

File No.: 2BE-MEA1318/ Amendment No. 2

February 27, 2015

David Frenette Agnico-Eagle Mines Limited C.P. 87 765 Ch. de la Mine Goldex Val d'Or, Quebec J9P 4N9

Email: david.frenette@agnico-eagle.com

RE: 2BE-MEA1318 Type "B" – Amendment No. 2:

Increase of Water Use for drilling; Installation of a Wastewater Treatment System "Bionest" at Amaruq (IVR) Camp site; Development and operation of quarries; Construction of a gravel road between camp and quarries; and Extension of Exploration Project boundaries.

Dear Mr. Frenette,

Please find attached, Amendment No. 2 to Licence No. 2BE-MEA1318 Type "B" issued to Agnico-Eagle Mines Ltd. (AEM or Licensee) by the Nunavut Water Board (NWB) (**Motion 2014-B1-041**) pursuant to its authority under Article 13 of the *Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada* and the *Nunavut Waters and Nunavut Surface Rights Tribunal Act*. The terms and conditions of the original Licence related to water use and waste disposal remain an integral part of this approval.

The NWB notes that the Nunavut Planning Commission (NPC) provided documentation stating that the proposal does not change the scope of the originally reviewed project to an extent that would warrant a further review by the NPC at this time<sup>1</sup>. The Nunavut Impact Review Board (NIRB) re-issued the recommended project-specific terms and conditions contained in the April 21, 2011 Screening Decision, NIRB File No.: 11EN010 in addition to new terms and conditions<sup>2</sup> which are designed to mitigate any potential impacts to the environment as per Section 12.4.4(a) of the Nunavut Land Claims Agreement (NLCA).

<sup>1</sup> NPC Conformity Determination dated February 4, 2015.

<sup>2</sup> NIRB Screening Decision dated February 10, 2015.

The NWB strongly recommends that the Licensee consult the comments received by interested persons on issues identified. This information is attached for your consideration<sup>3</sup>.

Sincerely,

Lootie Toomasie Nunavut Water Board

Vice Chair

LT/kk

Enclosure: Licence No. <u>2BE-MEA1318 - Amendment No. 2</u>

Comments – AANDC

Cc: Distribution – Kivalliq

3 Aboriginal Affairs and Northern Development Canada (AANDC), January 19, 2015.

# LICENCE AMENDMENT No. 2

Licensee: AGNICO-EAGLE MINES LTD.

Licence No: 2BE-MEA1318 Type "B"

Licence Issued: March 7, 2013
Amendment No. 1 Issued July 31, 2014
Effective Date: February 27, 2015
Licence Expiry: March 6, 2018

Pursuant to its authority under Article 13 of the Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in Right of Canada and the Nunavut Waters and Nunavut Surface Rights Tribunal Act, with respect to an application for amendment dated November 20, 2014, made by Agnico-Eagle Mines Ltd. (AEM), the Board hereby grants the following Licence amendment.

The Licence issued March 7, 2013 with an expiry date of March 6, 2018 shall be amended to include the following terms and conditions, with respect to the use of water and deposit of waste during camp operations and activities related to exploration that include prospecting, geological mapping, geophysical survey, diamond drilling, to allow AEM for the increase of water use, installation and operation of a Wastewater Treatment System "Bionest" at Amaruq (IVR) Camp, development and operation of quarries to supply aggregate for camp construction activities, construction of a gravel road between camp and quarries, and extension of exploration boundaries.

#### **Procedural History**

On November 20, 2014, AEM submitted to the Board an amendment (Amendment No. 2) application to allow for the increase of water use for drilling purposes, installation and operation of a Wastewater Treatment System "Bionest" at Amaruq (IVR) Camp, development and operation of quarries for camp construction activities, construction of a gravel road between camp and quarries, and extension of exploration boundaries.

The Amendment No. 2 application (Application) included the following documents as supplementary information:

- NIRB Part 1 Form
- NIRB Part 2 Form;
- Amendment Application;
- Claims Location map;
- Non-Technical Summary Amaruq Project English and Inuktitut;
- Wastewater Treatment Solutions "Bionest" Outland Camp/Nunavut; and
- Amaruq Camp and Project boundaries precise coordinates, submitted on December 9, 2014 as per request of NWB Staff.

On December 19, 2014, the Board distributed the Application for a thirty (30) day comment period. On January 19, 2015, submissions were received from Aboriginal Affairs and Northern Development Canada (AANDC). No concerns were expressed related to the proposed activities.

# Wastewater Treatment System "Bionest" (WWTS) Operation and Maintenance Plan

The Licensee shall be required to submit to the Board for approval within ninety (90) days following issuance of this amendment or at least sixty (60) days prior to commissioning the Wastewater Treatment System "Bionest" (WWTS), an Operation and Maintenance Plan for WWTS. The Plan should address, at a minimum, the treatment process overview and WWTS maintenance requirements, monitoring and inspection details, and emergency procedures.

## Quarry Management Plan

The Licensee shall be required to submit to the Board for approval within ninety (90) days following issuance of this amendment, or at least sixty (60) days prior to developing any quarry a Quarry Management Plan. The Plan should address, at a minimum, the number, locations, geochemical and physical characterization of the proposed aggregate materials including Acid Rock Drainage and Metal Leaching potential, erosion control measures, surface drainage and water management procedures, monitoring activities, and closure and reclamation methods.

## Spill Contingency Plan

The Licensee is required to update the Plan approved under Part H, Item 1 of the Licence and submit to the Board for review within thirty (30) days of issuance of the Amendment or within the 2014 Annual Report as required by Part B, Item 7. The updated Plan shall include the proposed changes to on-site facilities.

## Abandonment and Restoration Plan

The Licensee is required to update the Plan approved under Part I, Item 1 of the Licence and submit to the Board for review within thirty (30) days of issuance of the Amendment within the 2014 Annual Report as required by Part B, Item 7. The updated Plan shall include the proposed changes to on-site facilities.

#### LICENCE AMENDMENT No. 2

The Licence (Page ii) shall be amended to indicate the following:

#### **DECISION**

**LICENCE NUMBER: 2BE-MEA1318** 

This is the decision of the Nunavut Water Board (NWB) with respect to an application dated August 29, 2012 for a renewal of a Water Licence made by:

#### AGNICO-EAGLE MINES LIMITED

to allow for the use of water and disposal of waste during camp operations and activities related to exploration that include prospecting, geological mapping, geophysical surveys, diamond drilling on land and on ice, trenching and quarrying, water crossings installation during proposed gravel road construction, operation and closure based out at Amaruq (IVR) Camp at the Meadowbank Exploration Project located within the Kivalliq Region, Nunavut generally located at the geographical coordinates as follows:

Project Extents:

NW: Latitude: 65° 30' N Longitude: 97° 12' W NE: Latitude: 65° 33' N Longitude: 96° 00' W SW: Latitude: 64° 47' N Longitude: 97° 37' W SE: Latitude: 64° 47' N Longitude: 96° 22' W

Camp Location(s)

Amaruq (IVR) Camp: Latitude: 65° 24' 36" N Longitude: 96° 41' 41" W

## **AMENDMENT No. 2**

The Licence, (Page 1), shall be amended to indicate the following:

Quantity of Water Use

Not to Exceed: TWO HUNDRED AND NINETY NINE (299) CUBIC

**METRES PER DAY** 

## PART A: SCOPE, DEFINITIONS AND ENFORCEMENT

#### Amend

#### 1. Scope

This Licence allows for the use of water and the disposal of waste for a Mining undertaking classified as per Schedule I of the Regulations at the Meadowbank Exploration Project, located approximately 70-125 km north of the Hamlet of Baker Lake

within the Kivalliq Region, Nunavut (Amaruq (IVR) Camp located at latitude 65° 24' 36" N and longitude 96° 41' 41" W). Activities include camp operation, fuel storage, mineral exploration including: prospecting, geological mapping, geophysical surveys, diamond drilling, baseline data collection, water crossings' installations, trenching and quarrying.

#### Insert

#### 2. Definitions

"Wastewater Treatment System (WWTS)" means the wastewater treatment system "Bionest" for the treatment of sewage and greywater as described in the Amendment Application, dated November 20, 2014, and in the accompanying document entitled "Bionest Wastewater Treatment Solutions Outland Camp/Nunavut", dated August 24, 2014.

# PART C: CONDITIONS APPLYING TO WATER USE

Amend Item 1

The Licensee shall obtain all domestic freshwater for the Amaruq (IVR) Camp from a local lake as outlined in the application. The volume of water for domestic purposes shall not exceed nineteen (19) cubic metres per day. Drill water shall be obtained from local water source(s), proximal to the drilling targets as outlined in the application, up to a maximum of two hundred and eighty (280) cubic metres per day. The volume of water for the purposes of this Licence shall not exceed two hundred and ninety-nine (299) cubic metres per day.

# PART D: CONDITIONS APPLYING TO WASTE DISPOSAL

Amend Item 8

The Licensee shall dispose of all Greywater in a sump located a distance of at least thirty one (31) metres above the ordinary high water mark of any water body, at a site where direct flow into a water body is not possible and no additional impacts are created, unless otherwise approved by the Board in writing. Upon commissioning of the Wastewater Treatment System "Bionest" (WWTS), the Licensee shall direct all Greywater to the WWTS, unless otherwise approved by Board in writing.

Amend Item 9

The Licensee shall contain all Toilet Wastes in latrine pits or treated using incineration, chemical, portable or composting toilets. Latrine pits shall be located at a distance of at least thirty one (31) metres above the ordinary high water mark of any water body, treated with lime and covered with native material to achieve the pre-existing natural

contours of the land prior to abandonment. Upon commissioning of the Wastewater Treatment System "Bionest" (WWTS), the Licensee shall direct all Toilet Wastes to the WWTS, unless otherwise approved by Board in writing.

## Insert Item 13

All Wastewater effluent discharged from the Wastewater Treatment System "Bionest" (WWTS), at Monitoring Program Station MEA-1 shall not exceed the following Effluent quality limits:

Parameter	Maximum Concentration of any Grab Sample
pH	6.0 to 9.5
Biochemical Oxygen Demand (BOD5)	80 mg/L
Total Suspended Solids (TSS)	100 mg/L
Fecal Coliforms	1000 CFU/100mL
Oil and Grease	5 mg/L & No visible sheen

# Insert Item 14

All solid waste (sludge) from WWTS primary tank shall be disposed of in latrine pits that shall be located at a distance of at least thirty one (31) metres above the ordinary high water mark of any water body, treated with lime and covered with native material to achieve the pre-existing natural contours of the land prior to abandonment.

# PART E: CONDITIONS FOR CAMPS, ACCESS INFRASTRUCTURES AND OPERATIONS

Insert Item 6

The Licensee shall submit to the Board for approval within ninety (90) days following issuance of this amendment or at least sixty (60) days prior to commissioning the Wastewater Treatment System "Bionest" (WWTS), an Operation and Maintenance Plan for WWTS providing at a minimum the treatment process overview and WWTS maintenance requirements, monitoring and inspection details, and emergency procedures.

#### Insert Item 7

The Licensee shall submit to the Board for approval within ninety (90) days following issuance of this amendment or at least sixty (60) days prior to developing any quarry, a Quarry Management Plan. At a minimum, this plan should address the location, geochemical and physical characterization of the proposed aggregate materials including Acid Rock Drainage and Metal Leaching potential, erosion control measures, surface drainage and water management procedures, monitoring activities, and closure and reclamation methods.

#### Insert Item 8

The Licensee shall submit to the Board for review within thirty (30) days prior to construction, issued for construction drawings for all engineered project infrastructures (i.e. roads, camp pad construction, water crossings) stamped by a qualified Engineer. A Construction Summary Report including as-built plans and drawings stamped by a qualified Engineer shall be submitted to the Board within ninety (90) days of completing construction undertakings.

## Insert Item 9

The Licensee shall maintain a minimum of thirty one (31) metres large undisturbed buffer zone between the periphery of quarry sites and the high water mark of any water body. The Licensee shall not excavate and/or remove material from the quarry beyond a depth of one (1) metre above the high water mark or above the groundwater table, to prevent the contamination of groundwater. The quarrying shall be in accordance with all applicable legislation and industry standards including the *Northern Land Use Guidelines*, *Pits and Quarries* (INAC, 2010).

#### Insert Item 10

Sediment and erosion control measures shall be implemented prior to and maintained during the construction and operation where necessary to prevent entry of sediment into water.

#### Insert Item 11

The Licensee shall ensure that all containment and runoff control structures are constructed and maintained to prevent escape of wastes to the surface or groundwater systems.

## Insert Item 12

The Licensee shall limit any in-stream activity including crossing/fiording to low water period. Machinery fording the watercourse to bring equipment required for construction to the opposite side is limited to a one-time event (over and back) and should occur only if an existing crossing at another location is not available or practical to use. In-stream activity is prohibited during fish migration.

## Insert Item 13

The Licensee shall only use rock for construction that is determined to be non-acid generating and non-metal leaching.

#### Insert Item 14

The Licensee shall, for the purposes of clear span bridge installation, ensure that all activities remain outside of the natural channel width by the placement of abutments, footings or armoring above the ordinary high water mark so that there is no restriction to the natural channel processes.

### Insert Item 15

With respect to construction or other earthworks where direct or indirect flow into a water body is possible, the deposition of debris or sediment into or onto any water body is prohibited. These materials shall be disposed a distance of at least thirty one (31) metres from the ordinary high water mark in such a fashion that they do not enter the water.

## Insert Item 16

All surface runoff during the construction of any facilities, where flow may directly or indirectly enter a water body, shall meet the following Effluent quality limits:

Parameter	Maximum Average Concentration (mg/L)	Maximum Concentration of Any Grab Sample
		(mg/L)
Total Suspended Solids	50.0	100.0

## Insert Item 17

The Licensee shall ensure that all construction of engineered structures is supervised and field checked by an appropriately qualified and experienced Engineer in such a manner that the project specification can be enforced and, where required, the quality control measures can be followed. The Licensee shall maintain and make available at the request of the Board and/or an Inspector, all construction records of all engineered structures.

# PART J: CONDITIONS APPLYING TO THE MONITORING PROGRAM

## Insert Item 12

The Licensee shall, at a minimum, maintain Monitoring Stations at the following locations:

<b>Monitoring Station</b>	Description	Status
MEA-1	Wastewater Effluent discharged from the Wastewater Treatment System "Bionest" (WWTS)	New – Volume and Effluent Quality

## Insert

#### Item 13

The Licensee shall sample the effluent discharging from the WWTS, Monitoring Station MEA-1 prior to being released into environment in order to provide confirmation of effluent quality as required by Part D, Item 13, for the following parameters:

pH Fecal Coliforms
Biochemical Oxygen Demand (BOD<sub>5</sub>) Oil and Grease (and visual)
Total Suspended Solids (TSS)

# Insert

## Item 14

The Licensee shall, during periods of flow and just after a major rainfall event, conduct water quality testing immediately upstream and downstream of the water crossings, any significant water seeps in contact with the road and any flows originating from borrow pits or rock quarries on a monthly basis prior to construction, during the construction and upon completion while testing for criteria listed under Part J, Item 6.

## Insert Item 15

The Licensee shall implement a water crossings visual inspection and maintenance program prior to, during spring freshet and after heavy rainfall events to identify issues related to watercourse crossings structural integrity and hydraulic function.

# Insert

#### Item 16

Additional monitoring requirements may be requested by the Inspector.

## Insert

#### Item 17

The Licensee shall obtain a digital photographic record of all water crossings before, during and after construction has been completed.

## Insert

#### Item 18

The Licensee shall include in the Construction Summary Report required under Part E, Item 8 all data, monitoring results and information required by this Part.

All remaining terms and conditions of the Licence 2BE-MEA1318 Type 'B" and Amendment No. 1, dated March 7, 2013 and July 31, 2014, still apply.

This Licence Amendment No. 2 is issued and recorded at Gjoa Haven, NU on February 27, 2015.

Approved by,

Lootie Toomasie Nunavut Water Board

Vice Chair