



# MELIADINE GOLD PROJECT

ANNUAL REPORT: LICENCE 2BB-MEL0914

PRESENTED TO THE NUNAVUT WATER BOARD

**MARCH 2014** 

## Contact:

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<u>Part B clause 7:</u> The Licensee shall file an annual report on the appurtenant undertaking with the Board no later than March 31<sup>st</sup> of the year being reported which shall contain, but not limited to, the following information;

a) monthly and annual quantities in cubic metres of all freshwater obtained from Meliadine lake at monitoring stations MEL-1 and drilling sites;

Months 2013	Domestic	Water for	Water for	Total
	water	drilling use	underground	(m³/day)
	(m³/day)	(m³/day)	(m³/day)	
January	5.9	0.0	0.0	5.9
February	6.1	6.1	0.0	12.2*
March	17.5	183.3	0.0	200.8
April	20.2	191.9	0.0	212.1
May	22.3	177.3	0.0	199.6
June	19.5	108.4	0.0	127.9*
July	20.7	23.4	0.0	44.1
August	15.6	0.0	0.0	15.6
September	18.3	0.0	0.0	18.3
October	9.4	0.0	1.7	11.1
November	9.3	0.0	4.2	13.5
December	11.5	0.0	2.8	14.3
Annual average				73.5

b) the monthly and annual quantities in cubic meters of mine water pumped from the underground;

No underground water pumped out in 2013 at Meliadine site.

- c) an estimate of the current volume of waste rock and ore stockpiled on site;

  A stockpile of approximately 33,798 tons of ore and 4,260 tons of waste are on site.
- d) tabular summaries of all data generated under the monitoring program, part J;

  Please see <u>Appendix A</u> for data tables related to the 2013 monitoring. The location of sampling stations is shown on Figure 1 in <u>Appendix A</u>.
- e) a summary of modification and/or major maintenance work carried out on the water supply facilities, Bulk Fuel Storage Facility, Bermed fuel containment facilities

and sewage disposal facility, including all associated structures, an outline of any work anticipated for the next year;

## ➤ Fuel storage Facility

✓ Some double-walled tanks were relocated on the site to improve their efficiency. This is the summary of the fuel storage.

Table 1: Fuel Storage Location at Meliadine.

Location	Number	Size (Liters)	Description	
	1	50,000	Steel enviro tank	
Camp gen set unit	1	5000	Steel enviro tank	
	1	2500	Steel enviro tank	
	8	100,000	Steel enviro tank	
Tanks farm	2		Steel enviro tank	
	11	50,000	Steel enviro tank	
	1		Steel enviro tank	
	3	50,000	Steel enviro tank	
Camp jet -A 2		85,000	Steel enviro tank	
	1	50,000	Steel enviro tank	
Portal	2	13,500	Steel enviro tank	
	1	2500	Steel enviro tank	

## > Sewage treatment facility

- ✓ In 2013, a second UV disinfection system was run in series to disinfect the effluent, an ozone generator system was bought and tested and will continue to be tested in 2014 to continue improving the effluent quality. Also, some retention basins were bought and installed upon request from the Kivalliq Inuit Association.
- ✓ All the sludge pumped out of the Biodisk during the past years was transported by boat in 2013 to a southern treatment facility.

## f) a list of unauthorized discharges and follow-up action taken;

In the first 3 months of 2013, we had some problems with the disinfection of the effluent from the STP. We resolved the problem and, for the remainder of the year, we had good performance.

g) updates or revisions to the abandonment and restoration plan, site water management plan, waste rock and ore storage management plan, spill contingency plan and the operations and maintenance manual;

Attached in <u>Appendix B</u> are the revised Spill Contingency Plan (version of February 2014), the Reclamation and Closure Plan (version of August 2013) and the Water Management Plan (version of February 2014).

h) an updated estimate of the current Meliadine Lake Gold Project restoration liability, as required under Part B, Item 3, based upon the results of the restoration research, project development monitoring, and any modifications to the site plan;

An update of the "Reclamation and Closure Plan" was produced in 2013. The plan is attached in <u>Appendix B</u>.

i) a brief description of follow-up action taken to address concerns detailed in inspection and compliance reports prepared by the Inspector;

*See Appendix C for the complete reports.* 

On May 22, the KIA made an inspection at the Meliadine site. The inspector took a water sample of the used water treatment (STP) effluent to measure the level of fecal coliforms and some other parameters. The results respected the licence requirement.

On July 8, AANDC's inspectors made a compliance inspection of the Meliadine site. No non-compliance to the act was noted.

i) a summary of drilling activities and progressive reclamation of drill sites;

305 holes were drilled under the area covered by this licence for a total length of 66,572 meters. These drilling sites are reclaimed.

k) a summary of any abandonment and restoration work completed during the year and an outline of any work anticipated for the next year;

No reclamation activities related to licence 2BB-MEL0914 for 2013, except for the drilling sites.

Also, all hazardous wastes were shipped to a southern facility for treatment. A total of 32 containers of different kinds of wastes were shipped in 2013. The manifests are in Appendix D.

 a summary of any specific studies or reports requested by the Board, and a brief description of any future studies planned or proposed;

No request was received in 2013.

m) a public consultation/participation report describing consultation with local organizations and residents of the nearby communities, if any were conducted;

Agnico Eagle Mines Limited (AEM) had an active public consultation program in 2013. The consultation had several purposes:

- 1. Inform the public of the ongoing, advanced exploration program at the Meliadine site;
- 2. Describe the proposed Meliadine Gold Mine and the opportunities it will provide to the Kivalliq region;
- 3. Meet with the members of the Kivalliq communities and listen to their environmental concerns about the development and their expectations regarding the opening of the Meliadine Gold Mine; and
- 4. Regulatory consultation regarding Phase 1 All-Weather Access Road (AWAR) and the forthcoming Environmental Impact Statement.

Public and regulatory consultations are outlined in the following table.

Date	Place	Parties Attending and Subjects of Meeting
2013		
Jan 14-17	Rankin Inlet	Meliadine IIBA negotiating session between KIA and AEM
Jan 28	Vancouver	Meeting with NIRB Board staff to present an update on the draft Environmental Impact Statement of Meliadine
Jan 28	Vancouver	Meeting with CANOR-NPMO to present an update on the draft Environmental Impact Statement of Meliadine
Jan 31	Rankin Inlet	Meeting with KHTO Board to discuss the next workshop meeting on the DEIS with CLARC and HTO (February 13) and the road construction (blast notification).
Feb 11-13	Rankin Inlet	Meeting with the HTO, CLARC, KIA and GeoVector (KIA's consultant) to present an update on the Meliadine Project and workshop on draft Environmental Impact Statement
Feb 13	Rankin Inlet	Community Consultation where an update on the Meliadine Project was presented. Those attending did not ask any questions.
Feb 14	Chesterfield Inlet	Consultations with the Hamlet Council and the community. An update on the Meliadine Project was presented, and answers provided to the questions asked.
Feb 19	Ottawa	Meeting with DFO to present an update on the draft Environmental Impact Statement of Meliadine and specifically the No Net Loss Plan

Date	Place	Parties Attending and Subjects of Meeting
Feb 22	Winnipeg	Meeting with Transport Canada to present the Project, specifically as it relates to Navigable Waters and the Canada Shipping Act.
		A Workshop was held during the Nunavut Mining Symposium to consult
April 12	Iqaluit	with the Federal (EC, DFO, GN, EC, AANDC) and GN before they receive the DEIS for the Information Request (IRs) phase.
Apr 15-18	Rankin Inlet	Meliadine IIBA negotiating session between KIA and AEM
April 23	Rankin Inlet	AEM met with NTI, KIA, HTO and GN Wildlife to promote a hunters
April 23	- Kankin inict	Harvest study project.
June 21	Rankin Inlet	Meetings were held with the Hamlet and Government Services (GN) concerning the removal of the Char River Bridge, the Apache Pass and
		the airport By-pass.
June 27	Rankin Inlet	Presentation on AEM exploration activities, Phase 1 AWAR and road access made to town council, Community, Land and Resources, Hunters and Trappers Organization, Kivalliq Inuit Association, NTI
July 10	Rankin Inlet	Discussions were held with the Airport Manager and Government Services (GN) and airport Manager concerning and the airport By-pass.
July 15-16	— Rankin Inlet	Meliadine IIBA negotiating session between KIA and AEM
July 13-10	— Kankin iniet	
Aug 8	Rankin Inlet	Meeting with town council, Community, Land and Resources, Hunters and Trappers Organization, Kivalliq Inuit Association, NTI on the Phase 1 AWAR and Road Access Policy – minutes available
Sept 10	Rankin Inlet	Presentation was held during the Kivalliq Mayors meeting in Rankin on the status of the project.
Sept 10-11	Rankin Inlet	Meliadine IIBA negotiating session between KIA and AEM
Oct 1	Rankin Inlet	Kivalliq trade show presentation on the status of the project
Oct 15	Arviat	AEM participated in community information sessions organized by NIRB. NIRB was using these sessions to consult with communities to know their concerns regarding our proposed Meliadine Project. AEM was asked not to speak on the record unless asked to by NIRB to encourage the public to feel free to raise their concerns.
Oct 17	Rankin	AEM participated in community information sessions organized by NIRB. NIRB was using these sessions to consult with communities to know their concerns regarding our proposed Meliadine Project. AEM was asked not to speak on the record unless asked to by NIRB to encourage the public to feel free to raise their concerns.
Oct 16-17	Rankin Inlet	Regional Socio-Economic Monitoring Committee meeting where AEM shared the socio-economic data collected with the Government of Nunavut and other members of the Committee.
Oct 23	Meliadine Camp	Visit of HTO (Norman Ford and Paul ) and GN (Johanne Coutu-Autut) visit of surface facility
Oct 24	Meliadine Camp	Visit of AANDC Erika Marteleira Environmental Assessment Coordinator visit of surface and underground
Oct 29-30	Rankin Inlet	Meliadine IIBA negotiating session between KIA and AEM
Nov 3	— Meliadine Camp	Visit of the Nunavut Planning Commission of the surface facility and presentation on Meliadine project.
Nov 6	Meliadine Camp	Visit of the KIA land inspector and presentation of the surface facility and presentation on Meliadine project.
Nov 6	Rankin Inlet	Meeting with HTO Board explaining the status of the Project, Phase 1 All-Weather Access Road, caribou migration, sewage treatment – (minutes available)

Date	Place	Parties Attending and Subjects of Meeting
Nov 7	Rankin Inlet	Consultation with DFO, AEM and KHTO on fisheries compensation proposed by AEM – (minutes available)
Nov 7	Conference Call	Northern Projects Management Office, regulatory agencies and AEM discussed water management options outlined in the draft Environmental Impact Statement for the Meliadine Project.
Nov 19	Toronto	KIA and AEM reviewed the draft Environmental Impact Statement
Dec 3-5	Rankin Inlet	Technical Hearings for the Draft Environmental Impact Statement
Dec 6	Meliadine Camp	Visit of AANDC (Karen Costello and James Neary) and GN (Sylvie Leblanc and Lou Kamermans) Presentation and visit of surface facility.
Dec 10-12	Rankin Inlet	Pre-Hearing Conference for the Draft Environmental Impact Statement

n) Any other details on water use or waste disposal requested by the Board by November 1st of the year being reported.

*No details were requested by the Board.* 

### Part F clause 3:

Drill holes shall be immediately sealed and permanently capped to prevent induced contamination of groundwater or salinization of surface waters. The Licensee shall report all artesian flow occurrences within the annual report, including the location (GPS coordinates) and dates.

No drill holes had artesian flow.

#### Part F, clause 4:

Where drilling activity has penetrated below the permafrost layer, the NWB requests that the proponent record the depth of permafrost and location of the drill hole to be included within the annual report.

The lower permafrost boundary varies from point-to-point. AEM's estimate for this boundary is from approximately 425 to 450 metres. The only way we are sure that a hole penetrates the permafrost boundary is when the presence of water is detected.

Drill holes passing through the permafrost boundary are presented in the table below. This is an angled drill hole exceeding 600 metres in length.

Hole number	Hole Length	Year	UTM East	UTM North
M13-2093	630	2013	542872	6986777

## Part H, clause 3:

The licensee shall review the (Spill Contingency) plan referred to in this part as required by changes in operation and/or technology and modify the plan accordingly. Further revisions to the plan are to be submitted in the form of an addendum to be included with the annual report, unless otherwise by an inspector.

The spill management plan was updated in February 2014 and it is presented in Appendix B.

#### Part I, clause 4:

The licensee shall review the (Abandonment and restoration) plan referred to in this part as required by changes in operation and/or technology and modify the plan accordingly. Revisions to the plans are to be submitted in the form of an addendum to be included with the annual report.

An update of the "Reclamation and Closure Plan" was produced in 2013. The plan is attached in <u>Appendix B</u>.