

UPPER BEAVER GOLD PROJECT INITIAL PROJECT DESCRIPTION PART F: PLAIN LANGUAGE SUMMARY





August 2021



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1. INTRODUCTION

This document is a plain language summary of an Initial Project Description that was prepared for the Upper Beaver Gold project.

Agnico Eagle Mines, Limited (Agnico Eagle) is a senior gold mining company that has produced precious metals since 1957. It operates mines in Canada, in Finland and in Mexico, including in the Abitibi Region in Québec and has employs more than 11,000 people around the world. Agnico Eagle is committed to creating value for our shareholders while operating in a safe, and socially and environmentally responsible manner, as we contribute to the prosperity of our people, their families and the communities in which we operate. Further information is available at: <u>https://agnicoeagle.com</u>.

Agnico Eagle is planning to develop, operate and eventually reclaim an underground and open pit, gold and copper mine at the Upper Beaver Gold project site, located near Kirkland Lake, Ontario (see Figure S.1).

The Upper Beaver Gold project site was the location of mining between 1912 and 1971. Agnico Eagle currently has environmental applications in progress with provincial ministries for an advanced exploration program to collect rock from the underground areas, starting in 2022. In order to reduce environmental impacts, the new mine will expand on the original underground mine and other facilities being developed for the proposed advanced exploration program, where practical.



Argonaut Mine

Argonaut Mine, 1926







2. GENERAL INFORMATION

2.1 Project Name, Sector and Location

| Project Name | Upper Beaver Gold project |
|--------------|-------------------------------------------------------------------|
| Sector | Mines and minerals - gold and copper mine |
| Location | 19 kilometres (km) east of Kirkland Lake, Ontario; see Figure S.1 |

2.2 Proponent

| Proponent Agnico Eagle Mines, Limited (Agnico Eagle) | | | | | |
|------------------------------------------------------|--------------------------------------------------------------------|--|--|--|--|
| | https://agnicoeagle.com | | | | |
| Corporate Contact | Daniel Paré, Vice-President, Operations - Eastern Canada | | | | |
| | Agnico Eagle Mines, Limited | | | | |
| | 93, Arseneault St., Suite 202 | | | | |
| | Val d'Or, Québec, Canada J9P 0E9 | | | | |
| | T: (819) 759-3700, 4102920 M: (819) 442-3744 | | | | |
| | Daniel.Pare@agnicoeagle.com | | | | |
| Proponent Contact | Sarah Morin, Sustainable Development and Environmental Coordinator | | | | |
| | Agnico Eagle Mines, Limited | | | | |
| | 10 200, de Preissac Rd. | | | | |
| | Rouyn-Noranda, Québec, Canada J0Y 1C0 | | | | |
| | T: (819) 759-3700 M: (819) 277-8550 | | | | |
| | Sarah.Morin@agnicoeagle.com | | | | |
| Supporting Consultant | Sheila Daniel, Principal Geoscientist | | | | |
| | Wood Environment & Infrastructure Americas | | | | |
| | 2020 Winston Park Drive, Suite 600 | | | | |
| | Oakville, Ontario, Canada L6H 6X7 | | | | |
| | M: (416) 524-5928 | | | | |
| | Sheila.Daniel@woodplc.com | | | | |

2.3 Summary of Engagement with Stakeholders

Potentially interested stakeholders were identified based on whether they were close to the project (living nearby or by land ownership) or have demonstrated past or current interest in similar projects or developments in the region. The following stakeholders were engaged or informed prior to and during preparation of the Initial Project Description:

- Beaverhouse Lake cottagers and surface rights owners;
- Township of Gauthier;
- Town of Kirkland Lake;
- Township of Larder Lake;
- Citizens from the Kirkland Lake area;
- Kirkland Lake District Chamber of Commerce;
- Kirkland District Game and Fish Protection Association;
- Kirkland and District Community Development Corporation;
- Stella-Jones and Eacom Timber Company;





- Ministry of Northern Development, Mines, Natural Resources and Forestry (previously Ministry of Energy, Northern Development and Mines);
- Ministry of Environment, Conservation and Parks;
- Impact Assessment Agency.

The locations of the community stakeholders listed are shown in Figure S.2.

Key issues raised by stakeholders for the Upper Beaver Gold project to date include:

- Potential impacts on the cottagers' quality of life;
- Possibility of the expropriation of surrounding lands;
- Maintaining access to the land and to Beaverhouse Lake;
- Noise generated by site activities;
- Road safety;
- Potential impact on water quality and water levels;
- Maximization of socioeconomic impacts;
- Dust generated by site activities;
- Dewatering of York Lake.

It is Agnico Eagle's intent to continue to engage with these and other identified stakeholders as the project progresses. Activities planned in 2021 include: meetings with neighbours, presentations to local municipalities, virtual public information session, other project update meetings, information sharing by mail and email, newsletters, dedicated website (<u>https://upperbeaver.agnicoeagle.com/</u>) and other tools. A plan for future engagement will be developed at the end of 2021 if an Impact Assessment is required.

2.4 Summary of Engagement with Indigenous Nations

Agnico Eagle will work with the local Indigenous Nations to establish a mutually beneficial, cooperative and productive relationship. Agnico Eagle used the following criteria to identify the potentially interested Indigenous Nations for the Upper Beaver Gold project:

- Communities previously identified by the Northern Development, Mines, Natural Resources and Forestry to be consulted for exploration activities;
- Closeness to the project site;
- Past or current interest in similar projects or developments in the region;
- Historic and current land use where new facilities or work are proposed;
- Potential to be affected by the project.







The following list shows Indigenous Nations that may be affected by the project with whom Agnico Eagle has engaged with prior to and during preparation of this Initial Project Description:

- Beaverhouse First Nation (BHFN);
- Matachewan First Nation (MFN);
- Wahgoshig First Nation (WFN);
- Timiskaming First Nation (TFN);
- Métis Nation of Ontario (Region 3; MNO).

Locations of the related First Nation Reserves / communities are shown in Figure S.2.

Key issues raised to date by Indigenous Nations related or potentially applicable to the Upper Beaver Gold project include:

- Maintenance of access to sites of interest, such as the Beaverhouse Lake boat launch, the traditional trail and access to Beaverhouse Lake;
- Potential impacts (direct and indirect) to traditional sites;
- Consider Indigenous Knowledge during Impact Assessment and respect the confidentiality of Indigenous Knowledge and Land Use information;
- Impact on the well-being of current residents of community and region;
- Potential sites of spiritual, sentimental, traditional, cultural, and heritage value and interest for Indigenous groups in the area of the project;
- Potential impacts on wildlife, and including Moose and furbearers, in the mitigation measures;
- Potential impacts on the surface water and groundwater quality;
- Potential impacts on fish habitat and fish populations in the project's mitigation measures;
- Participation in baseline studies (i.e., wildlife, aquatics, etc.);
- Enhancement of positive socio-economic effects while minimizing adverse socio-economic effects.

Main topics and objectives for the Indigenous engagement activities planned in 2021 are:

- To involve Indigenous Nations in the baseline studies process depending on interests and capacities;
- To validate and adjust, if needed, the engagement activities planned in 2021;
- To collaborate with the Indigenous Nations to document Indigenous Knowledge;
- Information sharing by mail, email, newsletters and using other tools.

Agnico Eagle intends to engage with Indigenous Nations as the project continues to progress. A plan for future engagement will be developed at the end of 2021 if an Impact Assessment is required. Agnico Eagle is committed to ongoing engagement with Indigenous Nations respects and reflects the culture, protocols and values, as well as traditional land use practices of Indigenous Nations. Agnico Eagle understands that the COVID-19 pandemic has put a strain on meaningful engagement with Indigenous Nations. Agnico Eagle will adapt methods of engagement and will host face-to-face meetings with Indigenous Nations when they are open to meeting under the proper health protocols.





2.5 Regional Studies / Assessments and Strategic Assessments

There are no regional studies or Regional Assessments close to the location of the proposed project. The Initial Project Description fully considered the Strategic Assessment of Climate Change developed by Environment and Climate Change Canada.





3. **PROJECT INFORMATION**

3.1 **Purpose and Need for the Project, and Potential Benefits**

The purpose of the Upper Beaver Gold project is to produce gold doré bars and copper concentrate for sale, by constructing and operating a mine, processing plant and associated facilities (the Upper Beaver Gold project). Doré bars and copper concentrate are semi-pure products of gold and silver, and copper that will be trucked off site for further purification.

Gold and copper are metals with many applications, including:

- Building construction, including wiring (copper);
- Art, jewellery, medals and tableware (copper and gold);
- Computers and electronics (copper and gold);
- Medical tools and devices (copper and gold);
- As a monetary exchange medium or coins (gold and copper).

The demand for copper and gold is anticipated to grow in coming years.

The corporate strategy of Agnico Eagle is to maintain steady production across all of its mines. The Upper Beaver Gold project is intended to help meet this corporate need and provide a return on investment to Agnico Eagle shareholders. On a broader scale, metal mining is needed because it provides significant economic benefits to Ontario and Canada, and provides a large number of direct jobs and indirect employment.

The Upper Beaver Gold project is expected to have a positive effect on the local and regional economy. During all consultations to date, Agnico Eagle has received questions about jobs, business and training opportunities. Up to approximately 400 to 600 permanent jobs are expected, if the mine is approved to proceed, as well as a large number of contracts for qualified contractors in the region. The project is not expected to result in a large change in regional or local population, but may contribute growth for communities within commuting distance from the site.

3.2 Applicable Physical Activities Regulation Conditions

The following conditions of the Physical Activities Regulations (SOR/2019-285) of the *Impact Assessment Act* may apply to the Upper Beaver Gold project based on the current preliminary project design:

18 The construction, operation, decommissioning and abandonment of one of the following:
(c) a new metal mine, other than a rare earth element mine, placer mine or uranium mine, with an ore production capacity of 5,000 tonnes per day or more
(d) a new metal mill, other than a uranium mill, with an ore input capacity of 5,000 tonnes per day or more.

60 The construction, operation, decommissioning and abandonment of a new structure for the diversion of 10,000,000 cubic metres per year or more of water from a natural water body into another natural water body.





As required by the Regulation, Agnico Eagle is therefore submitting an Initial Project Description so that the Impact Assessment Agency can determine if an Impact Assessment is required.

3.3 Activities, Infrastructure, Structures and Physical Works

The proposed Upper Beaver Gold project will expand upon and/or modify historical underground workings, as well as facilities being developed as part of the proposed advanced exploration program, where practical, in order to mitigate and/or reduce environmental impacts. A preliminary site plan is provided in Figure S.3 and a cross section view of the mine development is shown in Figure S.4.

The Upper Beaver Gold project site has a long mineral exploration and development history. The main periods of mining were from 1912 to 1935 (La Mine d'Or Huronia and Argonaut Gold Mines), and from 1965 to 1971 (Upper Beaver Gold Mines). These mines have some historic liabilities, including openings to the underground, building foundations and mine wastes (rock and tailings). By establishing the open pit, Agnico Eagle will mitigate some of these historic liabilities, including stability issues from historic underground mine development, and historic tailings and mine rock in York Lake.

Agnico Eagle has requested approvals from the provincial ministries for an advanced exploration program at the Upper Beaver Gold project site that could be started in 2022. The advanced exploration program will include:

- Underground exploration development, including a ramp and surface opening (portal), shaft to underground and headframe / hoist house, underground exploration workings and ventilation openings (raises from underground to surface);
- Office, change room, maintenance shop, service building, explosives magazine and gatehouse (prefabricated steel, modular or fabric buildings);
- Stockpiles of overburden (250,000 tonnes), mine rock (2,000,000 tonnes) and ore (60,000 tonnes);
- Fresh water pumping station and pipeline;
- Sewage treatment plant;
- Ditching, pond(s), water treatment plant and effluent discharge pipeline;
- Diesel and propane fuel tanks;
- Laydown areas, parking and on-site roads;
- Security fence;
- Refurbishment of a 44 kilovolt power line connecting to a local power distribution network and emergency generator;
- Improvements to the existing site access road (Beaverhouse Road), including culverts, if needed.

Once the advanced exploration program is approved, ore samples (less than 60,000 tonnes) can be taken from the underground workings to be trucked off site for testing to validate various parameters, to support the final project design and get internal approval to go ahead with the Upper Beaver Gold project. Workers for the advanced exploration project, like for the future mine, will commute to the site daily and live in local communities.









3.3.1 Mine Facilities

The major mine facilities for the Upper Beaver Gold project are summarized in Table S.1 and described in comparison to the advanced exploration program facilities.

| Table S.1: Preliminary List of Mine Facilities and G | Comparison to Advanced Exploration Facilities |
|------------------------------------------------------|-----------------------------------------------|
|------------------------------------------------------|-----------------------------------------------|

| Proposed Mine Facility | Description |
|---------------------------------------------------------------|------------------------------------------------------------------------|
| Underground mine | |
| Shaft and hoist room | Minor modifications to the Advanced Exploration Program (AEP) facility |
| Surface portal and ramp | Use of the AEP portal; ramp will be extended at depth |
| Underground workings | Expansion of historic and AEP underground workings |
| Ventilation intake and exhaust raises | Use of the AEP raises and new intake (1) and exhaust (1) raises |
| Compressor building | Minor modifications to AEP facility |
| Mine dry (change room) | New building |
| Open pit | |
| – Open pit | New open pit partly at the existing York Lake location |
| Misema River diversion | |
| Diversion channels | Routing Misema River around the open pit, two new channels proposed |
| - Diversion dykes | Routing Misema River around the open pit, four new dykes proposed |
| Stockpiles | |
| – Mine rock | Expansion to the AEP stockpile |
| – Overburden | New overburden stockpile |
| – Organic soil | New organic soil stockpile |
| - On-site (uncrushed) ore | New ore stockpile |
| Low grade ore | New low grade ore stockpile |
| - Off-site ore | Potential new stockpile for ore trucked to site from other mine(s) |
| Processing plant area | |
| Crushing facilities | New facility; primary and secondary crushers with conveyors |
| Crushed ore dome | New facility |
| Mill (processing facility) | New facility |
| Paste / backfill plant | New facility located in mill |
| – Office | New facility |
| – Laboratory | New facility |
| – Electrical / mechanical shop | New facility |
| Tailings | |
| Tailings storage facility | New facility |
| Other primary buildings / facilities | |
| Trade / maintenance shop | AEP facilities may be used or expanded upon, if needed, or new |
| Warehouse / storage building(s) | facilities may be developed |
| Laydown, parking and yard areas | Expansion to AEP areas |
| Contractor office / area | New facility |





| | Proposed Mine Facility | Description |
|----|--------------------------------------|--------------------------------------------------------------------|
| - | Explosive storage – surface | New facility |
| - | Explosive storage – underground | Potential new facility or re-use of the AEP facility |
| Wa | ater management | |
| - | Primary retention pond | Potential expansion of AEP facility |
| - | Ditching and water collection | Two or more new ponds with ditching and related pumps and |
| | ponds | pipelines |
| - | Water management / treatment | Expansion of the AEP facility or a new facility |
| | plant | |
| - | Fresh water pump house | Potential expansion of AEP facility on Beaverhouse Lake |
| - | Potable water treatment plant | Potential new facility or re-use of the AEP facility |
| - | Effluent discharge pipeline, | Potential use or expansion of the AEP effluent pipeline, |
| | potentially with diffuser at outfall | anticipated to discharge to the Misema River downstream of York |
| | | Lake |
| Wa | aste management | |
| - | Temporary solid waste storage | Potential expansion of AEP facility |
| - | Domestic sewage treatment | Potential expansion of AEP facility |
| - | Demolition (non-hazardous) | Potential new facility development for the closure phase of the |
| | landfill | mine |
| Ро | wer supply | |
| - | Emergency generator(s) | Potential expansion of AEP facility |
| - | On-site power distribution | Expansion of the AEP power distribution system on site |
| Fu | el and chemicals | |
| - | Chemicals | Storage will be required for the chemicals used in ore processing |
| - | Propane tank farm | Potential expansion of AEP facility |
| - | Diesel fuel tanks | Potential expansion of AEP facility |
| Ot | her on-site infrastructure | |
| - | Security gatehouse / fencing | Expansion of AEP facility |
| - | Scale | New facility |
| - | On-site access / haul roads | Expansion of AEP facilities |
| - | Cottager / land users bypass | New facility |
| | road | |
| - | Other pipelines | Expansion of AEP facility |
| - | Core shack | New facility |
| Of | f-site infrastructure | |
| - | Extension of access road to site | Local re-routing at site of exiting road required |
| - | Refurbished 44 kV line | Continued use until transmission line available |
| - | 115 kV electrical substation | At regional grid connection |
| - | 115 kV transmission line | New line, connected to regional grid |
| - | Aggregate operation | Potential quarry to provide construction materials; location to be |
| | | determined |
| Fa | cilities Not Planned for the Mine | |
| - | Explosive manufacturing | No explosives manufacturing on site |
| - | Accommodations | No (workers will live in local communities and commute daily to |
| | | site) |





Underground Mining: The proposed underground mine will expand on the historical and advanced exploration underground workings. During mining, ore will be broken up by drilling and blasting, and will be brought to the surface either by trucking up the ramp or by means of the shaft. People will also access to the underground workings by means of the ramp, but primarily by shaft. Extracted ore from the underground mine will be transported to the surface for crushing and processing in an on-site plant. A portion of the rock that is not ore will be re-used to backfill the underground mine openings. Mine rock that cannot reasonably be re-used or kept underground will be brought to the surface and stored in a stockpile.

Open Pit Mining: Part of the ore to be mined and already mined historically is located less than 15 to 20 metres below York Lake. There is a concern that the sediments and rock between the lake and the ore might collapse into the mine. If that happened, it could directly affect worker safety and could cause the Misema River to flow into the underground mine. Through expert studies, it was determined that it would be best to divert the water flowing from the Misema River into the York Lake around the area, and remove the sediments and rock under the lake, as well as the ore by an open pit. This would also provide the opportunity to rehabilitate the historic tailings and mine rock located in and beside York Lake. The Misema River will be diverted around York Lake by means of diversion channels, with dykes placed, as needed, to retain the water level of Ava Lake. The conceptual design has four short dykes (approximately 30 to 75 metres in length) placed at the west end of Ava Lake and below York Lake, and two diversion channels (25 and 125 metres in length) joining Ava Lake directly to the Misema River downstream of York Lake (Figure S.3).

The open pit will be about 100 metres in depth and 300 metres in diameter, and will intersect York Lake. In order for the open pit to be developed, a channel will be created and dykes placed so that the Misema River can be diverted just around York Lake. The conceptual design has dykes placed at the west end of Ava Lake and below York Lake, and a channel joining Ava Lake directly to the Misema River downstream of York Lake. Once York Lake is isolated from the Misema River, fish in the lake will be transferred elsewhere in the Misema River system, and York Lake will be de-watered. When the mine eventually closes, the open pit may be refilled to create a larger lake at the current York Lake location.

Both the underground and open pit mine will operate continuously (24 hours per day, every day), yearround, except for periodic maintenance and similar operational disruptions. The pit will be in operation for only the first four or five years of operation. Based current information regarding the ore body, the overall life of the mine could extend 14 years or more.

Stockpiles: Ore, mine rock and overburden from mining, along with overburden stripped during general site development, will be stored in stockpiles on the surface. Preliminary storage capacities of the stockpiles are:

- Uncrushed ore stockpile: approximately 0.3 to 0.5 million tonnes;
- Mine rock stockpile: approximately 12 million tonnes;
- Overburden and organic soil stockpiles: approximately 2.5 million tonnes.

A low grade ore stockpile and potentially a temporary stockpile for off-site ore transported to the site for processing may also be created. Runoff from the stockpiles will be collected in ditches / ponds and will be re-used for ore processing, or treated to meet discharge criteria (if the criteria are not already met), and discharged to the environment.





Ore Processing: Ore from the ore stockpile will be crushed down to the size needed for processing in crushers and conveyed to a storage dome for temporary storage. Ore from the dome will be conveyed to the processing plant where the gold and copper will be extracted from the ore. The plant has been placed to avoid potential ore resources, and where geotechnical investigations indicate the presence of bedrock at or near the surface. Related exterior and interior tankage will be designed to ensure that any spillage is captured prior to release to the environment. Processing methods will entail several stages of conventional mineral processing, such as grinding, flotation and cyanidation. The processing plant has been designed to produce both doré bars and copper concentrate inside one building, using different equipment, chemicals and processes. These products will be periodically trucked to existing facilities offsite for additional purification / refining, likely about one to two trucks per day.

Tailings Storage: The main by-product by volume from processing ore in the plant is tailings. Tailings consist of ground rock and associated process water. Tailings will be treated in the plant to make sure that any cyanide content left from the gold extraction process are very low. Some of the tailings from the plant may be mixed into a paste and pumped underground to backfill some of the underground workings. Most of the tailings slurry will be filtered to create a drier material that will be trucked to a surface storage facility (tailings storage facility), where the tailings will be stacked into a controlled pile, potentially with a conveyor-like system and bulldozer(s). Ditching and ponds will collect runoff from the dry stack tailings facility. From the ponds, the runoff will be sent to an on-site treatment plant.

Other Buildings and Yard Areas: The preliminary site layout has been developed to re-use the advanced exploration program buildings and facilities, where practical (see Table 1), avoid areas of ore resources in order to minimize land disturbance, and to provide undisturbed setbacks from existing water courses, where practical. A tradeshop / maintenance will provide space for maintenance on heavy equipment. Wash bay(s) will be present in order that trucks and other equipment can be washed to allow effective maintenance and extend equipment life with wash water that has been captured and treated. A warehouse may also be established. An explosives storage area will also be developed on site. The location of any explosives-related facility on site will follow all federal regulatory guidance.

A network of access roads for smaller vehicle and haul roads for heavy equipment will be established within the site, as needed, to access project buildings and facilities using existing roads / roads proposed for the advanced exploration, and minimizing water crossings as reasonable. Three new water crossings are currently proposed for the Upper Beaver Gold project, likely as culverts, but potentially as bridges (Figure S.3). One or two existing water crossings may also require upgrading. Parking will also be provided as workers and suppliers will drive to the mine.

Domestic and Industrial Wastes: Domestic, special management and hazardous materials resulting from the construction and operation of the Upper Beaver Gold project will be shipped off-site to appropriate facilities for disposal. A demolition landfill may be established on the site for disposal of non-hazardous demolition waste created from closing the mine. Domestic sewage during the construction and operating phases will be treated by an approved method, such as in a sewage treatment plant, potentially as an expansion of the advanced exploration treatment system.

Water Management Facilities and Drainage Works: Ground water will flow naturally into the underground mine and open pit. The open pit will also collect runoff and direct precipitation. Agnico Eagle proposes to expand the water management system built for the advanced exploration program to





accommodate the operating mine. The water that is collected in the mine will be pumped to a water retention pond, where it will be treated. Precipitation and surface runoff that comes into contact with mine-related facilities will be collected in ditches / collection ponds and will also be pumped to the primary retention pond. Water in the retention pond will be treated, as needed, and excess water will be discharged to the environment. The precise discharge location has not as yet been determined, but is expected to be to the Misema River downstream from the Victoria Creek inflow to the Misema River. The final location will be selected with care to make sure that the receiving water course can receive this effluent and all related regulatory requirements are met, and could potentially be the same as for Advanced Exploration.

Additional fresh water will be required for ore processing and a fire water supply, and is expected to be pumped from Ava Lake. A potable water treatment plant could be constructed to treat water for use on site.

Access: There is an existing road that connects the site to Beaverhouse Road. It is expected that a portion of road on site will require re-routing around the open pit. A road extension is also expected to be developed for local cottagers and other land users so that local traffic can avoid the secure area of the mine development.

Power Supply: It is expected that a 115 kilovolt transmission line will be required to support the mine operations. If developed, it is expected that the transmission line would connect to the provincial electrical grid with a new substation approximately 6 km west of the site (Figure S.3). An emergency diesel-fired generator will also be present on the site.

Accommodation: No accommodations will be developed as part of the Upper Beaver Gold project. Agnico Eagle anticipates that workers will commute daily from existing communities / residences located within about an hour's drive in Ontario and Quebec.

Compensatory Aquatic Habitat: A plan for habitat compensation will be developed, which will be consulted upon and approved through a rigorous federal process, and when implemented, will mitigate effects to aquatic resources, including habitat loss, such as at York Lake.

Aggregate Operations: Aggregate will be required to construct the Upper Beaver Gold project. Future aggregate needs may be met by an on-site source developed during advanced exploration and re-use of mine rock, or other means. Agnico Eagle is planning a field investigation during Fall 2021 to assess a potential aggregate source in a fluvio-glacial system identified by a geomorphology study southeast of the site. Should the investigation be successful, an aggregate operation may be developed to support the mine at the best location within the system. The investigation and any future potential aggregate extraction will occur only on Crown land and subject to obtaining the necessary authorizations.

3.3.2 Preliminary List of Activities

Table S.2 provides a preliminary listing of activities associated with the construction, operation and decommissioning of the Upper Beaver Gold project.



Table S.2: Preliminary List of Activities of the Upper Beaver Gold Project

A) Construction Phase:

- Initiation and completion of engineering study(ies)
- Corporate decision to proceed
- Development / implementation of environmental protection and monitoring plan(s) for construction
- Ongoing engagement and consultation with stakeholders and Indigenous Nations
- Application for and receiving environment-related permits
- Hiring of individuals and contractors, and procurement of materials and equipment
- Mitigation for other construction-related effects, if / as needed
- Upgrade of the access road to site and installation of culverts / bridges, as needed
- Additional land clearing and implementation of erosion and sediment control measures
- Excavation and grading
- Movement of construction materials to site
- Construction of new site facilities and/or expansion of existing facilities (see Table 1)
- Development of compensation features, as needed
- Construction and opening of the Misema River diversion
- Transfer of fish from York Lake
- Dewatering York Lake to support pit development
- Stripping of overburden and initiation of open pit mine development
- Establishment of water management and treatment works
- Expansion of stockpiles as mine development proceeds
- Environmental monitoring and reporting, including work by Indigenous monitors as applicable

B) Operation Phase:

- Receiving outstanding environment-related permits
- Development and implementation of environmental protection and monitoring plan(s) for operation
- Ongoing engagement and consultation with stakeholders and Indigenous Nations
- Stockpiling of overburden and mine rock extracted from the open pit or direct use in reclamation
- Stockpiling of mine rock that has to be removed from the underground mine
- Transport of ore from the underground mine and open pit to the uncrushed ore stockpile
- Conveying of ore from the stockpile to crushers and into the storage dome
- Conveying of crushed ore into the processing plant to recover the gold and copper, and produce gold doré bars and copper concentrate that will be periodically shipped off-site for sale
- Tailings produced from processing ore will be filtered and stored in a surface facility, which will be expanded, as needed, or made into a paste for use as backfill in the underground mine
- As operations continue, the underground mine will become progressively larger below the ground surface
- As operations continue, the open pit will become progressively larger and deeper to the maximum size
- Reclamation of facilities will occur when they are no longer needed / depleted
- Studies will be completed to ensure long-term success of pit lake
- Ongoing management and treatment of excess site waters to meet regulatory requirements
- Discharge of treated excess site waters to the environment
- Ongoing management of chemicals and wastes





- Environmental monitoring and reporting, including work by Indigenous monitors as applicable
- Follow up environmental studies

C) Decommissioning and Closure Phase:

- Development and implementation of environmental protection and monitoring plan(s) for closure
- Ongoing engagement and consultation with stakeholders and Indigenous Nations
- Removal of mine equipment and allowing underground mine and open pit to fill with water
- Sealing of openings to underground to ensure long-term site safety
- Removal of chemicals when no longer needed for proper disposal
- Potential establishment of on-site demolition landfill for inert waste, and/or contracts for demolition waste removal
- Demolishing of facilities as no longer needed with waste managed according to regulatory requirements
- Investigate and remediate ground with spillage, if any, such as near liquid fuel storage areas
- Removal of power infrastructure when no longer needed
- Break concrete foundations down to grade or near grade
- Break up concrete and compacted ground, and puncture liners to establish free drainage
- Regrade project lands, as needed, for long-term stability and establish final surface drainage
- Place a growth material over affected areas, as needed, to ensure long-term vegetation success
- Environmental monitoring and reporting, including work by Indigenous monitors as applicable
- Cancelling environmental approvals when no longer required
- If appropriate, connect the flooded open pit to the Misema River system once the quality of the pit water meets regulatory requirements
- Return of reclamation financial assurance

3.4 Maximum Production Capacity

Mining and ore processing will occur at a total rate of approximately 4,000 to 10,000 tonnes per ore per day as an annual average over the life of the mine. During the years of open pit operation, there could be daily peaks of ore extraction (maximum rate of extraction) reaching up to 15,000 tonnes per day. The maximum potential ore processing plant input capacity proposed is 10,000 tonnes per day.

The Upper Beaver Gold project will also require the diversion of the Misema River around the proposed open pit. The predicted flow through the proposed diversion during the mine operations phase, based on current information, is expected to be on average approximately 91.5 million cubic metres per year (2.9 cubic metres per second). Based on a long-term modelled record, the maximum average annual flow diversion has been estimated at approximately 126 million cubic metres per year (4.0 cubic metres per second).





3.5 Preliminary Schedule

The Upper Beaver Gold project is currently being evaluated from the exploration, engineering and environmental perspectives. The stages anticipated for the Upper Beaver Gold project are as follows:



3.6 Potential Alternatives

Agnico Eagle is a publicly traded company that proposes to develop and operate the Upper Beaver Gold project in order to provide shareholders with a reasonable return on investment from the development and operation of a mine. There are no functionally different alternatives to the mine that meet the purpose of the project, and which are technically and economically feasible. The alternative of not proceeding to develop the mine and both the negative and positive consequences of this approach will be considered.

Feasible alternative means of developing, operating and reclaiming the project will be considered during future regulatory documentation and may include the following alternatives and others:

- Mine rock, overburden and organics storage (various stockpile locations, re-use as construction and reclamation material);
- Tailings storage methods and location (dry stack facility or conventional slurry facility, codeposition, various locations, re-use as backfill underground);
- Water management and treatment (water re-use, applicable treatment technologies);
- Effluent discharge location (Misema River various locations);
- Watercourse realignments and structures (locations of diversion channels and dykes);
- Aquatic offsetting and compensation measures (to be determined through the rigorous federal approvals process);
- Solid waste management location (existing landfill off site, or new landfill on site);
- Domestic sewage treatment method (package treatment plant or septic tile field);
- Water supply source (local lake or groundwater);
- Aggregate supply source (develop a dedicated aggregate resource on or near the site, re-use mine rock or purchase aggregate from suppliers);
- Site access road location (existing route, new route);







- New access to Beaverhouse Lake (to be determined through ongoing engagement);
- Power supply requirements (transmission line or diesel power);
- Mine decommissioning and closure methods:
 - Open pit (flood and keep isolated, flood and reconnect to Misema River);
 - Demolition waste management (landfill on site or existing landfill off site).

In consideration of the local site conditions, there are no alternative methods that are economically viable for:

- Mining methods (constrained by ore location and geometry, and land ownership / tenure);
- Ore processing methods (controlled by laboratory testing and analyses to obtain optimal recovery utilizing full scale proven technologies);
- Location of process plant and related site infrastructure (limited by location of mine, land ownership / tenure and preference to limit overall site footprint as practical);
- Type and location of explosive storage and siting (strictly controlled by federal regulations and rock type / blast requirements).





4. LOCATION INFORMATION AND CONTEXT

4.1 Geographic Coordinates

The centroid of the proposed open pit is located at coordinates:

- Universal Transverse Mercator (UTM) 5335489N, 591784E (NAD 83 Zone 17N);
- Latitude / longitude 79° 45' 56.189" W, 48° 9' 57.663" N.

4.2 Description of Lands and Surrounding Area

The Upper Beaver Gold project property (as of February 1, 2021) comprises patented mining claims with surface and mining rights, mineral leases with surface and mining rights, and unpatented mining claims with mining rights only. The Upper Beaver Gold project facilities are planned to be placed on patent mining lands having both mineral and surface rights.

The Upper Beaver Mine property is located in an area of low population density. The nearest seasonal residences are located on Beaverhouse Lake, or close to Beaverhouse Lake, where there are approximately 19 cottages (see Figure S.5). Agnico Eagle intends to ensure that mining activities do not noticeably change Beaverhouse Lake water levels.

The closest community is Dobie, Ontario, located approximately 5 km southwest of the Upper Beaver Gold project site, and Beaverhouse First Nation settlement is located approximately 5 km to the north (see Figure S.2). The town of Kirkland Lake is located 19 km to the west and the town of Larder Lake is located 8.5 km southeast of the proposed mine site in Ontario. It is expected that workers may live in these communities and other areas, such as Englehart, Earlton and Matachewan, in Ontario, and Rouyn-Noranda, in Québec. These communities are located approximately one hour from site. These communities could therefore be impacted by the Upper Beaver Gold project. None of these communities is anticipated to receive off-site natural or biological effects.

Agnico Eagle is in ongoing discussions with local Indigenous Nations to determine historic and current, land and resource uses. Based on current knowledge, including documentation that is publicly available, Agnico Eagle understands that the Upper Beaver Gold project property is located on lands that may have been used previously for traditional purposes by the members of the BHFN, MFN, WFN, TFN and MNO Region 3.

The Upper Beaver Mine property is located near the boundaries of the Treaty 9, 1905, Robinson – Huron Treaty, 1850, and James Bay and Northern Quebec Agreement, 1977 lands. The closest Indigenous community to the project site is BHFN which has a settlement on the Misema River approximately 5 km north of the project site. The Nation was not included in Treaty #9 and does not have Reserve lands. Reserves lands are shown in Figure S.2. The nearest Reserve lands are associated with the WFN, located approximately 44 km north of the project site.

Based on research and publicly available information, Agnico Eagle is aware of the following land claims and/or assertions of the Indigenous Nations that overlap or are near the site, as shown in Table S.3. Agnico Eagle will continue to engage with Indigenous Nations to determine any other assertions and whether they have assertions related to the Upper Beaver Gold project.





| Contours (10 m intervals) | 1.5 2 | 2.5 Kilometres | Datum: NAD83 Projection: UTM Zone 17N | W S | PROJECT N°: OMEMA2008 SCALE: 1:25,000 | FIGURE: S.5 DATE: August 2021 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|------------------------------------------|----------------------------------|
| Low-lying Area Watercourse Waterbody Existing Access Road | Private Individual (Patent) (Patent) | Patent - Mining and Surface Rights Patent - Mining Rights Only Patent - Surface Rights Only Patent - Surface Rights Only | August 2021. - Waterbodies, waterco wetland extracted fron NDMNRF and modifie site plan layout provid Agnico Eagle; to be fie | urse and n LIO, ed to match ed by eld confirmed | Land Tenure | and Land Use |
| Cottages | Other Land Tenure Township of Gauthier | Licence of Occupation - Mining and Surface Rights | Site Layout (Productio - Land tenure provided Agino Eagle, Decemb | on)". by er 2018/ | UPPER BEAV | ER PROJECT |
| LEGEND Preliminary Project Boundary Proposed Mine Feature | Municipal Boundary | Agnico Eagle Mine Ltd. Land Tenure | NOTES: - Site plan layout shown provided by Agnico Ea Site Preparation 210 (Arrangement Plan Upp | n was agle, "005 General per Beaver | AGNICO EAGLE UPPER BEAVER PROJECT | wood. |
| LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICSOV LITICS | LCSOV DTIPUESSO | TOWNSHIP OF GAUTHIER NAMER RESERVED VISIONS NEW CONSTRUCT NEW CONSTRUCT | | | Mosscheet | Sposetacle Leftes |



| Indigenous Nation | Claim and Assertions |
|--------------------------|--------------------------------------------------------------------------------|
| Beaverhouse First Nation | Wabun Tribal Council, on behalf of BHFN, has made assertions of BHFN's |
| (BHFN) | traditional territory. Boundaries of their traditional territory are in the |
| | vicinity of the project. |
| Matachewan First Nation | In 2009, MFN filed a Treaty Land Entitlement claim indicating that the |
| (MFN) | Nation did not receive all the land it was entitled to under Treaty #9 (1906). |
| | It is understood from the federal government that this claim has been |
| | settled. |
| Wahgoshig First Nation | In April 2010, the Algonquin Anishinabeg Nation Tribal Council made |
| (WFN) | assertions of their rights in their ancestral territory. The claim included a |
| | map of boundaries of the traditional territory, which is the same as that |
| | presented in their comprehensive land claim of 1989. The boundaries |
| | extend into Ontario and in the vicinity of the project. |
| Timiskaming First Nation | In January 2013, the Algonquin Nation Secretariat made assertions of their |
| (TFN) | rights and title over an area of o 34,000 square kilometres of an area that |
| | extends into Ontario, in close vicinity to the project. |
| Métis Nation of Ontario | Métis assert a right to harvest in large areas of Ontario. The government has |
| – Region 3 (MNO) | accommodated Métis rights on a regional basis within the Métis' harvesting |
| | territories identified by the MNO. An interim agreement between the MNO |
| | and the Ontario government (Ministry of Natural Resources and Forestry) |
| | recognizes the MNO's Harvester Card system. On April 30, 2018, the MNO |
| | and Ontario signed a new Framework Agreement on Métis Harvesting that |
| | advanced the recognition of Métis' rights in Ontario. |

Table S.3: Land Claims and Assertions of Indigenous Nations

Sources:

Government of Canada, Crown-Indigenous Relations and Northern Affairs Canada. Website: Aboriginal and Treaty Rights Information System. https://sidait-atris.aadnc-aandc.gc.ca/atris_online/home-accueil.aspx. Accessed July 5, 2021. Métis Nation of Ontario. Harvesting. https://www.metisnation.org/registry/harvesting/. Accessed July 5, 2021.

The *First Nations Land Management Act* enables Indigenous Nations to develop their own laws with respect to land use, the environment, and natural resources to maximize cultural and economic development opportunities with their new land management authorities. Under the First Nations Land Management, land administration is transferred to Indigenous Nations once their land codes come into effect. At this time, Agnico Eagle is not aware of any land codes currently in progress for each of the potentially affected Indigenous Nations. Throughout engagement activities with Indigenous Nations, Agnico Eagle will determine whether the Upper Beaver Gold project will affect any land codes and will ensure that the project will support the framework set out in the land code.

Agnico Eagle will engage and work with Indigenous Nations to determine whether there are other lands set aside for the use and benefit of the Indigenous Nations that could be affected by the Upper Beaver Gold project.





There are no federal lands near the Upper Beaver Gold project property. The closest federal lands are First Nation Reserve lands located more than 40 km away:

- Abitibi Wahgoshig Reserve 70, 44 km;
- TFN Reserve, 61 km;
- Matachewan Reserve 72, 62 km.

The site is located inland, and there are no related marine or port aspects.

4.3 Physical and Biological Environmental Setting

Agnico Eagle and its predecessors have been conducting environmental investigations on the Upper Beaver Gold project site since 2010. The area of influence of the project on the physical and natural environment is expected to be limited to the project footprint and nearby area; however a much larger area has been investigated prior to development, to ensure there is sufficient background information for future comparison.

4.3.1 Climate, Air Quality, Noise and Light

- Mean monthly temperatures range from a low of -14.9°Celsius in January to a high of 18.3°Celsius in July. The mean annual precipitation for Kirkland Lake is 939 millimetres. July through October is typically the wettest period.
- The Upper Beaver Gold project site is located in a remote part of northeastern Ontario and there are no significant nearby man-related sources of air emissions or noise.
- There are no existing permanent industries in the immediate area, although there are in the region.
- There may be localized areas where noise emissions reflect recreational and exploration activities.
- There are limited local man-made sources of existing light, although light is given off by ongoing exploration, and there will be light sources associated with the Upper Beaver advanced exploration program, when approved and developed.

4.3.2 Physiography and Geology

- The project site is located at an elevation of about 290 to 310 metres above sea level on a plateau above local waterbodies / watercourses.
- The overall landscape is glaciated bedrock terrain, with an undulating overall topography with occasional flat areas.
- Geochemistry investigations have been completed periodically during exploration programs to date for potential ore, mine rock and tailings. The risk of acid rock drainage development from mine rock is considered low with appropriate management based on current information.





4.3.3 Surface Water and Groundwater

- Local watercourses and waterbodies are shown in Figure S.6. The project site is located immediately adjacent to three small lakes, which are inline with the Misema River: Beaverhouse Lake, Ava Lake and York Lake. York Lake contains residual tailings from historic mining operations.
- The Misema River flows southward into the Blanche River, which drains into Lake Timiskaming, and further south to the Ottawa River and St. Lawrence River.
- Ongoing surface water sampling at and near the site indicates that baseline water quality is similar to other lakes in the area.
- Groundwater flows from the main site area generally mimics the local topography, and generally flows toward the local watercourses / waterbodies downslope.

4.3.4 Terrestrial Environment

- The site and lands immediately around the property are representative of Boreal Forest, although some of the area shows influence of rotational forestry, and recreational and periodic mine exploration / mining activities.
- Harvested and regenerating lands are present on the site. Studies indicate that the forest units are dominated by Black Spruce, Poplar, Tamarack and Balsam Fir.
- No Provincially Significant Wetlands have been identified nearby.
- Wildlife nursery area (waterfowl brood rearing habitat), late winter Moose habitat, Moose aquatic feeding area and Moose calving site were identified locally.
- Wildlife species previously observed as present on the site or during studies locally include: Moose, Beaver, Northern River Otter, Black Bear, Grey Wolf, Skunk, Raccoon, Red Fox, Eastern Chipmunk, Red Squirrel, Snowshoe Hare, Muskrat, Big Brown / Silver-haired Bat, and Little Brown Myotis (a Species at Risk).
- Birds identified during previous counts are typical of northern Ontario. Over 100 different bird species were observed, or identified as probably or possibly present during breeding bird surveys, marsh monitoring or incidental identifications during 2011. The species identified included: duck, flycatcher, grouse, jay, osprey, sparrow, swallow, vireo, warbler, woodpecker.
- Amphibians and reptiles identified through previous investigations in the area include: Green Frog, Leopard Frog, Spring Peeper, Wood Frog, American Toad, Painted Turtle, and Common Gartersnake.

4.3.5 Aquatic Environment

- Aquatic baseline studies were completed on the Upper Beaver Gold project site and nearby, including fish habitat and community assessment, fish collection, and benthic invertebrate and sediment analyses.
- Fish communities within the region have been identified as generally diverse, with cool water game fish species dominating larger lakes and river systems, and a variety of commonly occurring small bodied species being found in abundance within small creeks and beaver ponds.







- Fish communities observed in sampled watercourses reflected small-bodied forage fish, and predominantly: Pearl Dace, Finescale Dace, Northern Redbelly Dace, Longnose Dace, Fathead Minnow, Brassy Minnow, Brook Stickleback, Creek Chub, Common Shiner, Golden Shiner, Mottled Sculpin and Logperch.
- Local lakes also contained larger bodied fish, including coarse and game fish species, such as: Northern Pike, Walleye, White Sucker, Yellow Perch, Smallmouth Bass and Brown Bullhead.
- White Sucker spawning habitat and potential Walleye spawning habitat were found in the Misema River system.

4.3.6 Species at Risk

- Only one Species at Risk terrestrial or aquatic species have been viewed or identified as present on the Upper Beaver Gold project site in proposed development areas to date. A Little Brown Myotis was potentially detected in 2018 in one station. A more extensive survey will be done on site to confirm this finding.
- Five Species at Risk were identified as present in the area nearby, but off site during previous studies: Little Brown Myotis, Whip-poor-will, Canada Warbler, Common Nighthawk and Rusty Blackbird.

4.4 Social, Economic and Health Context

4.4.1 Social Context

- The Upper Beaver Gold project site is located in northeastern Ontario, which has a total population of 565,000 and a density of 1.4 people per km².
- Of that population, 30.2% live in a rural area, and 50% in small and medium-sized population centres, compared to the Ontario overall average of 69.3% of the population living in a large urban centre and 14.1% in a rural area.
- A previous study identified cultural heritage landscape and built heritage resources at the Upper Beaver Gold project site and local vicinity related to the site's mining heritage. These have been investigated by a licensed archaeologist as appropriate. Two sites (DbGw-24 and DbGw-26) have been identified as having moderate cultural heritage value or interest, and would require either excavation and documentation (not currently proposed), or protection and avoidance of development impacts.
- The local lands support recreational activities by locals and tourists, including fishing, trapping, camping and hunting.
- There are a number of seasonal cottages along the Misema River upstream of the project site and a rudimentary, public boat launch located at the west end of Beaverhouse Lake.
- There are no First Nation Reserve lands in close proximity to the site (see Figure S.2), although the site is anticipated to be within the traditional territories of a number of Indigenous Nations.
- The closest Indigenous community to the site is the BHFN settlement on the Misema River System, approximately 5 km and upstream of the site.





- According to the Crown Land Use Policy Atlas, mineral exploration and development are encouraged in the area, with some limitations.
- There are no federal parks nearby. The closest provincial park (Gem Lake Maple Bedrock Provincial Park) is located 7 km to the east of the site.

4.4.2 Economic Context

- The regional economy has been traditionally reliant upon mining and forestry industries, although mining has been the primary economic driver with the decline of the forestry industry over the last decade and longer.
- The closest mines to the Upper Beaver Gold project are:
 - Macassa Mine, Kirkland Lake Gold, Kirkland Lake, Ontario;
 - Young-Davidson Mine, Alamos Gold, Matachewan, Ontario.
- The site was mainly cut by forestry companies in the last 10 years.
- The largest proportion of workers in Kirkland Lake area are employed in the mining sector.

4.4.3 Health Context

- The Timiskaming Health Unit is located in the southern portion of northeastern Ontario with offices in New Liskeard, Kirkland Lake and Englehart.
- The Kirkland and District Hospital is located in Kirkland Lake, west of the Upper Beaver Gold project site, which consists of permanent medical staff, including general practitioners and family practice, with visiting specialists.



5. FEDERAL, PROVINCIAL, INDIGENOUS AND MUNICIPAL INVOLVEMENT AND EFFECTS

5.1 Federal Funding or Federal Lands

There is no anticipated federal funding for the Upper Beaver Gold project. No federal lands will be used for the Upper Beaver Gold project, including Reserve lands.

5.2 Environmental Approvals

5.2.1 Federal

In addition to the potential requirement for completion of an Impact Assessment pursuant to the *Impact Assessment Act*, the Upper Beaver Gold project may require federal approvals related to the *Fisheries Act*, *Canada Navigable Waters Act* and *Explosives Act*, pending additional regulatory guidance.

Table S.3 provides a preliminary list of federal environmental approvals that could potentially be required for the Upper Beaver Gold project.

5.2.2 Provincial

The Upper Beaver Gold project may require completion of one or more provincial environmental assessment processes, depending on the final project design. It is anticipated that an environmental assessment will be required for the disposition of Crown resources (Class Environmental Assessment for Resource Stewardship and Facility Development Projects), including for the diversion of the Misema River around York Lake. There is also the potential that there could be an environmental assessment requirement related to the provision of grid power to the site (Class Environmental Assessment for Minor Transmission Facilities), depending on the voltage required and grid connection location.

Table S.4 provides a preliminary listing of the provincial environmental approvals that are expected to be required to construct, operate and close the Upper Beaver Gold project site based on the preliminary project design.

There are no facilities planned in Québec, and no transboundary negative impacts from the Upper Beaver Gold project are anticipated.

5.2.3 Municipal

The project is located within the boundaries of the Township of Gauthier Official Plan and Township of Larder Lake Official Plan. Agnico Eagle is in discussions to determine if rezoning of the lands is required.



| Table S.4: Preliminary List of Potential Federal and Provincial Appro | vals |
|-----------------------------------------------------------------------|------|
|-----------------------------------------------------------------------|------|

| Department / Ministry | Act, Approval and Project-related Activities |
|--------------------------------|-------------------------------------------------------------------------|
| Environment and Fisheries Act | t, Schedule 2 Listing (Metal and Diamond Mining Effluent Regulations): |
| Climate Change – Storage | of mineral waste covering minor tributaries that are frequented by fish |
| Canada – An alterr | native assessment is required and a fish habitat compensation plan |
| Fisheries and Fisheries Act | t, Authorization for Harmful Alteration, Disruption or Destruction of |
| Oceans Canada Fish Habitat | or Death of Fish by means other than Fishing: |
| – Direct im | pacts to fish habitat, including overprinting of waterbodies and |
| construc | tion of structures in waterbodies / watercourses |
| – Indirect i | mpacts to fish habitat including flow reductions |
| – An appro | oved fisheries offset plan will be required |
| Natural Resources Explosives A | <i>ct</i> , Licence for Magazine: |
| Canada – Storage | of explosives (magazine) |
| Transport Canada Canada Nav | vigable Waters Act: Approval under the Navigation Protection Program: |
| – Diversion | n of unscheduled watercourse to provide for safe mining |
| Northern <i>Mining Act</i> , | Closure Plan [new]: |
| Development, – Progress | ive reclamation and final closure of the site |
| Mines, Natural – Construc | tion of dykes above the high water mark of watercourses if any |
| Resources and Ontario Env | ironmental Assessment Act, Class Environmental Assessment(s) for |
| Forestry (Ontario) Resource St | ewardship and Facility Development Projects [new]: |
| – The Upp | er Beaver Gold project is expected to require completion of this Class |
| Environn | nental Assessment, subject to regulatory confirmation |
| Public Lands | s Act or Lakes and Rivers Improvement Act, Work Permits: |
| – Construc | tion of facilities on Crown land, including below the high water mark |
| of water | podies / watercourses |
| Public Lands | <i>s Act</i> , Land Use Permit: |
| – Tempora | ry land tenure for facilities off the mining lease, if required |
| Crown Fores | st Sustainability Act, Forest Resource Licence (Cutting Permit): |
| – For cutti | ng of merchantable timber for site development |
| Fish and Wi | Idlife Conservation Act, Permit to Collect Fish for Scientific Purpose: |
| – Fish tran | ster during construction |
| – Fisheries | investigations during construction, operation and closure. |
| Aggregate R | Pesources Act, Aggregate Permit: |
| – If the pro | posed field investigations are successful, Agnico Eagle may pursue an |
| aggrega | te resource permit to provide aggregate |
| Environment, Ontario Wa | ter Resources Act, Permit to Take Water: |
| Conservation and – Dewater | ing activities for construction and mine dewatering |
| Parks (Ontario) – Fresh wa | ter supply |
| Environmen | tal Protection Act, Environmental Compliance Approval for Industrial |
| | tic Sewage WOrks: |
| – iviine wa | ter, process water and contact water, tailings management and |
| | - Stwayt tal Drotaction Act Environmental Compliance Approval for |
| Environmen | |
| All and NOI | |





| Department / Ministry | Act, Approval and Project-related Activities |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Ontario <i>Environmental Assessment Act</i> , Class Environmental Assessment(s) for Class Environmental Assessment for Minor Transmission Facilities [new]: |
| | Based on the preliminary project design, the Upper Beaver Gold project is expected to require completion of this Class Environmental Assessment, based on the anticipated length of the line (greater than 2 km length) in comparison to the Electricity Projects Regulation. |

Note:

Although not expected, a provincial *Endangered Species Act* permit could be required, pending the results of ongoing environmental baseline investigations.





6. POTENTIAL EFFECTS OF THE PROJECT

6.1 Changes to Fish and Fish Habitat, Aquatic Species and Migratory Birds

Table S.5 provides a preliminary listing of changes to the following that may result from the construction, operation and closure of the Upper Beaver Gold project.

No changes to aquatic species as defined in the federal *Species at Risk Act* are anticipated, as none are known or expected to be present based on the multi-year environmental baseline studies completed to date.

6.2 Potential Changes to the Environment on Federal Lands or Lands outside Ontario

There are no federal lands near the project site, and no development is planned to occur on federal lands or Reserve lands. For this reason, there are no expected changes to federal lands, including Reserve lands.

The project is not expected to result in changes to the natural and physical environment outside of Ontario, as will be confirmed through future modelling. Based on proximity of the Upper Beaver Gold project to the Ontario – Québec border, it is expected that some workers and contractors may travel to the site from Québec. In addition, there will be one to two trucks per day transporting copper concentrate to a purification / refining facility in Québec over the existing Ontario / Québec highway infrastructure.

The project is not of a scale or location, so that could result in changes to the environment outside of Canada.

6.3 Potential Effects to Indigenous Peoples

- Agnico Eagle is engaging with Indigenous Nations and Peoples with respect to the construction, operation and closure of the Upper Beaver Gold project, including the determination of the potential for impacts to physical and cultural heritage, and how the project may impact diverse population groups within these Indigenous Nations.
- There are 10 registered archaeological sites located near (within 2 km) the project. These sites were fully investigated and only two sites confirmed to have ongoing or moderate cultural heritage value or interest by the archaeologists. The sites have not been fenced in order to allow for ongoing First Nation use, but have been designed as no work zone areas. These sites are not expected to be altered by the proposed Upper Beaver Gold project development.
- Agnico Eagle acknowledges that there are sites for which studies have not shown having cultural heritage value or interest by following Ministry of Heritage, Sport, Tourism and Cultures Industries Standards and Guidelines, but which could still have spiritual, sentimental, and traditional value and interest for Indigenous Nations in the area of the project. Some sites could be potentially altered by the proposed project.
- The Upper Beaver Gold project may result in effects to Indigenous Peoples, treaty rights and historic and current land and resource uses. This may include potential changes to land access, loss of traditional lands and ability to hunt, fish, gather and/or trap as well as the ability to practice their culture.





| Environmental Component | Project Phase | Potential Source of Effect | Potential Change to the Environment | Preliminary Area of Influence |
|--------------------------------------------------------------------------------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fish and fish habitat, as defined in subsection 2(1) of the <i>Fisheries</i> <i>Act</i> | Construction | Diversion of waterbodies / watercourses Installation of temporary and permanent infrastructure | Alteration, disruption and destruction of fish and benthic fauna habitat from direct disturbance, blasting and mine dewatering Change to the natural surface water flow pattern Surface water quality alteration (meeting regulatory requirements, but not at background levels at discharge location) | Project footprint Project footprint Project footprint and a short mixing zone downstream of the discharge location in the Misema River |
| | Operations | Water management and treatment | Surface water quality alteration (meeting regulatory requirements, but not at background levels at discharge location) | Project footprint and a short mixing zone downstream of the discharge location in the Misema River |
| | Closure | Site reclamation and closure | Surface water quality alteration until discharge ends and site is reclaimed Potential for creation of fish habitat in new pit lake, expected to be re-connected to the Misema River system | Project footprint and a short mixing zone downstream of the discharge location in the Misema River Project footprint |

Table S.5: Preliminary List of Changes to the Environment under Federal Authority





| Environmental Component | Project Phase | Potential Source of Effect | Potential Change to the Environment | Preliminary Area of Influence |
|--------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Migratory birds, as defined in subsection 2(1) of the <i>Migratory</i> <i>Birds Convention</i> <i>Act, 1994</i> | Construction | Clearing of habitat to allow for site construction Installation of permanent facilities Additional vehicle traffic | Habitat loss Disturbance of species Increased risk of collision or mortality | Project footprint Potential limited area outside the footprint related to noise disturbance Primarily related to local roads |
| | Operations | Operation of permanent facilities Additional vehicle traffic | Disturbance of species Increased risk of collision or mortality | Potential limited area outside the footprint related to noise disturbance Primarily related to local roads |
| | Closure | Site reclamation and closure | Habitat redevelopment | Project footprint |





- The Upper Beaver Gold project may have effects on diverse population groups which will be assessed in the Impact Statement. Potential effects may include: effects on Indigenous women, elders, youth, etc.; effects on Indigenous women's safety; and/or changes on community well-being and health of Indigenous Peoples.
- These potential effects will be investigated through the environmental approvals process for the mine and ongoing engagement activities.
- Agnico Eagle believes that there will be positive economic effects as a result of the Upper Beaver Gold project, including employment and business opportunities (for individuals, as well as Indigenous communities).

6.4 Estimate of Greenhouse Gas Emissions

As with virtually all industrial operations, greenhouse gases will be emitted during all phases of the project (construction, operation and closure). The primary sources of greenhouse gas emissions from each project phase are expected to be:

- Construction: diesel combustion in mobile equipment;
- Operation: diesel combustion in mobile equipment, blasting in the open pit and underground, processing or ore and indirect emissions from purchased grid power;
- Closure: diesel combustion in mobile equipment.

Direct emissions (Scope 1) have been estimated at 20.9 kilotonne-CO₂Eq/year. Indirect emissions (Scope 2 and off-site transport) for the Upper Beaver Gold project have been estimated at 9.7 kilotonne-CO₂Eq/year utilizing the guidance developed by Environment and Climate Change Canada.

6.5 Wastes and Emissions

Table S.6 provides a brief summary of the types of wastes and emissions that are likely to be generated from the Upper Beaver Gold project, in the air, in or on water, and in or on land, during the construction, operation, closure phase of the project.

6.6 Overview of Potential Environmental Effects

Table S.7 provides a summary of the potential environmental effects of the Upper Beaver Gold project. This information will be clarified through ongoing engagement activities, the environmental approvals process, and engineering investigations and studies for the mine. Table S.8 provides an overview of comments received to date and a proposed preliminary approach to address these aspects, including in the site design as appropriate.

The *Impact Assessment Act* requires that potential cumulative effects also be considered. Cumulative effects will be assessed in the Impact Statement in accordance with Impact Assessment Agency of Canada guidance. For the Upper Beaver Gold project, it is anticipated this would include cumulative effects associated with the exploration program and advanced exploration program at the site. Agnico Eagle is purposefully developing the Upper Beaver Gold project (the mine), to expand and/or modify facilities that are being developed during the advanced exploration program in order to minimize environmental disturbance as practical.



Table S.6: Preliminary Listing of Types of Wastes or Emissions

| Environmental Component | Project Phase | Anticipated Waste or Emission | Primary Project Sources |
|----------------------------|--------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| In the air | Construction, Operations and Closure | Dust emissions Air including greenhouse gas emissions from machinery and equipment Noise emissions Light | Blasting, crushers, conveyors, tailings storage facility, stockpiles, roads and laydown areas Process plant, mobile equipment Open pit blasting, crusher, stockpiling activities Site illumination for safety |
| In or on land | Construction | Domestic solid waste Regulated and non-regulated, industrial solid and liquid waste Mineral waste (overburden and mine rock) Vibration | Process plant, maintenance, office Process plant, maintenance, office Open pit and underground mine |
| | Operations | Domestic solid waste Regulated and non-regulated, industrial solid and liquid waste Mineral waste (overburden, mine rock and tailings) Vibration | Process plant, maintenance, office Process plant, maintenance, office Open pit and underground mine |
| | Closure | Domestic solid waste Regulated and non-regulated, industrial solid and liquid waste | Process plant, maintenance, office Demolition activities, maintenance, office |
| In or on water | Construction | Treated contact runoff discharged to the Misema River as effluent Treated domestic sewage | Project site (captured in water management infrastructure and treated in ponds and water treatment plant) Sewage treatment plant |
| | Operations | Treated contact runoff and effluent discharged to the Misema River Treated domestic sewage | Project site (captured in water management infrastructure and treated in ponds and water treatment plant) Sewage treatment plant |
| | Closure | Treated contact runoff and effluent discharged to the Misema River Treated domestic sewage | Project site (captured in water management infrastructure and treated in ponds and water treatment plant) Sewage treatment plant |





| Environmental Component | Potential Effect (Preliminary) | Proposed Mitigation (Preliminary) |
|------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Air Quality, Greenhouse Gases, Noise and Light | Air emissions have the potential to generate dust or products of petroleum hydrocarbon combustion Noise emissions from the project have the potential to disturb other area users Greenhouse gas emissions from project have a minor potential to contribute to global carbon dioxide emissions Operation of an industrial facility will cause a localized light glow that is visible off site Impacts on how and where Indigenous Nations Rights are exercised Preliminary: Areal Extent Air quality regulatory requirements will be met at property boundary | Provincial regulatory requirements will be met for on-site emissions and air quality at the property boundary Provincial regulatory criteria will be met for on-site emissions and at surrounding noise sensitive locations, such as cottages Appropriate management practices / plans will be developed and implemented Water sprays will be used to control dust emissions from haul roads and construction areas, and best management practices will be followed for dust control during operations Measures will be used to reduce sound emission effects, such as: developing a compact site, maintaining tree screens around work areas, reducing the overall height of stockpiles, maintaining equipment in good working order and utilizing efficient mufflers Development of a compact overall site, as proposed, will reduce haulage / transportation distances for greater fuel economy and reduce greenhouse gas emissions |
| | Noise regulatory requirements will be met at nearest receptor (cottage) A night glow is expected to be visible off site | Maintaining equipment and vehicles in good working order also improves on fuel combustion efficiency Care will be taken to ensure lights are properly aimed to minimize off-site light disturbance |
| Local waterbodies / watercourses | Project development may overprint small creeks and beaver ponds, and have the potential to reduce downstream flow in the immediate vicinity, but flow is returned to the same watershed elsewhere A portion of the local surface water system will require dewatering (York Lake) and diversion (Misema River) in order to safely mine the underground resources, which will result in a disruption to fish habitat | Effluent discharge to the environment will meet all federal and provincial regulatory requirements In-water structures will be designed to avoid interference with navigation as reasonable Compensatory aquatic habitat, which will be consulted upon and approved through a rigorous federal process, will be provided to mitigate effects to aquatic resources, including habitat loss Establishment of an open pit will support the removal of historic mine rock and tailings that are currently within or adjacent to the Misema River system |

Table S.7: Preliminary Summary of Potential Environmental Effects





| Environmental Component | Potential Effect (Preliminary) | Proposed Mitigation (Preliminary) |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Vibration (such as from explosives use) may disturb aquatics species An intake / discharge location is proposed (to be determined), which has the potential for habitat disturbance and to affect water quality and flows Three or more new crossings at locations to be determined may be needed, which has the potential for habitat disturbance Impacts on how and where Indigenous Nations Rights are exercised | Preliminary plan is to re-connect the water re-filled open pit (pit lake) to the Misema River system on closure, which will increase the overall lake size for future uses |
| | Preliminary: Areal Extent Habitat disturbance will be limited to project footprint Effluent quality will meet regulatory requirements before release to environment and will be protective of aquatic life There may be a small area downstream of the discharge location (mixing zone) where water quality may not be the same as the background water quality | |
| Groundwater System | Open pit and potentially underground mine dewatering will affect the local groundwater levels and may affect surface water flows, although not expected to be material based on historical information Groundwater quality is not expected to be affected | Modelling investigations will fully assess potential effects to support mitigation, if needed Groundwater levels will return after the mine workings, including the open pit, flood at closure |





| Environmental Component | Potential Effect (Preliminary) | Proposed Mitigation (Preliminary) |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Preliminary: Areal Extent Dewatering may result in a depression in the local groundwater level, but based on historical information, it is anticipated to be narrow and primarily limited to the project footprint | |
| Natural Vegetation and Wildlife | Wildlife (and including Moose and other furbearers) may be disturbed by site activities and disturbance, including noise Mine site and related infrastructure development, if any, will displace existing terrestrial habitat Mine site development may displace existing terrestrial habitat for Species at Risk Impacts on how and where Indigenous Nations Rights are exercised Preliminary: Areal Extent Habitat disturbance will be limited to project footprint Potential limited area outside the footprint related to noise disturbance Increase potential for wildlife collision primarily on local roads | The majority of the site has been previously disturbed through past forestry, exploration or mining activities, or will be disturbed by the proposed advanced exploration program, but some areas to be affected remain a more natural condition A compact site for the new mine will be developed to limit disturbance to new areas as reasonable Tree clearing will be avoided during the bird nesting season The site will be reclaimed after mining ends to support future productive habitat |
| Hunting, Trapping, Fishing and Tourism | Limited effect as the mine is to be located on an active advanced exploration program site on private property, where access is controlled / restricted for safety of workers. There will be a more extensive disruption to the local experience in the immediate | Agnico Eagle intends to continue work with its neighbours to mitigate potential localized effects during operation Hunting will continue to be restricted on the project site in order to ensure the safety of workers and others On closure, the disruption will cease and the existing hazards in York Lake (tailings and mine rock) will be removed, which will enhance the area in the future |





| Environmental Component | Potential Effect (Preliminary) | Proposed Mitigation (Preliminary) |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | vicinity of the site from the larger scale mining operation | The preliminary plan is to connect the pit lake from the flooding of the open pit to the Misema River system on closure, which will increase the overall lake size for future uses |
| | Preliminary: Areal Extent Potential limited area outside the footprint related to noise disturbance, including Ava Lake and a portion of Beaverhouse Lake | |
| Commercial Operations | Could limit access to people and resources for other operations and potentially draw local people back to the area for jobs | No mitigation measures are proposed, other than to optimize economic benefits to the local and regional economies, including to local Indigenous Nations as reasonable |
| | Preliminary: Areal Extent To be determined | |
| Traditional use of lands and resources | Effects on spiritual relationships and connection with the environment Effects on locations of sentimental, traditional and heritage value Effects on traditional use of lands and resources as sites of value and interest to First Nation(s) Effects on cultural practices Changes to land and resources resulting in effects on exercising rights Preliminary: Areal Extent Potential limited area outside the mineheld lands related to noise disturbance | Ongoing engagement with Indigenous Nations to mitigate potential effects |
| Indigenous / Public Health and Safety | All regulatory requirements (such as for air quality, noise, water quality and similar) will be met Effects on Indigenous women's safety Effects on Indigenous women, youth, elders, etc. | Agnico Eagle with work with local Indigenous Nations with an aim of helping ensure the project will provide a positive benefit Traffic management and awareness will reduce potential for accidents on public roads Potential to establish a road extension for local cottage traffic |





| Environmental Component | Potential Effect (Preliminary) | Proposed Mitigation (Preliminary) |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Changes to community safety and well- being and health of Indigenous Peoples Increased risk of vehicle collision due to increased traffic | |
| Socio-economics | Benefits including employment and procurement opportunities Benefits for education and training opportunities Effects on healthcare services and providers Effects on traffic due to mine personnel commuting to site | Agnico Eagle with work with local Indigenous Nations and with communities with an aim of helping ensure the project will provide a positive benefit |
| Physical and cultural heritage | No anticipated effect to known archaeology sites Effects to cultural heritage to be deter mined | Archaeological studies have been conducted and no cultural heritage features or artefacts have been identified in locations of proposed development This will continue to be reviewed as the project's designs and progress including relation to the diversion of the Misema Piver |
| Identified structures | Preliminary: Areal Extent Heritage disturbance will be limited to project footprint No effect expected, pending determination | and mitigation will be completed, if needed Measures will be put in place to identify any as yet undetected features or artefacts during construction None expected to be required, other than protection |
| or sites * | of diversion routing / water levels | |

Notes:

* Structures or sites of historical, archaeological, palaeontological or architectural significance.

This preliminary assessment of potential effects was developed in part through ongoing engagement activities, including through a review of a draft of the Initial Project Description by the BHFN, MFN and WFN.



| Table S.8: Preliminary Comments and Preliminary Approach / Act | ions |
|----------------------------------------------------------------|------|
|----------------------------------------------------------------|------|

| Preliminary Comments / Concern | Preliminary Approach to Address / Actions |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Will access be retained to Beaverhouse Lake? How will the spawning beds closure to the boat launch at Beaverhouse Lake be affected? | Agnico Eagle will ensure that access is retained to Beaverhouse Lake. The current plan is to establish a new, improved access route that will avoid the mine site. There will be no direct effect on the spawning beds. Water levels in Beaverhouse Lake are proposed to be retained at current levels. Any potential indirect effects to Beaverhouse Lake will be fully assessed through the environmental regulatory process. |
| Will Indigenous Knowledge be considered, such as location of medicinal plants, harvestable plants and wildlife? | Agnico Eagle hopes to be able to work with local Indigenous Nations to help document this information so that it can be used in assessing potential effects from the Upper Beaver Mine and developing appropriate mitigation strategies. |
| Will local community members be able to be involved in the planning and approvals process? | There is a rigorous approvals process to develop any new mine in Ontario. As part of that process, there are required periods when individual community members can comment. Agnico Eagle will respond to all comments received through this process, but also continue its ongoing process of consultation and engagement with Indigenous Nations, local cottagers and other stakeholders. |
| York Lake is connected to a series of lakes. What will the effect be of draining the lake on the lake system? | The potential effects on the Misema River system will be fully assessed through the regulatory process. Agnico Eagle intends to maintain the lake levels in the other lakes by creating a diversion around York Lake before it is dewatered. Because parts of York Lake were infilled historically with mine tailings and rock, the habitat in the lake is not the same as natural lakes. As part of the regulatory process, Agnico Eagle will need to develop a strategy to provide compensation for this loss of habitat. Fish present in the lake will be removed, as reasonable, prior to completion of the dewatering of York Lake, and will be transferred to another reasonable location nearby in discussion with the approval of the regulatory authorities expected to be required. |
| How big is the open pit? Will draining the lake help solve the problem of containing water from your underground workings? | The open pit is relatively small compared to some other open mines as it is part of what is primarily an underground mine operation. Agnico Eagle will contract specialists to help assess the groundwater aspects of the underground mine to ensure both the safety of the workers, as well as being able to accurately assess potential environmental effects to the surrounding area prior to the development occurring. |





| Preliminary Comments / Concern | Preliminary Approach to Address / Actions |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Dust, noise and traffic impacts (such as speed) are of concern Dust emission, noise, vibration, light pollution and visual impact during operation Quality of life for cottagers | Although this is a historic mining location and an area with a number of mines, Agnico Eagle acknowledges that development of a new mine will change the site, including after the mine is closed and reclaimed. Agnico Eagle believes the site will be improved, including the removal of historic safety hazards and mine wastes (mine rock and tailings in/at York Lake). Agnico Eagle believes that through proper mitigation, many of the local concerns will be alleviated. These measures will be fully defined through the regulatory process, but expected to include (but are not limited to): Effective controls on dust (stockpiles design, retaining vegetation, use of water sprays) Selecting quieter machine options (such as power supply), when reasonable Keeping equipment well maintained Where practical, locating facilities to minimize off-site effects Proper road maintenance and imposing speed limits on any roads under Agnico Eagle's control Aiming lights purposefully where needed for safety. Agnico Eagle will monitor the potential effects determined through the studies during construction and operation, and will apply additional mitigation measures if needed to reduce |
| How will the site be cleaned up at closure? Will there be contracting and jobs available? | During the mine construction and operation, Agnico Eagle will remediate the historic hazards within the mine footprint. As reasonable, progressive reclamation will also occur during the operation phase for the effects of the mine, but most of the reclamation will occur after the mine closes. A preliminary plan to reclaim the site will be included and provided for comment during the impact assessment process. In addition, a detailed regulatory Closure Plan will be required before any construction starts for the mine. As part of that process, Agnico Eagle will be required, before mining starts, to provide the provincial government with financial assurance (such as a bond) for the full amount to close the mine to ensure the public is protected. Agnico Eagle will set up a process to ensure that local communities are aware of potential opportunities. Although some of the contracts and jobs will be very specialized and may not be able to be filled locally. Agnico Eagle would like to ansure that local papele also get banefits. |

