



Water Resources
Nunavut Regional Office
P.O. Box 100
Iqaluit, NU, X0A 0H0

October 6, 2015

Phyllis Beaulieu
Manager of Licencing
Nunavut Water Board
Gjoa Haven, NU, X0E 1J0

AANDC reference
CIDM# 954239

NWB reference
#2AM-MEL----

Re: Update to AANDC's Review of Agnico Eagle Mines Ltd.'s (AEM) Application for a New Type A Water Licence for its Proposed Meliadine Gold Mine. Licence No. 2AM-MEL----, ARCADIS Review of AEM's Closure Cost Estimate and AEM's Response

Dear Ms. Beaulieu,

AANDC would like to apologize in advance for the oversight in not including the supplemental document referenced in the ARCADIS Memo in AANDC's October 5, 2015 submission to the NWB. Discussions have taken place with the applicant on the issue of the Closure Cost Estimate provided in the application. The responses provided in turn by AEM have clarified issues and answered questions on the Closure Cost Estimate. AEM has agreed that their responses to our questions can be filed for the Board's consideration.

Please do not hesitate to contact me by telephone at 867-975-4282 or email at ian.parsons@aandc-aadnc.gc.ca for further comments or any questions.

Sincerely,

Ian Parsons, B.Sc
Regional Coordinator
Aboriginal Affairs and Northern Development Canada
P.O. Box 100
Iqaluit, NU, X0A 0H0

c.c.: Andrew Keim, A/Manager Water Resources, Nunavut Regional Office (NRO), AANDC
Erik Allain, Manager of Field Operations, NRO, AANDC

Memorandum

To: Phyllis Beaulieu, Nunavut Water Board

From: Ian Parsons, Regional Coordinator, Water Resources Division, AANDC

CC: Andrew Keim (AANDC)
Erik Allain (AANDC)
Amjad Tariq (AANDC)
Christine Wilson (AANDC)
Karen Costello (AANDC)

Date: October 6, 2015

Re: Update to AANDC's Review of Agnico Eagle Mines Ltd.'s (AEM) Application for a New Type A Water Licence for its Proposed Meliadine Gold Mine. Licence No. 2AM-MEL----, ARCADIS Review of AEM's Closure Cost Estimate and AEM's Response

Applicant: Agnico Eagle Mine Ltd.
Project: Meliadine Gold Project
Region: Kivalliq

A. BACKGROUND

August 27, 2015 the Nunavut Water Board (NWB or Board) provided notification to interested parties that Agnico Eagle Mines Limited Partnership (Agnico Eagle or the applicant) had completed submission of an application for a Type "A" water licence # 2AM-MEL---- for development work related to the mining of the Meliadine Gold Project.

Interested parties were asked to review the water licence application and provide technical comments by October 5, 2015

B. RESULTS OF REVIEW

On behalf of Aboriginal Affairs and Northern Development Canada's (AANDC) Water Resources Division, comments and recommendations are provided in the attached appendices for the NWB's consideration. These appendices include a memo prepared by ARCADIS on AANDC's behalf and a memo prepared by AANDC Water Resources staff.

Encl.
ARCADIS memorandum
AEM Response



ARCADIS Canada Inc.
121 Granton Drive
Suite 12
Richmond Hill
Ontario L4B 3N4
Tel 905 882 5984
Fax 905 882 8962
www.arcadis.com

MEMO

To:
Karen Costello – AANDC
Ian Parsons - AANDC

Copies:
File

From:
Charles Gravelle

ENVIRONMENT

Date:
September 21, 2015

ARCADIS Project No.:
702388-000

Subject:
Preliminary Review of Agnico Eagle Mine Limited RECLAIM Estimate
Meliadine Mine, Nunavut

The following comments are based on a preliminary review of the RECLAIM cost estimate provided by Agnico Eagle Mines Inc. (AEM) as part of their Water Licence application (dated 15 September 2015) for the Meliadine Mine and a recent site visit by ARCADIS staff (17 to 18 September 2015). Upon receipt of additional information from Agnico Eagle ARCADIS will prepare an independent RECLAIM cost estimate for the Meliadine mine closure program. For ease of review the comments are grouped using the major headers within the RECLAIM cost model.

Open Pit

Tiriganiq Pit #1

The following comments pertain to the closure and rehabilitation of the Tiriganiq Pit #1:

- No concerns with signage, perimeter berm or road blocks
- It has been assumed that any issues with rock zones within the pit wall, that could potentially create an adverse impact on water quality, will be managed during the construction of the pit and as such is not carried as a liability at closure – this will need to be monitored during the operation of the mine as part of the water licence
- Pit wall stability will be managed on an on-going manage and as such there will not be a requirement to complete any stability work upon closure of the mine

- Consideration should be given to preparing an engineered outfall structure at the A9 pond outlet to ensure the flow of water during the freshet does not deteriorate/erode the surficial soils.
- How was the cost for the transfer of water from Meliadine Lake to the pit, as part of the pit closure work, derived?
- How was a cost of \$350,000 derived for the supply of the pump station and piping?
- How was the volume of water to be transferred to Pit #1 determined as it is not consistent with the estimated volume of water for the pit as outlined in the Interim Closure and Reclamation Plan (ICRP) and where did the cost for the purchase of water come from ?

Tiriganiq Pit #2

The following comments pertain to the closure and rehabilitation of the Tiriganiq Pit #2:

- No concerns with signage, perimeter berm or road blocks
- It has been assumed that any issues with rock zones within the pit wall, that could potentially create an adverse impact on water quality, will be managed during the construction of the pit and as such is not carried as a liability at closure – this will need to be monitored during the operation of the site as part of the water licence
- Pit wall stability will be managed on an on-going manage and as such there will not be a requirement to complete any stability work upon closure of the mine
- Consideration should be given to preparing an engineered outfall structure at the A38 pond outlet to ensure the flow of water during the freshet does not deteriorate/erode the surficial soils.
- The cost for the transfer of water from Meliadine Lake to the pit has not been carried in the RECLAIM estimate as part of the pit closure work
- The cost for the mobilization and demobilization of the water supply system does not appear to be covered in the RECLAIM estimate we have assumed the system for Pit #1 will be transferred to Pit #2 – confirm.
- Need to carry a cost for the purchase of water to fill Pit #2.

Underground Workings

The following comments pertain to the closure of the underground mine workings:

- What do the numbers 250 x 3x3 and 1.14 represent in the volume calculation for the berm and where is this berm located? If the portals are backfilled why is a perimeter berm required?

- How was the Meadowbank cost developed for the capping of the mine vent raises?
- The volume of waste rock being used in the contouring around the portal(s?) appears to be high - is it for both Portal 1 and 2? What was the basis of this number given the costs already carried to seal the portals?
- How was the cost to remove hazardous materials from the underground derived? It is unclear why the RECLAIM unit for a scoop tram was used? How was the quantity of 90x24 derived – it is unclear if this refers to staff days.
- How will flooding of the underground workings be monitored?

Tailings Management

The following comments pertain to the closure of the tailings storage facility (TSF):

- How were the overburden and waste rock cover volumes derived given that progressive reclamation work is to be done on the tailings facility? Need to confirm that the overburden cover extends down the final TSF slopes so as to minimize surface water infiltration.
- What is the basis for the unit rates applied for the recovery of local waste rock and overburden for the tailings cover work?
- Why is there a management cost for discharge from the TSF if the TSF is not expected to generate any discharge once covered with the overburden cap (see TREAT SUPERNATANT)?
- How was the unit rate for the Pump Water cost derived as it appears to have been prorated from another program?

Rock Pile Management

No concerns with the waste rock stockpile management for Waste Rock Stockpile Facilities (WRSF) 1, 2 or 3 as these stockpiles will be constructed during the operations as a progressive work element and should be constructed in a manner consistent with the final configuration of the respective WRSFs. The breaching of containment dykes associated with the respective WRSFs is costed under water management.

Chemicals

The following comments pertain to the management of chemicals and other hazardous wastes present on the site at the end of operations:

- The costs for a Phase I and II ESA are low for this type of site – where did these values come from for this estimate?
- What is the basis for the estimated quantities of hazardous materials?
- The disposal costs for batteries and paint appear to be low – how were they derived?
- Why are there no charges included in the RECLAIM estimate for the transportation and disposal of hazardous materials? Is it already in the removal cost – please confirm?
- What is the basis for the volume of fuel being assumed to require management at the closure of the site? Where will this fuel be located as one would assume there will be fuel in the Rankin Inlet fuel cache as well as on site?
- How was the potential management of residual cyanide considered in the RECLAIM estimate?
- Where did the quantity of petroleum hydrocarbon contaminated (PHC) soil come from? The quantity appears to be conservative.
- How is the decommissioning of the PHC landfarm accounted for in the RECLAIM estimate?

Building and Equipment Management

The following comments pertain to the removal of buildings and equipment as part of the closure program:

- How were the building tonnage and unit rates derived for the equipment management for both the on-site and off-site disposal scenarios?
- How were the building areas and unit rate for the demolition work derived?
- Why is a cost being carried for an interim cover on the landfill? Cost is already carried to construct the landfill as part of operational costs.
- What is the basis of the unit rate for the grading out of the waste rock pads in the Industrial Area of the site?
- Where are the costs for the removal of the water intake structure and diffuser carried in the RECLAIM estimate?
- What is the basis for the rates/costs to remove the bridges and culverts?
- Why has it been assumed that 120 mandays will be required to remove the fuel and glycol system?

Water Management

Only covers the breaching of the various containment dykes. Not clear how the decommissioning of the water treatment system has been accounted for in the RECLAIM estimate.

Water Treatment

The following comments pertain to water treatment at closure:

- How was the volume of water derived and why is the cost included for three years?
- How was the allowance for the pumping of water from sumps and ponds to the treatment plant derived?

Interim Care and Maintenance

What is the basis for the three years of anticipated Care and Maintenance for the closure of the Meliadine operations?

Post Closure Costs

The following comments relate to the Post Closure costs:

- The annual program costs appear to be low given the amount of work required – is the plan to use local personnel or contractors to complete the monitoring work?
- The number of sampling events should be amended from ten done annually to a longer period of monitoring but on a less frequency schedule after the initial five years (i.e. annual for five years, every second year for ten years and then two additional monitoring periods five years apart their after. This will provide monitoring until 25 years after closure. An alternative post-closure program that has been used at other sites included annual sampling/site assessments, for the first 7 years, then at year 10, followed by year 15 then finally year 25. At year 25 a complete geo-technical site assessment would once again have to be completed. Either option could be considered.
- Consideration should be given to adding more sampling points at lakes A8 and B7 (two locations near CP3 and CP4) so as to monitor downstream of significant tailings and waste rock storage areas.

Indirect Costs

The following comments relate to the Indirect costs:

- No issues with the engineering, project management, HASP/Monitoring/QA&QC
- No concerns with Bonding/Insurance
- No concerns with the Contingency amount.



September 30, 2015

Ian Parsons / Karen Costello
Aboriginal Affairs and Northern Development Canada
Nunavut Regional Office
Bldg. 918, PO Box 100
Iqaluit, NU X0A 0H0

Re: Response to ARCADIS Preliminary Review of Agnico Eagle Mines Limited RECLAIM Estimate for the Meliadine Gold Mine, Nunavut

Dear Ms. Costello and Mr. Parsons,

We would like to thank Aboriginal Affairs and Northern Development Canada (AANDC) for their comments and review of the RECLAIM Estimate for Meliadine Gold Project (Project). Comments and requests were sent in an email dated 22 September 2015 by Ian Parsons of AANDC to Stéphane Robert of Agnico Eagle Mines Limited (Agnico Eagle). Below is a summary of comments and requests made by ARCADIS Canada Inc. (ARCADIS), as a representative of AANDC and responses to the requests, prepared by Golder Associates Ltd. (Golder) on behalf of Agnico Eagle.

=====

Request: *The following comments pertain to the closure and rehabilitation of the Tiriganiaq Pit #1:*

- *No concerns with signage, perimeter berm or road blocks*
- *It has been assumed that any issues with rock zones within the pit wall, that could potentially create an adverse impact on water quality, will be managed during the construction of the pit and as such is not carried as a liability at closure – this will need to be monitored during the operation of the mine as part of the water licence*
- *Pit wall stability will be managed on an on-going manage and as such there will not be a requirement to complete any stability work upon closure of the mine*
- *Consideration should be given to preparing an engineered outfall structure at the A9 pond outlet to ensure the flow of water during the freshet does not deteriorate/erode the surficial soils.*
- *How was the cost for the transfer of water from Meliadine Lake to the pit, as part of the pit closure work, derived?*
- *How was a cost of \$350,000 derived for the supply of the pump station and piping?*

- *How was the volume of water to be transferred to Pit #1 determined as it is not consistent with the estimated volume of water for the pit as outlined in the Interim Closure and Reclamation Plan (ICRP) and where did the cost for the purchase of water come from ?.*

Response:

- The pit perimeter treatment will remain as proposed.
- Yes, impact on water quality from the pit slopes will be managed during operations and no rock formation in the open pit has been identified that would cause a concern with water quality at closure.
- Yes, pit slopes will be excavated to stable configuration, so no stability work is planned at closure.
- At this time an engineering outfall structure is not needed, but a small allowance for a rock weir at A9 pond to minimize soil erosion could be added in subsequent estimates.
- The cost to flood the pit was based on 3 pumps with a capacity of 500 cubic metres per hour (m³/hr) each and an efficiency of 85% for each pump, operating 4 months per year and 24 hours per day, for a total of 3 years. The cost for fuel was obtained from Meadowbank Mine 2014 operating cost data.
- Based on Meadowbank Mine 2014 operating costs data and data from similar operating mines.
- The volume of the pits was obtained from the mine planning group for the Project. The volumes for Tiriganiaq pits 1 and 2 were combined and presented under the Pit 1 estimate. Volume presented in Reclaim was based on initial mine estimates and is under estimated by 300,000 m³; based on the volume presented in the ICRP at 11.45 M-m³. The volume to be pumped made a small allowance for snow melt and run-on water during the closure period. The volumes would be adjusted as the operation proceeds. The cost for the purchase of water was obtained from Meadowbank Mine 2014 operating costs data.

Request: *The following comments pertain to the closure and rehabilitation of the Tiriganiaq Pit #2:*

- *No concerns with signage, perimeter berm or road blocks*
- *It has been assumed that any issues with rock zones within the pit wall, that could potentially create an adverse impact on water quality, will be managed during the construction of the pit and as such is not carried as a liability at closure – this will need to be monitored during the operation of the site as part of the water licence*
- *Pit wall stability will be managed on an on-going manage and as such there will not be a requirement to complete any stability work upon closure of the mine*
- *Consideration should be given to preparing an engineered outfall structure at the A38 pond outlet to ensure the flow of water during the freshet does not deteriorate/erode the surficial soils.*

- *The cost for the transfer of water from Meliadine Lake to the pit has not been carried in the RECLAIM estimate as part of the pit closure work*
- *The cost for the mobilization and demobilization of the water supply system does not appear to be covered in the RECLAIM estimate we have assumed the system for Pit #1 will be transferred to Pit #2 – confirm.*
- *Need to carry a cost for the purchase of water to fill Pit #2.*

Response:

- The pit perimeter treatment will remain as proposed.
- Yes, the impact on water quality from the pit slopes will be managed during operations and no rock formation in the open pit has been identified that would cause a concern with water quality at closure.
- Yes, pit slopes will be excavated to stable configuration, so no stability work planned at closure.
- At this time an engineering outfall structure is not needed, but a small allowance for a rock weir at A38 pond to minimize soil erosion could be added in subsequent estimates.
- The cost to flood Tiriganiaq Pit 2 is covered under Tiriganiaq Pit 1 cost estimates. As mentioned under Tiriganiaq Pit 1 section above, volumes for Tiriganiaq pits 1 and 2 were combined and presented under Pit 1.
- Mobilization cost for the pumping equipment is covered under the Tiriganiaq Pit 1 cost estimate. The piping system for the flooding will be assembled so water from the lake can be pumped to either pit. It was anticipated that the estimate to install the pumps and pipes to flood the pits which is in addition to the estimate to supply (purchase) the pumps would allow for both mobilization and decommissioning of the water supply system which are covered under the Tiriganiaq Pit 1 cost estimate, line 49.
- It is covered under Tiriganiaq Pit 1 costs as previously mentioned.

Request: *The following comments pertain to the closure of the underground mine workings:*

- *What do the numbers 250 x 3x3 and 1.14 represent in the volume calculation for the berm and where is this berm located? If the portals are backfilled why is a perimeter berm required?*
- *How was the Meadowbank cost developed for the capping of the mine vent raises?*
- *The volume of waste rock being used in the contouring around the portal(s?) appears to be high - is it for both Portal 1 and 2? What was the basis of this number given the costs already carried to seal the portals?*
- *How was the cost to remove hazardous materials from the underground derived? It is unclear why the RECLAIM unit for a scoop tram was used? How was the quantity of 90x24 derived – it is unclear if this refers to staff days.*

- *How will flooding of the underground workings be monitored?*

Response:

- The volume noted or the dimensions reported correspond to the sections of the portal ramps to be backfilled with rock. The numbers provided are estimated based on the horizontal length, area and slope of the ramps.
- The cost for steel and concrete were obtained from the Meadowbank Mine operation. The designs for the caps (slab thickness and steel) were based on Ontario guidelines for capping vent raises and manways. The estimates were based on other remote mines that require caps on vent raises.
- An allowance in addition to backfilling the ramp was included to regrade the area above and around the portal to promote positive gravity drainage away from the portal area at closure.
- The estimate to remove the hazardous materials (solvents and/or oil etc. in maintenance shops and safety stations etc. underground) was based on an allowance for a crew of 2 or 3 people with a piece of mobile equipment (scope tram or underground pickup) to remove the hazardous material. It was anticipated that the effort would require up to 90 days and the equipment would be required for 24 hours each day (2 shifts). The scoop tram unit rate was used in the model and it was anticipated that the crew costs would be covered by the unit rate used for the mobile equipment.
- As mentioned in the ICRP, physical monitoring to check groundwater inflow rates will be carried out at the start of the flooding period as the closure of the underground starts, but would be limited once the ventilation system is turned off. The groundwater monitoring would then be accomplished with instruments installed in manways or vent raises. The frequency of monitoring will be reduced in the post-closure period. Costs for these items are covered in Reclaim under Post-Closure Monitoring and Maintenance.

Request: *The following comments pertain to the closure of the tailings storage facility (TSF):*

- *How were the overburden and waste rock cover volumes derived given that progressive reclamation work is to be done on the tailings facility? Need to confirm that the overburden cover extends down the final TSF slopes so as to minimize surface water infiltration.*
- *What is the basis for the unit rates applied for the recovery of local waste rock and overburden for the tailings cover work?*
- *Why is there a management cost for discharge from the TSF if the TSF is not expected to generate any discharge once covered with the overburden cap (see TREAT SUPERNATANT)?*
- *How was the unit rate for the Pump Water cost derived as it appears to have been prorated from another program?*

Response:

- The volumes reported, correspond to the volumes of capping materials required for Cell 3 at the end of the process / milling operation. The material for the initial areas of the TSF will be covered as part of progressive reclamation; as mentioned in the ICRP. The TSF closure cover on the slopes includes a 3.7 m to 4.2 m thick waste rock layer. Based on preliminary thermal analyses carried out to date and as summarized in the ICRP, it is expected that the tailings will freeze back as the cover is placed. Therefore, to extend the overburden layer down the final TSF slopes is not required. Further analysis will be carried out during the next project stages to confirm the cover design.
- Based on Meadowbank Mine 2014 operating costs data and confirmed with similar projects experience.
- The TSF cover may take up to 1 year to place, so an allowance has been included (the Project assumes 1 year as a contingency).
- Water volume was obtained from a water balance developed for the closure period for the mine design and the unit rates to operate the treatment plant are from Meadowbank Mine 2014 operating costs data.

Comment: *No concerns with the waste rock stockpile management for Waste Rock Stockpile Facilities (WRSF) 1, 2 or 3 as these stockpiles will be constructed during the operations as a progressive work element and should be constructed in a manner consistent with the final configuration of the respective WRSFs. The breaching of containment dykes associated with the respective WRSFs is costed under water management.*

Response:

- No response is required.

Request: *The following comments pertain to the management of chemicals and other hazardous wastes present on the site at the end of operations:*

- *The costs for a Phase I and II ESA are low for this type of site – where did these values come from for this estimate?*
- *What is the basis for the estimated quantities of hazardous materials?*
- *The disposal costs for batteries and paint appear to be low – how were they derived?*
- *Why are there no charges included in the RECLAIM estimate for the transportation and disposal of hazardous materials? Is it already in the removal cost – please confirm?*
- *What is the basis for the volume of fuel being assumed to require management at the closure of the site? Where will this fuel be located as one would assume there will be fuel in the Rankin Inlet fuel cache as well as on site?*

- *How was the potential management of residual cyanide considered in the RECLAIM estimate?*
- *Where did the quantity of petroleum hydrocarbon contaminated (PHC) soil come from? The quantity appears to be conservative.*
- *How is the decommissioning of the PHC landfarm accounted for in the RECLAIM estimate?*

Response:

- The estimates are based on review of similar end of mine efforts where the majority of the clean-ups have been carried out during operations and there are good records on activities on file.
- Based on Meadowbank Mine operating data and an anticipated planned careful management of hazardous materials as the operation approaches closure.
- Based on Meadowbank Mine operating data and experience from the Meliadine exploration effort.
- Yes, the transport / disposal costs are cover under the removal costs.
- The fuel remaining at the mine site will be sent to Rankin Inlet or incinerated and the fuel not required during the closure and reclamation activities in Rankin Inlet will be sold locally, returned to suppliers, disposed of by a licensed handler or incinerated, as mentioned in the ICRP.
- Residual cyanide has been included under “mill and water treatment reagents” item. It will be presented under a separate item for better identification in future closure estimates.
- The volume or quantity of petroleum hydrocarbon contaminated (PHC) soil was defined as a percentage of the area under the process plant, the maintenance shops, the incinerator and the tank farm. It was estimated that up to 25% of the above area to depth of 30 cm would be impacted and thus would require management. This was considered a reasonable first estimate.
- Covered under lines 39 and 40 on Chemical sheet. The word landfarm title was not used in Reclaim model. The title biopile has been used instead as per Reclaim setup. Landfarm is mentioned in the ICRP.

Request: *The following comments pertain to the removal of buildings and equipment as part of the closure program:*

- *How were the building tonnage and unit rates derived for the equipment management for both the on-site and off-site disposal scenarios?*
- *How were the building areas and unit rate for the demolition work derived?*
- *Why is a cost being carried for an interim cover on the landfill? Cost is already carried to construct the landfill as part of operational costs.*

- *What is the basis of the unit rate for the grading out of the waste rock pads in the Industrial Area of the site?*
- *Where are the costs for the removal of the water intake structure and diffuser carried in the RECLAIM estimate?*
- *What is the basis for the rates/costs to remove the bridges and culverts?*
- *Why has it been assumed that 120 man days will be required to remove the fuel and glycol system?*

Response:

- It was assumed that 50% of the total tonnes of material (steel and building materials) shipped to site would be managed at closure. A total of 55,000 tonnes of material is assumed to be shipped to site at the start of operations. Thus, 27,500 tonnes will be salvageable and shipped off-site and/or will be disposed on-site. It has also been assumed that salvage value is equal to zero.
- Building areas were provided by Agnico Eagle and were obtained from project current design layouts. Unit rates are based on equipment unit rates from Meadowbank data and data from other sources.
- A cost for the interim cover at the landfill is included as Agnico Eagle anticipates it will require 2 to 3 summer seasons to close the mine site and an interim cover should be left on the landfill at the end of each summer. At the completion of the closure demotion effort, the final cover would be placed.
- Unit rate is based on Meadowbank Mine operating cost data and data from other mines.
- The costs for the removal of the water intake structure and diffuser were not included in the cost estimate; it should be and would be covered in future models.
- The rates/costs to remove the bridges and culverts are based on Meadowbank Mine operating cost data and data from other mines to remove culverts. Estimate to remove bridges was obtain from a contractor who proposed to use large backhoes for the effort. The estimate was then adjusted to the remote Meliadine site. Agnico Eagle will provide Meliadine bridge construction cost to AANDC/Arcadis.
- The 120 man days assumes 3-4 people working during one summer season to remove the fuel and glycol system.

Request: *Water Management - Only covers the breaching of the various containment dykes. Not clear how the decommissioning of the water treatment system has been accounted for in the RECLAIM estimate.*

Response:

- The decommissioning of the water treatment system is covered under Buildings and Equipment, and the cost estimates are provided in lines 18 and 52. The water treatment facility will be constructed and used during operations. In future closure models, the estimate would be presented as a separate line item as the water treatment plant (WTP) will be maintained for three water treatment seasons as a contingency before being dismantled and disposed of in an appropriate landfill facility either on-site or in Rankin Inlet (if approved) as mentioned in the ICRP.

Request: *The following comments pertain to water treatment at closure:*

- *How was the volume of water derived and why is the cost included for three years?*
- *How was the allowance for the pumping of water from sumps and ponds to the treatment plant derived?*

Response:

- The water volume was obtained from a water balance developed for the closure period for the mine design. Agnico Eagle has decided that the WTP and Meliadine Lake discharge system will be operated for three water treatment seasons as a contingency before being dismantled and disposed of in an appropriate landfill facility either on-site or in Rankin Inlet (if approved) as mentioned in the ICRP. Thus, the cost is included in the estimate.
- The water volume was obtained from a water balance developed for the closure period of the mine life for the mine design. The unit rates to operate the treatment plant are from Meadowbank Mine 2014 operating costs.

Request: *Interim Care and Maintenance - What is the basis for the three years of anticipated Care and Maintenance for the closure of the Meliadine operations?*

Response:

- Agnico Eagle has decided that a period for care and maintenance may be appropriate as a contingency in closure planning. Thus, an Interim Care and Maintenance cost is based on the number of years of interim water treatment which has been assumed to be three years as a contingency.

Request: *The following comments relate to the Post Closure costs:*

- *The annual program costs appear to be low given the amount of work required – is the plan to use local personnel or contractors to complete the monitoring work?*
- *The number of sampling events should be amended from ten done annually to a longer period of monitoring but on a less frequency schedule after the initial five years (i.e. annual for five years, every second year for ten years and then two additional monitoring periods five years apart their after. This will provide monitoring until 25 years after closure. An alternative post-closure program that has been used at other sites included annual sampling/site assessments, for the first 7 years, then at year 10, followed by year 15 then finally year 25. At year 25 a complete geo-technical site assessment would once again have to be completed. Either option could be considered.*
- *Consideration should be given to adding more sampling points at lakes A8 and B7 (two locations near CP3 and CP4) so as to monitor downstream of significant tailings and waste rock storage areas.*

Response:

- The plan is to use local personnel and/or environmental contractors to complete the inspections and annual monitoring work to extent possible. The unit costs used for the estimate are the unit costs provided in the Reclaim 6 and 7 models (annual geotechnical inspection not included in Reclaim 7, it was taken from Reclaim 6) under the ‘high’ classification.
- Agnico Eagle has selected a 10 year monitoring program for the post-closure period based the results of project geochemistry testing completed to date and on the water quality modelling completed for the mine permit. The test results and modelling indicates that the water quality in the post-closure period will satisfy the current discharge criteria for the closed mine in a 10 year period and longer term (i. e. 25 years) monitoring is not required. It is understood that as the mine operates, addition geochemistry testing and water quality monitoring will be completed to confirm the current model results and if the future works suggest a long post-closure monitoring period is needed, the mine will adjust the current plan. The number of inspections and sampling events for a 25 year monitoring plan is similar to the planned 10 year period, so the cost estimate to complete a revised plan as suggested, would have minimal impact on the cost estimate (i.e. in the magnitude of dollars).
- Sampling points are based on the monitoring program developed for the project which is considered adequate for the current level of design of the Project. Additional sampling is planned under the Aquatic Effects Monitoring Program Design Plan at Lake A8 and B7 (see Figure 4-1). The monitoring program will be reviewed and updated, as required. The monitoring programs will be initiated during pre-development, construction, and operations to provide additional baseline information on which to base the Final Closure and Reclamation document.



Request: *The following comments relate to the indirect costs:*

- *No issues with the engineering, project management, HASP/Monitoring/QA&QC*
- *No concerns with Bonding/Insurance*
- *No concerns with the Contingency amount.*

Response:

- No response is required

CLOSURE

Should you require any further information or questions please contact Stéphane Robert via email or by telephone.

Regards,

Stéphane Robert
Manager Regulatory Affairs
stephane.robert@agnicoeagle.com
T: 819.759.3555 x5188
M: 819.763.0229

Attachments: n/a