Appendix I2

Document: Executive Summary

AGNICO EAGLE

MEADOWBANK GOLD PROJECT

Summary of revision
and
Executive Summary:
2015 Management Plans, Reports and Studies

March 2016

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Section 1: 2015 Management Plans: Summary of Revisions and Executive Summary Translations

1.1: Spill Contingency Plan, Version 6

Summary of Revisions

This document is a revision of the Spill Contingency Plan which was initially prepared in 2008 (version 1) and was subsequently updated in 2011 (version 2), 2012 (version 3), 2013 (version 4), and 2014 (version 5). Recommendations made during the water license renewal process were incorporated in this revision. Section 3, 5.1.3 and 5.6 along with Table 4 and Appendix L and M were updated. A section on event monitoring was added along with seepage monitoring.

Executive Summary

This document presents the Spill Contingency Plan for Agnico Eagle Mines Limited (AEM) Meadowbank Mine Site, All Weather Access Road (AWAR) and Baker Lake Marshalling Facilities, which is a requirement of the Meadowbank Gold Project Type A Water License No. 2AM-MEA1525 issued on July 23, 2015. The Spill Contingency Plan (SCP) designates lines of authority, responsibility, establishes proper reporting and details plans of action in the event of a spill. This plan applies to the operational phase of the mine and is applicable to all AEM employees and any contractors associated with the project located at latitude 65°01'52"N longitude 96°04'22"W approximately 70 km north of Baker Lake in Nunavut including the Baker Lake Marshalling Facilities located at latitude 64°18'36"N and longitude 95°58'04"W and the AWAR.

1.2: Water Quality and Flow Monitoring Plan, Version 5

Summary of Revisions

This document is a revision of the Water Quality and Flow Monitoring Plan which was initially prepared in 2008 (version 1) and subsequently updated in 2009 (version 2), 2014 (version 3) and 2015 (version 4).

In 2016, a comprehensive review of the management plan was completed. All sections were revisited to reflect changes to the latest life of mine plan and to the renewed NWB water license 2AM-MEA1525. Modifications include the incorporation of Phaser and BB Phaser pits, and WEP1 and WEP2 sumps as part of the water quality monitoring program.

Executive Summary

The Water Quality and Flow Monitoring Plan (the Plan) has been prepared in accordance with the requirements of the Nunavut Water Board Type A water license 2AM-MEA0815 and updated as per the renewed Water License 2AM-MEA1525. The Plan is one component of the Aquatic Effects Management Program (AEMP) and is closely associated with the Water Management Report and Plan.

Section 2 in this Plan includes an overview of the monitoring programs and mine development schedule. Section 3 provides specific details (including sampling locations and parameters to be measured) for the compliance monitoring program, along with general guidance for the event monitoring program. An adaptive management program is described for both regulated discharges and non-regulated discharges in Section 3 as well. Requirements of the flow monitoring program are described in Section 4, and an overview of the reporting requirements in Section 5.

1.3: Incinerator Waste Management Plan, Version 6

Summary of Revisions

This document is a revision of the Incinerator Waste Management Plan which was initially prepared in 2008 (version 1) and updated in 2009 (version 2), 2012 (versions 3 and 4) and 2014 (version 5).

In 2016, a comprehensive review of the management plan was completed. Modifications include update to the incinerator ash chromium guideline to comply with the revised Nunavut Environmental Guideline for Industrial Waste Discharges (2011), and updates to waste oil and incinerator ash sampling frequencies. Moreover, best management practices regarding the management of used oil will therefore be provided by the GN Environmental Guideline for Used Oil and Waste Fuel (2012). This document supercedes the NWT Used Oil and Waste Fuel Management Regulations which was previously used.

Executive Summary

This Incinerator Waste Management Plan (IWMP) describes the performance limits, waste management protocols, operation, monitoring and record keeping requirements for the incinerator and waste oil burning furnaces. This plan was developed in support of AEM's renewal application for a Type A Water License from the Nunavut Water Board (NWB). AEM's water license 2AM-MEA1525 was renewed on July 23, 2015. This updated IWMP is a component of the Meadowbank Environmental Management System. This IWMP will be maintained by AEM to reflect the current operations at the Meadowbank Gold Project, permit requirements and regulatory setting. The IWMP will be reviewed on a regular basis and revised by AEM when necessary to ensure that the project staff, operators and regulatory bodies are kept aware of any changes to project operations. Any changes in operation/procedures are communicated to all applicable Meadowbank Departments.

The main objective of waste management relating to the primary incinerator and waste oil furnaces is to minimize the amount of solid waste to be incinerated by implementing an effective waste segregation and reuse (in the case of waste oil) program to ensure that only appropriate types of waste are incinerated. The primary objective of incineration is to eliminate materials from the landfill that could create odours, attracting wildlife to the landfill site or to the Meadowbank camp; as well as to avoid the generation of leachate caused by the decomposition of putrescible materials. The primary incinerator is a dual chamber, high-temperature incinerator and is used to dispose of solid waste from the accommodation camp, kitchen, shops, and offices that cannot be landfilled. The materials to be incinerated will be limited to putrescible waste such as paper, wood, food packaging and food waste. In addition, a number of small waste oil burning furnaces will be utilized in order to recycle used petroleum products such as heavy lubricants and engine oil. Ash produced from the incineration process will be disposed of in the on-site landfills provided it meets criteria as stated in Industrial Waste Discharges into Municipal Solid Waste and Sewage Treatment Facilities (GN, 2011). A protocol is implemented for testing incinerator ash and contingent measures for alternate disposal of ash if quality is unsuitable for landfilling.

The incinerator at Meadowbank is manufactured by Eco Waste Solutions. The incinerator is designed to ensure the emissions meet Canadian Council of Ministers of the Environment (CCME) Canada-wide Standards for Dioxin and Furans (CCME, 2000a) and the CCME Canada-wide Standards for Mercury Emissions (CCME, 2000b). In addition to the incinerator technology, the implementation of a waste management and segregation plan will further limit emissions of dioxins and furans from the incinerator. Compliance with the performance limits is confirmed by stack testing conducted once every two years (providing that the waste stream has not changed). Should an exceedance of the CCME Standards occur, AEM will change the frequency of stack testing to once per year as well as conduct an investigation related to the cause of the exceedance (thoroughly check the waste stream).

In order to demonstrate compliance with performance limits, an annual incineration management report will be prepared and submitted to the NWB (as part of the water license annual report), Government of Nunavut (GN), Environment Canada (EC), and NIRB. The quantity of materials incinerated on site during operations and a record of performance temperatures together with results from stack testing and ash monitoring, will be included within the annual report.

1.5: Mine Waste Rock and Tailings Management Report and Plan - 2016, Version 5

Summary of Revisions

This document is a revision of the Mine Waste Rock and Tailings Management Report and Plan - 2015, initially prepared in 2009 (version 1), and updated in 2013 (version 2), 2014 (version 3), 2015 (version 4) and finally updated in 2016 (version 5).

The whole document was reviewed and updated. More specifically, sections were updated with the actual Life of Mine (LOM) for operations ending in Q3 2018.

Executive Summary

Agnico Eagle Mines Ltd. Meadowbank Division (AEM) is operating the Meadowbank Gold Mine (the Mine), located on Inuit owned surface lands in the Kivalliq region approximately 70 km north of the Hamlet of Baker Lake, Nunavut. The Mine is subject to the terms and conditions of both the Project Certificate issued in accordance with the Nunavut Land Claims Agreement Article 12.5.12 on December 30, 2006, and the Nunavut Water Board Water Licence No. 2AM- MEA1525 issued on July 23, 2015. This report presents an updated 2016 version of the Mine Waste Rock and Tailings Management Plan.

The Mine consists of several gold bearing deposits: Vault, Portage and Goose Island. A series of dikes are required to isolate the mining activities from neighbouring lakes. The dikes were and will be constructed using quarried materials or using materials produced during mining.

Waste rock from the Portage and Goose Island Pits is currently being stored in the Portage Rock Storage Facility (PRSF), and in the Portage pit as infill. Pit infill is only carried out in areas where mining is completed, and, as such, contributes to the overall fish habitat compensation approved by Fisheries and Oceans Canada (DFO). The Portage Rock Storage Facility was constructed to minimize the disturbed area and will be capped with a 4m layer of non- acid- generating rock to constrain the active layer within relatively inert materials. In fact this 4m capping has been completed around the perimeter of the PRSF and is considered part of progressive reclamation. This control strategy is designed to minimize the onset of oxidation and the subsequent generation of acid rock drainage through freeze control of the waste rock as a result of permafrost encapsulation and capping with an insulating convective layer of NAG rock. The waste rock below the capping layer is expected to freeze, resulting in low rates of acid rock drainage (ARD) in the long term. Thermistors currently installed in the RSF indicate that freezing is occurring.

Mining commenced in the Vault Pit in 2014. Waste Rock from the Vault pit mining operations is stored in the Vault Waste Rock Storage Facility (VRSF). Mining is also planned, once approved by
regulatory agencies, in Vault Phaser and BB Phaser pits beginning in Q4 2017. Waste rock from the Vault, Phaser and BBPhaser Pits will be stored in the existing Vault Rock Storage Facility (VRSF). Geochemical predictions indicate that a capping layer will not be required over this area as the majority of waste rock is considered NPAG. To date, through the ARD testing program it

has been determined that approximately 87% of the waste rock generated is NPAG. As a precaution PAG waste rock is placed in the middle of the VRSF. This material will be covered with at least 4m of NPAG to minimize any generation of ARD. An adaptive management plan includes monitoring of water quality during operations to confirm modelling predictions and to allow adjustments to the closure plan as required. The waste rock is expected to eventually freeze.

The Tailings Storage Facility (TSF) is delineated by a series of dikes built (and to be built) around and across the basin of the dewatered northwest arm of Second Portage Lake. The TSF is divided into the North and South Cells. From 2010 to 2015 tailings were placed in the North Cell. The North Cell of the TSF is delineated by the Stormwater Dike (separates North and South Cells), Saddle Dams 1 and 2 and perimeter rockfill road structures. Tailings deposition commenced in the South Cell in 2014 and will continue until 2018 when mine operations are scheduled to cease (North Cell deposition was completed in 2015). The South Cell is delineated by the Central Dike and Saddle Dams 3, 4 and 5. The division of the TSF into cells allows tailings management in comparatively smaller areas with shorter beach lengths that reduce the amount of water that is trapped and permanently stored as ice. Operation in cells also allows progressive closure and cover trials to begin in the North Cell (2014- 2016) while tailings deposition continues in the South Cell.

AEM is considering a Tailings Optimization Plan that may affect the future configuration of the South Cell. Should this Plan move forward AEM will advise regulatory bodies in advance and obtain any permits and licenses as required.

Tailings are placed sub- aerially as slurry and water from the pond is reclaimed during operation. The current tailings deposition strategy is to build beaches against the faces of the perimeter dikes to push the pond away, and ultimately produce a tailings surface that directs drainage towards the western abutment of the Stormwater Dike. Following mine operations, a minimum 2-m thick cover of NAG rockfill will be placed over the tailings as an insulating convective layer to confine the active layer within relatively inert materials. The final thickness of the rockfill cover layer will be confirmed in the final design based on thermal monitoring to be completed during operations. The control strategy to minimize water infiltration into the TSF and the migration of constituents out of the facility includes freeze control of the tailings through permafrost encapsulation. Capping commenced in the northeast area of the North Cell TSF in 2015. Further capping of the North Cell is planned during the winter of 2016.

A Thermal Monitoring Plan (TMP) was developed to observe the freezeback of the TSF and RSFs in order to comply with the Nunavut Water Board (NWB) water license 2AM- MEA1525. The License requires a TMP to monitor temperatures of the TSF and RSFs during and after, mining operations.

All infrastructures needed for mine operations, closure and reclamation, including mine waste management areas, will be re- contoured and/or surface treated during closure according to site specific conditions to minimize windblown dust and erosion from surface runoff. This activity is designed to enhance the potential for re- vegetation to occur and wildlife habitat re-establishment.

1.6: Tailings Storage Facility; Operation, Maintenance and Surveillance Manual, Version 6

Summary of Revisions

This document is a revision of the Tailings Storage Facility; Operation, Maintenance and Surveillance Manual, first reviewed in 2012 (version 1), 2013 (version 2 and 3), 2015 (version 4 and 5), and now reviewed in 2016 (version 6).

The whole document was reviewed and updated. One change made during this revision of the document was to add an appendix (Appendix IV) about the Central Dike specific trigger values. Other than that change, the update was just a comprehensive review of the whole document and tables and figures were updated to reflect changes in personnel.

Executive Summary

This operation, maintenance and surveillance (OMS) manual provides a reference document to be used by the personnel responsible for the operation, maintenance and surveillance of the Tailings Storage Facility (TSF) at the Meadowbank Gold Project that is owned and operated by Agnico Eagle Mines Limited (AEM). The TSF is the permanent surface storage facility for tailings produced during the operation of the mine.

This OMS manual addresses the operational issues of the TSF. It does not examine design, construction or closure issues in detail. Details of the design and construction requirements for the TSF are presented in the references provided later in this document. Details on closure are included in the Closure Plan.

1.7: Dewatering Dikes; Operation, Maintenance and Surveillance Manual, Version 4

Summary of Revisions

This document is a revision of the Dewatering Dikes; Operation, Maintenance and Surveillance Manual, first reviewed in 2012 (version 1), 2013 (version 2 and 3), 2015 (version 4), and now reviewed in 2016 (version 5).

The whole document was reviewed and updated. There were no major changes made during this revision of the document. Overall, the update was just a comprehensive review of the whole document and tables and figures were updated to reflect changes in personnel.

Executive Summary

This document includes procedures for the operation, maintenance and surveillance (OMS) of the Dewatering Dikes at the Meadowbank Gold Project, Nunavut, operated by Agnico Eagle Mines Limited (AEM), Meadowbank Division. The Dewatering Dikes are comprised of the following structures: East Dike, Bay-Goose Dike, South Camp Dike, and Vault Dike. The dewatering dikes isolate the open pit mining activities from Second Portage Lake,Third Portage Lake and Wally Lake. This OMS Manual refers to the dewatering, operations, and decommissioning phases of the Dewatering Dikes.

1.8: 2015 Water Management Report and Plan, Version 3

Summary of Revisions

This document is a revision of the 2013 Water Management Report and Plan first reviewed in 2015 (version 2) and finally updated in 2016 (version 3).

The whole document was reviewed and updated. This version is a revision for the 2013 Water Management Plan (by AEM) according to the updated Life of Mine and water management strategies.

The principal additions to this update are:

- The revision of runoff water management strategy that positively impacts the mill freshwater consumption;
- The addition of a year of production related to the new life of mine (LOM);
- The tailings deposition parameters used for the model following the results of the 2015 bathymetries analysis and the new tailings deposition guideline;
- The Central Dike seepage status update;
- The updated planning of the Phaser Lake dewatering (pending approval from the NWB – application has been submitted).

Executive Summary

Agnico-Eagle Mines Ltd. Meadowbank Division (AEM) is operating the Meadowbank Gold Mine (the Mine), located on Inuit-owned surface lands in the Kivalliq region approximately 70 km north of the Hamlet of Baker Lake, Nunavut. The mine is subject to the terms and conditions of both the Project Certificate issued in accordance with the Nunavut Land Claims Agreement Article 12.5.12 on December 30, 2006, and the Nunavut Water Board Water Licence No. 2AM_MEA1525 issued on July 23, 2015.

This report presents an updated version of the Water Management Plan 2014 and provides a revised site-wide water balance. The revised water balance determines the demand and storage requirements of water over the life of the mine. The storage strategies and required transfers will be discussed at large. Certain concepts within the water balance, including pit flooding, remain at the conceptual stage for now and will be further detailed in the Final Mine Closure and Reclamation Plan to be submitted one year prior to final closure in accordance with the current Type A Water License.

The necessity of this particular water management update follows changes in the observed natural pit water inflows, updated tailings deposition parameters, mine and milling life schedule and production rate, tailings management and pit backfilling strategies.

The 2015 Water Management Plan also includes the 2015 Water Quality Forecast Update (Appendix C), the 2015 Freshet Action Plan (Appendix D) and the 2015 Ammonia Management Plan (Appendix E). The Water Management Plan will be updated on a yearly basis as required by the Nunavut Water Board Water License 2AM-MEA1525.

1.9: Emergency Response Plan, Version 18

Summary of Revisions

This document is a revision of the 2008 Emergency Response Plan and reviewed regularly afterwards. The whole document was reviewed since last submitted to the NWB and numerous modifications were made.

Executive Summary

The purpose of this Emergency Response Plan (ERP) is to provide a consolidated source of information for employees, contractors, and site visitors to respond quickly and efficiently to any foreseeable emergency that would likely occur at the Meadowbank project site. This ERP forms a component of the Environmental Management System (EMS) for the Project. As such, it is a working document that will be reviewed and updated on a regular basis as mine development, construction and operations proceed.

This ERP addresses gold mining, processing, transportation and related activities at the Meadowbank site as well as possible emergency scenarios that may occur off-site along the All Weather Private Access Road or at the Baker Lake Marshalling Facility. Guiding the development of this document has been the principle that an effective ERP must provide:

- A clear chain of command for safety and health activities;
- Well-defined corporate expectations regarding safety and health;
- Comprehensive hazard prevention and control methods; and
- Record-keeping requirements to track program progress.

AEM will ensure that all employees, contractors and site visitors fully understand and comply with all legislated safety standards, and the policies and procedures outlined in the ERP.
This ERP will be reviewed annually, or more frequently as required, to ensure compliance with applicable legislation, to evaluate its effectiveness and to continually improve the procedures. All employees, contractors and site visitors are encouraged to offer suggestions for ways to eliminate potential hazards and improve work procedures.

Section 2: Executive Summary of Reports or Studies Submitted in 2015

2.1: 2015 Annual Geotechnical Inspection Meadowbank Gold Mine, Nunavut

Executive Summary

Agnico Eagle Mines Limited (AEM) mandated Golder Associés Ltée (Golder) to conduct the 2015 geotechnical inspection of the Meadowbank Gold Mine Project to comply with the requirements of AEM`s Water Licence Permit. The inspection was conducted from August 27 to September 3, 2015, and covered the geotechnical aspects and the review of the available instrumentation data for the dewatering dikes, the tailings storage facilitu (TSF) structures, the structures along the All-Weather Private Road (AWPR) located between the mine site and the town of Baker Lake, the bulk fueld storage facility at the mine site and at Baker Lake, as well as other site facilities suc as site roads, the landfill, the landfarm, the Stormwater Management Pond, the diffusers, the erosion and sediment protection structure and the airstrip.

At the time of the inspection, and based on the instrumentation data, the condition of the dewatering dikes appears stable. It is recommended to flag the piezometers that recorded data below 0ºC in the past at East Dike and Bar-Goose Dike ans be very careful when interpreting their data as they might be broken. Once a piezometer has frozen it cannot be relied upon even it if unfroze.
It is recommended that the ultramafic waste rock dump not move closer to the downstream toe of South Camp Dike to allow for good visual observation of the downstream toe area. The tension cracks observed on the crest of Vault Dike in 2013 have mostly faded. No geotechnical issue were observed with these structures.
The safety berm on several areas of Bay-Goose Dike should be replaced. The settlement and tension cracks observed in 2013 and 2014 on the upstream side within the termal cap of Bay-Goose Dike were still bisible but did not show signs of progression. The water pond at the downstream toe and the seepage downstream of Bay-Goose Dike and into Bay-Goose Pit should continue to be monitored. North channel, Channel 1 and Channel 3 should be carefully monitored as the instrumentation or field observations seem to indicate that seepage could be occurring at these locations but is directly reported to Bay-Goose Pit instead of the downstream tow of the dike. The seepage being reported to Bay-Goose Pit should be included in the statistics of Bay-Goose Dike seepage.

At the time of the inspection and based on the instrumentation data the TSF structures were in good condition. The tailings beach was adequate against the majority of the structure. Water was observed directly ponding against portions of Stormwater Dike and Central Dike. AEM is closely monitoring the formation of a tailings beach against the peripheral structure of the TSF. AEM is not planning on protecting Stormwater Dike as part of the closure strategy for the North Cell. Golder recommends continuing the deposition of tailings along all structures, as per the design requirement, including Stormwater Dike. A water balloon was observed in the liner at Stormwater Dike; it is recommended to puncture the liner to free the water and to repair it afterward. Water was observed on the downstream side of Saddle Dam 2 ponding within the rockfill embankment. It is recommended to observe carefully this area and be on the lookout for additional water ponding within the rockfill. The environment department should continue monitoring the water quality of the water ponding downstream of Saddle Dam 1 and within the Saddle Dam 2 rockfill and share this information with the engineering department to determine if seepage from the North Cell if happening at this location. Outflow of clear water was observed downstream of Stormwater Dike (South Cell). It is recommended to assess the water quality to determine its origin.

Clear water was observed ponding at the downstream tow of Central Dike. AEM is currently planning pumping some of that water back to the South Cell to control water level in the downstream toe area. The instrumentation data and other observation indicate the presence of seepage from the South Cell. AEM is working closely with the MDRB and the dike designer (Golder) to determine the seepage pathway and to establish measures to keep the situation udner control. Golder recommends: 1) maintaining a tailings beach against Central Dike, 2) to control the hydraulic gradient by proper management of South Cell water pond and dike downstream toe pond, 3) to closely monitor the water quality and 4) to inspect the structure.

No geotechnical issues were identified with the bridges, culvert and quarries along the AWPR. It is recommended to pay particular attention to culverts R-00A, 5+700, PC-14 and PC-16. If insufficient capacity to handle the flows is observed at freshet, or water is circulating under the road at these locations, then it is recommended to clear the obstructions or repair the culverts. It is recommended to add protection the the fine granular material placed around culverts PC-17 and PC-17A. It is also recommended to monitor the progression of the erosion of culvers it is recommendant to repair them.

Presence of unstable blocks and loose rocks along steep walls were also observed in most of the quarries but especially in Quarries 3, 7, 9, 16, and 23. These unstable blocks and loose rocks should be cleaned if operation of these quarries resumes. It is recommended that workers be cautions in the quarries and be made aware of potential hazard.

No geotechnical issues were observed with the Meadowbank Vault fuel tank. Water was observed ponding in several areas at the Baker Lake fuel tank farm and at the Meadowbank Main Camp fuel tank. Ongoing removal of fluids that accumulated within the secondary containment facilities should be managed to minimize the amount of water in contact with the tanks base. At the Baker Lake fuel tank farm, the geomembrane was exposed between Tanks 1 and 2 on the internal slope. Exposed damaged geomembrane was also observed between the south side of tank 2 and 3. Holes in the geomembrane and to re-cover he area with fill material. Per AEM, the deificiencies observed at the Baker Lake Tank Farm were repaired in September after the inspection.

At the Meadowbank Main Camp fuel tank two small channels of erosion were observed in the tank platform. It is recommended to repair these channels to control the erosion of the foundation pad.

It is recommended to monitor at freshet the performance of the five culverts installed on Vault Road as three of them are partially collapsed in the middle. One of them has an entirely obstructed inlet and one of them has a partially obstructed outlet.

It is important that the diversion ditch and its erosion protection structure and sediment barriers be inspected during the next freshet season. No geotechnical concerns were identified with the diffusers, landfill, landfarm, Stormwater Management Pond, and airstrip.

2.2: Annual Review of Portage, Goose and Vault Pit Slope Performance (2015)

Executive Summary

An annual site visit to inspect the performance of the pit walls of the open pits at Agnico Eagle Mines Ltd.'s (AEM) Meadowbank Mine was carried out by CJ Clayton Mine Geotechnical Services Ltd. (CJC) during the period 10 September 2015 to 22 September 2015. The following serves to summarise the key observations and associated recommended actions from the annual inspection. A detailed summary of recommended actions is presented in Section 9.

PORTAGE PIT

The Portage Pit is subdivided into 5 pits, labelled A through E from north to south.

Pit A

At the time of the site visit the Pit A platform was inactive. Since the 2014 site visit the pit has only been deepened by a single bench from 5053 mRL to 5046 mRL. The west, north and east walls of the pit continue to perform well. There are no significant geotechnical concerns for Pit A. Visual monitoring should continue as part of regular geotechnical inspections.

Pit B

Mining of Pit B is complete and it continues to be backfilled as a waste rock dump. Access to the pit is limited as the main ramp on the west wall has been closed. There are no significant geotechnical concerns for Pit B. There was no indication of dump instability associated with the Pit B dump. Visual monitoring should continue as part of regular geotechnical inspections.

Pit C and D

Mining is complete at both pits and they are backfilled as waste rock dumps. Access was limited. The dumps are performing adequately, and no tension cracks were observed in the crest areas, where access was possible. There are no significant concerns for Pits C and D. It was not possible to inspect an area of the Dump D crest which was observed in 2014 to have tension cracks. However, the dump face and toe were observed to show no indications of instability. Visual monitoring should continue as part of regular geotechnical inspections.

Pit E

At the time of the site visit the floor platform elevation at Pit E3 was at 5039 mRL. There are 7 benches remainingto be mined at Pit E3, to a final planned elevation of 4983 mRL, with a target completion of Q3 2017. There are no significant geotechnical concerns for Pit E3 east and west wall. The east wall is developed within permafrost, which provides additional strength and stability to the rock mass. The west wall has limited areas developed in permafrost; some seepage faces are noted and the presence of water may contribute to bench scale instability especially where ultramafic rock is present. Shear structure within the ultramafic dips into the wall creating a top release plane for bench scale wedge failures. Visual monitoring should continue as part of regular geotechnical inspections.

The Pit E3 south wall has experienced significant instability, and AEM are currently developing a plan to mitigate the instability and manage risk. The area has been designated no entry until remedial measures are undertaken to stabilize and monitor the wall, including slope depressurization, crest unloading, and installation of additional slope monitoring installation. The mechanism of failure is well understood, and the contributing factors are the complex geology and structure, the absence of permafrost and the presence of groundwater. The engineering geology model and stability analyses indicate the failure behind the crest will be limited to the depth of the ultramafic rock and will not extend back to the dewatering dike. AEM are in the process of designing a program to stabilize the slope, and to install additional instrumentation such as piezometers, TDR cables, and thermistors. Monitoring of the slope using the GroundProbe radar is currently the most effective method for managing risk. Monitoring should continue with diligence, and vigilance.

Pit E West Wall Ramp

The Pit E3 ramp is situated on the west wall of the pit, and descends to the south into the pit. Several areas of potential instability were noted in the benches of the ramp. A rock fall containment berm along the west side of the ramp is being used to effectively manage the risk of rock falls from the areas of potential instability. The ultramafic rock below the ramp is strongly sheared, but is currently performing well. The rock fall containment berm should be maintained along the ramp. The ultramafic rock should continue to be scaled carefully, and operators instructed to avoid over-excavating which could lead to instability. Visual monitoring should continue as part of regular geotechnical inspections.

Pit E Pushback South and East Wall

In general, the bench performance of the pushback areas is satisfactory, although bench crests tend to be ragged with some over-break, and areas where structure has been undercut. The relatively good performance of the walls is attributable in part to the iron formation and volcanic rock forming significant proportions of the wall, and the presence of permafrost with associated absence of water. Visual monitoring should continue as part of regular geotechnical inspections.

GOOSE PIT

Mining has been completed at Goose pit to a final floor elevation of 4997 mRL. The Goose pit slopes continue to perform adequately. Waste rock has been end-dumped into the northwest corner of the pit near the access ramp entry, using the pit as a short-haul dump. A pit lake has formed, and is at an elevation of 5031.18 mRL (15 October 2015). During the inspection a series of tension cracks were identified on the waste rock dump platform. This area is now classified as no entry, and a rock fill berm has been placed to prevent access. The dump may be reactivated in the future. Prior to reactivation an inspection of the dump should be carried out, and an appropriate action plan developed. Visual monitoring of both the pit and the waste dump should continue as part of regular site geotechnical inspections.

Slope Monitoring Instrumentation

There have been no significant changes to the TDR or thermistor response patterns. With the exception of piezometer tip PZ4c in GPIT-14, pressure heads have remained constant. Tip PZ4c exhibited a sudden pressure rise in 2013 followed by a gradual reduction in pressure to steady-state conditions; a similar pressure increase has been noted in 2015 but there are insufficient data yet to determine if the trend in gradual pressure reduction will also be repeated. This presents no risk to pit slope or waste dump stability, but should be reviewed again next year.

Vault Pit

Mining of the Vault Pit has advanced significantly since the 2014 inspection, providing the first opportunity to evaluate the performance of the pit slopes. In general, the pit slopes are performing as anticipated, and there are currently no significant geotechnical concerns for the current conditions. AEM has carried out mapping using Lidar scan images to digitize structure and compare with the orientations used to develop the optimized wall configurations (2013), complying with a recommendation from the 2014 inspection. The structural orientations from the mapping are generally consistent with the orientations used in the design study. An inflow along the east wall was in response to the wall pushback into a talik beneath the former Vault Lake, and to the lake area being managed with a relatively high water surface at 5134.1 mRL. As noted in the 2014 inspection report, any push back of the east-southeast high wall should include a re-evaluation of the slope stability as the optimized design (2013) assumed the wall would remain frozen (with the exception of the upper bench). A pushback of the east high wall will place it in the unfrozen talik beneath Vault Lake, and may change the conditions for the stability of the slope.

Footwall (Vault Grid West Wall)

The wall is being mined as a series of single benches (7m high) to create a footwall slope. There are no significant geotechnical concerns noted, and no evidence of large scale (overall slope) instability for the footwall slope. The slope follows the inclination of the ore which is inclined to the east, parallel with foliation and stratigraphy. Bench faces are pre-sheared at steep angles but break back to the orientation of the foliation and stratigraphy. The low benches are being used to effectively manage the undercutting of the east dipping stratigraphy by minimizing potential failure volumes. An area at the south end of the wall exhibits an increased density of continuous joint and fault features intersecting to form wedges. However, the plunge of these wedges is shallow, on the order of 30 degrees, and roughly parallel to the dip of the overall slope angle. An area of seepage adjacent to the ramp may be derived from a hydraulic connection to east-west and northsouth structures connecting with the talik beneath the dewatered Vault Lake. If increased raveling is noted, it may be necessary to construct bumper berms in this area

Southwest Wall (Vault Grid South Wall)

The stratigraphy intersects the south wall at right angles. There are no significant geotechnical concerns noted, and no evidence of large scale (overall slope) instability for the slope. The stratigraphy intersects the south wall at right angles. Pre-shearing of the walls has been effective for developing steep bench faces, although these can be blocky in appearance. The benches are being appropriately cleaned and scaled. Continue visual monitoring as part of regular site geotechnical inspections.

East Wall (Vault Grid East Wall)

The east wall (grid east) is being developed as a two-phase pushback. Phase 1 had been completed to a floor elevation of approximately 5081 mRL at the time of the site inspection, while Phase 2 had not been significantly developed since the 2014 inspection. There are no significant geotechnical concerns noted, and no evidence of large scale (overall slope) instability for the slope. The Phase 1 east wall is a temporary wall and has been developed using bulk blasting. Bench performance is generally good despite bulk blasting. Care should be exercised while operating beneath the temporary benches, and light vehicle traffic and personnel must maintain a safe setback distance from the temporary bench faces. Visual monitoring should continue as part of the regular geotechnical inspections.

Phase 2 is a final wall and is being developed using pre-shear blasting methods. There has been no significant advancement of the Phase 2 pit from the 2014 inspection. An inflow of water to the Vault pit along the east wall through the ring road occurred on 16 September 2015. This was reviewed and determined to be a response to pushback of the wall to intersect the talik beneath former Vault Lake, and also to operation of Vault Lake at an elevation of 5134 mRL, approximately 4 m higher than the downstream side of the ring road. The following recommendations were made:

- Lower the water level in Vault Lake to reduce inflows through the ring road.
- If settlement of the ring road is noted, use road rock fill material to bring back to grade. Monitor for the development of tension cracks within the road surface. Restrict access on the downstream side of the ring road in the immediate area of the seepage.
- Continue visual monitoring of the inflows as part of regular site geotechnical inspections.
- Review inflow observations during the next annual pit inspection, and compare observations to thermal model predictions from 2013 optimization study (Golder 2013).
- If significant inflows continue to be observed during 2016 summer thaw period, install piezometers and thermistor behind the wall, record observed conditions, and compare with predicted conditions.
- If observed conditions are not consistent with the predicted conditions it may be necessary to review the optimized slope stability in the context of new data.

Vault Grid North Wall)

The Vault north wall (grid north) transitions from the west wall to the east wall. There is a sump near the base of the wall at the northwest corner. A wedge in the northwest corner is associated with seepage along its base. If the wedge were to fail, it could compromise the haul road at the crest. A stability assessment should be made, and bolting of the wedge should be considered. Light vehicle traffic and personnel should maintain a safe setback distance from the temporary bench faces. The water lines crossing the wedge should be moved. Continue visual monitoring as part of regular site geotechnical inspections.

2.3: 2015 Independent Geotechnical Expert Review Panel Report 17

Executive Summary
Report 17 – July 27-30, 2015

The meeting of the Dike Review Board was held on site as planned from July 27th to 30th. The Board is comprised of three members, Mr. D. W. Hayley, Dr. N. R. Morgenstern and Mr. D. A. Rattue. All three members were in attendance. The objectives were to review the status of the design, construction and operations with respect to the current Life of Mine (LOM), and to be informed of the growth prospects. The activities covered those outlined in the agenda which is included as Attachment A. The list of attendees at the meeting is given in Attachment B. Digital copies of some results of Central Dike instrumentation were transmitted prior to the meeting. Paper copies of the various PowerPoint presentations were provided by Agnico-Eagle Mines (AEM) during the meeting. Copies of two technical memoranda and a letter report were also provided during the course of the meeting and a list of the same is included in Appendix C. A selection of photographs taken during the visits is to be found in Appendix D. Appendix E contains a copy of a memo transmitted by the Dike Review Board shortly after the meeting. In the report which follows, the Board's recommendations are underlined.

2.4: 2015 Independent Geotechnical Expert Review Panel Report 18

Executive Summary
Report 18 – September 18, 2015

The meeting of the Dike Review Board was held in the Montréal offices of Golder Associates (GAL) on September 18th. The Board is comprised of three members, Mr. D. W. Hayley, Dr. N. R. Morgenstern and Mr. D. A. Rattue. All three members were in attendance. The objectives were to review the status of the investigation and studies relating to the seepage that has been observed to be ponding at the toe of the Central Dike since October 2014. The Board was informed of this situation in July 2015 (17th MDRB meeting) and questions were posed at that time as to whether:

i. the South Cell can be filled as intended in a safe manner?

ii. the resulting situation will be consistent with closure requirements i.e. freeze back and "walk-away"?

The activities covered those outlined in the agenda which is included as Attachment A. The list of attendees at the meeting is given in Attachment B. Paper copies of the various PowerPoint presentations were provided by Agnico-Eagle Mines (AEM) and GAL during the meeting. In the report which follows, the Board's recommendations are underlined.

2.5: 2015 Landfarm Report

Executive Summary

As per the Landfarm Design and Management Plan (February, 2013), this report has been prepared to provide the following information regarding landfarm activities in 2015:

- volume of material added to and removed from the facility
- disposal or reuse location
- results from laboratory analyses of soil and contact water
- volume and type of nutrient additions
- visual inspection results
- volume of contact water pumped

In 2015 a new method of monitoring landfarm volumes was established following a review of record-keeping methods. Rather than monitoring the quantity of each individual addition of contaminated soil to the landfarm, AEM conducted two surveys of landfarm material – one before and one after soil sampling/removal activities. While total soil additions in 2015 can therefore only be estimated from January - August (when the first survey took place), this method will increase the accuracy of tracking landfarm additions and removals in future years. End-of-year estimates in 2014 indicated a total landfarm contaminated soil volume of 2347 m3. In August 2015, the landfarm held a total of 2587.2 m3 of contaminated soil, based on survey results. Therefore approximately 240.2 m3 were added from January – August, 2015. Following screening and removal activities (October, 2015), the total volume from survey results was 2349 m3. Therefore, a total volume of 238.2 m3 of remediated soil were removed in 2015 and placed in the waste rock storage facility or used in site works (TSF base cover material). This includes approximately 63 m3 of remediated fine material, and 176 m3 of screened coarse material. Visual inspections indicated that the landfarm berm and pad appear to be structurally intact, and no maintenance requirements were identified. Some ponded water was observed within the landfarm, and was sampled but an insufficient volume accumulated to warrant pumping to the TSF. No seepage was identified.

2.6: 2015 Habitat Compensation Monitoring Report
Executive Summary

According to Fisheries and Oceans Canada (DFO) Authorizations NU-03-0191.2, NU-03-0191.3 and NU-03-0191.4, AEM maintains a Habitat Compensation Monitoring Plan (HCMP; AEM, 2014a) to ensure that fish habitat compensation features are constructed and functioning as intended. Based on the schedule described in the HCMP, monitoring of compensation features currently occurs every 2 years.

In 2015, monitoring was conducted for the constructed spawning pad, located at stream crossing R02 along the all-weather access road (AWAR), as well as for several mine site habitat compensation features (East Dike, Bay-Goose Dike, Dogleg Ponds). As described in the HCMP, the AWAR study included a visual assessment of stability, as well as biological monitoring to confirm use by Arctic grayling. The onsite monitoring included an assessment of interstitial water quality, periphyton growth, and fish use.

The constructed spawning pads at stream crossing R02 along the AWAR were visually confirmed to be stable as designed. Generally, condition factors of adult fish, population size distributions and timing of migration were within the range of values seen in previous years, confirming continued use of this area by Arctic grayling. Larval drift rates of collection continue to exceed those observed prior to construction of the spawning pad, suggesting a net positive increase in Arctic grayling reproduction, either through direct increased use or reduced pressure on upstream spawning areas.

Onsite, interstitial water quality within the dike faces met CCME guidelines for the protection of aquatic life (with the exception of TSS in one sample), and healthy periphyton community growth with increasing biomass was observed, compared to values from 2013. Angling and underwater motion camera monitoring proved to be a successful non-lethal program that demonstrated continued fish use of the dikes as habitat. CPUE of dike face monitoring stations was similar to or higher than reference stations. A total of 85 fish were caught through angling and there were no mortalities. A total of 32 fish were captured on camera during the underwater motion camera program. Angling in the Dogleg system identified presence of both lake trout and Arctic char in

the previously fishless Dogleg North, as well as Arctic char in Dogleg Pond. Bathymetric surveys were not completed, but fish presence in Dogleg North indicates that access to this pond has been established. In particular, presence of char suggests a seasonal connection to Second Portage Lake, since Dogleg Pond and NP-2 were previously determined to be inhabited by lake trout and round whitefish. Water levels and connectivity will be confirmed during the next monitoring event.

Overall, the constructed spawning pads at R02 have not only increased the quantity of high-value habitat, but appear to be effectively increasing production rates in the local population. Angling and underwater camera were found to be effective at demonstrating fish presence, and fish appear to be using habitat created by dikes and diversion channels around the mine site.

2.7: Core Receiving Environment Monitoring Program 2015

Executive Summary

The CREMP (Appendix G1) focuses on identifying changes in limnological parameters, water and sediment chemistry, or changes to primary (phytoplankton) and secondary (benthic invertebrate community) aquatic producers that may be associated with mine development activities. This is accomplished through the application of a temporal/spatial trend assessment that includes application of quantitative decision criteria (i.e., early warning “triggers” and action “thresholds”) to facilitate immediate and objective decision-making regarding appropriate management actions. This information is integrated annually into the Aquatic Ecosystem Monitoring Program (AEMP) for holistic environmental management and decision making.

Meadowbank Study Lakes

CREMP monitoring started in 2006 and in-water mine development started in 2008. Key mine development activities that could result in changes to the aquatic receiving environment include: East Dike construction (2008), Bay-Goose Dike construction (2009-10), dewatering of both lakes and impoundments (2009-11, 2013), effluent discharge (2012 to present), and general site-related mining activities that mostly generate dust (e.g., rock crushing, blasting, ore and waste hauling; 2008 to present). Key findings for 2015 are summarized in Table ES-1:

- Water Chemistry – As in the past, there were some statistically significant mine-related changes relative to baseline/reference conditions identified in 2014 at one or more near-field (NF) areas that exceeded their respective triggers: alkalinity (SP); conductivity (TPN, TPE, TPS, SP, WAL, TE); hardness (TPN, TPE, TPS, SP, WAL, TE); major cations (i.e., calcium, potassium, magnesium, and sodium [TPN, TPE, SP, WAL]); TDS (TPN, TPE, TPS, SP, WAL, TE); and TKN (WAL). In the absence of effects-based thresholds (e.g., CCME water quality criteria) for these parameters, their triggers were set at the 95th percentile of baseline data. While these results represent mine-related changes, the observed concentrations are still relatively low and unlikely to adversely affect aquatic life. These trends need to be reviewed again in 2016.

- Sediment Chemistry – Quantitative trigger analysis for sediment is based on coring results, which are conducted on a three-year cycle to coincide with MMER EEM field studies. This program was last conducted in 2014 and will be conducted next in 2017.

Grab samples submitted for analysis in 2015 showed similar concentrations to previous years based on visual comparison of the data. With the exception of chromium at TPE, none of the grab samples exceeded the trigger values in 2015. The 2014 CREMP report provided a thorough examination of the temporal and spatial trend of chromium at TPE, with an overall conclusion that ultramafic rock used to construct the Bay- Goose Dike is the likely source of increased sediment chromium concentrations at TPE relative to baseline conditions. As per the recommendations in last year's CREMP (Azimuth, 2015b), the 2015 program incorporated bioavailability and toxicity testing to evaluated whether sediment chromium concentrations pose a risk to the benthic invertebrate community at TPE. Sequential extraction tests on sediment show the majority of sediment chromium is sequestered in the sediment matrix, which is largely non-bioavailable. Furthermore, the fractions that are bioavailable occur at concentrations below effects-based threshold concentrations (i.e., ISQG and PEL). Toxicity tests on amphipod (Hyalella) and midge larvae (Chironomus) survival and growth provided no evidence of contaminant-related effects to the test organisms exposed to sediments from TPE compared to the field control treatment (INUG and PDL). These results provide effects- based evidence that chromium concentrations at TPE are unlikely to adversely affect the benthic invertebrate community. No targeted follow-up studies are proposed for TPE beyond continued scrutiny of the temporal trend in sediment chromium concentrations in 2016.

- Phytoplankton Community – TPE and TPS both had slightly reduced biomass relative to reference in 2015, but in both cases the results were not statistically significant. Overall, the phytoplankton results from 2015 were within the range of reference/baseline conditions in each area.

- Benthic Invertebrate Community – A few locations had particularly high abundance in 2015 relative to previous years, notably INUG and TPS. There was an "apparent" reduction (>20%) in total abundance at TPE, TEFF, and WAL when compared to INUG, but none of the results were statistically significant. Furthermore, when compared to previous years the results are well within the range of natural variability. In summary, there were no statistically significant short-term (i.e., past year) or longer-term (i.e., past two to four years) trends in reduced abundance or richness at the NF, MF, or FF locations in 2015.

Baker Lake

CREMP monitoring at Baker Lake started in 2008. Key mine-related activities include barge/shipping traffic and general land-based activities associated with the tank farm area. No spills of fuels, hydrocarbons or any other materials were reported in the vicinity of the barge dock and jetty in 2015. There were no cases where water quality parameters exceeded the triggers in 2015. A minor decrease in phytoplankton biomass was noted at BBD in 2015, but the result is considered representative of the variability in this endpoint given there were no instances of trigger exceedances in water quality parameters in 2015. Overall, there were no changes in the aquatic receiving environment were observed that were attributable to AEM's activities in Baker Lake, and as such, no follow-up management actions are required for 2016.

2.8: 2015 Hamlet of Baker Lake Harvest Study – Creel Results

Executive Summary

Background

In March 2007, a harvest study was initiated by Agnico Eagle, in association with the Baker Lake Hunters and Trappers Organization (HTO), to monitor and document the spatial distribution, seasonal patterns, and harvest rates of hunter kills before and after construction of the Meadowbank All-Weather Access Road (AWAR). The harvest study is conducted annually and is open to Inuit and non-Inuit residents of Baker Lake who are at least 16 years of age. The harvest study focuses primarily on terrestrial wildlife harvests; however, fishing results are also recorded in support of on-going creel surveys. This memo is required to meet Fisheries and Oceans Authorization NU-03.0190 condition 5.2.4. In 2015, creel results were collected from 16 participants over the course of the year. Lower numbers compared to previous years are likely a reflection of participant fatigue and declining response rate, given the length of time the study has been ongoing. In 2015, total fish harvested was 1,826. One participant reported 1,016 fish caught over the year. Arctic Char catch in 2015 increased over 2014 records, likely reflecting higher participation rates, while Lake Trout harvest rates remained comparable to recent years. Lake Whitefish catch continued to vary widely, often a result of very few participants catching a large quantity of fish. Some fishing effort was observed north of Whitehills Lake in 2015, which was not observed in 2014, but results generally indicate that study participants are less willing to travel long distances to catch fish, regardless of AWAR access, likely due to the abundance of fish in close proximity to the Hamlet of Baker Lake.

2.9: 2015 Groundwater Monitoring and Water Quality Results, Meadowbank Mine, Nunavut

Executive Summary

The 2015 groundwater monitoring program at Meadowbank was conducted in accordance with the Groundwater Monitoring Plan (AEM, 2014). The objectives of this program are to monitor the salinity of shallow and deep groundwater in order to update site water quality predictions and to document any effects of mining on groundwater quality, particularly with respect to tailings deposition.

In 2015, wells MW-14-01 and MW-08-02 were each sampled twice as per the 2014 Plan. As recommended by Golder (2012), attempts were also made to augment the groundwater sampling program using alternative sources such as production drill holes. In 2015 the alternate sources included two geotechnical drill holes that were successfully sampled in Portage pit E3 in December, 2015. Analysis of key parameters indicated this to be groundwater. Therefore, these results are included in the 2015 report.

Concentrations of all parameters measured in groundwater samples in 2015 are provided in this report, along with a year-over-year comparison of salinity-related results that are relevant to the site water quality model. All historical results are provided in Appendix A. Of note, is that groundwater encountered in the Portage Pit is no longer pumped to the Portage Attenuation pond as this pond became the South Cell Tailings Storage Facility in 2014. Therefore, there is no further discharge to Third Portage Lake. Any pit water is pumped to the South Cell and the water quality considered for predictions and modeling is that of the South Cell. Pit sumps are sampled

during open water periods as a component of the Water Quality and Flow Monitoring Plan, and could contain groundwater. These results are also used as input parameters for overall South Cell water quality modelling (SNC, 2016).

For salinity-related parameters (conductivity, TDS, chloride), results for MW-08-02 and Pit E3 drill hole samples were lower than or within the range of those observed historically onsite. Elevated concentrations of salinity-related parameters encountered previously (2014) at MW-14-01, which were related to well installation (salt used in drilling process), decreased by more than 50% in 2015. For tailings-related parameters (total cyanide and dissolved copper), results for the samples collected from well MW-08-02 and Pit E3 drill holes in 2015 were similar to those observed historically onsite (near detection limits), indicating no measureable movement of tailings into deep groundwater at these locations. For well MW-14-01, total CN values were recorded in the range of 0.1 mg/L, which is slightly lower than or similar to the 2014 concentrations at this location and lower than NWB limits for discharge to surface water, but higher than observed in groundwater elsewhere onsite historically (<0.005 mg/L). Results for dissolved copper were lower than those observed at this location in 2014, and similar to or lower than those observed historically in groundwater onsite since 2008 (prior to commencement of operations – background levels). These results (i.e. below or at background levels) for dissolved copper, which is associated with tailings, suggest that the observed cyanide values are unlikely to be due to significant migration of tailings into groundwater. However, concentrations of tailings-related parameters will continue to be closely monitored at this location to ensure concentrations in groundwater are not rising. Two sampling events are planned again for 2016 (spring and fall).

All measured concentrations of other metals were below NWB license limits for discharge to surface water for all locations, and were within the range of historical results (see Appendix A), with the exception of zinc at MW-08-02 and aluminum at Pit E3 (likely due to residual rock dust in the drill hole).

2.10: 2015 Wildlife Monitoring Summary Report

Executive Summary

As a requirement of the NIRB Project Certificate, the 2015 Wildlife Monitoring Summary Report represents the 10th of a series of annual Wildlife Monitoring Summary Reports for the Agnico Eagle Mines Ltd. (Agnico Eagle) Meadowbank Mine (the project). Baseline and monitoring programs were first initiated in 1999 and will continue throughout the life of the mine. Details of the wildlife monitoring program for the project are provided in the Terrestrial Ecosystem Management Plan (Cumberland 2006). The 2015 report provides the objectives, methodology, historical and current year results, and management recommendations for each monitoring program. Each subsequent Wildlife Monitoring Summary Report builds on data presented in the previous year's report and monitoring incorporates recommendations from the previous reports.

Four active Peregrine Falcon (Falco peregrinus) nests were observed and monitored at quarry sites along the AWAR in 2015; no nesting activity was observed at Portage Pit or other pits in 2015. Raptor nest management plans were not warranted at any of the active nest sites as no project-related effects on falcon nesting success were observed.

The Government of Nunavut (GN) Caribou (Rangifer tarandus) collaring program, ongoing for the past seven years in the Baker Lake area, continued in 2015 with monitoring of existing collared animals and 10 additional collars deployed in 2015, as part of regional efforts to understand Caribou populations. Seasonal Caribou movements within and adjacent to the Meadowbank Regional Study Area (RSA) were tracked and mapped throughout the year. In 2015, collared Caribou were present in the RSA during the spring, late summer, fall, and early winter seasons, and several movements of collared Caribou were recorded across the Meadowbank AWAR.

Hunter Harvest Study (HHS) participation rates declined in 2015 (35 respondents), although overall reported number of Caribou harvested in 2015 was slightly higher than in 2014 (n=305, compared to n=269 last year). In 2015, 54% of all reported Caribou harvests were within 5 km of the AWAR, which was higher than the average of 40% since the study began. To date, the threshold level of 20% change in hunting patterns within the RSA has not been exceeded. With a declining participant rate, interpretation of hunting data becomes increasingly difficult. Agnico Eagle has suspended the program for 2016, but will be consulting with the Baker Lake HTO and GN representatives to discuss the findings of the study to date, explore other options for collecting hunting and fishing data in the Baker Lake area, and facilitate greater involvement of the local community, including the HTO, in future years of the study.

The AWAR was closed as a proactive and mitigative measure for approximately 10 days in October and November, as large herds of Caribou were observed nearby. No Caribou fatalities occurred at the mine site or along the AWAR in 2015. Improved food-handling practices and employee awareness programs at the mine site helped ensure that there were no mine-related Wolf (Canis lupus) or Wolverine (Gulo gulo) fatalities. With the Authorization of the GN officer, one Arctic Fox (Vulpes lagopus) needed to be euthanized after attempts to deter the animal were unsuccessful.

2.10: 2015 Q22 Report

Executive Summary

Quarry 22 was also historically used as a temporary storage area for contaminated materials generated as a result of petroleum hydrocarbon spill clean-up activities prior to the establishment of the landfarm at the Meadowbank site. Following the INAC inspection report in 2012, this report has been prepared to provide information regarding the clean-up of quarry 22.

- Explanation of presence of contaminated soil in quarry 22;
- Transfer of material to Meadowbank Landfarm;
- Next steps for the finalization of the decontamination.

No sampling was done in 2015 in Quarry 22. AEM will ensure that a sampling campaign is completed earlier in 2016. Using the same methodology as in 2014 for soil sampling in Q22, results will then be compared to CCME criteria. AEM will then assess any future actions based on the soil sampling campaign.

In addition AEM will continue to ensure that runoff (if any) will stay within the site of the quarry during freshet and thus not impact any watercourses and/or the environment.

2.11: EEM Cycle 2 Interpretive Report

Executive Summary

Introduction

Agnico Eagle Mines Ltd: Meadowbank Division began discharging treated effluent during 2009, and was subsequently required under the Metal Mining Effluent Regulations (MMER) to monitor effects of that effluent on fish and fish habitat. This is the mine`s Second EEM Interpretive Report, and it is submitted to Environment Canada on behalf of Agnico Eagle Mines Limited, Val d'Or, Québec. This report documents the results of the adult fish population survey and the benthic invertebrate community survey completed for the mine`s Cycle 2 EEM biological monitoring studies, as well as the sub-lethal toxicity testing carried out on the Meadowbank Division effluent since the drafting of the Cycle 2 Study Design.

Fish Population Survey

Lake trout was the sentinel fish species used in the 2014 Cycle 2 EEM survey; other species are not present in sufficient numbers. Lake trout from the exposed area in Third Portage North Lake (TPN) were compared to those from two reference lakes, Innuguguayalik Lake (INUG) and Pipedream Lake (PDL). The study was designed as a non-lethal study, with additional data collected from incident mortalities. The parameters examined were size distribution, age distribution, weight adjusted for length, liver weight adjusted for weight and length, weight at age and length at age. The Lake Trout from TPN were similar to those from PDL with a significant difference ($P<0.05$) only for the weight versus length relationship. Lake Trout from TPN were 4.2% heavier than Lake Trout from PDL when adjusted for length. Compared to Lake Trout from the INUG reference area, those from TPN were 5.7% heavier when adjusted for length ($P=0.000$), 11.3% shorter when adjusted for age determined from otoliths ($P=0.015$) and 28.4% lighter when adjuster for age determined from otoliths ($P=0.010$). It should be noted that the power of tests involving otolith age was low due to the small sample sizes, which increases for both false positives and false negatives.

The Cycle 1 EEM study did not find any effects on the Lake Trout populations.

Benthic Invertebrate Community Survey

This 2014 survey of benthic invertebrates focused on the exposure area in Third Portage North Lake (TPN), with INUG and PDL as local reference areas. This is the second invertebrate community survey for the Meadowbank Mine under the MMER. Benthos have been sampled from TPN and INUG since 2006, while PDL has been sampled since 2009. TPN was in a baseline condition from 2006 to 2008, and has been in an exposed condition since 2009. Benthos invertebrates were collected on August 22 (TPN) and 23 (INUG, PDL), 2014. Effects assessment involved use of baseline period data dating back to 2006, and involved testing of before-after-control-impact (BACI) and trend over time variations.

Sediments in the three sampling areas have been similar among sampling years, consisting largely of fines (silt and clay sized materials), and relatively low concentrations of organic carbon (normally 1 to 3%). Benthic communities of the three study areas were similar in 2014, and similar to what had been described in previous years. The communities were dominated numerically by chironomids (50 to 80%) and Sphaeridae (16 to 32%). Sub-dominant taxa in each of the three sample areas were, variously, Nematoda, Naididae, Tubifcidae, Lumbriculidae and Acarina.

Total abundances in 2014 were generally <1,000 organisms per m^2, similar to what was observed in 2011. INUG and PDL sample areas produced an average of about four families per sample, whereas TPN produced an average of about 3 (2 to 4) families per sample in 2014. The number of taxa observed was generally lower in 2014 in all sample areas relative to what was observed in 2013, but within the range of values previously observed across the complete data record.

Reflecting somewhat lower taxa richness per sample, equitability was generally higher in 2014 in each of the sample areas, with INUG producing values of about 0.5-0.8, PDL producing values ranging between about 0.4 and 0.8, and TPN producing values ranging between about 0.35 and 0.9

Mercury in Fish Flesh
Agnico Eagle Mines TLD. has monitored mercury concentrations in the Meadowbank Division effluent since August 2009. Concentrations have remained below or near the detection limit of 0.01 µg/L. There was, therefore, no requirement to conduct a fish tissue survey during Cycle 2.

Sub-lethal Toxicity
Cycle 2 tests with fathead minnows and *Pseudokirchneriella subcapitata* were similar to Cycle 1 in that little or no inhibition was observed in any of the samples tested. Inhibition of *Ceriodaphnia dubia* survival and reproduction and of *Lemna minor* growth was often significant but was highly variable from sample to sample in both Cycle 1 and Cycle 2. The potential for effects on the receiving water has been eliminitated with the closure of the effluent stream.

Cessation of Discarge and Implications for EEM
In the future, the Meadowbank mine does not expect to discharge any water from the Portage Attenuation Pond (Tailings Storage Facility) to the receing environment; rather, beginning in 2015, it will be combined with freshwater from Third Portage Lake and used to re-flood the Portage and Goose pits as part of mine reclamation. Discharge from the Vault Attenuation Pond to Wally Lake began in 2014 and will continue until the end of production. The implications of this to the EEM process will be discussed with Environment Canada.

2.12: All-Weather Access Road Dust Monitoring Report

Executive Summary

Similar to 2014, the 2015 study aimed to characterize dust deposition rates with respect to distance from the Meadowbank AWAR in order to determine the potential for impacts to habitat in excess of those predicted in the FEIS. In addition, dustfall was measured in the area of the proposed Amaruq AWAR to obtain measurements of background dustfall in this location, and to act as reference samples for the Meadowbank AWAR. The *2015 All-weather Access Road Dust Monitoring Report* can be found in Appendix G11.

The objectives of the study conducted in 2015 were to:

1. Characterize the dustfall gradient in relation to distance from the Meadowbank AWAR.
2. Compare rates of dustfall with background concentrations and regulatory guidelines.
3. Identify inter-annual trends in rates of dustfall.
4. Relate results to impact predictions as described in the Terrestrial Ecosystem Impact Assessment (Cumberland, 2005).
5. Record the range of background rates of dustfall occurring in the area of the proposed Amaruq AWAR.

Dustfall samples were collected in open vessels containing a purified liquid matrix provided by an accredited laboratory (Maxxam Analytics). Particles are deposited and retained in the liquid, which is then filtered to remove large particles (e.g. leaves, twigs) and analyzed by the accredited laboratory for total and fixed (non-combustible) dustfall.

Dustfall canisters were deployed from August 5 to September 7, 2015 (Meadowbank AWAR) and August 8 to September 9, 2015 (proposed Amaruq AWAR route), and calculated dustfall rates were normalized to 30 days (mg/cm2/30 days, per ASTM 1739-98). Thus dustfall sampling is conducted in August, which is one of the driest months with a high volume of traffic (i.e. at the peak of the shipping season at Meadowbank).

All samples were compared to available regulatory guidelines from Alberta Environment, as well as to the range of background dustfall rates (samples collected at the Inuggugayualik Lake reference site in 2014, and proposed Amaruq road location in 2015). No regulatory standards for dustfall are available for the territory of Nunavut, and those available elsewhere are based on aesthetic or nuisance concerns. On this basis, Alberta Environment has published a guideline for recreational/residential areas of 0.53 mg/cm2/30d, and a guideline for commercial/industrial areas of 1.58 mg/cm2/30d. Total dustfall results are compared to these guidelines to provide context.

Under assumptions of continuous, long-term dust emissions from AWAR traffic, the FEIS predicted that effects of dust on vegetation and wildlife would not be significant (<1% change in the Local Study Area, outside an assumed zone of influence), even without the use of mitigation measures such as minimizing traffic and applying dust suppressants. Although the FEIS does not quantify anticipated dust levels in relation to the AWAR, it is stated that “Results from modeling, air monitoring, and snow surveys indicate that most dust particles will settle out within 100 m of the source (BHP, 2000).” The smallest zone of influence (ZOI; area where habitat is assumed lost due to sensory disturbance and other factors) for any wildlife VEC is also 100 m. Therefore, the main goal of the AWAR dustfall studies is to determine whether the majority of dustfall does settle out within 100 m.

Results to date indicate that more than a 50% reduction in average total dustfall is occurring from 25 m to 100 m on the downwind (most impacted) side of the road, indicating that the majority of dustfall does settle within the predicted 100 m zone. In addition, average rates of dustfall decline below Alberta Environment’s guideline for recreational areas within 100 m of the AWAR. Further, all but one sample collected 300 m from the AWAR and many samples collected at 100 and 150 m have been within the range of background dustfall levels. Based on these results, it is unlikely that FEIS predictions are being exceeded and that impacts to VECs (vegetation community productivity and wildlife) due to dust are occurring beyond the smallest assumed ZOI (100 m).

These results are supported by wildlife monitoring conducted under the Terrestrial Ecosystem Management Plan, including the Wildlife Screening Level Risk Assessment.

Wildlife monitoring to date has indicated no significant road-related effects, dust monitoring has indicated no trend towards increasing rates of dustfall, and risk assessment has indicated no incremental risk for wildlife from chemical contaminants near the AWAR. Therefore, impacts of Meadowbank AWAR road dust to not appear to be exceeding predictions made in the FEIS.

2.13: 2015 Blast Monitoring Report for the Protection of Nearby Fish Habitat

Executive Summary

In accordance with NIRB Project Certificate No.004, Condition 85, AEM Meadowbank Division developed a blasting program which complies with *The Guidelines for the Use of Explosives In or Near Canadian Fisheries Water* (Wright and Hopky, 1998) as modified by the DFO for use in the

North. As a result, AEM conducts monitoring to evaluate blast related peak particle velocity and overpressure to protect nearby fish bearing waters.

The results of the 2015 blast monitoring program are available in the report entitled "*2015 Blast Monitoring Report for the Protection of Nearby Fish Habitat*" prepared by AEM, attached as Appendix G6.

Peak particle velocity (PPV) and overpressure monitoring data were recorded throughout 2015 during blasting activities at the North Portage Pit, South Portage Pit, Bay Goose Pit and Vault Pit. The blast monitoring stations are illustrated in Figure 1 and Figure 2 of the report. The Portage stations are located near the shoreline of Second Portage Lake and the station located on the Bay Goose Dike is near Third Portage Lake East Basin. The Vault Pit station #1 is located between the Vault Attenuation Pond (dewatered Vault Lake) and the Vault Pit, and Vault Pit station #2 is located near Wally Lake.

Blast monitoring was conducted at Goose Pit from January to April 2015 when mining ceased. Blast monitoring was also conducted from January thru December 2015 at Portage Pit South, Portage Pit North, Vault station #1 and, Vault station #2 according to blast patterns.

In 2015, the average PPV was 2.38 (CI +/- 0.33) with a maximum of 16.5 mm/s (maximum in 2014 and 2013 were 23.8 and 32.7 mm/s respectively). The average was lower than 2014 (3.93 mm/s) and 2013 (5.39 mm/s) averages. PPV concentrations exceeded the DFO limit of 13 mm/s on two (2) occasions. Both exceedances occurred during the period of egg incubation which is from August 15 to June 30 for lakes around the Meadowbank mine site. Overpressure measurements were all below the DFO limit of 50 kpa. The number of PPV exceedances has decreased significantly in 2015 compared to 2013 and 2014 which recorded 16 and 8 exceedances, respectively. Exceedances recorded in 2015 occurred in Portage Pit E3 – the closest to the blast monitoring station. They were triggered by large blast patterns with numerous holes being blasted at the same time. These types of blast are rarely conducted and AEM will attempt to eliminate these in the future.

As in the past, based on the monitoring station locations and in comparison to other studies conducted at Ekati, exceedances of 13 mm/s PPV recorded in 2015 were unlikely to impact salmonid incubation sites at the Meadowbank Mine site. This is supported by data collected along the East dike, near South Portage Pit, as part of the Habitat Compensation Monitoring Program which documented the presence of spawning lake trout, despite blasting occurring nearby.

2.14: 2015 Air Quality and Dustfall Monitoring Report

Executive Summary

Onsite Monitoring

The 2015 air quality and dustfall monitoring program at Meadowbank was conducted in support of the Air Quality and Dustfall Monitoring Plan - Version 2 (November, 2013).

The objective of the 2015 program was to measure dustfall, total suspended particulates (TSP), PM10, PM2.5 and NO2 at four monitoring locations around the Meadowbank site. Locations were established in 2011 in consultation with Environment Canada.

Results obtained for the measured parameters were compared to Government of Nunavut (GN) Environmental Guidelines for Ambient Air Quality (October, 2011) for TSP, PM2.5 and NO2; BC Air Quality Objectives (August, 2013) for PM10; and Alberta Ambient Air Quality Guidelines (August, 2013) for dustfall. The Canadian Ambient Air Quality Standards for PM2.5 (May, 2013) are also referenced.

Of 114 TSP samples obtained, one sample exceeded the relevant GN standard of 120 µg/m3, with a concentration of 210 µg/m3. This sample was obtained from DF-2, which is located immediately south (downwind) of the main mine plant area and adjacent to the TCG contractor area. Annual average TSP values at each station did not exceed the GN guideline for that time period of 60 µg/m3. For PM10, no samples exceeded the BC Air Quality Objective of 50 µg/m3 for the 24-h average. For PM2.5, no samples exceeded the GN guideline of 30 µg/m3 or the Canadian Ambient Air Quality Standard of 28 µg/m3 for the 24-h average. No suspended particulates exceeded the relevant GN or Canadian standards for annual averages.

The Alberta recreational area guideline for dustfall was exceeded in one out of 48 samples, which is lower than all previous years. The industrial area guideline was not exceeded in any sample. The GN annual average standard for NO2 of 32 ppb was not exceeded, with a maximum monthly average of 3.3 ppb.

Estimated greenhouse gas emissions for the Meadowbank site as reported to Environment Canada's Greenhouse Gas Emissions Reporting Program in 2015 were 187,280 tonnes CO2 equivalent, which is similar to the value obtained in 2014 (179,889 tonnes CO2 equivalent).

A summary of incinerator stack testing results is provided. The result for mercury (average) was <0.22 µg/Rm3 @11%O2, which is below the Environment Canada guideline of 20 µg/Rm3. Measured concentrations of dioxins and furans (21.0 pg TEQ / Rm^3 @ 11 % v/v O2) also met Environment Canada guidelines (80 pg TEQ / Rm^3 @ 11 % v/v O2).

Overall, there are no apparent trends towards increasing air quality concerns at the Meadowbank site.

2.15: 2015 Noise Monitoring Report

Executive Summary

The 2015 noise monitoring program at Meadowbank was conducted in support of the Noise Monitoring and Abatement Plan (AEM, 2014). The objective of the program is to measure noise levels at five previously determined monitoring locations around the Meadowbank site, over at least two 24 h periods. In 2015 AEM's objective was to increase noise monitoring to include two monitoring rounds of 3-4 days per station, since high winds in the area tend to substantially reduce the quantity of available valid data (see previous reports). While monitoring was conducted for a total of 21 days, total usable hours of data for each station ranged from 8 - 36 hours. Since noise levels vary constantly over time, Meadowbank's noise monitoring instruments

measure acoustical energy near-continuously and report a single number for each minute, representing the “equivalent sound level” (Leq).

Two Leq values exceeded the daytime target sound level of 55 dBA. Both were at station R5, with recorded values of 55.4 and 61.7 dBA. These values are well within the range of those observed in previous years, and are likely a result of increased helicopter activity associated with exploration projects during the monitoring time period, since this station is close to the helicopter pad at the exploration camp. One value at R5 exceeded the nighttime target sound level (45 dBA), with a recorded Leq-night value of 51.6 dBA. An examination of the data for the nighttime period indicated that the 1-h Leq only exceeded 45 dBA for the 6 am – 7 am hour, likely as a result of the morning helicopter shift beginning at 6 am. While station R5 is located near a known caribou migration route, helicopter activity during the caribou migration time period is minimized compared to the summer monitoring months, so sound levels are expected to be lower at the time of year when caribou are migrating in the area. Further, noise levels recorded at this station for all time periods were within the range of those observed historically. Nevertheless, a reminder of AEM’s wildlife policy regarding helicopter use (Cumberland, 2005) was sent to the Exploration group during the migration to help ensure minimal impacts on wildlife.

AEM will continue to monitor noise levels around site and particularly at the R5 location in 2016, and will ensure two noise meters are available to reduce the potential for sampling delays related to instrument malfunction.