AGNICO EAGLE

Main Application Document and

Project Description:

Amaruq Exploration Portal/Ramp Program, Quarry and

Advanced Underground Exploration and Bulk Sample Collection

March 2016

Version 1

Table of Contents

Tables

Figures

Plates

Appendices

ᐊᒪᒃᓂ-ᒥᑦ ᖃᓄᖅᓴᐃᓂᖏᑦ ᐃᑲᖅᑕᕐᕕᒋᔭᐅᓂᖅ

ᓇᐃᓐᓇᕐᓂᒃᑯᑦ ᖁᔭᓕᓐᓄᑐᑦ ᐊᒪᓚᓗ ᐃᓄᐃᑎᑐᑦ

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Popular Summary in English and Inuktitut

The Amaruq Exploration property is a 408 square kilometre (km^2) site located on Inuit Owned Land approximately 150 kilometres (km) north of the hamlet of Baker Lake and approximately 50 km northwest of the Meadowbank Mine in the Kivalliq region of Nunavut. In early 2013, the property was acquired by Agnico Eagle subject to a mineral exploration agreement with Nunavut Tunngavik Incorporated. The Kivalliq Inuit Association issued Agnico Eagle a land use permit and the Nunavut Water Board, a water licence for exploration purposes. Surface drilling started in 2013 and is continuing. Drilling to date at the Amaruq Exploration Property indicates an inferred resource that has the potential to be mined as a satellite pit and would allow the Meadowbank mine to continue operating beyond 2018. AEM is currently collecting environmental baseline data for an impact assessment and is evaluating the economics of this mine (i.e. it is at the pre-feasibility stage).

The reliability of a mine feasibility study is based on the quality of the information going into it; most importantly, the information on the rock containing the gold (ore). The size and shape of an ore body is estimated by drilling from surface, but it remains just an estimate until one can see and explore the ore body in three dimensions; for a deposit such as Amaruq, this is best done from underground. That said, the Amaruq property has the potential to be both open pit and an underground mine, but is in the preliminary phase of analysis.

As a result, Agnico Eagle is proposing to explore deep sections of the gold ore body at the Amaruq property by constructing a portal and a ramp similar to what has been constructed at the Meliadine project located outside of Rankin Inlet. This is an amendment to the currently approved exploration activity under the Amaruq Exploration Type B license. Exploration and collection of bulk sample(s) from the underground will determine if underground mining of the ore body is feasible sometime in the future.

Work on the portal would begin in late 2016, with underground work on the ramp to continue from 2017 and operate year round in 2018 when the Amaruq Exploration Access road is complete. The ramp would advance rapidly from 2018 to 2020, inclusive. If the results from underground exploration are encouraging, underground activities could continue beyond 2020.

Document Control

Version	Date	Section	Page	Revision
1	March 2016	All	All	Main Application Document Project Description -Amaruq Ramp, Bulk Sample and Quarry Program

Document prepared by:

John Witteman
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Document Approved by:

Ryan Vanengen
Agnico Eagle Mines Ltd.
Environment Superintendent – Nunavut
Permitting and Regulatory Affairs

1. Introduction

1.1 Background

Agnico Eagle Mines Limited (Agnico Eagle) signed an exploration agreement with the Nunavut Tunngavik Inc. (NTI) in January 2013 for the Amaruq[1] property. The Amaruq Project is a 408-square kilometre exploration property located on Inuit Owned Land approximately 150 kilometres north of Baker Lake and about 50 kilometres northwest of the Meadowbank mine as shown in figure 1.

The Kivalliq Inuit Association issued Agnico Eagle a land use permit for exploration purposes and the Nunavut Water Board, a Type B water licence. Since the signing of the exploration agreement in 2013, Agnico Eagle has been carrying out an active gold exploration program, including diamond drilling of the more promising prospects. The results of the drilling has shown encouraging gold mineralization at the north end of Whale Tail Lake. This inferred resource has the potential to be mined as a satellite open pit and would allow the Meadowbank mine to continue operating beyond 2018. AEM is currently collecting environmental baseline data for an impact assessment and is in the pre-feasibility stage of evaluating an open pit project.

As part of its advanced exploration at the Amaruq Project, Agnico Eagle carried out consultations with the local Inuit and regulatory agencies to ensure they understand what is being proposed and to get their input in planned activities. Section 12 lists the consultation carried out to date for the Amaruq Exploration Project. A traditional knowledge study was carried out in December 2014 (Burt and Witteman, 2014), followed up by a site visit with elders in September 2015 and another traditional knowledge workshop in Baker Lake on February 2015.

The Amaruq underground program is a component of advanced exploration. Agnico Eagle is applying to the NWB for an amendment to the currently approved exploration activity under the Amaruq Exploration Type B license. More specifically, Water Licence Amendment 4 is an application to develop a quarry to obtain waste rock for construction, to develop a portal and access ramp for advanced underground exploration, and to collect a bulk ore sample. As shown in Figure 2, ancillary infrastructure included in the underground program include two waste rock pads, the services pad holds surface infrastructure related to the underground program and a bulk ore sample, and the operations pad holds waste rock piles for each rock type encountered in developing the ramp, aggregate and a crusher for making aggregate (crushed rock) and piles of aggregate. Other infrastructure includes a diversion ditch on the south side of the waste rock pad leading to Pond A-P5, a storm water storage pond. The portal, quarry and associated infrastructure will all be at least 31 metres from any waterbody.

[1] The Amaruq Project was formerly known as the IVR Project.

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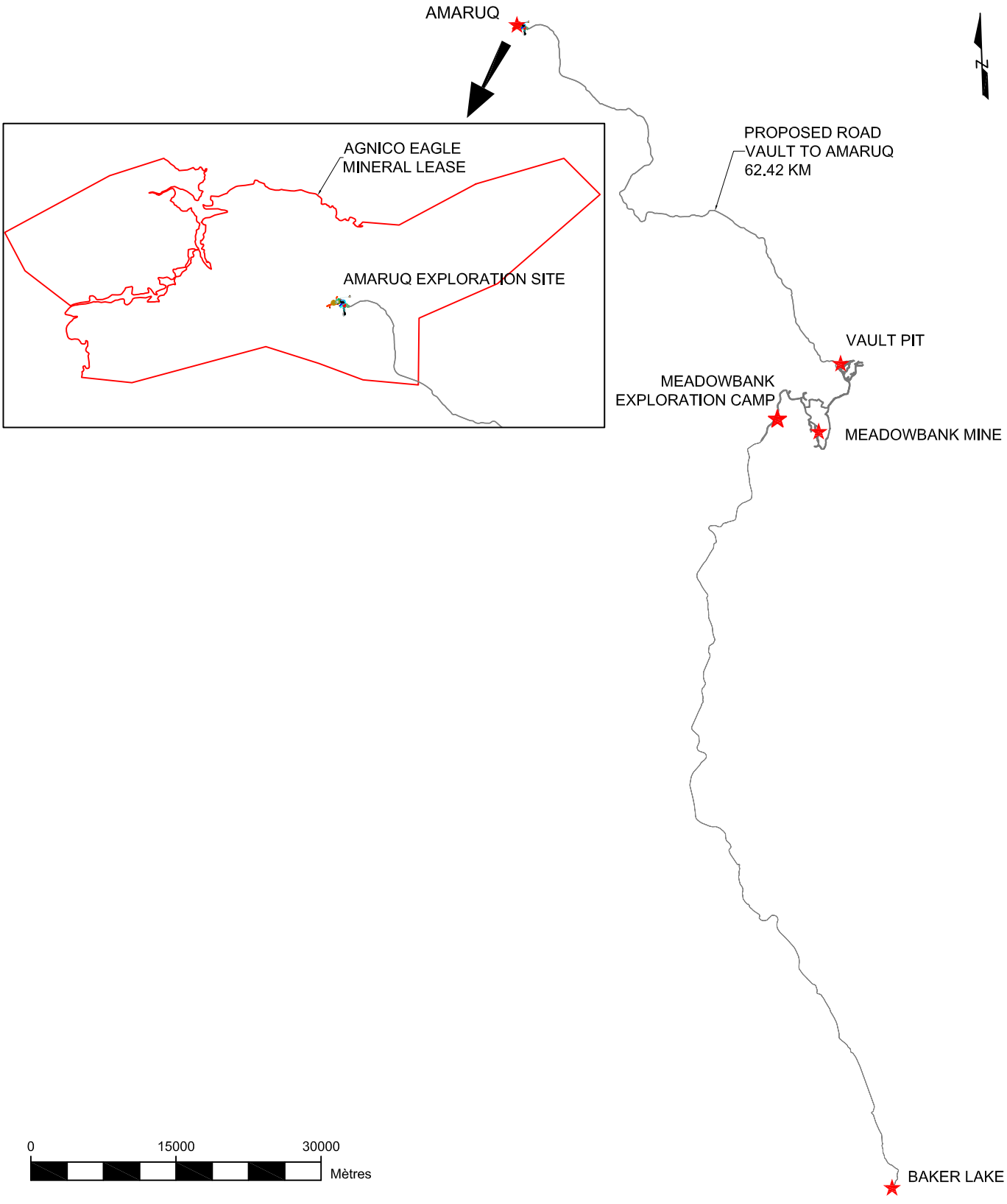

REV	DATE	DESCRIPTION	PAR BY

REVISIONS

AGNICO EAGLE – MEADOWBANK DIVISION

AGNICO EAGLE

AMARUQ PROJECT
PLAN VIEW
MAP LOCALISATION

No. PROJET / PROJECT No.	6108	DATE	2016–02–17
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APPROUVÉ PAR / APPROVED BY	J.WITTEMAN		
NO. DESSIN / DRAWING NO.	FIG 1		REVISION 1

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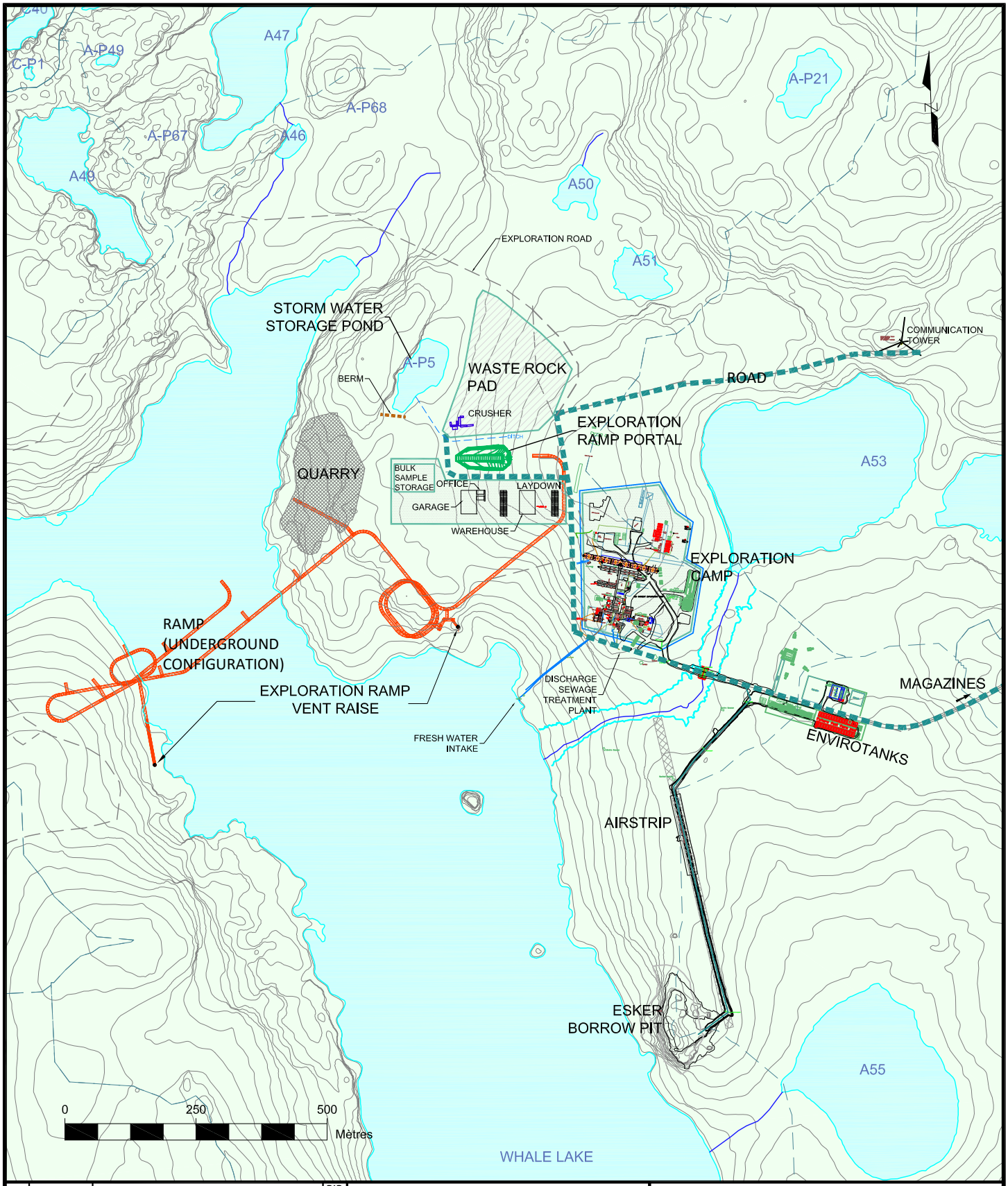

REV	DATE	DESCRIPTION	PAR BY

REVISIONS

AGNICO EAGLE – MEADOWBANK DIVISION

AGNICO EAGLE

AMARUQ PROJECT
PLAN VIEW
SITE ARRANGEMENT, RAMP & ROAD

No. PROJET / PROJECT No.	6108	DATE	2016-02-17
DESSINÉ PAR / DRAWN BY	J.CRETE		FEUILLE/SHT 1 / 1
APPROUVÉ PAR / APPROVED BY	J.WITTEMAN		
NO. DESSIN / DRAWING NO.	FIG 2		REVISION 7

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1.2 Proponent Information

The Amaruq Exploration Property is owned and managed by Agnico Eagle Mines Limited (Agnico Eagle), a Canadian publicly traded mining company listed on the Toronto and New York Stock Exchange (NYSE:AEM, TSX:AEM) with head offices in Toronto, Ontario.

Agnico Eagle is a senior Canadian gold mining company that has produced precious metals since 1957. Its nine mines are located in Canada, Finland, and Mexico, with exploration and development activities in each of these regions as well as in the United States. Agnico Eagle began exploring for minerals in Canada since 1953 and has been active in the Kivalliq Region since 1990. Agnico Eagle owns and operates the Meadowbank mine, which is located 70 km directly north of Baker Lake and approximately 50 km southeast of the Amaruq Exploration site. In addition, Agnico Eagle owns rights to the Meliadine Gold Project, which is located approximately 25 km north of Rankin Inlet, and 80 km southwest of Chesterfield Inlet. The Meliadine Gold Project is now in the final permitting phases for development having received a final Project Certificate from the NIRB in February 2015 (NIRB 2015).

Agnico Eagle is a senior mining company with a proven reputation for sustainability and economic success wherever it operates. Its success is based on grass roots exploration and successful mining in politically stable countries. Unlike venture capital exploration companies, the economic base and free cash flow from its operations, permits the construction the exploration ramp and ancillary facilities that does not have a proven resource. Agnico Eagle maintains strong relationships with the Nunavut Planning Commission (NPC), the Nunavut Impact Review Board (NIRB), Nunavut Water Board (NWB), Kivalliq Inuit Association (KIA) and other regulators in advancing its projects. Most notably, the recent approval by NIRB for the Meliadine Project and by the NWB's pre-hearing decision on the Meadowbank Mine Type A Water Licence Renewal. These relationships are built on thorough monitoring, reporting and presentation of information to the regulators and stakeholders, and is backed by successful and accomplished operations. Agnico Eagle sees potential in the north and, if approved by the regulators, is willing to invest in the Amaruq exploration portal/ramp project with the knowledge that building the ramp may not translate into additional resource extraction and production for Agnico Eagle.

Agnico Eagle has the financial resources to undertake the ramp as shown in its audited financial statements, which can be found at the following web address:

http://s1.q4cdn.com/150142668/files/doc_financials/2015/2015-Annual-Report.pdf

1.3 Contacts for the Amauq Project

The people who work for and with Agnico Eagle in advancing the Amaruq Exploration Portal/Ramp Program are listed below:

Agnico Eagle – Exploration:	Agnico Eagle Mines Limited CP 87, 765 Chemin de la mine Goldex Val-d'Or (Qc) J9P 4N9 Ph. 819 -874-5980
Exploration Manager:	Denis Valliancourt, Exploration Manager CP 87, 765 Chemin de la mine Goldex Val-d'Or (Qc) J9P 4N9 Ph: 819-874-5980 Email: denis.vaillancourt@agnico-eagle.com
Manager of Regulatory Affairs:	Stephane Robert, Manager of Regulatory Affairs Baker Lake, Nunavut, Canada, X0C 0A0 Ph : 819-759-3555 (ext.5188) M : 819-763-0229 Email : stephane.robert@agnicoeagle.com
Environmental Superintendent:	Ryan Vanengen, Environment Superintendent: Permitting and Regulatory Affairs Baker Lake, Nunavut, Canada, X0C 0A0 M: 819-651-2974 Email: ryan.vanengen@agnicoeagle.com
Exploration Division Environmental Coordinator:	David Frenette, Environmental Coordinator CP 87, 765 Chemin de la mine Goldex Val-d'Or (Qc) J9P 4N9 Ph: 819-874-5980 Email: david.frenette@agnico-eagle.com

1.4 Required Authorizations

1.4.1 Land Use

Agnico Eagle has sole responsibility for the construction, and ongoing inspection and maintenance of all of the components of the proposed Amaruq exploration portal/ramp project and related infrastructure. It also has sole responsibility for the reclamation and closure of the Amaruq project should the ore body being explored prove to not be economic.

1.4.2 Land Use Planning

All project proposals in the Keewatin Planning Region that require a licence or authorization from a land use authorizing agency must be assessed by the NPC for conformity with the Keewatin Regional Land Use Plan (NPC 2000). The proposed Amaruq exploration ramp project is entirely within the Kivalliq (Keewatin) region of Nunavut and therefore is subject to confirmation of conformity determination to the Keewatin Regional Land Use Plan. Agnico Eagle is requesting that NPC undertake a conformity determination on the proposed Amaruq exploration ramp project. Agnico Eagle considers the submission of the Type B Amendment application to the NWB will trigger NPC conformity determination requirements. It should be noted that Agnico Eagle received a positive NPC conformity determination for the exploration activity on the Amaruq Exploration site on May 26, 2008, a winter road on January 22, 2015 and the Amaruq exploration access road on July 16, 2015. The winter road and access road allows bulk supplies such as fuel, drill supplies and other consumables to be delivered to the Amaruq Project. The only other access being by air via fixed wing airplanes or helicopters.

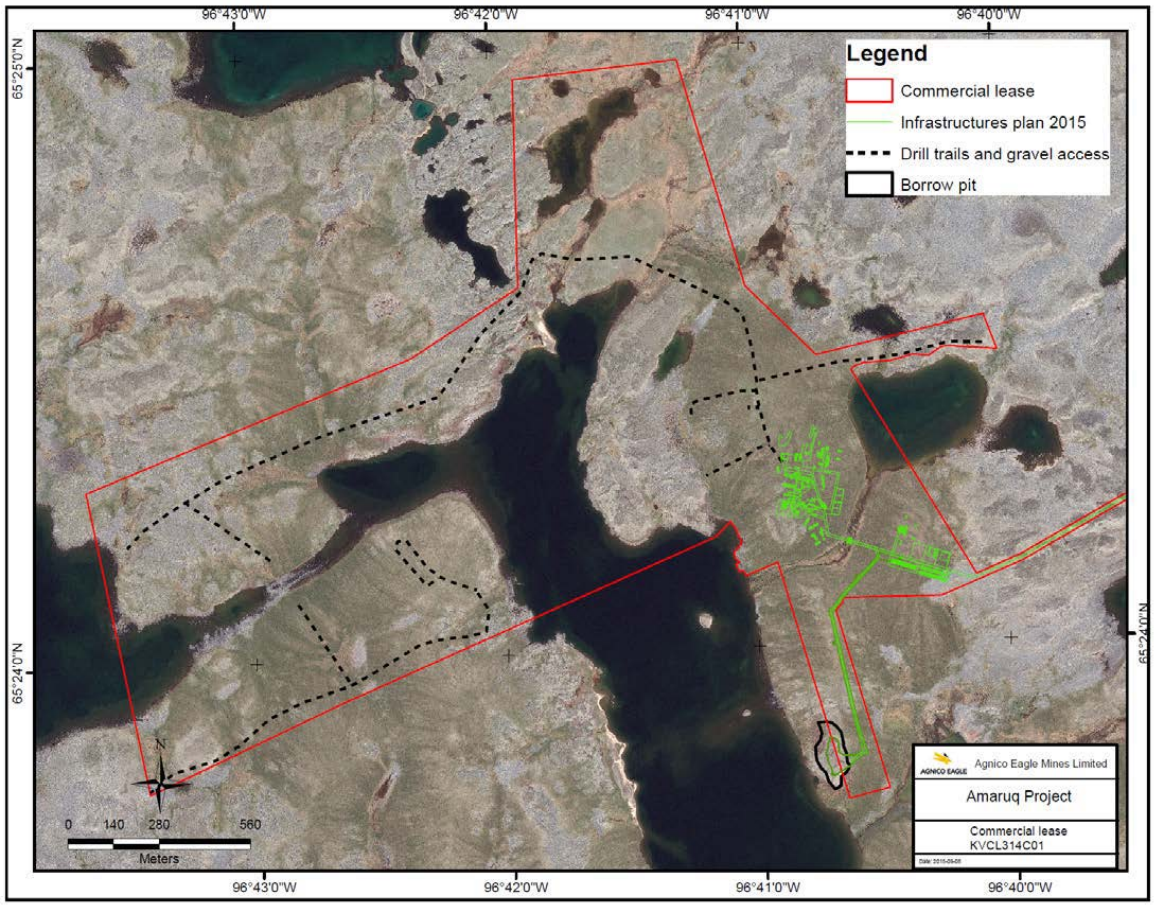
1.4.3 Inuit Owned Land

As stated previously, the 408 km^2 Amaruq Property is located on Inuit Owned Land (IOL), and the rights to minerals found therein was secured by Agnico Eagle in 2013 subject to a mineral exploration agreement with Nunavut Tunngavik Incorporated (NTI). Land and environmental management of Inuit owned land is generally governed by the provisions of the Nunavut Land Claims Agreement as the area encompassing exploration was transferred to the Kivalliq Inuit Association (KIA) when the Nunavut Land Claims Agreement came into effect. Surface administration of the land remains with KIA and Agnico Eagle holds a commercial lease for the immediate camp site as shown in Plate 1. Agnico Eagle files an annual work plan for the upcoming year with the KIA for their approval.

1.4.4 Environmental Screening

The information provided in this main application document has been compiled to meet the information requirements established by the NIRB (http://www.nirb.ca/). Agnico Eagle understands that a positive environmental screening decision for this Application is required before any other agency can issue any permits, leases, or authorizations that would allow Agnico Eagle to commence development of the portal/ramp and quarry.

Plate 1. Amaruq Commercial Lease with the KIA



1.4.5 Water Licence Amendment Approval

Agnico Eagle has compiled the amendment application and supporting information to meet concordance to the NWB Draft - Supplemental Information Guideline (SIG) for Advanced Exploration (Attachment A to the cover letter). The complete application includes the following:

1. Cover letter to the NWB;
2. An amendment application of water licence 2BE-MEA1318;
3. Draft Supplementary Information Guide for Advanced Exploration;
4. Non-technical English and Inuktitut Summary;
5. Cover letter with a cheque for the application fee;
6. Project Description – Amaruq Portal/Ramp and Quarry;
7. Conceptual Reclamation and Closure Plan – Version 6; and
8. Spill Contingency Plan – version 10.

Agnico Eagle holds two water licences for the Amaruq property. The exploration site is subject to Type B Water Licence 2BE-MEA1318, which was last amended in January 2016. This amendment includes the

installation of an additional Bionest sewage treatment plant and envirotank, increased camp capacity, drilling from barges in open water, and changes to monitoring program stations. Agnico Eagle is requesting another amendment to 2BE-MEA1318 for an exploration portal/ramp, quarry, and ancillary infrastructure and activities.

In 2015, Agnico Eagle also received a Type B license for the construction of an Exploration Access Road Type B Water License 2BE- MEA1525. There are no changes or amendments required to water licence 2BE-MEA1525 as a result of the current exploration ramp project.

2. Project Rationale

The goal of all Agnico Eagle mining operations is to mine sustainably, on an economically viable property within an accepting and politically stable region while at the same time managing and mitigating predicted social and environmental impacts. The reality is that mining is dependent on available resources that are feasible; therefore once mine development operations begin and capital costs are made, companies are continuously seeking additional satellite deposits to support existing mine operations. Once a potential ore zone is identified, it must go through all the same stages of exploration as any other deposit to fully assess the economic and environmental feasibility of mining the deposit. The Amaruq property hosts such a deposit. Drilling to date at the Amaruq exploration site indicates an inferred resource that has the potential to be mined as a satellite open pit and would allow the Meadowbank mine to continue operating beyond 2018. AEM is currently collecting environmental baseline data for an impact assessment and is evaluating the economics of this mine (i.e. it is at the pre-feasibility stage).

Currently, initial exploration work has identified an inferred deposit but additional infill or delineation surface drilling is required to complete a resource estimate and to determine the feasibility of advanced exploration (i.e., continued delineation drilling, underground ramp development, underground drilling, and bulk sampling). At each stage of exploration, studies are completed to determine the economic feasibility of the project taking into account technical, financial, and environmental factors to determine if an application is to be made to regulators for future phases or development. Alternatively, a decision is made to abandon the project and focus resources on other potential properties. This proposed amendment, in combination with continued surface drilling, will allow Agnico Eagle to better understand the underground portion of the Amaruq deposit. The ultimate goal for the advanced Amaruq Exploration Ramp Project is to determine if the deposit (both open pit and underground mine) can be classified as a feasible satellite deposit to the Meadowbank mine.

3. Proposed Changes to the Amaruq Exploration Site

The Amaruq underground program will use existing infrastructure at Amaruq site as much as possible. The workforce to develop the portal and ramp and to operate the quarry will lead to an additional 30 to 40 persons being onsite at any one time. The changes to the camp resulting from the underground program are presented in table 1.

Table 1. Changes to the Amaruq Exploration Site with the addition of the Exploration Portal/Ramp Development

What will change	February 2016	With Portal/ Ramp Development
Rooms in Camp	140	200 – 2 new wings are to be added to the camp
Sewage Treatment	2-Bionest sewage treatment plants – each having a treatment capacity of 13,500 L / day 1 – Bionest with capacity 6,500 L/day Total treatment capacity = 33,500 L/day or 240 L/person/day	3-Bionests with capacity of each 13,500 L/day 2- Bionests with capacity of each 6,500 L/day Total treatment capacity = 53,500 L/day or 267 L/person/day
Power generation	3 – Gensets, 2 running, one on standby. kW at 85% capacity = 510 kW	4 – Gensets, 3 running, one on standby. kW at 85% capacity = 935 kW
Fuel Storage (all fuel is stored in double walled envirotanks excepting some barrels that have secondary containment)	31 – 50,000 L (30 – diesel, 2 – Jet B) 2 – 100,000 L (diesel) 1 – 10,000 L (gasoline) Total = 1,760,000 L	35 – 50,000 L (34-diesel, 2-Jet B) 2 – 100,000 L (diesel) 1 – 10,000 L (gasoline) Total = 1,960,000 L
All weather roads	3 km	3.4 km
Fresh water pumped from Whale Lake	12 to 35 m^3/day depending on the population in camp	55 - 57 m^3/day when the camp is full. (5 to 7 m^3/day will be pumped to the ramp for use in its development)
Borrow Pits and Quarries	1 Esker Borrow Pit	1 Esker Borrow Pit and 1 Rock Quarry
Waste Rock Pads	None	2 pads, one for ramp infrastructure and storage of bulk sample. Another for waste rock, aggregate and crusher

Waste products from the underground program's garage, warehouse and office will lead to incremental increases to those already managed onsite; these waste products will be dealt with in accordance with the current Type B License. All wastes that could attract wildlife, used spill response supplies, and other appropriate wastes will be incinerated in the Amaruq Exploration onsite incinerators. Wastes that cannot be incinerated but that can be landfilled will be shipped by winter road or access road (when completed) and disposed of in Meadowbank's approved landfill. Wastes that cannot be incinerated or landfilled will be prepared for shipment to a certified waste management company outside of Nunavut for treatment, recycling and/or disposal.

Spill kits[2] are to be located in the garage and warehouse on the waste rock pad. The garage will service and repair underground equipment and will have a liner under the gravel floor to capture any inadvertent spills that may occur in the garage.

Sewage will be regularly collected from portable toilet located inside the garage. The sewage will be transported to the camp and added to the camp's sewage treatment plant.

Mine vehicles will drive to the fuel transfer pad next to the envirotanks to fill up. Fuel transfer is not expected to occur at the portal.

[2] Spill response is described in the Spill Contingency Plan for the Amaruq site.

4. Portal/Ramp and Quarry Schedule

The Meadowbank mine is scheduled to complete all mining activities by the third quarter of 2018 with the exhaustion of its known ore reserves. Consequently, timing of sourcing additional ore reserves that could be milled at the Meadowbank mine is of critical interest to Agnico Eagle.

The underground exploration program will probe deeper sections of the Whale Tail ore deposit and, if results are encouraging, lead to the collection of a bulk sample. This program will run from 2016 to 2020 inclusive. Underground exploration will take place while the ramp is being advanced with a bulk sample of ore to be collected sometime in 2018 or 2019. The Amaruq underground program parallels that undertaken earlier for the Meliadine Project. Table 2 provides a schedule of the underground program as well as other related activities. Figure 2 shows the location of portal, waste rock pad, quarry, and related infrastructure while Figure 3 is an expanded view that included the location of explosive and cap magazines.

Table 2. Schedule for Advanced Underground Exploration

Activity	Date[1]
Exploration drilling from surface	2013 to present
Pre-feasibility studies of the Whale Tail Deposit are underway	2016
Exploration delineation drilling of ore body from surface; construct portal	2016 - 2017
Develop ramp and undertake underground exploration; develop quarry	2017 - 2020
Completion of Amaruq exploration access road;	2018
Continue surface and underground advanced exploration[2].	2018 - 2020
Continue feasibility studies	2018
Collect bulk sample of ore	2018 - 2019
Complete exploration ramp	2020

[1] Dates provided are conceptual only and are dependent on receipt of regulatory authorizations from the authorizing agencies, and a positive feasibility study in mining a satellite ore deposit to feed the Meadowbank process plant.

[2] Year round ramp development will commence once the exploration access road has been completed.

The Amaruq Exploration quarry is to supplement the waste rock excavated in developing the ramp. In large part, waste rock from the quarry and ramp is to initially be used to supply construction material for the services and operations pads near the portal. Access to rock material from the quarry will be required since sufficient NPAG waste rock will not be available from the ramp when it is most needed; this being when the services pad holding infrastructure servicing ramp development needs to be constructed. After the pads are constructed, rock from the quarry is to be used to make aggregate for backfilling around the cover over the box cut, constructing a berm, road construction, and upgrading ancillary facilities around the site.

The quarry at its full extent will have a surface area of 27,307 m^2. The services pad holding the laydown, buildings and bulk ore sample will have a surface area of 31,716 m^2. The operations pad will have an area of 42,506 m^2 and will hold piles of various types of waste rock encountered in developing the ramp, a crusher and piles of aggregate suitable for construction use.

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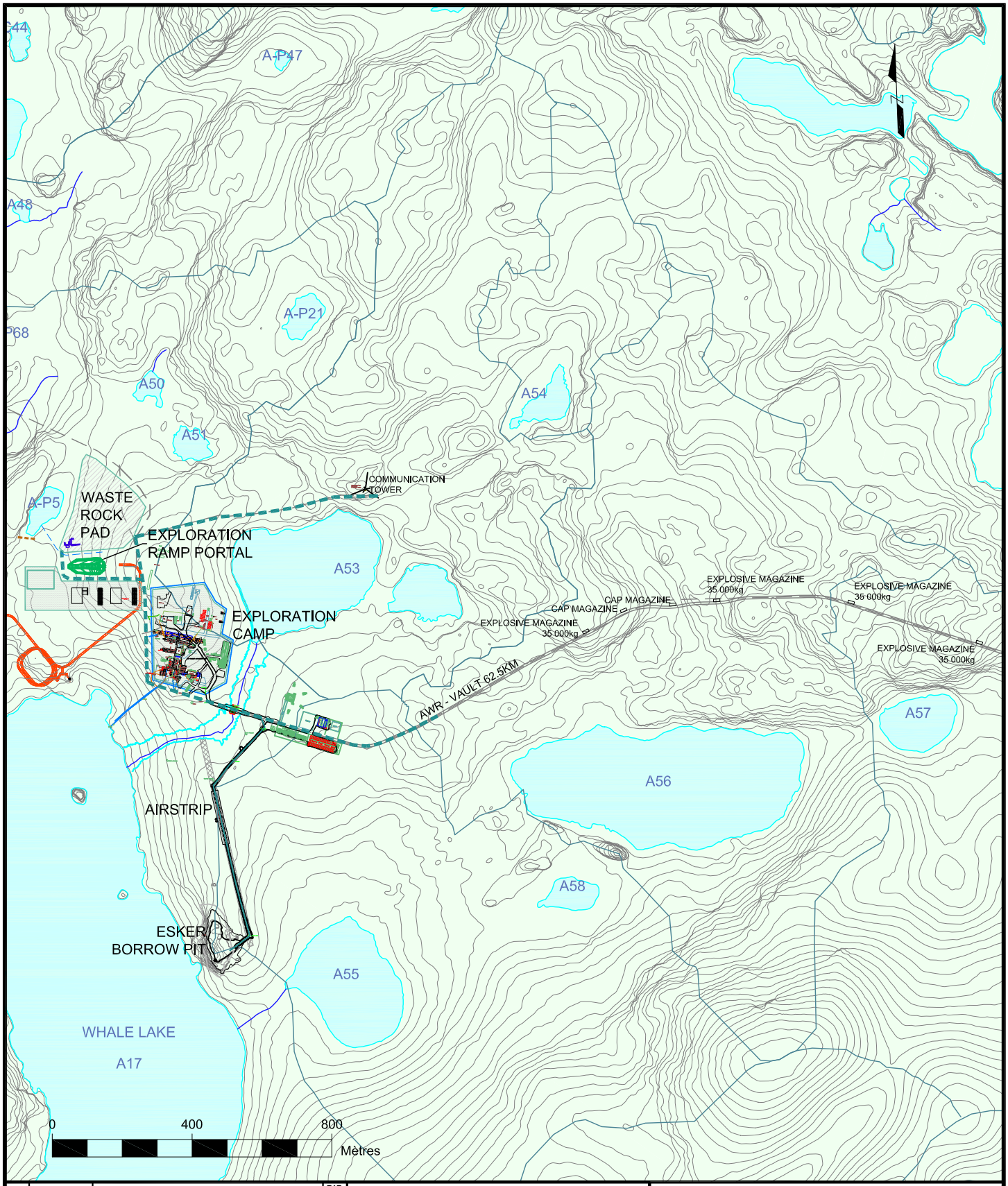

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REVISIONS

AGNICO EAGLE – MEADOWBANK DIVISION

AGNICO EAGLE

AMARUQ PROJECT
PLAN VIEW
MAGAZINE LOCALISATION

No. PROJET / PROJECT No.	6108	DATE	2016-02-17
DESSINÉ PAR / DRAWN BY	J.CRETE		FEUILLE/SHT 1 / 1
APPROUVÉ PAR / APPROVED BY	J.WITTEMAN		
NO. DESSIN / DRAWING NO.	FIG 3		REVISION 3

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5. Required Authorizations

Approvals are required from the Nunavut Planning Commission (NPC), Nunavut Impact Review Board (NIRB), Nunavut Water Board (NWB), and the Kivalliq Inuit Association (KIA) in developing the portal/ramp and quarry. The authorizations are outlined in table 3. The program is not expected to have any effects on fish or fish habitat, navigation or traditional use of the Amaruq area as it is within the approved footprint of the Type B Exploration license and KIA land leases.

Table 3. Authorizations for the Portal – Ramp Program

Authorization	Authority	Basis	Status
Conformity determination with Keewatin Regional Land Use Plan	Nunavut Planning Commission	Determines if the project conforms with the Keewatin Regional Land Use Plan, and decides if the project requires screening by NIRB	Additional conformity review by NPC. (On May 26, 2008, a NPC conformity review found that Meadowbank's regional mineral exploration conformed to the Land Use Plan.)
Project Screening	Nunavut Impact Review Board	Screens the underground program and, if a detail assessment is not required, allows the program to proceed to authorizations.	NIRB to screen Amaruq underground exploration program. In 2011, NIRB screened Agnico Eagle's exploration program and determined it could proceed. (Screening decision 11EN010.)
Type B Water Licence Amendment	Nunavut Water Board	Allows the use of water and disposal of waste in developing the portal/ ramp and quarry	Amendment 4 (described herein) to water licence 2BE-MEA1318 remains to be approved by NWB
Quarry Permit on IOL	Kivalliq Inuit Association	Allows the use of material from the quarry to be used for pad developments, fill around the box cut cover, road construction and constructing ancillary facilities	Letter will be sent to KIA. The use of the quarry will be outlined in the 2017 Work Plan
Commercial Lease KVCL314C01	Kivalliq Inuit Association	Approves changes to the 2016 Work Plan. The changes include the portal/ramp and a quarry	Letter sent to KIA with changes to 2016 Work Plan
Explosive Magazine Permit	Worker's Safety & Compensation Commission	Permits for explosives magazines at approved locations	Request will be sent to WSCC
Mine Rescue Plan	Chief Inspector - Mine Health & Safety Act, Regulations, Part VIII	A Mine Rescue Plan to be prepared before approval of with the portal/ramp is granted.	Mine Rescue Plan is to be prepared by AEM and contractor before development of the ramp is initiated.

The Amaruq Exploration team has developed an emergency response plan for the site. If approved, the plan will be updated to include the ramp and quarry program.

Agnico Eagle and the contractor selected for the underground exploration program will jointly develop a Mine Rescue Plan. This Plan will be comprehensive and is to be submitted to the Nunavut Government to comply with its mine safety legislation and regulations before the start of ramp development.

6. Regional and Site Geology[3]

Lithological units associated with the ramp and portal development include the mafic volcanic and intermediate intrusive rocks, while the underground development will also cross ultramafic, clastic sedimentary and iron formation waste rock.

Lithological codes, “geochemical codes" and a description of each unit are provided below:

Mafic Volcanic (V3 “1b”) – Visually, the mafic volcanic unit has a very similar colour and texture to greywacke. The contact between the two units is diffuse and gradational; whole rock analyses are needed to properly distinguish these two units.

Intermediate Intrusive (I2 “8b”) – This unit is located in the southern and eastern part of the development. It is mostly a diorite unit, which is commonly porphyritic with medium sized grains of plagioclase that are commonly sheared and flattened. It is non-altered and non-mineralized.

Ultramafic – Komatiite (V4A “0a&ob”) – There are two main units that are grouped into this lithology: komatiite (geological code 0a), and a transitional komatiite (0b); for the basis of this report they are referred to as ultramafic rocks. The 0a unit is commonly on the northern part of the underground development, while the 0b unit is south. Both units are commonly altered with a talc-chlorite-carbonate package and are often deformed. The transitional ultramafic rock is distinguished based on whole rock chemistry, which is intermediate between the calc-alkaline and tholeiite units.

Clastic Sedimentary – Greywacke and Chert (S3 & S10 “3b”) – This unit is dominantly comprised of greywacke (S3 “3b”) and chert (S10). The greywacke lithology is present in two locations (S3S & S3N) and between the two ultramafic units mentioned above (S3C), while the chert unit is dominantly located within or in close proximity to the ore zones. The S3C unit also has varying amounts of silica, which was noted during sample collection by Golder and is not defined in the geological model.

Iron Formation (S9E&S9D “0a_alt”) - This unit is a hard, dense and banded unit and has two sub units; a sulfide facies Iron Formation (S9E) and a silicate facies Iron Formation (S9D), which cannot be

[3] The description of the regional and site geology is from Golder and Associates 2016. Evaluation of the Geochemical Properties of Waste Rock from the Underground Ramp, Whale Tail Deposit, Amaruq Mining Project. The complete geochemical memorandum is found in Appendix A.

distinguished chemically. The formation of this rock is interpreted as the subaqueous deposition of sediments associated with the V4A_0a unit. The iron formation commonly contains many alteration-related minerals (calcite, amphiboles, and chlorite) and can sometimes be harder due to silicification. This unit can also be weakly to strongly magnetic closer to the mineralized zones because of the sulphide minerals present as part of the alteration package. Carbonate veins and veinlets, which sometimes can contain pyrrhotite, are often present within this unit.

7. Geochemistry of Waste Rock

The geochemical investigation of the various rock types and ore to be encountered in developing the ramp and quarry was carried out by Golder (Appendix A). For all rock types investigated and using a shake flask equivalent procedure, results showed that the concentrations almost all leachate parameters are below Water Licence 2BE- MEA1218, Part D Item 12 effluent discharge criteria, with the exception of arsenic in at least one sample from each rock type exceeding 0.5 mg/litre (except chert and intermediate intrusive), and pH in all rock types. Paste pH values range from 8.8 to 10.0 corroborating the presence of readily available buffering capacity in all samples.

The complete description of work carried out and the recommendations arising from the work is presented in the Golder report. The report is provided as a supporting document to the amendment application and is included as part of the amendment application.

7.1 Ramp and Portal Waste Rock

Waste rock from the intermediate intrusive lithology in the ramp and portal area is suitable for use as construction material as it is non-PAG and reports no water licence criteria exceedances in kinetic testing.

Similarly, waste rock from the mafic volcanic lithology waste rock is also suitable for use as construction material.

7.2 Underground Development Waste Rock

The chert lithology is potentially acid generating (PAG) will require means to prevent oxidation of sulphides to control acid rock drainage (ARD) in the long-term. This material is not suitable for construction use; it should be managed in a way to prevent acidification in the long-term.

The ultramafic lithologies from the underground development exhibit leachable arsenic concentrations that are above the water Licence criteria of 0.5 mg/L and may not be suitable as construction material where the waste rock would contact open water. However, site specific conditions may be such that arsenic does not leach out of rock at concentrations that exceed criteria. This material could be disposed of and managed on the operations waste rock pad, or possibly be used in construction where exposure and release to water infiltration is minimized.

Some samples of mafic volcanic, greywacke and one sample of iron formation waste rock from the ramp development leach arsenic at concentrations above 0.5 mg/L in static leaching tests. However, the static leaching tests are more conservative than kinetic tests and site conditions. As development of the ramp proceeds closer to the deposit, samples of these lithologies should be analyzed for their total arsenic content to assist in determining whether the material is suitable for construction or should be deposited and managed on the waste rock pad.

Golder's complete memorandum to Agnico Eagle is found in Appendix A. It provides the basis for the recommendations listed above.

8. Uses of Waste Rock and Ore

The location of the portal, services and operations pads, and rock quarry are shown in Figure 2 along with other site infrastructure. The ramp is designed to production standards, 5.2 metres high and 5.2 metres wide, and over its development a total of approximately 612,400 tonnes or 319,800 m^3 of waste rock will be excavated as described in Table 4. The bulk ore sample will be between 9,000 and 15,000 tonnes and will be collected in 2018 - 2019.

Explosives will be used in developing the ramp. As shown in Figure 3, two cap and four explosive magazines will be established. The explosive magazines will be spaced at 365 metre intervals along the Amaruq – Vault all-weather access road, the nearest being approximately 1.5 km from the main camp site. Each magazine will hold 35,000 kg of explosives. Both ammonium nitrate – fuel oil (ANFO) and packaged emulsion explosives are to be used. With only the winter road to depend on initially, a full year's supply of explosives and caps will be stored. At the end of 2017 when the all-weather access road is complete, explosives will be delivered by road. On starting work on the ramp, a temporary explosives and caps magazines will be established underground at the portal entrance. Once the ramp has progressed to a sufficient depth, these will be moved deeper underground.

For the first year and most of the second year, ramp development will proceed through an intermediate intrusive rock type, which is not potentially acid generating (NPAG) and does not leach trace metals above Type B Water Licence criteria. This rock will be used for road and pad construction purposes, and making aggregate. As the ramp proceeds into rock types that do leach trace metals above Type B Water Licence criteria, these rock types will be held in piles on the operations waste rock pad and will not be used for construction. As described in the Water Management section, leachate from the Services and Operations waste rock pads is captured and controlled.

All rock types in the quarry are NPAG. While eighty percent of the rock to be quarried is intermediate intrusive or greywacke and does not leach trace metals above water licence criteria; twenty per cent is mafic volcanics that can leach arsenic above Water Licence criteria of 0.5 mg/L. One of three mafic volcanics samples is above 0.5 mg/L and the average arsenic concentration of the three samples is 0.49 mg/L.

The quarry is located adjacent the portal as shown in Figure 2 and will be used to supply waste rock and aggregate for backfilling, construction and upgrading existing ancillary infrastructure onsite. The crusher is to be located on the operations waste rock pad and will make aggregate using acceptable rock from the quarry and the underground. It is expected that the quantity of rock excavated from the quarry will range from 150,000 to 350,000 tonnes over the five years of underground development and quarry operations. All crush will be stockpiled on the operations pad and be available for use onsite when and where required. Planned uses of aggregate includes backfilling around the portal cover, constructing berms as needed, upgrading site roads and making camp improvements. If aggregate remains at the end of the underground program, it will used on future roads and development. If it is not needed in future development, the aggregate will be spread over the waste rock pad and left in place.

The permafrost at Amaruq is up to 420 metres deep (Knight Peisold 2015). The services and operations pads will be constructed using approximately 120,000 m^3 of waste rock from the quarry, waste rock from ramp development, and overburden resulting from excavating the box cut. The surface area of the pads will be approximately 74,000 m^2 and between 1.5 to 2.0 metres thick. They are to be built on undisturbed land, preferably during winter. The thickness of the pads will protect the underlying permafrost and allow permafrost to aggrade into the pads. The two pads will hold underground support infrastructure, laydown, waste rock piles, bulk sample pile, crusher, and aggregate piles.

Table 4. Waste Rock and Ore from Ramp Development

Year	Location	Length of Ramp (metres)	Rock Removed (tonnes)	Rock removed (cubic metres)
2017	Box Cut	0	28,000[1]	14,900
2017	Ramp	500	46,700	24,800
2018	Ramp and Ventilation Raise[2]	1500	137,200	73,000
2019	Ramp, Ventilation Raise, and Access[3]	3000	268,900	143,000
2018 – 2019	Ore body	-	9,000 to 15,000	4,700 to 7,900
2020	Ramp and Access	1500	131,600	70,000
Total Waste Rock		6500	612,400	325,700

[1] The box cut includes both overburden and waste rock, both will be used in constructing the waste rock pads.

[2] A ventilation raise is a vertical 3 metre circular or square 3m x 3m shaft that goes from the ramp to surface. A ventilation fan is located in the ramp at the base of the shaft or placed on top of the raise at surface.

[3] Access refers to underground development to access drilling locations and the ore body.

A berm will be constructed downstream of the fishless storm water management pond. All contact surface water will report to AP-5. If water accumulates small natural swales near the pads, it will be tested and, if found acceptable, be released to the environment. If not, it will be used in the underground as makeup water or for dust control at the crusher (see Water Management for more information).

9. Ramp Layout

The underground configuration of the ramp is shown in Figure 2. It will descend to depth within intermediate intrusives and mafic volcanics before entering the talik under Whale Tail Lake. The quarry will be located above the ramp but neither will affect the other. The box cut and portal are expected to start in late 2016 and be completed in 2017. As outlined in table 4, the volume of the material excavated for the box cut is 14,900 m^3 of which approximately one third will be overburden and remainder waste rock. The overburden is principally large boulders and will be used in building the pads. Overburden will not be saved for future reclamation.

In 2017, the box cut will be covered with a galvanized bridge plate arch similar to that at Meliadine as shown in Plates 2 and 3. The cover will prevent snow from accumulating in the box cut, and prevent snow melt and rain from flowing down the box cut into the ramp. Figures 3 and 4 show the box cut and its cover in more detail. The exposed box cut outside its cover will be backfilled with aggregate and compacted.

Plate 2. Meliadine Project Ramp Entrance