July 13th, 2016

Manager of Licensing, Nunavut Water Board
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Subject: Management Plan submission prior to new construction

Madam, Sir,

As requested, the following information and comments are intended to address the comments received from ECCC and INAC for Agnico Eagle's *Management Plan Submission Prior to New Construction*.

Should you have any questions please do not hesitate to contact the undersigned.

Regards,

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1.0 Indigenous and Northern Affairs Canada

Comment 1: The proponent has provided an Addendum (Section 5-update) to the Water Quality Monitoring and Management Plan for Dike Construction and Dewatering (Version 4, March 2010)* to reflect monitoring to be conducted starting July 20, 2016 (pending regulatory approval) as part of Phaser Lake dewatering activities.

INAC notes that Water Quality Monitoring and Management Plan for Dike Construction and Dewatering (Version 4, March 2010) was prepared in accordance with Water Licence 2AM-MEA0815 (expired). Section 4 of the plan (Version 4, March 2010) provides proponent's commitments for water quality monitoring and total suspended solid (TSS) management for dikes construction including East dike, South Camp dike and Bay-Goose dike. Tentative schedules of work for various activities for the mentioned dikes were also included in the plan accordingly.

INAC is concerned that the provided Addendum alone (section 5 –update) is inadequate for water quality monitoring and management for the new Vault dike construction and dewatering activities (Figure 2 of the Addendum). Tentative schedule of work for various activities and procedures related to Vault dike construction and dewatering are not available in the plan.

Recommendation 1: INAC recommends that Water Quality Monitoring and Management Plan for Dike Construction and Dewatering (Version 4, March 2010) be updated in accordance with the new Water Licence No. 2AMMEA1525 to include the monitoring requirements and management for Vault dike construction and dewatering. In addition, tentative schedule of work for various activities and procedures related to Vault dike construction should be included in the plan.

Agnico Eagle's Response:
Agnico Eagle has included the monitoring requirements and management for Phaser dewatering in its addendum to section 5. Vault dike construction and Vault dewatering activities were completed in 2013 and 2014. There will be no further dewatering dike construction at the Meadowbank site. Agnico Eagle is of the opinion that the Water Quality Monitoring and Management Plan for Dike Construction and Dewatering and addendum are complete and adequately address upcoming monitoring requirements and management at the Meadowbank site for the dewatering of Phaser Lake.

2.0 Environment and Climate Change Canada

Comment 1: The "Management Plan submission prior to new construction" is an addendum to the March 2010 Water Quality Monitoring and Management Plan for Dike Construction and Dewatering, which is difficult to access on the NWB ftp site. To be more useful, the addendum should be standalone for key information, and should include Figure 12 from the original Plan showing the Standard Operating Procedure for suspended sediment monitoring and management. At a minimum, a link to the original Plan should be included.

Agnico Eagle's Response:

Agnico Eagle has prepared an addendum of Section 5 as information contained in other sections has not changed. Sections 2 and 3 are still applicable and there will be no more dewatering dike construction at the Meadowbank site (Section 4). Figure 12 has been incorporated to the Addendum. A link to the NWB ftp website to refer to the Original Plan (Version 4, March 2010) has also been included to the Addendum for clarity. See Appendix A for the Addendum update.

Comment 2: For the use of turbidity as a field surrogate for Total Suspended Solids (TSS) measurement, reference should be made to how the site-specific turbidity-TSS relationship will be established. Quality Assurance/Quality Control practices should be referenced.

Agnico Eagle's Response:

During the dewatering of Phaser Lake, daily Total Suspended Solids (TSS) water samples will be analyzed at the onsite laboratory (non-accredited) in addition to the regulatory samples. These samples will constitute a good control method for the environment team to follow the water quality during the dewatering process. These samples will only be used as guidance and will not replace regulatory samples.

*The dewatering monitoring relationship between turbidity and TSS as described in Appendix A (TSS – Turbidity Relationship) of the Water Quality Monitoring and Management Plan for Dike Construction and Dewatering (*Version 4, March 2010*) will not be used during Phaser Lake dewatering as daily TSS analysis and turbidity readings are considered more reliable. The Addendum in Appendix A to this letter has been modified accordingly.*

The purpose of quality assurance and quality control (QA/QC) for turbidity measurements is to ensure that the field data collected are representative of the water sampled. The objective is to ensure the turbidity measurements meet the QA/QC standard: ensure the turbidity meters are properly calibrated (i.e. their readings have high precision and accuracy. Furthermore, data quality is assured throughout the collection and analysis of samples using standard procedures, certified laboratories and by staffing with trained technicians.

For samples collection, QA/QC practices will be followed during Phaser Lake dewatering activities. One (1) field duplicate will be collected every ten (10) samples for daily and weekly samples.

Comment 3: Agnico Eagle Mines Ltd. is planning to start dewatering July 2016. The dewatering plan should identify any variation in practices for dewatering occurring during winter conditions in the event of a delay.

Agnico Eagle's Response:
No dewatering is planned during the winter time because of operational constraints. If delays occur, Agnico Eagle will resume dewatering activities in spring 2017.

Comment 4: It is not stated how the lake level monitoring will be used to determine whether Wally Lake remains within natural variation. The original Plan does not provide details, and excerpts have just been reiterated for the Phaser dewatering. To demonstrate that the licence requirement can be met, the Plan should identify the high and low water elevations for Wally Lake, and how measurements will be compared.

Agnico Eagle's Response:
Wally lake water level will be measured weekly prior to and during dewatering activities. Measurements will be compared with historical data and natural variation (139.3 to 139.7m).

Appendix A - Water Quality Monitoring and Management Plan for Dike Construction and Dewatering (Version 4, March 2010) - Addendum update

ADDENDUM

AGNICO EAGLE

Project Name:	Meadowbank Gold Project	
Plan / Version:	Water Quality Monitoring and Management Plan for Dike Construction and Dewatering	Version 4
NIRB Requirement:	Project Certificate No. 004	**Condition:** not applicable
NWB Requirement:	2AM-MEA-1525	**Condition:** Part D, Item 5
Addendum:	**Version 4; March 2010 (see link for reference below)**	

Section Change	**Specify: Update or New**	**Details**
Section 5	Update	**WATER QUALITY MONITORING AND MANAGEMENT DURING DEWATERING ACTIVITIES** In the summer of 2016, Agnico Eagle plans to dewater Phaser Lake to allow for mining activities to occur in Phaser and BB Phaser pits. During dewatering activities, there is potential for sediments to become suspended as exposed substrates slump. Suspended sediments could then enter the water pipe(s) and be discharged to Wally Lake. In addition, the discharge itself could disturb the bottom sediments in the lakes and lead to increased levels of suspended sediments. The following plans will mitigate against possible problems with suspended sediments and other key parameters (i.e., pH and aluminum) during dewatering: • Intake pipe(s) will be located at a sufficient distance from shore (minimum 10 meters) and, to the extent possible, in areas with highest water depth. • The discharge will be located in areas of Wally Lake where there is deep, low-value habitat. Monitoring during dewatering will be primarily

		focused at the water intake pumps or at the outlets of the water treatment plant, but will also include the receiving environment of Wally Lake. During the dewatering of Phaser Lake, daily Total Suspended Solids (TSS) water samples will be analyzed at the onsite laboratory (non-accredited) in addition to the regulatory samples. These samples will constitute a good control method for the environment team to follow the water quality during the dewatering process. These samples will only be used as guidance and will not replace regulatory samples. Turbidity readings will also be taken. Weekly samples will be taken at the water intake pumps or at the outlets of the water treatment plant, and at the receiving environment. These samples will be analyzed by an accredited laboratory. QA/QC practices will be followed during Phaser Lake dewatering activities for the daily and weekly samples. One (1) field duplicate will be collected every ten (10) samples for daily and weekly samples. QA/QC practices will also be applied to the turbidity readings. <u>Dewatering Locations</u> Three locations will be used to dewater Phaser Lake (see Figure 1). First of all, pumping will be conducted at location 1 to dewater basin 1. When the water level will reach elevation 138m, basins 2 and 3 will be separated from basin 1. Water intake will then be transferred to location 2 and pumping will continue in basin 2. At elevation 137.4m, basins 2 and 3 will be separated. Dewatering will finally be conducted at location 3 to complete dewatering of basin 3. Water will be discharged to the Vault Attenuation Pond (Figure 2). At this location a Water Treatment Plant (WTP) is installed to treat the water if needed. The WTP will be used when the water quality monitoring from the Vault Attenuation Pond, including water from Phaser Lake, indicates the water does

not meet the license criteria. The WTP will be bypassed when the water quality monitoring indicates the license criteria are being met; in this event water will be discharged directly to Wally Lake.

Standard Operating Procedure for Monitoring And Management During Dewatering

The Standard Operating Procedure (SOP) for monitoring and management of suspended sediments and other key parameters during dewatering is shown in Figure 12 (version 4, March, 2010), attached to this Addendum. Of mention, the SOP strives for proactive prevention and mitigation of problems. Monitoring will be conducted under the direction of Agnico Eagle's Environmental supervisor on-site. All monitoring results will be included in the Monthly Monitoring Summary Report.

LAKE LEVEL MONITORING DURING DEWATERING ACTIVITIES

In addition to the monitoring and management of suspended sediments, a hydraulic monitoring plan has been developed to monitor the following components:

- Water level in Wally Lake will be measured weekly prior to and during dewatering activities. Measurements will be compared with historical data and natural variation (139.3 to 139.7m) and;
- Outlet erosion inspections to monitor outlet stability, including potential erosion and/or ice damming within the outlets.

Wally Lake water levels will be surveyed at a location of sufficient distance from the outlets to limit potential lake level drawdown effects. Lake water levels will be monitored weekly during dewatering.

Figure 1. Water intake locations for Phaser Lake Dewatering

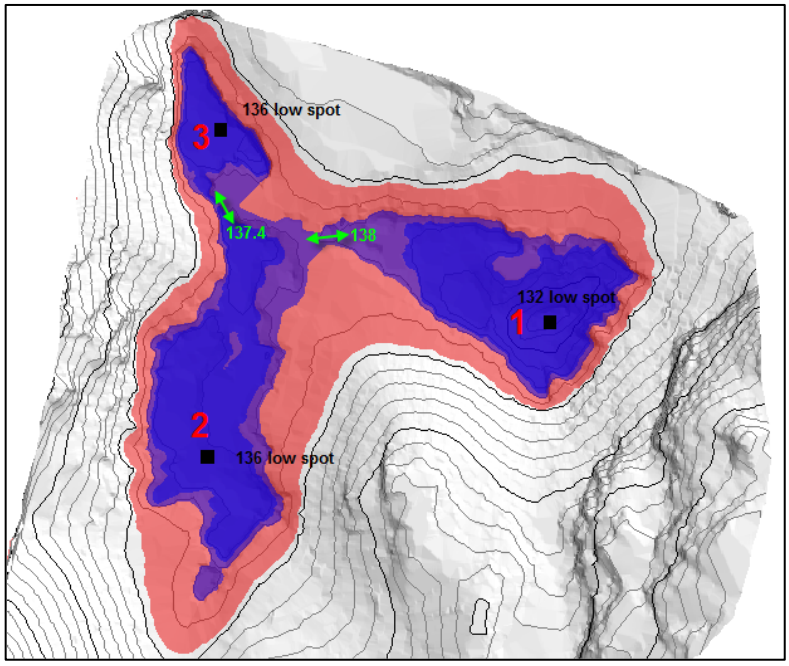
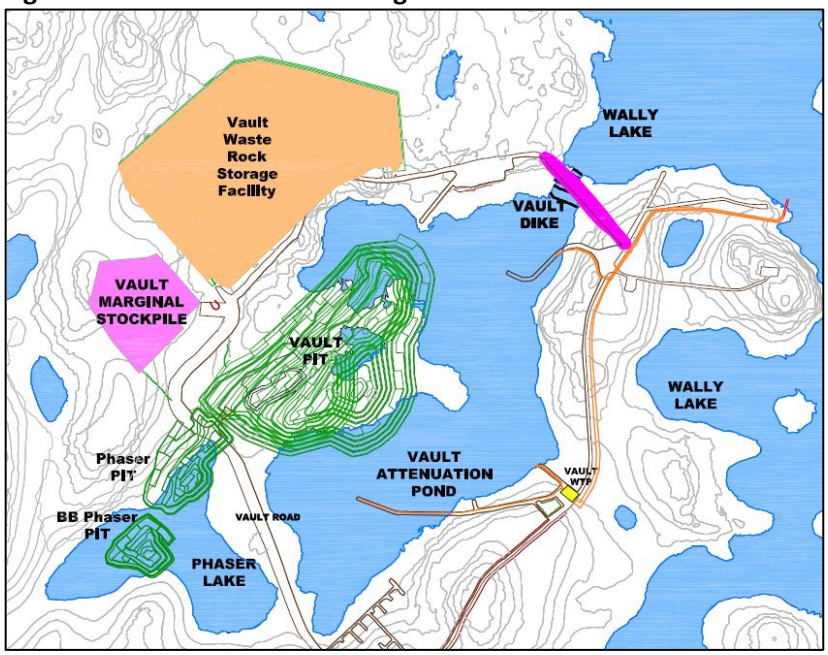


Figure 2. Phaser Lake Dewatering Area

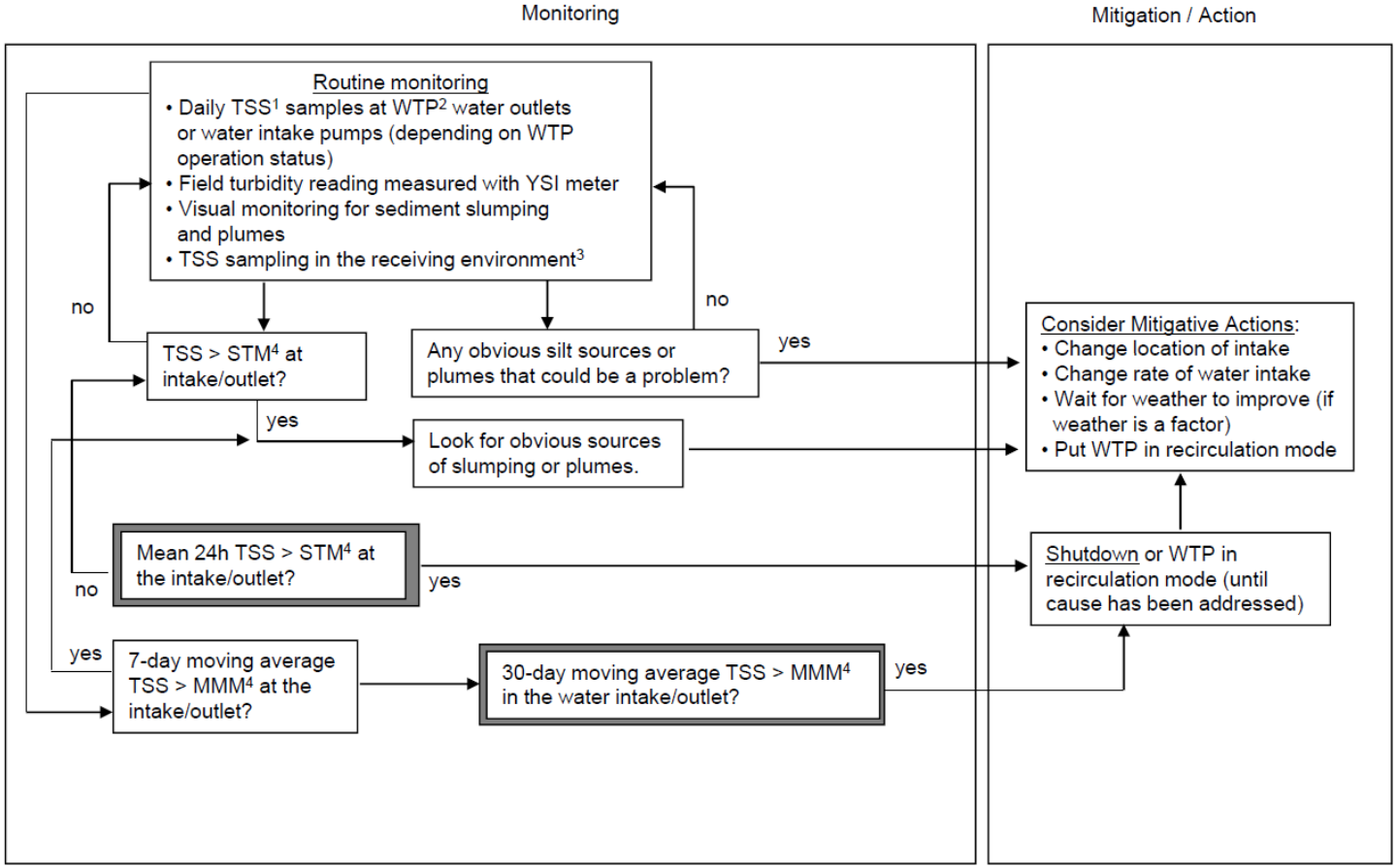


Link to the NWB ftp website to refer to the original document:

Water Quality Monitoring and Management Plan for Dike Construction and Dewatering (Version 4, March 2010

http://www.nwb-oen.ca/public/registry/2%20MINING%20MILLING/2A/2AM%20-%20Mining/2AM-MEA1525%20Agnico/3%20TECH/5%20CONSTRUCTION%20(D)/D11%20Water%20Quality%20Monitoring%20Dike/100504%202AM-MEA0815%20D11%20Water%20Quality%20Monitoring%20and%20Mgmt%20Plan%20Ver%204-ILAE.pdf

Figure 12: Standard Operating Procedures for Suspended Sediment Monitoring and Management During Lake Dewatering



Notes: 1. TSS will be measured using turbidity as a surrogate 2. WTP = Water Treatment Plant 3. Monitoring on a weekly basis 4. STM = short term maximum concentration of TSS; MMM = maximum monthly mean TSS concentration

**For Phaser dewatering; Daily TSS will be analyzed at the onsite laboratory instead of using turbidity as a surrogate*

Source: Water Quality Monitoring and Management Plan for Dike Construction and Dewatering (Version 4, March 2010)