plan to inform and consult with stakeholders. These engagement activities began in 2021 and continued into 2022.

Two citizen information meetings have already been held: the first in September 2021 and the second in September 2022. The main objectives of these meetings were to present the mining company, the Marban Project and the progress of the project.

In May 2022, two specific consultation meetings were held. Among other things, they addressed the need to relocate some of the residences currently on the project site and to reroute Gervais Road around the project site.

O3 Mining also held over 70 individual meetings with people living in the immediate vicinity of the Marban Project.

During the various meetings, citizens raised questions and concerns. These included the following:

- **Questions and concerns about what the mining company will do:** the company's commitment, the importance of establishing a relationship of trust, the need to have a follow-up committee with citizens, the relocation of certain properties, etc.
- **Questions about the project itself:** the tailings facility, the planned detour of Gervais Road, etc.
- **Questions and concerns about the project's nuisances:** dust, noise, vibrations during blasting and drilling, etc.
- **Potential impacts of the project on the environment:** impacts on the groundwater resources, impacts on the water level of artesian wells and the quality of the water, impacts on wildlife, etc.
- **Potential impacts on communities:** impacts on property values, impacts on hunting areas, impacts on safety, etc.

Going forward, O3 Mining plans to continue to inform and consult with citizens and other interested parties in a number of ways.

4 ENGAGEMENT ACTIVITIES WITH INDIGENOUS GROUPS

O3 Mining has initiated procedures to specifically inform the following three Indigenous groups:

- Conseil de la Première Nation Abitibiwinni (Pikogan);
- Nation Anishnabe du Lac-Simon (Lac-Simon);
- La Communauté anicinape de Kitcisakik (Kitcisakik).

O3 Mining held virtual meetings with the three groups to present its operations, the Marban Project and the progress of the project. The company exchanged emails and phone calls with the representatives of the three groups to discuss various topics. Finally, the company had face-to-face meetings with representatives of the communities of Lac-Simon and Pikogan.

The main elements discussed by the representatives of the three indigenous groups met are the following:

- **Questions and concerns about what the mining company will do:** importance of working respectfully, agreeing on how to communicate, etc.
- **Questions about the project:** number of jobs the project will create, etc.
- **Potential impacts of the project on the environment:** impacts of the project on plants and animals, importance of taking into account indigenous knowledge, etc.
- **Potential impacts of the project on communities:** training, economic development, etc.

In addition, O3 Mining sent information letters and emails to eight other indigenous communities: Long Point First Nation (Winneway), Crie Nation Government, Wahgoshig First Nation, Kebaowek First Nation (Kebaowek), Kitigan Zibi Anishinabeg (Kitigan Zibi), Timiskaming First Nation (Timiskaming), Wolf Lake First Nation (Hunter's Point) et Mitchikanibikok Inik First Nation.

- The Timiskaming First Nation community has requested a meeting with the mining company to learn more about the project.
- The Kitigan Zibi Anishinabeg community has informed the mining company that it does not wish to participate in the consultation process due to its distance from the project location.

Going forward, O3 Mining intends to continue its information and consultation activities with interested indigenous groups, while respecting the pace of each group.

5 ENVIRONMENTAL STUDIES, PLANS AND EVALUATIONS

At this time, O3 Mining has prepared the following three reports:

- NI 43-101 technical report and preliminary economic assessment of the Marban Project (Ausenco, 2020);
- NI 43-101 technical report and mineral resource estimate (Ausenco et G Mining, 2022); and
- NI 43-101 technical report and pre-feasibility study (Ausenco, 2022).

6 STRATEGIC ASSESSMENT

Environment and Climate Change Canada has prepared a *Strategic Climate Change Assessment Study*. This study will be used in the environmental assessment of the Marban Project. It will provide guidance for assessing the project's greenhouse gas (GHG) emissions and for assessing the project's resilience to climate change.

PART B – PROJECT INFORMATION

7 PURPOSE, NEED AND POTENTIAL BENEFITS OF THE PROJECT

The development of gold mining projects is justified by the increase in investment in precious metals like gold since 2020. The uncertainty created by the COVID-19 pandemic, inflation and market uncertainty make gold a safe haven for investors, which also explains the rise in the value of gold. This rise also creates a growing demand for the metal.

Given the price of gold and the anticipated resources on the Marban property, O3 Mining wishes to exploit these resources.

The current operating plan calls for a mine life of almost 10 years. The project involves investments of 718 million Canadian dollars. It will have significant economic benefits for the city of Val-d'Or, the Abitibi-Témiscamingue region and the province of Quebec. According to initial estimates, the project will create approximately 115 direct jobs and 240 indirect jobs.

8 APPLICABLE REGULATIONS

A preliminary analysis indicates that the *Impact Assessment Act* (IAA) applies to the Marban Project. The federal government's Impact Assessment Agency will have to decide whether an impact assessment is required for this project because of the environmental effects it could have on various components of the environment covered by section 7(1) of the IAA.

9 PERMANENT OR TEMPORARY ACTIVITIES, INFRASTRUCTURES, STRUCTURES AND WORKS

The technical information on the Marban Project currently available is that provided in the pre-feasibility study mentioned in section 5.

The project provides for a set of infrastructure and facilities, shown on Map 1, including the following:

- an ore processing plant and its related infrastructure (security, offices, locker rooms, workshop, warehouse, milling, laboratory, etc.);
- a waste rock storage area;
- two overburden storage areas;
- an ore storage area;
- tailings storage facilities consisting of a tailings storage area and two pits (Keriens and Norlartic);
- water distribution networks;
- stormwater and contact water management infrastructures;
- an electrical substation connected to the existing Hydro-Quebec grid from which a network will supply power to the site;

- an explosives storage site powered by a diesel generator due to its isolation;
- an incinerator for empty explosive boxes;
- four diesel tanks for the mining equipment;
- traffic routes between the various infrastructures, including safety controls to prevent interactions between personal vehicles and mining equipment;
- an access road via Highway 117 and a gatehouse, leading to the administration building and security.

The establishment of these infrastructures and facilities will require:

- a modification to the current alignment of Gervais Road to bypass the infrastructures to the east of the project site;
- a new crossing of the Canadian National Railway on the future access road to the project site; and
- a deviation of a section of Keriens Creek currently flowing over the project ore deposits.

The Marban Project is a conventional open pit mine using drills and trucks coupled with hydraulic shovels. The plant will be fed with crushed material from the ore pits. The ore processing will include:

- primary and secondary crushing;
- a covered storage pile for crushed ore to provide buffer capacity for the milling plant;
- a grinding of the crushed ore;
- cyanidation process;
- carbon regeneration, cyanide destruction, thickening and tailings disposal.

The operation of the mine will last almost ten years. At the end of the operation, site rehabilitation work will be carried out in accordance with applicable regulations.

10 MAXIMUM PRODUCTION CAPACITY AND PRODUCTION PROCESS

The previous section describes the production process. The nominal capacity of the mill is 16,438 tpd (6.0 Mtpa) with a mine life of 9.6 years.

11 PROJECT SCHEDULE

The projected schedule is as follows:

- 2022 to 2024: Pre-feasibility, feasibility and detailed engineering studies.
- 2025: Construction.
- 2026: Start of operation.
- 2036: End of operation and start of rehabilitation.
- 2039: End of rehabilitation and environmental monitoring of the site.
- 2042: End of post-closure monitoring.

Minière O3 O3 Mining

PROJET MARBAN PROJECT

LOCALISATION DU SITE/ SITE LOCALISATION

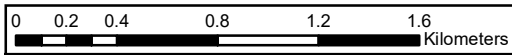


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Info. Carto.:
Projection: UTM Zone 18N
Datum: NAD 1983
Municipalités: Malartic/ Val d'Or
MRC: La Vallée de l'Or

Légende/ Legend

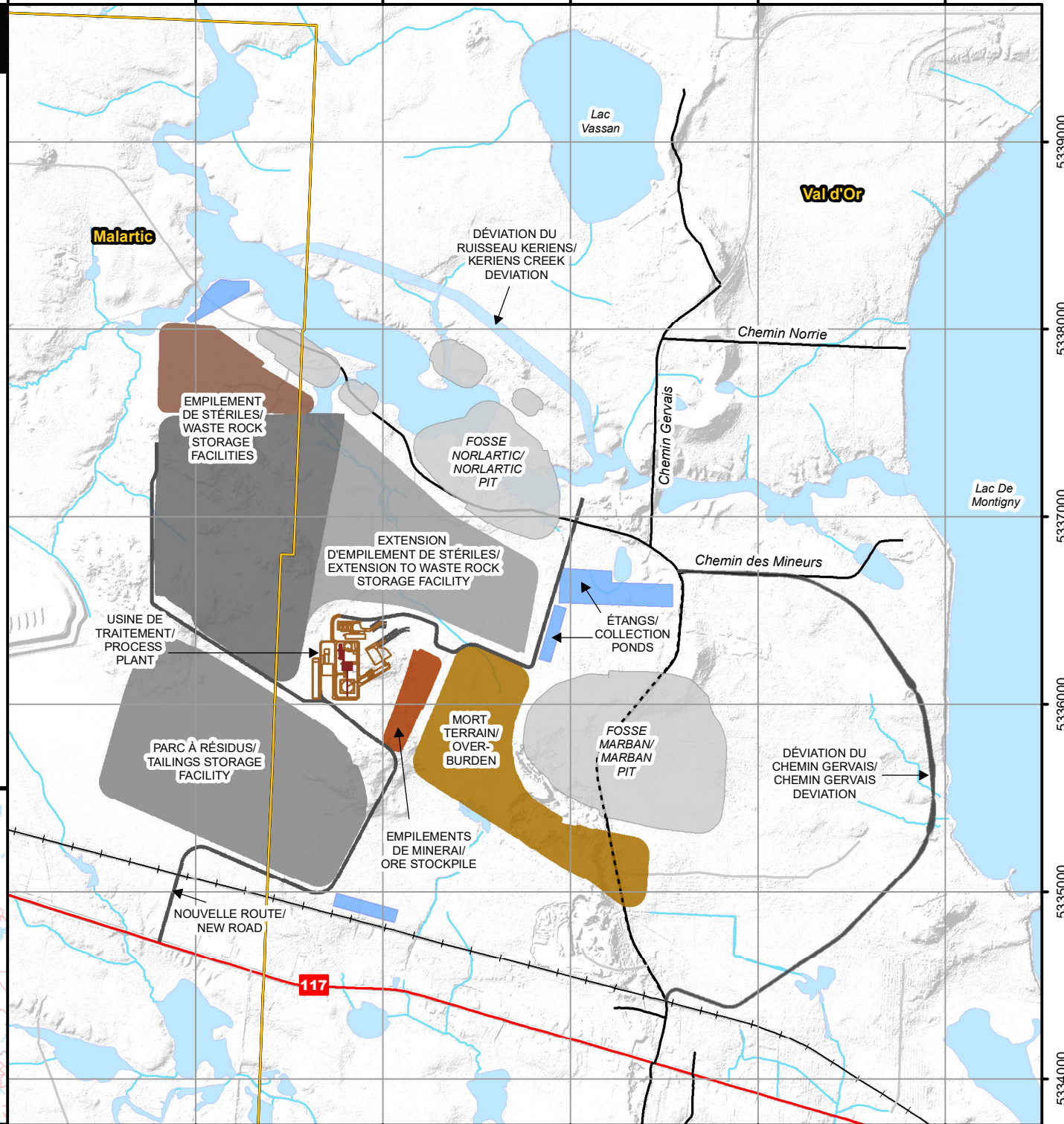
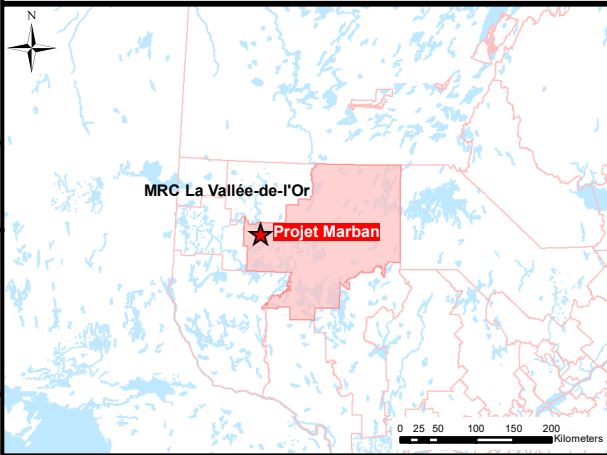
- Municipalité/ Municipality
- Chemin de fer/ Railroad



Réalisation par/ Drawn by:

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Date: 2022-11-18



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12 POTENTIAL ALTERNATIVES

The project description presented in Section 9 is based on an analysis of the different possible options and the alternatives that have been identified as preferable. In future studies, a more detailed analysis of the optimization of these alternatives will be conducted (including evaluation of best available technologies for various project components).

In addition, O3 Mining is examining the possibility of processing the gold ore extracted at the Marban site in an existing processing plant.

Since the project presented is the exploitation of a gold deposit, there is no alternative to the project. The only way to realize the project is through the implementation of a mine.

PART C – LOCATION INFORMATION AND CONTEXT

13 DESCRIPTION OF THE PROPOSED LOCATION

The project is located in the Abitibi-Témiscamingue administrative region, approximately 15 km northwest of Val-d'Or, in the province of Quebec.

The property is located on lots of the renovated cadastre of Quebec owned by the City of Val-d'Or, private companies, individuals and crown land. Some private and corporate lots are constructed.

No residences are present to the west and north of the project. About thirty residences are located to the east and northeast of the project. In these areas, the closest residence to the project is just over one kilometer away. To the south of the project, the closest residence to the project is approximately one kilometer away.

In addition to the residences on the periphery of the project, some lots owned by private companies, individuals and the City of Val-d'Or will have to be purchased. O3 Mining has already begun discussions with the owners of these lots for the purchase and relocation, if necessary.

The project site is located within the traditional territory of the Algonquin Anishinabeg Nation (Anicinabek). The Indigenous communities closest to the project site are the following:

- Conseil de la Première Nation Abitibiwinni (Pikogan) (52 km);
- Nation Anishnabe du Lac-Simon (Lac-Simon) (50 km);
- Communauté anicinape de Kitcisakik (Kitcisakik) (84 km); et
- Long Point First Nation (Winneway) (76 km).

No reserve lands are located in the project area. The project area is, however, located on lands that are subject to a comprehensive land claim agreement or self-government agreement. To date, discussions with indigenous groups and field observations indicate that the project site is not being used by these groups for traditional activities.

14 SUMMARY DESCRIPTION OF THE BIOLOGICAL AND PHYSICAL ENVIRONMENT

The Marban Project property is located in northwestern Quebec on the Canadian Shield. The average elevation of the property is approximately 300 metres. The property is relatively flat, with local relief of 15 to 30 m.

The regional climate is continental. The project is located in the northern temperate vegetation zone. Forested wetlands and open wetlands are present. Wetlands also occupy a large portion of the proposed site and are located in relatively flat areas and along streams.

The project area is primarily located in the Keriens Creek watershed, which drains into the northeastern portion of Lake De Montigny, which borders the eastern boundary of the Marban Project property.

At the study site, water level readings taken in December 2021 show that groundwater depths range from the surface to 7.7 m deep.

One special-status plant species, Ostrich fern (*Matteuccia struthiopteris* var. *pensylvanica*), was observed in the study area. This species is designated as vulnerable to removal.

Seven avian species at risk were observed in the study area: Bald Eagle (*Haliaeetus leucocephalus*), Evening Grosbeak (*Coccothraustes vespertinus*), Rusty Blackbird (*Euphagus carolinus*), Bank Swallow (*Riparia riparia*), Barn Swallow (*Hirundo rustica*), Common Nighthawk (*Chordeiles minor*), and Canada Warbler (*Wilsonia canadensis*). Other species at risk that could potentially be present, as preferential habitats are found in the study area, are the Eastern Whip-poor-will (*Caprimulgus vociferous*), Bobolink (*Dolichonyx oryzivorus*) Short-eared Owl (*Asio flammeus*), Olive-sided Flycatcher (*Contopus cooperi*), Eastern Wood Pewee (*Contopus virens*), Wood Thrush (*Hylocichla mustelina*) and Eastern Meadowlark (*Sturnella magna*).

All but one of the bat species confirmed to date have a precarious status, either provincially or federally. The Hoary Bat (*Lasiurus cinereus*), the Eastern Red Bat (*Lasiurus borealis*) and the Silver-haired Bat (*Lasionycteris noctivagans*) are likely to be designated threatened or vulnerable in Quebec. The Little Brown Bat (*Myotis lucifugus*) and the Northern Long-eared Bat (*Myotis septentrionalis*) are listed as endangered in Canada since 2014.

The presence of the Snapping Turtle (*Chelydra serpentina*) has been confirmed in the study area. This species has been listed as a species of special concern in Canada since 2011. Signs of turtle nesting were also reported. The home range of the Smooth Greensnake (*Opheodrys vernalis*) does not cover the study area. However, a few sightings have been made within 25-30 km of the study area according to the Ministère des Forêts, de la Faune et des Parcs (MFFP). This snake was not observed during the field work. It is likely to be designated as threatened or vulnerable in Quebec. Two species of salamanders were targeted because of the availability of habitat even though their home range does not cover the study area. The Four-toed Salamander (*Hemidactylium scutatum*) and the Northern Dusky Salamander (*Desmognathus fuscus*) are likely to be designated as threatened or vulnerable in Quebec. As mentioned previously, neither of these two species was found.

The Marban Project is located in the critical habitat of the Val-d'Or Woodland Caribou, as identified in the federal recovery strategy for the boreal population of woodland caribou in Canada. However, the provincial protected areas for caribou do not cover the Marban site.

15 SUMMARY DESCRIPTION OF THE HEALTH, SOCIAL AND ECONOMIC CONTEXT

The Marban Project is located in the RCM of La Vallée-de-l'Or. The project covers the territory of two municipalities, Val-d'Or and Malartic.

According to Statistics Canada census data, the population of the RCM of La Vallée-de-l'Or was nearly 45,000 in 2021. Val-d'Or is one of the largest communities in the region and has all major services, including an airport with regular flights to Montreal. Val-d'Or is a major service center for the mining and forestry industries.

On the Marban Project site, there are leases between the government and individuals for recreational hunting. However, there are no summary shelter (hunting camp) or cottage (cabin) leases issued by the MRC de La Vallée-de-l'Or on the project site. There are also no traplines with exclusive rights.

No archaeological sites listed by the Ministère de la Culture et des Communications, the planning and development plan of the RCM of La Vallée-de-l'Or and the Inventory of Archaeological Sites in Quebec are located in the project area.

As previously indicated, the project site is located within the traditional territory of the Algonquin Anishinabeg Nation (Anicinabek). Four Indigenous communities are located within 100 km of the project site. No reserve lands are located in the project area. However, the project area is located on lands that are subject to a comprehensive land claim agreement or self-government agreement.

A study produced by a consultant in 2020 at the request of O3 Mining summarizes the economic and social statistics for Quebec, the Abitibi Témiscamingue region, the RCM of the Vallée-de-l'Or, the City of Val-d'Or and the four indigenous communities with land claims that include the project site, namely the Nation Anishnabe du Lac-Simon (Lac-Simon), the Communauté anicinape de Kitcisakik (Kitcisakik), the Conseil de la Première Nation Abitibiwinni (Pikogan) and Long Point First Nation (Winneway). This study provides a better understanding of the main issues specific to these communities (young demographics, lower housing conditions, lower levels of education, lower rates of employment, lower median income, negative economic vitality index, and more frequent health problems).

The development of relationships with the various communities will allow us to learn more about their specific problems and to know the priority issues. The acquisition of this knowledge will allow the development of joint projects with the communities that will meet their needs. O3 Mining may include data on other communities that may be targeted in the next stages of the project.

PART D – FEDERAL, PROVINCIAL, TERRITORIAL, INDIGENOUS AND MUNICIPAL INVOLVEMENT AND EFFECTS

16 FINANCIAL SUPPORT

O3 Mining is examining possible sources of financing for the Marban Project, including the participation of a federal or provincial authority.

17 FEDERAL LAND

No federal land is located in the Marban Project area.

18 JURISDICTIONS THAT HAVE POWERS, DUTIES OR FUNCTIONS IN RELATION TO AN ASSESSMENT OF THE PROJECT'S ENVIRONMENTAL EFFECTS

The Marban Project is subject to federal and provincial environmental regulations.

Following the environmental assessment process, O3 Mining will need to obtain a series of authorizations from the Government of Canada and the Government of Quebec for the construction and operation of the project.

Permits for the construction of the buildings will also have to be obtained at the municipal level.

PART E – POTENTIAL EFFECTS OF THE PROJECT

19 POTENTIAL EFFECTS ON THE COMPONENTS OF THE ENVIRONMENT

The Marban Project activities could have effects on the environment (Table 1). Some of the potential changes relate to components of the environment under legislative authority of Parliament, namely:

- fish and fish habitat as defined in subsection 2(1) of the Fisheries Act;
- aquatic species, as defined in subsection 2(1) of the Species at Risk Act; and
- migratory birds, as defined in subsection 2(1) of the Migratory Birds Convention Act, 1994.

Table 1: Key potential changes to environmental components

Environmental components	Project phase	Source of potential effect	Potential change
Fish, fish habitat and aquatic species at risk (wild fish species)	Construction	<ul style="list-style-type: none"> – Site preparation (deforestation, stripping, excavation, earthworks, blasting, watercourse detour) – Installation of temporary and permanent infrastructures (foundations, construction of buildings and access roads) – Transportation and traffic – Use and maintenance of equipment 	<ul style="list-style-type: none"> – Disruption, degradation and loss of fish and benthic habitat – Alteration of surface water quality (suspended solids, accidental spills) – Modification of the natural flow pattern of surface water
	Operation	<ul style="list-style-type: none"> – Management of ore, tailings and waste rock – Water management and treatment – Presence of mining infrastructures – Transportation and traffic – Use and maintenance of equipment 	<ul style="list-style-type: none"> – Disruption, degradation and loss of fish and benthic habitat – Alteration of surface water quality (suspended solids, accidental spills) – Modification of the natural flow pattern of surface water
	Closure	<ul style="list-style-type: none"> – Dismantling of equipment and infrastructure – Rehabilitation and restoration of the site – Transportation and circulation 	<ul style="list-style-type: none"> – Disruption of fish and benthic habitat – Improvement of surface water quality
Aquatic species at risk (marine plant)	Construction	<ul style="list-style-type: none"> – No effect is anticipated for this aspect 	<ul style="list-style-type: none"> – Not applicable
	Operation		
	Closure		

Table 1: Key potential changes to environmental components (cont.)

Environmental components	Project phase	Source of potential effect	Potential change
Migratory birds	Construction	<ul style="list-style-type: none"> – Installation and presence of the site – Site preparation (deforestation, stripping, excavation, earthworks, blasting, watercourse detour) – Installation of temporary and permanent infrastructures (foundations, construction of buildings and access roads) – Transportation and traffic – Use and maintenance of equipment 	<ul style="list-style-type: none"> – Loss and fragmentation of habitats – Disturbance of populations – Risk of collisions or mortality – Modification of the quality of the habitat in case of spill
	Operation	<ul style="list-style-type: none"> – Mine Operations – Management of ore, tailings and waste rock – Water management and treatment – Presence of mining infrastructure – Transportation and traffic – Use and maintenance of equipment 	<ul style="list-style-type: none"> – Disturbance of populations – Risk of collisions or mortality – Alteration of the quality of habitats
	Closure	<ul style="list-style-type: none"> – Installation and presence of the site – Dismantling of equipment and infrastructure – Rehabilitation and restoration of the site – Transportation and traffic 	<ul style="list-style-type: none"> – Disturbance of populations – Risk of collisions or mortality – Improvement of habitat quality

20 POTENTIAL EFFECTS ON FEDERAL LANDS, IN ANOTHER PROVINCE OR OUTSIDE CANADA

No impact of the Marban Project is apprehended on the federal land, outside the province of Quebec or outside Canada.

21 POTENTIAL EFFECTS ON INDIGENOUS PEOPLES

The Marban Project activities may have an impact on Indigenous peoples. Table 2 provides a preliminary list of potential effects on the current use of lands and resources for traditional purposes and potential impacts on their natural and cultural heritage. This list will be updated as consultations with Indigenous peoples continue. To date, discussions and field observations show that the project site is not being used by Indigenous peoples in the area.

Table 2: Key potential effects on Indigenous peoples

Features	Project phase	Source of potential effect	Potential effect
Current use of land and resources for traditional purposes	Construction	<ul style="list-style-type: none"> – Installation and presence of the site – Site preparation (deforestation, stripping, excavation, earthworks, blasting) – Installation of temporary and permanent infrastructures (foundations, construction of buildings and access roads) – Transportation and traffic 	<ul style="list-style-type: none"> – Loss of places and practice of traditional activities, if applicable – Loss of temporary shelter (hunting camp) – Temporary disruption of traditional activities, if applicable – Increased heavy vehicle and worker traffic on local and regional roads and increased risk of road incidents
	Operation	<ul style="list-style-type: none"> – Management of ore, tailings and waste rock – Water management and treatment – Presence of mining infrastructures – Transportation and traffic 	<ul style="list-style-type: none"> – Permanent impacts on community land use (change in land use) – Increased heavy vehicle and worker traffic on local and regional roads and increased risk of traffic incidents
	Closure	<ul style="list-style-type: none"> – Installation and presence of the site – Dismantling of equipment and infrastructure – Rehabilitation and restoration of the site – Transportation and traffic 	<ul style="list-style-type: none"> – Temporary disruption of traditional activities, if applicable – Reuse and reappropriation of the mine site for traditional activities, if applicable
Natural and cultural heritage	Construction	<ul style="list-style-type: none"> – Site preparation (deforestation, stripping, excavation, earthworks, blasting) – Installation of temporary and permanent infrastructures (foundations, construction of buildings and access roads) 	<ul style="list-style-type: none"> – Uncovering of archaeological remains – Potential disturbance of sites and places of cultural, heritage and archaeological interest, if applicable
	Operation		– No potential impacts on this feature
	Closure		– No potential impacts on this feature

22 POTENTIAL EFFECTS ON TO THE HEALTH, SOCIAL OR ECONOMIC CONDITIONS OF INDIGENOUS PEOPLES

Marban Project activities could also result in changes to the health, social, or economic conditions of Indigenous peoples. The direct impacts of the proposed mine activities, such as noise and dust emissions, will be non-existent on Indigenous peoples since the closest community to the project is Lac-Simon, which is more than 50 km away. Potential impacts on surface and groundwater will also be very low due to the remoteness and the direction of water flow (watershed configuration). Therefore, the anticipated health and social impacts are related to the anticipated economic impacts such as employment and entrepreneurial opportunities. The development of joint projects between the company and the communities will also be an opportunity to contribute positively to the different issues of the communities.

Table 3 provides a preliminary list of these potential changes. It will need to be updated following consultations with Indigenous peoples.

Table 3: Key potential effects in the health, social or economic conditions of Indigenous peoples

Features	Project phase	Source of potential effect	Potential effect
Economic conditions	Construction	<ul style="list-style-type: none"> – Purchase of goods, services and materials – Site preparation (clearing, excavation, etc.) – Construction of mining infrastructures – Labour 	<ul style="list-style-type: none"> – Business opportunity for regional companies – Tax revenues – Creation or maintenance of jobs in the region
	Operation	<ul style="list-style-type: none"> – Purchase of goods, services and materials – Labour 	<ul style="list-style-type: none"> – Business opportunity for regional companies – Tax revenues – Creation or maintenance of jobs in the region
	Closure	<ul style="list-style-type: none"> – Dismantling of infrastructure – Rehabilitation and restoration of the site – Labour 	<ul style="list-style-type: none"> – Decreased demand for goods and services – Gradual downsizing of the mine
Social conditions	Construction	<ul style="list-style-type: none"> – Installation and presence of the site – Site preparation (deforestation, stripping, excavation, earthworks, blasting) – Installation of temporary and permanent infrastructures (foundations, construction of buildings and access roads) – Transportation and traffic – Purchase of goods, services and materials – Labour 	<ul style="list-style-type: none"> – Change in hunting habits for land users – Change in family dynamics – Change in quality of life – Potential for tension between Indigenous peoples and the public
	Operation	<ul style="list-style-type: none"> – Mining of the deposit – Ore processing – Circulation and maintenance of machinery – Maintenance of infrastructures and equipment 	<ul style="list-style-type: none"> – Change in hunting habits for land users – Change in family dynamics – Change in quality of life – Potential for tension between Indigenous peoples and the public
	Closure	<ul style="list-style-type: none"> – Dismantling of infrastructure – Rehabilitation and restoration of the site – Labour 	<ul style="list-style-type: none"> – Changement des habitudes de chasse pour les utilisateurs du territoire – Modification de la dynamique familiale – Changement au niveau de la qualité de vie

Table 3: Key potential effects in the health, social or economic conditions of Indigenous peoples (cont.)

Features	Project phase	Source of potential effect	Potential effect
Health conditions	Construction	<ul style="list-style-type: none"> – Installation and presence of the site – Site preparation (deforestation, stripping, excavation, earthworks, blasting) – Installation of temporary and permanent infrastructures (foundations, construction of buildings and access roads) – Construction of mining infrastructures – Transportation and traffic – Purchase of goods, services and materials – Labour 	<ul style="list-style-type: none"> – Concerns about human health risks (dust, water and groundwater quality, noise, stress, etc.) – Decreased sense of safety for road users and increased risk of accidents – Difficulty in integrating Indigenous workers – Risk of tension between the Indigenous peoples and the population
	Operation	<ul style="list-style-type: none"> – Mine Operations – Management of ore, tailings and waste rock – Water management and treatment – Management of hazardous materials and residual materials (hazardous and domestic) – Presence of mining infrastructures – Transportation and traffic – Purchase of goods, services and materials – Labour 	<ul style="list-style-type: none"> – Concerns about human health risks (dust, water and groundwater quality, noise, stress, etc.) – Decreased sense of safety for road users and increased risk of accidents – Difficulty in integrating Indigenous workers – Risk of tension between the Indigenous peoples and the population
	Closure	<ul style="list-style-type: none"> – Dismantling of equipment and infrastructure – Flooding of the mine – Rehabilitation and restoration of the site – Management of hazardous materials and residual materials (hazardous, domestic and construction) 	<ul style="list-style-type: none"> – Concerns about human health risks (dust, water and groundwater quality, noise, stress, etc.) – Reuse and reappropriation of the mine site (feeling of reclaiming the land)

23 GREENHOUSE GAS EMISSIONS

The GHG that will potentially be emitted by the Marban Project are:

- carbon dioxide (CO₂);
- methane (CH₄);
- nitrous oxide (N₂O).

These GHG will be emitted during all phases of the project (construction, operation, and closure). As an indication, the project could emit 55,924 tCO₂eq during the construction period (two years). It is currently estimated that the project could emit approximately 59,025 tCO₂eq of GHGs on an annual basis during the operation phase.

Quantification of GHG emissions from the project will be detailed in the environmental impact assessment.

24 WASTE AND EMISSIONS

Marban Project activities will generate solid waste, air emissions, and liquid discharges.

With respect to solid waste, O3 Mining will manage residual materials and hazardous waste according to the laws and regulations in effect. Master contracts will be signed with specialized companies in the region for the management of these wastes.

Air emissions will occur during the construction and operation of the project:

- dust emissions and associated elements;
- air emissions from machinery and equipment used.

An air quality management and dust control plan will be established to control these air emissions.

Project activities will generate mine wastewater. It will be reused as much as possible in the operations. Water treatment may be required to ensure that the discharge of mining effluent complies with current regulations and with the requirements that will be defined by the Ministère de l'Environnement et de la Lutte contre les changements climatiques (MELCC) of Quebec during the authorization process of the project

Finally, appropriate work practices and an emergency response plan will be put in place to prevent accidental spills. In the event of an accidental spill, contaminated soils will be recovered and managed in accordance with current regulations.

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