WATER LICENCE INSPECTION FORM

☐ Original
☒ Follow-Up Report

Licensee	Licensee Representative
2BB-MEL1424	Philip Roy
Licence No. / Expiry	**Representative's Title**
July 21st, 2024	Environment Division
Land / Other Authorizations	**Land / Other Authorizations**
IOL	--
Date of Inspection	**Inspector**
May 8th 2017	WRO C. Wilson

Activities Inspected

☒ Camp ☐ Drilling ☐ Mining ☐ Construction ☐ Reclamation ☒ Fuel Storage
☐ Roads/Hauling ☒ Other: Spill no. 17-103 ☐ Other:

SECTION 1 ☒ **Comments (s.1)** ☐ Non-Compliance with Act or Licence (s.__) ☐ Action Required (s.__)

On May 8th, 2017 Indigenous and Northern Affairs Canada's Water Resource Officer, Christine Wilson conducted a follow up to the April 10th inspection of Agnico Eagle Mines Limited's ('AEM') Meliadine Advanced Exploration project, water licence 2BB-MEL1424. The inspection was completed with the assistance of AEM's, Environmental Technician, Philip Roy.

This report was produced with the information provided in response to the April 10th inspection; the findings of the May 8th inspection and a post inspection meeting with AEM's, Superintendent Energy and Infrastructure, Lonny Syvret, and General Manager, Martin Plante.

Observations

General

1. There are approximately 340 people in total at site, split between the exploration camp (2BB-MEL1424) and the mine camp (2AM-MEL1631).
2. The temperature high is -5 degrees Celsius and water has begun to flow around site.

Sewage Treatment Plant

3. Effluent from the Sewage Treatment Plant (STP) is sent through pipe to a rock dissipation channel (photo 1). This channel, though outside in the cold climate remains open and flowing during the winter months under the snow cover (photo 2). Water was observed flowing from this location freely through the rock fill (photo 3) and eventually down to Meliadine Lake.
4. The newest addition to the STP is the two bionest units referred to as BIO3 and BIO4 by AEM environment department. AEM determined that the bionest generally provided good treatment once oil and grease is removed from the system. Waste water from the kitchen -which has a higher oil and grease content-, has been routed directly to the rotating biological contractor ('RBC'), by passing the bionest system.
5. The bionest system has been providing good treatment for turbidity but averaging a low pH. BIO4 is producing a pH of around 4.8 while BIO3 has a pH of around 6.6. Both these reading were taken onsite (photo 4).

Fuel Storage/ Spill

6. On April 8th AEM reported a spill of approximately 30 000 liters of diesel fuel to the tundra at the exploration fuel farm facility ('tankfarm'). The 24-Hour Spill Reporting Line ('Spill Line') issued a report with spill number 17-103.
7. Since spill 17-103, two updates have been provided to INAC. The first update was provided on April 9th through the Spill Line, the second provided on May 5th to the inspector (appendix 1).
8. Reclamation is ongoing; approximately 800m^3 of soil is estimated as contaminated, with 560m^3 of that soil placed in the exploration land farm facility ('landfarm') (photo 5).
9. The landfarm appears to be at or nearing capacity, the inspector is concerned that there is no additional space in the facility if another spill was to occur (photo 6).
10. The access ramp to the landfarm has contaminated material at the same elevation as the berm walls allowing potentially contaminated water to escape the land farm containment. The inspector is concerned with the lack of freeboard for containment of freshet water (photo 7).
11. A portion of the contaminated soil will remain in place until decommissioning of the tankfarm. This portion is located under the remaining tanks. AEM has covered part of this section with a HDPE liner and clean fill to protect the already cleaned area from further contamination (photo 8, 9 and 10).
12. Tanks 17 and 18 have been completely drained, decommissioned and moved from the spill site. AEM confirmed that the remaining tanks on the pad are full of fuel.
13. AEM confirmed that no contamination has been found on the south side of the road (see attached 1, page 3, General Environment, plan view map).
14. The current focus of the reclamation is on the construction of the snow management cell (photo 11, 12, and 13).
15. With the increased temperatures, water puddles are beginning to form and water is starting to flow from the site.
16. Water has started to pool at a location near the entrance to tank farm/land farm area. The contaminated water from the land farm, tank farm and spill area appears to be flowing in this general direction. The inspector was concerned that if the water is not diverted that there could be off site impacts (photo 14)
17. The environment department has been conducting three inspections daily to ensure thorough monitoring of the site. Environment is still continuing to delineate areas with potential contamination. The inspector understands with all the activity occurring that there is opportunity for transfer of contaminates. Once the contaminate snow is removed a site re-assessment will be completed.
18. Contaminated snow is currently stock piled at the entrance of the tankfarm/ landfarm at approximately N63° 1' 23.73", W92° 11' 10.72"
19. More detailed information on the reclamation and measures taken to address the contaminated snow can be found in

appendix 1.

20. The tankfarm is used by both the exploration camp and the mine. AEM informed the inspector that the intended plan is to start construction of the portal fuel farm this month and decommission the exploration tank farm to begin proper reclamation of the site.
21. AEM has informed the inspector that a final report is being produced by the third party consultant that will be submitted to the inspector for review before June 2nd, 2017.
22. A number of fuel storage structures around the camp were inspected. A summary of the general concerns noted; the lack of spill kit or accessibility to spill kits, spillage around tanks (inside and outside tanks), snow accumulation around the tanks making it difficult to thoroughly inspect or draw fuel from them (in the inspector opinion) responsibly (photo 15, 16, 17 18, and 19).

SECTION 2	☐ Comments (s.__)	☒ **Non-Compliance with Act or Licence (s.2)**	☐ Action Required (s.__)

An follow up inspection will be scheduled in coordination with the environment department.

SECTION 3	☐ Comments (s.__)	☐ Non-Compliance with Act or Licence, (s.__)	☒ **Action Required (s.3)**

Actions Required

-AEM will provide to the inspector, a final report regarding the incident before June 2nd, 2017.

-AEM environment/ operation departments are encouraged to rigorously field audit all departments that management or handle fuel. The inspector again expresses concern with the lack of containment for any additional contaminated soil.

Closing Remarks

AEM continues to work with the third party consultants to finalize a reclamation strategy, as information becomes available AEM has committed to provide the inspector with daily updates. All the requirements from the April 10th inspection have been met.

Licensee or Representative	**Inspector's Name**
	WRO C Wilson
Signature	**Signature**
	Original signed on file
Date	**Date**
	May 11th, 2017

Office Use Only:	Follow-up report to be issued by Inspector	☒ Yes	☐ No

cc. Erik Allain, Manager, Field Operations, INAC
Manager, Licensing, Nunavut Water Board
Jessica Huza, Environmental Coordinators, AEM
Jeff Pratt, Environmental Coordinator, AEM
Erika Voyer, Environment General Supervisor, AEM

Attached: Photo Log, May 8th, 2017
Appendix 1- May 5th Spill update

PHOTO LOG

Date:	Authorization Number:	Camera/Model:	Inspector
May 11th, 2017	2BB-MEL1424	Sony DSC-HX50V Cyber shot	WRO Wilson

Photo No.	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 1	N63° 1’ 43.58”, W 92° 10’ 9.85”

Description:
Mel-7 Sewage Treatment Plant outfall looking south.

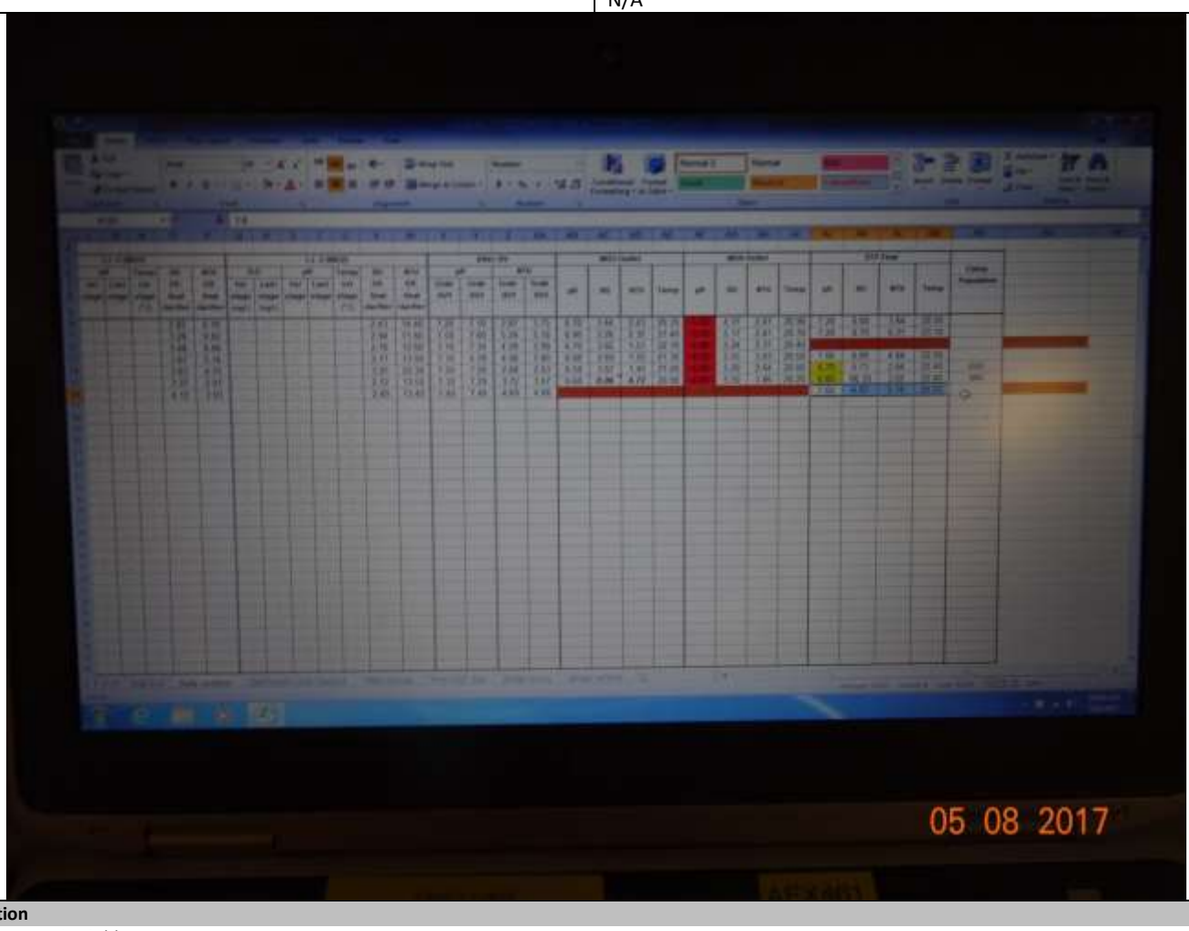
Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 2	N63° 1’ 42.62”, W 92° 10’ 8.69”

Description
Looking North: STP outfall and dissapation channel

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 3	N 63° 1’ 42.50”, W 92° 10’ 8.29”

Description
MEL-7 outfall

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 4	N/A



Description
Bionest parameter table

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 5	N63° 1’ 24.88”, W 92° 11’ 10.76”

Description

Contaminated Soil in Landfarm

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 6	N63° 1’ 26.9”, W 92° 11’ 13.51”

Description

Landfarm containment berm, contaminated material banked on the containment wall.

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 7	N63° 1’ 25.66”, W 92° 11’ 11.22”

Description

Access ramp to the landfarm, the ramp slopes to the north allowing water to espape the containment of the landfarm.

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 8	N63° 1’ 23.44”, W 92° 11’ 8.85”

Description

Looking East South East: Photo A of excavation sequence, the bypass road and the south portion of the excation

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 9	N63° 1’ 23.47”, W 92° 11’ 8.84”

Description

Looking East: Photo B of excavation

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 10	N63° 1’ 23.47”, W 92° 11’ 8.84”

Description

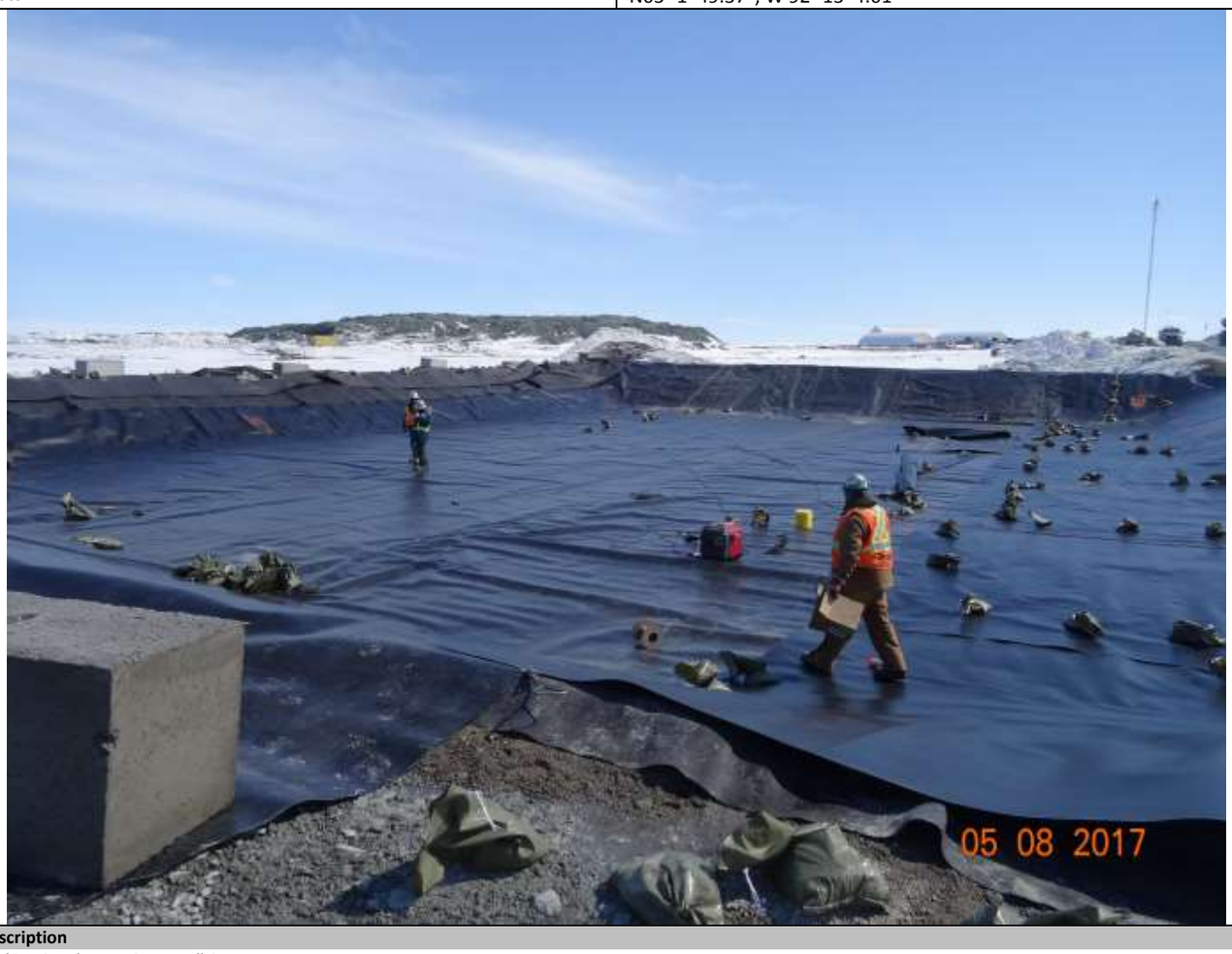
Looking North East: Photo C of excavation

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 11	N63° 1’ 49.37”, W 92° 13’ 4.66”

Description

Looking East: Snow cell 1

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 12	N63° 1’ 49.37”, W 92° 13’ 4.61”



Description

Looking South East: Snow cell 2

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 13	N63° 1’ 49.37”, W 92° 13’ 4.61”

Description

Looking South: Snow Cell 3

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 14	N63° 1’ 24.51”, W 92° 11’ 9.54”

Description

Melting water(spill excavation site in the background). Slope from left to right in frame.

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 15	N63° 1’ 47.28”, W 92° 10’ 2.99”

Description

Full tank of fuel outside the scope of regular environmental inspections.

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 16	N63° 1’ 38.32”, W 92° 10’ 15.08”

Description

50ft plus Jet A fuel line outside the scope of AEM environment inspections

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 17	N63° 1’ 39.75”, W 92° 10’ 23.78”

Description
Spill kit, broken open and filled with snow; not accessible.

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 18	N63° 1’ 44.31”, W 92° 10’ 8.81”

Description
Diesell fuel spilled from tank vent

Locations name:	Lat/Long (DD.MM.SS.SS, NAD83)
Photo 19	N63° 1’ 25.94”, W 92° 11’ 7.26”

Description

Diesel fuel tank 22 with fuel in drip tray; tray comprimised. Snow around valves making it unnessaryily difficult to draw fuel.

May 5th, 2017

Christine Wilson
Water Resources Officer
Indigenous and Northern Affairs Canada
Ikingutigiit Center Suite 1, PO Box 129
Rankin Inlet, NU
X0C 0G0

Re: Agnico Eagle Mines – Meliadine Division Responses to INAC April 10, 2017 Water Licence Inspection Report

As requested, the following information and comments are intended to address the recommendations/questions outlined in Section 3 of the below inspection report:

- Indigenous and Northern Affairs Canada – April 10, 2017*, Water Licence Inspection Form.*

Should you have any questions or require further information, please do not hesitate to contact the undersigned.

Best regards,

Manon Turmel
manon.turmel@agnicoeagle.com
819-759-3700 x 8025
Environmental Compliance Counselor

Erika Voyer
erika.voyer@agnicoeagle.com
Environment General Supervisor

Action Required: The proponent will submit to the inspector a topographical map that includes the area of contamination (e.g.: route to landfarm, material storage…etc.), nearby water bodies (e.g.: names of lakes and approximate distances), local infrastructure and date.

Agnico Eagle Mines response:

Please find the requested topographical map in Appendix A.

Action Required: The proponent will submit to the inspector a record of tank inspection before and after spill no. 17-103.

Agnico Eagle Mines response:

Agnico Eagle conducts two types of inspections at the exploration fuel farm area. Environmental Inspections covering the following items are completed every two weeks by the Environment Department: emergency trailer, spill kits, protection of hazardous material storage tanks from weather and physical damage, access to connectors, valves and hoses to inspect for potential leaks, housekeeping practices, secondary containment and observation of spills. A template of items covered during the inspection can be found in Appendix B. The table below illustrates environmental inspections that were completed in 2017 before spill no.17-103.

Date	*Purpose*
18 January 2017	*Environmental Inspection*
30 January 2017	*Environmental Inspection*
1 March 2017	*Environmental Inspection*
22 March 2017	*Environmental Inspection*
29 March 2017	*Environmental Inspection*
5 April 2017	*Environmental Inspection*

Following the spill on April 8th 2017, Environmental inspections were completed daily as part of the spill clean-up activities. The Environmental Team visited the site on multiple occasions every day and collaborated with SWAT Consulting on site. Following completion of clean up actions, environmental inspections will be performed weekly.

Secondly, weekly fuel tank inspections completed by the Site Services Department and targeting the following items are completed: tank walls, roof, piping, pumps, foundations, etc. A template of items covered during the inspection can be found in Appendix C. During the winter of 2016-2017, only Tank 18 was inspected due to safety issues. Tank 18 was the only tank involved in fueling and refueling operations. Work orders are issued weekly by the JDE system and thus inspection of Tank 18 was completed weekly prior to the spill and will continue to be completed weekly after the spill. A work order template is presented in Appendix D.

Action Required: The proponent will submit to the inspector the construction schedule for the Meliadine Gold Mine, landfarm facility and fuel farm facility associated with water licence no. 2AM-MEL1525.

Agnico Eagle Mines response:

Construction of the permanent landfarm facility will start in August 2017. Construction of the Portal fuel farm will commence in May 2017 and construction of Industrial Site fuel farm will commence in August 2017.

Action Required: The proponent will develop and submit a plan that addresses the immediate measure that will need to be taken to contain the spill and contaminated snow. This plan should be submitted to the inspector as soon as it is available.

Agnico Eagle Mines response:

Following the spill event on April 8th, 2017, immediate efforts were put into the containment and clean-up of the spill. In order to support and guide the clean-up activities, Agnico Eagle has hired a third party professional from SWAT Consulting Inc. to oversee the clean-up and restoration efforts at the Meliadine site. SWAT Consulting was on site from April 12th to May 1st 2017.

From the cleanup occurring at the site of the spill incident, contaminated soil and snow were excavated. A total of approximately 560 m^3 of contaminated soil has been placed within the landfarm facility, designed for treatment of hydrocarbon contaminated soil. Treatment of the soil will be completed in the landfarm during the upcoming summer seasons, following the Landfarm Management Plan. Field testing was conducted during the excavation of the material to guide the work and removed contaminated material. Confirmatory samples were also sent to

an external accredited laboratory for testing. The excavation has been secured on site to restrict access. The contaminated snow, placed within the landfarm footprint, was covered with a layer of ballasted geotextile in order to prevent dispersion of the snow by wind. A total of approximately 1,000 m3 of contaminated snow has been stockpiled and secured. The contaminated snow will be transferred from the landfarm before the freshet period, to avoid having excess contaminated water within the landfarm footprint.

The requested plan for management of the contaminated snow can be found in Appendix E; Technical Memo – Containment Cell for Contaminated Snow Storage and Management.

In accordance with the Water License requirement, a follow up report including details on the spill cleanup actions undertaken will be submitted by May 9th 2017. A final report, including the final SWAT Consulting report of clean up and remediation, including confirmatory results, will be issued in May 2017 to INAC. The report will also include the final spill investigation details, lessons learned, mitigation measures to implement, as built of the contaminated snow cell and details on melt water treatment.

Appendix A. Topographical Map

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DRAWING NO.

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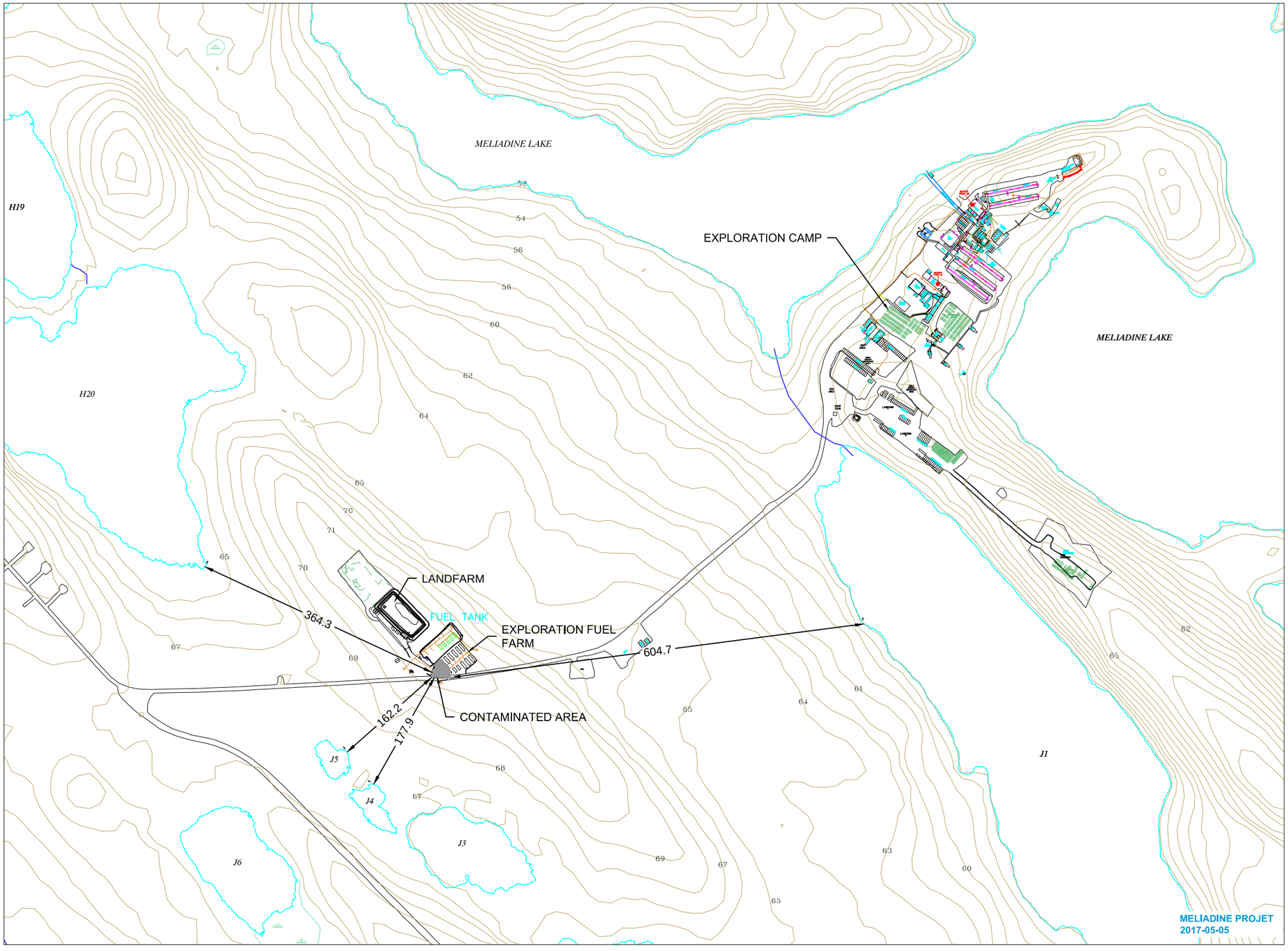

NOTES:

POUR INFORMATION
FOR INFORMATION
DATE : 2017-05-05
AGNICO EAGLE

AGNICO EAGLE

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TITRE / TITLE	# DWG

DESSINS EN RÉFÉRENCE/REFERENCE DRAWINGS

REV	DESCRIPTION	DATE	PAR BY

REVISIONS

DESSINÉ PAR / DRAWN BY	LYSANNE R. FRENETTE	DATE	2017-05-05
VÉRIFIÉ PAR / CHECKED BY			
APPROUVÉ PAR / APPROVED BY			

No. PROJET / PROJECT NO. 65

DATE 2017-05-05

TITRE / TITLE

AGNICO EAGLE – MELIADINE
600 – GENERAL ENVIRONNEMENT
210 – GENERAL ARRANGEMENT
PLAN VIEW
CONTAMINATED AREA AND DISTANCES TO NEARBY WATERBODIES

ÉCHELLE/ SCALE	FICHIER / FILE	
	65-600-210-005_R0.DWG	
No. DESSIN/ DRAWING NO.	REVISION	FEUILLE/SHT
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AE–CART–ANSI B

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Appendix B. Environmental Inspection Template

Environmental Inspection Report (Site Services Owner)

DATE : Inspected By :

Location :

In Compliance with	Subject	Conform	Non-conform	N/A	Comments
Type A Water licence No: 2AM-MEL1631 April 2016 Section: D8 Type A Water licence No: 2AM-MEL1631 April 2016 Section: E9 Licence 2BB-MEL1424 July 2014 Section C8	The Licensee shall monitor for signs of erosion and implement and maintain sediment and erosion control measures				
Type A Water licence No: 2AM-MEL1631 April 2016 Section: D10	The Licensee shall construct and maintain all containment and runoff control structures to prevent escape of Wastes to surface Waters.				
Type A Water licence No: 2AM-MEL1631 April 2016 Section:D20 Licence 2BB-MEL1424 July 2014 Section E7	The Licensee shall conduct all activities in a manner so as to minimize impacts on Surface Drainage				
Type A Water licence No: 2AM-MEL1631 April 2016 Section: D26	The Licensee shall ensure that pollutants from machinery fording the crossings do not enter Water.				
Type A Water licence No: 2AM-MEL1631 April 2016 Section: D28 Licence 2BB-MEL1424 July 2014 Section E20	The Licensee shall not utilize any equipment or vehicles in the course of this undertaking unless the ground surface is in a state capable of supporting the equipment or vehicles without rutting or gouging.				
Type A Water licence No: 2AM-MEL1631 April 2016 Section: D29	The Licensee shall not store material on the surface of frozen streams or lakes except what is for immediate use.				
Type A Water licence No: 2AM-MEL1631 April 2016 Section: E6	The Licensee shall equip all Water intake hoses with a screen of an appropriate				

License 2BB-MEL1424 July 2014 Section C5	mesh size to ensure that fish are not entrained				
Type A Water licence No: 2AM-MEL1631 April 2016 Section: F11 Licence 2BB-MEL1424 July 2014 Section D3	The Licensee shall locate areas designated for Waste disposal at a minimum distance of thirty-one (31) metres from the ordinary High Water Mark				
Type A Water licence No: 2AM-MEL1631 April 2016 Section:F14 Licence 2BB-MEL1424 July 2014 Section D5 Section 4 and 4.2 of Incinerator Waste Management Plan September 2012 Waste management plan Nov.2103, Section 2.1 Meliadine Gold Project Wildlife protection and response plan July 2013, Section 2.2.3	The Licensee shall dispose of all food waste in an incinerator designed for this purpose				
Type A Water licence No: 2AM-MEL1631 April 2016 Section: F15 Licence 2BB-MEL1424 July 2014 Section D6	The Licensee shall not open burn plastics, wood treated with preservatives, electric wire, Styrofoam, asbestos or painted wood				
Type A Water licence No: 2AM-MEL1631 April 2016 Section: F16 Licence 2BB-MEL1424 July 2014 Section D8 Reclamation and closure plan November 2010 Section: 2.0	The Licensee shall remove from the Project site, all solid and liquid Hazardous Wastes generated through the course of the project's activities,				
Type A Water licence No: 2AM-MEL1631 April 2016 Section: H3	The Licensee shall provide secondary containment for fuel and chemical storage as required by applicable standards and acceptable industry practice.				
Licence 2BB-MEL1424 July 2014 Section D10 Used Water Management Plan may 2013 Section 2.1	The Licensee shall dispose of all Sewage generated at the Camp to the Waste Water Treatment Facility				
Licence 2BB-MEL1424 July 2014 Section E9	With respect to access road, pad construction or other earthworks, the deposition of debris or sediment into or onto any water body is prohibited.				
Licence 2BB-MEL1424 July 2014 Section H2	The Licensee shall prevent any chemicals, petroleum				

	products or wastes associated with the project from entering Water.				
Meliadine Water management plan February 2014, Section 4.0, 4.3	No activity within 31 m of a natural water body or water course (except if regulators authorised it)				
Meliadine Water management plan February 2014, Section 4.0	No fuel storage or fuel handling within 31 m of a natural water body or watercourse.				
Meliadine Water management plan February 2014, Section 4.1	Any water pumps from any lake, body of water or watercourse are registered in Cubic meter per day.				
Meliadine Water management plan February 2014, Section 4.2	The only domestic effluent is MEL-7				
Meliadine Water management plan February 2014, Section 4.4	P1 water pumping to the environment needs the received Meliadine environmental department approval.				
Meliadine Water management plan February 2014, Section 6.2	Push downstream of the pad, as much accumulated snow from the waste rock pad as possible to minimize contact with the broken rock.				
Meliadine Water management plan February 2014, Section 6.5	Environmental department need to authorise the pumping of the landfarm berm to the environment.				
Used Water Management Plan may 2013 Section 2.3.4	The sludge is pumped into 205 liters drums.				
Spill contingency plan, February 2104, Section 1.3.2 ; Spill contingency plan Dec 2015, Section 4 and 7	A fuel spill kit is available at each fueling station.				
Spill contingency plan Dec 2015, Section 2.2,4 and 6.1.3; Fishery Act Section 36 (3) ; Meliadine Gold Project Wildlife protection and response plan July 2013, Section 2.2.4	All spills must be reported to the AEM environmental department with a full spill report adequately fill. And all spill need to be cleanup				
Spill contingency plan Dec 2015, Section 4	Use of suitable secondary containment in transport, transfer and storage of Hazardous Material				
Spill contingency plan Dec 2015, Section 4 Waste management plan Nov.2013 main document	To prevent incident, good housekeeping practice is required.				
Spill contingency plan Dec 2015, Section 4	Fuel and chemical storage area are maintain in a way that make it possible to				

	inspected the connectors, the hoses, the valve (all possible leaking part)				
Spill contingency plan Dec 2015, Section 4	All drum/containers are kept sealed or close				
Spill contingency plan Dec 2015, Section 4	Hazardous material storage area is adequately protected from weather and physical damage.				
Spill contingency plan Dec 2015, Section 5 and 7	All mobile equipment have its own spill response kit				
Spill contingency plan Dec 2015, Section 7.	The mobile environmental emergency trailer will be easily accessible and transportable.				
Section 2 of Incinerator Waste Management Plan September 2012	Ash produced from the incineration process will be disposed according to best practice				
Section 4.1 and 5.2 of Incinerator Waste Management Plan September 2012	Number of incinerator load per day is documented				
Section 4.1 and 5.2 of Incinerator Waste Management Plan September 2012	Number of Ash drum generated by the incineration process is documented				
Waste management plan Nov.2103, Section 2.1	Waste is properly segregated at the source (Domestic, Hazardous waste, Recycled, General)				
Waste management plan Nov.2103, Section 2.1	Scrap metal and scrap tire (under 24.5in rime size) are to be stocked in containers.				
Waste management plan Nov.2103, Section 2.1	Treated wood, plastic and glass will be send to the landfill or stored in a ''construction debris'' container.				
Waste management plan Nov.2103, Section 2.1	All Hazardous waste will be securely package in Quatrex Bag, Drum or Battery Quatrex Bag and securely Stored in containers.				
Waste management plan Nov.2103, Section 2.1	All Hazardous waste are to be properly package, label before being put in containers.				
Waste management plan Nov.2103, Section 2.1	Waste containers (seacan) need to be properly label				
Meliadine Gold Project Wildlife protection and response plan July 2013, Section 2.2.3	Lithering is prohibited on, in the vicinity of the site, and along access roads.				
Meliadine Gold Project Wildlife protection and response plan July 2013, Section 2.2.3	All temporary storage containers for food (Food waste bin) will be wildlife protective. (Bear proof lid)				

Meliadine Gold Project Wildlife protection and response plan July 2013, Section 2.2.3 ; 2.2.6	No open top bucket or anything similar will be tolerated outside buildings (to use as waste bins)				
Meliadine Gold Project Wildlife protection and response plan July 2013, Section 2.2.5	The snow will be manage to avoid building up snow banks on the side of the road				
Meliadine Gold Project Wildlife protection and response plan July 2013, Section 2.2.6	Building will have skirt to avoid having wildlife under building.				
Meliadine Gold Project Wildlife protection and response plan July 2013, Section 2.2.6	Keep seacan door closed at all time to avoid wildlife using them as shelter				

Comments / Recommendations

Environmental Personnel Name :

Signature :

Actions Corrected:

_____

_____

_____

_____

Supervisor Name: _____

Signature: _____

Appendix C. Site Services Inspection Template

AGNICO EAGLE

MELIADINE TANK FARM
WEEKLY Inspection sheet

DATE: 10-01-2017 TIME: 1h

Inspection done by: ROBERT GÉNÉREUX

Equipment	Type of inspection		Comments / Results
	Visual	Other :	
√ = compliant X = non-compliant			
PORTAL AREA - DIESEL			
U/G Machinery Diesel fuel tank #1	√		
Waste Fuel tank #2	√		
Generator Diesel fuel tank #3	√		
CMAC Diesel fuel tank #30	√		
Diesel Fuel unloading / distribution area	√		
Diesel Fuel piping	√		
Diesel Fuel piping connections	√		
HELICOPTER – JET A			
Baker Lake Jet A tank #4	—		
Baker Lake Jet A tank #5	—		
	—		
Diesel Fuel unloading / distribution area	—		
Diesel Fuel piping	—		
Diesel Fuel piping connections	—		
	—		
TANK FARM - DIESEL			
Diesel fuel tank #9	√		
Diesel fuel tank #10	√		
Diesel fuel tank #11	√		
Diesel fuel tank #12	√		
Diesel fuel tank #13	√		
Diesel fuel tank #14	√		
Diesel fuel tank #15	√		
Diesel fuel tank #16	√		
Diesel fuel tank #17	√		
Diesel fuel tank #18	√		

Regional Office:
93, Rue Arseneault
Bureau 202
Val d'Or, Quebec J9P 0E9
Tel: 819-825-3744

Rankin Inlet Office:
P.O. Box 879
Rankin Inlet, Nunavut X0C 0G0
Tel: 867-793-4610
Fax: 867-793-4611

Diesel fuel tank #19	✓		
Diesel fuel tank #20	✓		
Diesel fuel tank #21	✓		
Diesel fuel tank #22	✓		
Diesel fuel tank #23	✓		
Diesel Fuel unloading / distribution area	✓		
Diesel Fuel piping	✓		
Diesel Fuel piping connections	✓		

Note: ***The point of this inspection is to inspect the condition and functionality of the fuel tanks and associated equipment to ensure it is properly working and that any potential problems are addressed prior to having a major incident.***

Regional Office:
93, Rue Arseneault
Bureau 202
Val d'Or, Quebec J9P 0E9
Tel: 819-825-3744

Rankin Inlet Office:
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Rankin Inlet, Nunavut X0C 0G0
Tel: 867-793-4610
Fax: 867-793-4611

Appendix D. Work Order Template

AGNICO EAGLE

Work Order

Unit Number	**65BLD42000**

Equipment Description:
EXPLO GENERAL BUILDING

Location:

Estimates:
Est. Hours: 1.00
Estimated Downtime Hours:

People :
Crew: 65100 Team General Services Meliadin
Lead Craft: Building Mechanic
Supervisor:
Assigned To:
Requester:
Originator: 100605 Banville, Alexandre
Inventory Item Number:

Order Number	**1619084**

Description: WEEKLY FUEL TANK INSPECTIONS
WEEKLY FUEL TANK INSPECTIONS

Order Type : WM
Type: 6 PREVENTIVE MAINTENANCE WO
Priority: 3 PLANNED
Status: 70 In Execution

Parent W.O. No: 01619084
Business Unit: 6534615
Subsidiary:

Dates :
Order Date: 2017-04-24
Requested Finish Date:
Planned Start Date: 2017-05-02
Planned Finish Date: 2017-05-02

Actual Start Date :

Start time :

Work to be done

FILL CHECKLIST ATTACHED

Work Done

Actual Finish Date **End Time**	**Employee**	**Downtime**

DONE

Appendix E. Technical Memo – Containment Cell for Contaminated Snow Storage and Management

TECHNICAL MEMO – Containment Cell for Contaminated Snow Storage and Management

To: Christine Wilson, Water Resources Officer, Indigenous and Northern Affairs Canada

Introduction

This technical memo intends to present the details of the work to be undertaken for the construction of the Containment Cell for placement of the contaminated snow generated by the spill that occurred on April 8th, 2017, at the Meliadine Gold Project.

Background

On April 8th, 2017 a 30,000 liter spill occurred at the Meliadine Gold Project. A spill of P-50 diesel from a fuel transfer tank hose resulted in a reportable spill to the Government of Nunavut and other associated governing bodies that administer the Meliadine Gold Project. Immediate efforts were put into the containment and clean-up of the spill. In order to support and guide the clean-up activities, Agnico Eagle has hired a third party professional from SWAT Consulting Inc. to oversee the clean-up and restoration efforts at the Meliadine site.

From the cleanup occurring at the site of the spill incident, contaminated soil and snow were excavated. The contaminated soil has been placed within the landfarm facility, designed for treatment of hydrocarbon contaminated soil. The contaminated snow, within the landfarm footprint, was covered with a layer of ballasted geotextile in order to prevent dispersion of the snow by wind. A total of approximately 1,000 m^3 of contaminated snow has been stockpiled and secured. The contaminated snow will be transferred from the landfarm before the freshet period, to avoid having excess contaminated water within the landfarm footprint.

Objectives of the Work

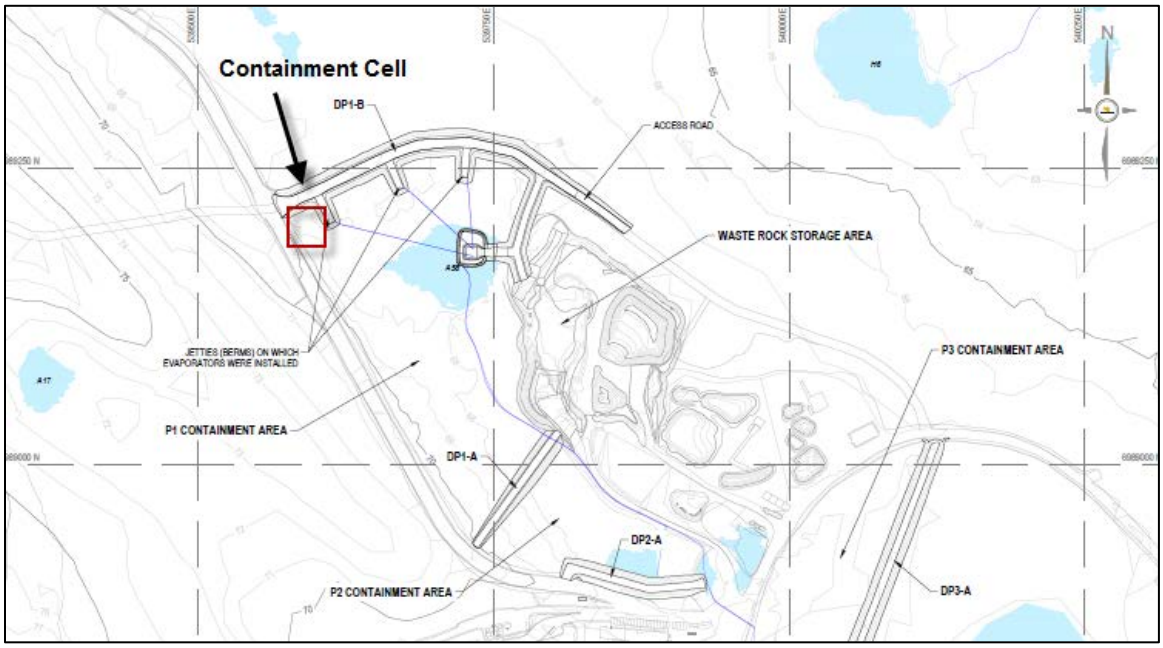
In order to contain the contaminated snow during freshet, a cell will be built in the P1 area on site, to ensure containment of the melted snow at freshet. The contaminated snow placed within the landfarm will be transported to the Containment Cell located in the P1 area. The design of the Containment cell, the location and management of the contaminated water are described below.

The work schedule is also presented, along with the next reporting steps.

Design of the Containment Cell

The Containment Cell will be located in the P1 area, on the upstream side of the DP1-B structure, as presented on Figure 1. The cell will be located on the west corner of the DP1-B, between the rock finger build for the placement of the evaporator, and between the access road. In order to build the Containment Cell, the following work elements will be completed, as detailed on the attached drawing (draft version).

Figure 1 – Containment Cell General Location



The peripheral structures of the Containment Cell will be at El. 70.0 m, to ensure proper freeboard with the a maximum elevation within the cell at El.69.5m and the operating level of P1. The designed maximum elevation of the P1 pond is at El. 68.5m. The cell is designed to contain a volume of 1500 m^3 of snow and to contain 930 m^3 of water at El.69.5m. However, no large amount of water will be allowed to accumulate in the cell, as described below.

Foundation preparation of the cell will consist of removing all the snow, ice and boulders to reach the natural ground surface and obtain a smooth surface. Before placement of any material on top of the foundation, visual inspection will be performed by personal on site for approval. Once the foundation will be deemed acceptable, rockfill placement will begin to build the bottom platform and the berm at the South periphery of the cell. The material will consist of rockfill coming from the underground mine and will be carefully selected to have a grain size distribution that will ease the next step of the construction and ensure the performance of the cell. A smooth slope toward the South East to a flat section will be made with the rockfill material. This configuration will allowed pumping of water in the corner of the cell once the snow will melt. The following steps of construction will be the placement of a layer HDPE liner enveloped by geotextile. This work will be performed by Texel who will ensure the quality control and performed the related test on the liner.

Snow transportation

Once the Containment Cell construction will be completed, the contaminated snow located in the landfarm will be transported by truck to the Containment Cell. The necessary actions will be taken to avoid contamination during transportation of the snow. The operations will be supervised by a supervisor of Site Services and the Environment Technicians will also review the work to ensure proper methods of transportation and snow placement are applied.

Pumping System

The contaminated snow will be placed in the Containment Cell and the snow will gradually melt into the cell. Once there will be sufficient water available in the cell, the water will be pumped to tanks located on the DP1-B structure. The tanks will be placed on DP1-B following the construction of the Containment Cell. The hose will be inspected before the pumping activities to ensure that there is no leak. Pumping will be periodical when melted water is available in the cell; no large amount of water will be allowed to accumulated in the cell. Pumping will be completed under the supervision of the Site Services Supervisor and the Environment Technicians will inspect the pumping system daily to ensure operations are adequate. Pumping will be completed once the entire amount of contaminated snow will be melted.

Contaminated water contained in the tanks will be treated to remove hydrocarbon. The treated water will then be discharged in the pond CP1. The details of the treatment will be provided at future date, in a separate memo.

Work Schedule

The work is planned to occur according to the proposed schedule below.

Work Items	**Time Period**
Construction of the Containment Cell into P1 area	May 2 – May 10th
Transportation of contaminated snow into the Containment Cell	May 10th – May 12th
Pumping of contaminated water from the Containment Cell to the tanks	During melt period (expected from June to July)
Future Treatment for melted contaminated snow	After melt period (expected from July to August)

Next Reporting Steps

Following the construction of the Containment Cell, an as-built of the structure will be submitted to INAC. The treatment method for the water from the contaminated snow will also be provided to INAC. The volume of water treated and discharged to CP1 will be recorded. These details (as-built and treatment) will be submitted with the final SWAT report detailing the cleanup actions at the spill site, along with the final spill investigation details, lessons learned and mitigation measures.

Please contact the undersigned if you have any question regarding the described work.

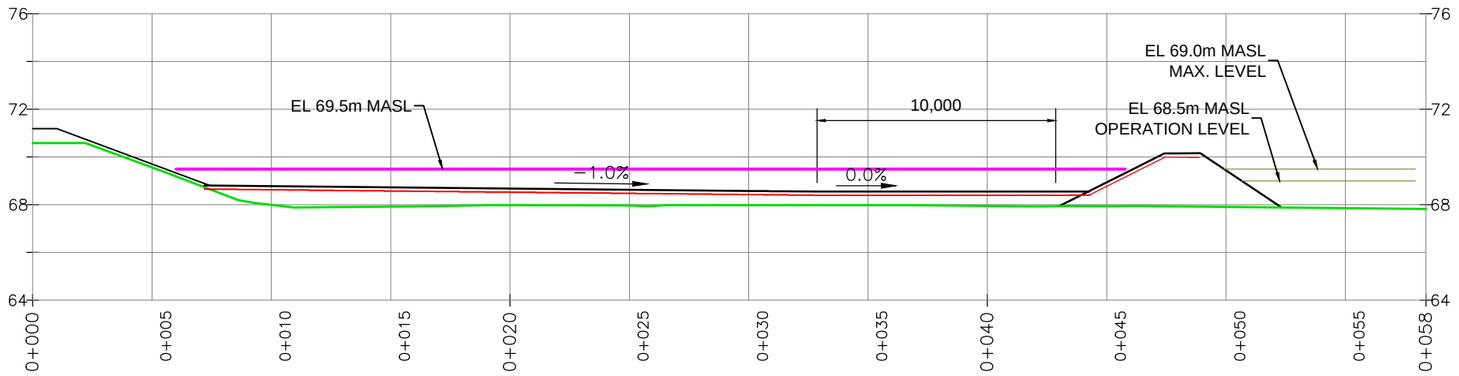
Agnico Eagle Mines Limited – Meliadine Division

Erika Voyer
erika.voyer@agnicoeagle.com
819-759-3555 x8025
Environmental General Supervisor

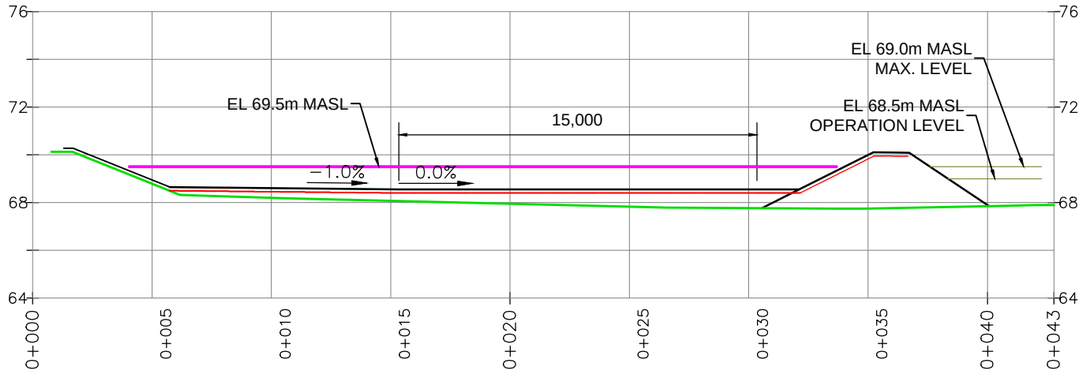
NO. DESSIN
DRAWING NO.

FORMAT ANSI B–11x17

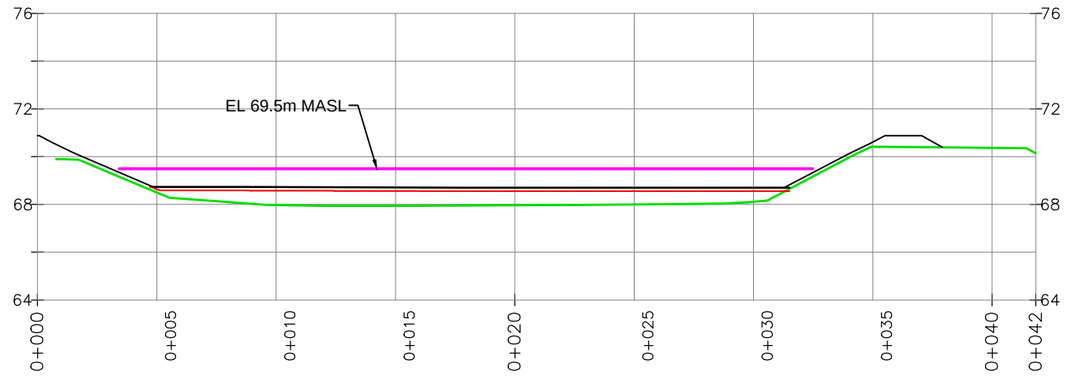
DRAFT VERSION



SECTION A-A



SECTION B-B



SECTION C-C

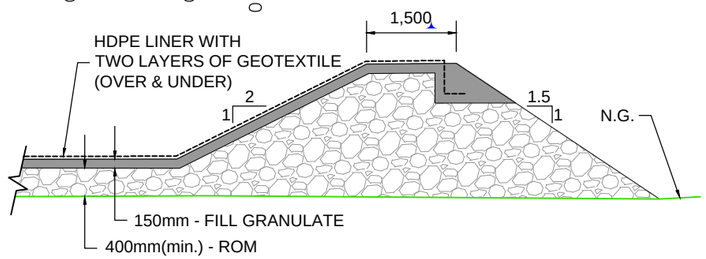
NOTES FOR CONSTRUCTION

Snow placement in the cell will be done softly with a shovel;

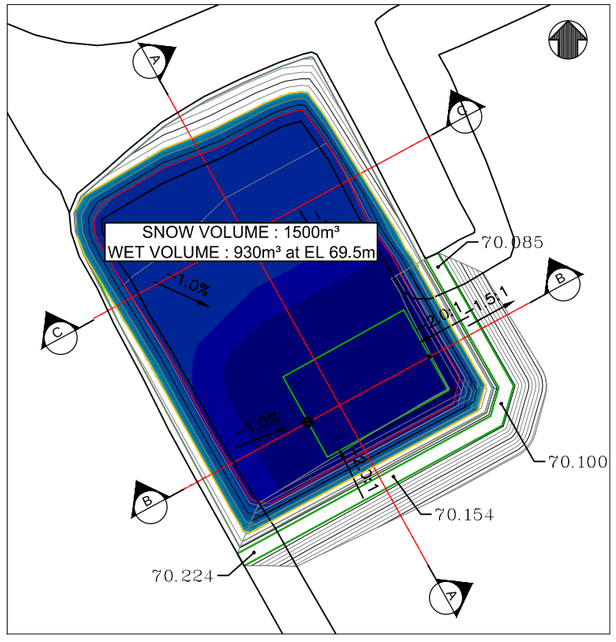
This installation is temporary;

This containment cell have a maximum operating level of 0,5 meter below the top elevation of the liner;

The max operating level D/S of the cell is 69 MASL.

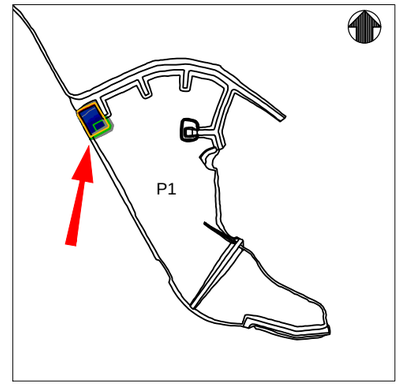


NEW BERM & INFRASTRUCTURE DETAILS



TOP VIEW N.T.S.

NOTES:



AGNICO EAGLE
MELIADINE

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TITRE / TITLE	# DWG

DESSINS EN RÉFÉRENCE/REFERENCE DRAWINGS

REV	DESCRIPTION	DATE	PAR BY

REVISIONS

DESSINÉ PAR DRAWN BY	J.CRETE	DATE	2017–05–04
VÉRIFIÉ PAR CHECKED BY	T. LEPINE		2017
APPROUVÉ PAR APPROVED BY	T. LEPINE		2017
No. PROJET PROJECT NO.	DRAFT VERSION		
DATE	2017–05–04		

TITRE / TITLE
AGNICO EAGLE – MELIADINE DIVISION
695 – WATER MANAGEMENT
230 – EARTH WORK
PLAN, SECTION & DETAILS
SNOW CONTAINMENT

ÉCHELLE/ SCALE	N/A	FICHIER FILE	.DWG
No. DESSIN/ DRAWING NO.	65–695–230–001	REVISION	B
		FEUILLE/SHT	1 / 1

AE–CART–ANSI B

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