Final Spill Report
Tank Release April 8, 2017

This report is the final follow up report pertaining to the spill report originally sent April 8, 2017, and the subsequent follow up reports sent April 9 and May 9, 2017. This final report includes all previously provided information from previous reports.

1 BACKGROUND

On April 8th, 2017, a spill of approximately 30,000L of diesel fuel was reported at the Meliadine Tank Farm (Tank 18). Following the spill event, immediate efforts were put into the containment and clean-up of the spill. In order to support and guide clean-up activities, Agnico Eagle retained 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.

Contaminated material was excavated and sent to the landfarm. A Containment Snow Cell, which includes an impermeable liner, was constructed in the P1 area at Meliadine Site to contain and manage the contaminated snow at freshet.

2 SPILL REMEDIATION AND RECLAMATION REPORT

SWAT Consulting was on site from April 12th to May 1st 2017. SWAT consulting has prepared a 3rd party report on behalf of Agnico Eagle depicting the remedial actions carried out by Agnico Eagle prior to and under the supervision of SWAT consulting. The report can be found in appendix A.

3 INVESTIGATION, CAUSES, AND CORRECTIVE ACTIONS

Through investigations, photos, and statements which took place on April 8th, 9th, 10th , and the final investigation on April 11th, the following was determined:

April 7th when fuel truck operators were loading fuel, truck was loaded with fuel, when the operators put the fuel hose back the ball valve on the fuel hose was closed in full. The ball valve on the base of the fuel tank was put in a position thought to be closed. The main gate valve for the fuel tank was not

closed. Upon placing the fuel hose nozzle in the secondary containment holder, it is believed the valve was knocked open while inserting it. The operators left back for the site. This occurred at 19:00.

No one returned to the fuel tank holding area until April 8th at approximately 15:25. This is the time when the end of the fuel line was closed to stop the spill.

In 20hrs 25 minutes (19:00 Apr 8th and 15:25 Apr 9th) 29,669.1 Liters were released from Tank #18. It was a leak of ~24 liters per minute.

3.1 Causes of the Spill:

1) The main gate valve should have been closed –Inadequate procedure.

2) The ball valve on the base of the tank is worn and does not achieve a physical closed position, the ball valve and handle rotates 360^0 not allowing an exact spot for a closed position – Faulty Equipment

3) The secondary containment in which the end of the fuel hose is placed in (to avoid hose residual spilling on the ground), was not properly designed and the orifice was created too small which resulted in friction with the valve handle causing it to open when putting it into the secondary containment – Newly Modified Equipment

3.2 Corrective Actions:

Attached in Appendix B the Accident Investigation form is found with all documents related to the initial investigation

1) ***Develop a specific procedure for refueling & fuel transfer*** – new procedures were drafted for refueling & fuel transfer. These new procedures can be found in Appendix B
2) ***Lock out white fuel tanks. No longer use them. Top feed tanks will only be used.*** – White tanks have been locked out and will no longer be used. When any white tanks that currently have fuel inside need to be emptied, the new fuel transfer procedures will be followed and these tanks will not be refilled.
3) ***All fuel associated modifications have to be done by filling the modification request document following the modification procedure*** – Currently, no modification to the system is required at this point; everything is covered in the procedures. If any further modifications are required the modification procedure will be followed.
4) ***Evaluate the requirements of having dedicated operators for fuel distribution, transfer, and monitoring until permanent fuel distribution system in place at Meliadine Site*** – Meliadine now has dedicated personnel who solely look after refueling and fuel transfer. The job is their primary task to perform.
5) ***Evaluate the live transfer & tank and the possibility of reducing it to a smaller amount of fuel liters and build a secondary containment. Evaluation to Technical Services Group and Construction.*** – After evaluation and the decision to build the 3 million liters fuel tank this

summer, the plan is to reduce to 400-500k liters in fuel farm during summer and to decommission the fuel farm by 2018; as such no containment will be built. Proper training of our operators will be ensured and the buddy system (two persons) will be used until the fuel farm is decommissioned.

4 FUTURE OF MELIADINE FUEL CONTAINMENTS

The Meliadine project has now entered into the construction phase of the project and with the recent spill occurring, adequate and safe fuel containment for the site is a high priority. In June of 2017, the Portal Fuel Farm will begin construction to have adequate fuel storage for the gensets and equipment used at the portal. In August 2017, construction of the 3 million liter (main) fuel farm will commence. It is expected that the main fuel farm will be operational in Q4 2017. Once the main fuel farm becomes operational, the current fuel containment area will begin to have the fuel tanks drawn down. Decommissioning for this area will take place will take place by November 2018 with the reclamation activities schedule to be completed by September 2019.

5 SNOW CELL

A cell was created inside the P-1 Cell to hold contaminated snow that was generated from the spill at the fuel containment area. This cell was lined with a polyethylene liner to avoid transfer of melting snow into the other ponds part of the P-area. Construction drawing for this containment can be found in Appendix C. When the snow melts inside, this cell this water will be transferred to the area in which the water treatment system will be set up. It will be stored in a large tank with secondary containment. The movement of water to the tank began June 1, 2017. Below are some photos of the construction of the snow cell. For additional details on the snow containment cell, please refer to the document “AEM Response to INAC Inspection April 10th 2017” provided on May 5th 2017.

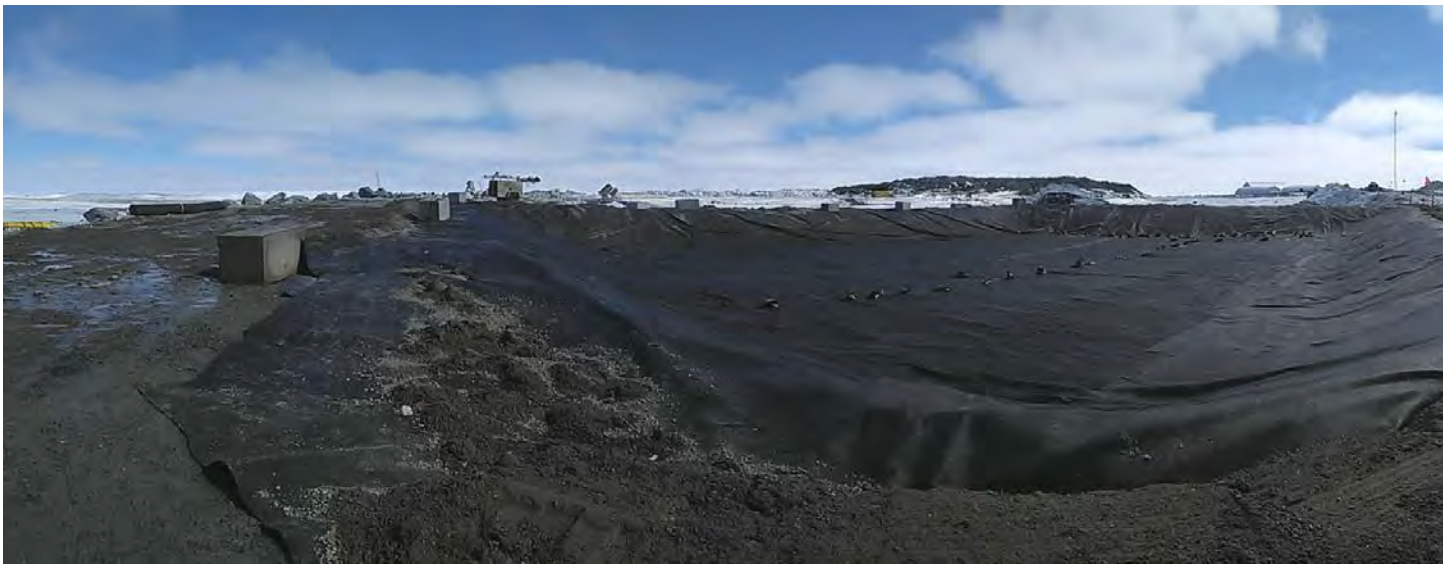
AGNICO EAGLE
MELIADINE

AGNICO EAGLE
MELIADINE

AGNICO EAGLE
MELIADINE

AGNICO EAGLE
MELIADINE

AGNICO EAGLE
MELIADINE



AGNICO EAGLE
MELIADINE

6 TREATMENT FOR CONTAMINATED SNOW

Please find below the technical memorandum from Agnico Eagle regarding the treatment unit Meliadine will be using to treat contaminated water that has accumulated from snow that was in contact with this spill. An oil separator (AquaSweep™) will be used to remove contamination from the water.

Once the contaminated water will be treated and will reach suitable quality, it will be discharged to the CP1 pond.

AGNICO EAGLE

MEMO

Date: 2017/03/23

To: Jessica Huza

From: Thomas Genty, eng. Ph.D.
Environmental Engineer

Subject: Oil Separator – diesel spill

The oil separator (AquaSweep^{TM}) will be mainly used to remove fuel, hydraulic oil and grease from the landfarm water between freshet and October. The Separator is based of phase separation enhanced with coalescing plate. This design is typical for oil / water separator [1].

The oil separator assume a specific gravity of organic compound between 0.82 and 0.94 as a major design parameter (ref: 6515-S-265-094 Oil Separator Package_Proposal_BI Pure_Rev01_OB). Flow rate is also a major design parameter and must be keep in the supplier recommendation range (25 USGPM).

The discharge performance of the system should be 5 ppm according to the supplier.

The table below present specific gravity of different organic compounds.

Table 1: Specific gravity

Chemical	Specific gravity	Reference
Diesel Fuel Oil	0.81 - 0.96	[2]
Hydraulic oil	0.87 - 0.89	[3]
Automotive and industrial grease	0.9	[4]

Thus, design hypothesis use by the supplier seems to be in accordance with Table 1. This hypothesis can be confirm further by oil, fuel and grease suppliers used on site if needed.

Moreover, diesel density is in the operational range of the system. Therefore, after snow melting (snow which had been in contact with diesel spill), the diesel should be separated from the water within the system.

In the case of a spill of diesel in snow, Reference [5] says that: “On flat surfaces, or if a mechanical arm can reach the oiled area, mechanical techniques can be used to scrape snow-covered areas for removal and disposal. These techniques could include melting to separate the oil and snow, or burning”. Thus, after melting, the effluent (water) can be treated with an oil-separator according to the supplier manual of operation.

AGNICO EAGLE

References:

[1] EPA, 2013, Oil/Water Separators. https://www.epa.gov/sites/production/files/2014-04/documents/5_owseparators_2014.pdf
[2] http://www.engineeringtoolbox.com/specific-gravity-liquid-fluids-d_294.html
[3] http://www.greenyourboat.com/documents/products/hydrolic-fluids-iso-32/gm-performance-data.pdf
[4] http://www.vegagerdin.is/Handbaekur/Varasom_efni.nsf/d1d74a33198675a30025798800427c56/11ecf0a50d03fdc60025790c0037c9f2/$FILE/Shell%20Gadus%20S3.PDF
[5] GUIDE TO OIL SPILL RESPONSE IN SNOW AND ICE CONDITIONS IN THE ARCTIC: page 131, Table IV-2.5 https://oaarchive.arctic-council.org/handle/11374/403?show=full

7 MONITORING STRATEGY FOR SPILL AREA

This plan describes the monitoring program planned for 2017 in order to assess the impact of the April 8th diesel fuel spill on the receiving environment. The monitoring plan consists of sampling four different types of samples, which include the following:

1. Surface runoff that is collecting in low points from the spill site (License B fuel farm);
2. Soil samples collected from borehole locations around the perimeter of the spill site (9 location proposed, see Figure 1)
3. Shallow groundwater, if observed, can be collected from the boreholes (PVC pipe and a screen will be installed in the boreholes) ;
4. Water column samples from downstream lakes including J3, J4 and J5.

During freshet, it is likely that surface runoff from the fuel farm pad will collect in low points downstream. Samples from these areas will be collected on a weekly basis, when water is available. To assess whether or not any fuel migrated from the spill site, nine boreholes are planned around the perimeter of the spill site. The boreholes can serve to collect both soil and shallow groundwater samples. It is proposed to drill these shallow boreholes above the permafrost layer to avoid creating a conduit to the deeper layers unnecessarily. If water is encountered in the boreholes then samples of the shallow groundwater can also be collected from these locations by installing a PVC pipe, a screen and a cap. These boreholes will be installed once sufficient snow melt has occurred and the ground is dry enough to allow for drilling. As for the lake sampling planned, based on the localized topography, the three closest lakes include J3, J4, and J5. The distance from the spill site to these lakes are: 201 m, 498 m, and 711 m, respectively. Sample collection will occur during open water season.

For the four different sample types, monitoring will begin this year (2017) and will be conducted annually until it can be determined that no residual impacts of the spill remain.

Table 1 below, provides details on the sample location, the ID names that will be used as well as the frequency and analytical parameters.

Location	Name/ID	Frequency	Parameters	NOTE:
Surface Runoff	17103-SR-X	WEEKLY*	BTEX, F1-F2, PAH, pH, TSS, TDS, turbidity	Will be compared to background water quality levels
Surface Wells	17103-SW-X	WEEKLY*	BTEX, F1-F2, PAH, pH, TSS, TDS, turbidity	Will be compared to background water quality levels
Borehole (soil)	17103-BH-X	Once	BTEX, PAH, F1-F4	Soil samples will be screened for comparison to the *Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health*,

				Industrial Use (CCME, 2001)
Lake J3	17103-J3-X	WEEKLY	BTEX, F1-F2, PAH, pH, TSS, TDS, turbidity	Will be compared to background water quality levels
Lake J4	17103-J4-X	WEEKLY	BTEX, F1-F2, PAH, pH, TSS, TDS, turbidity	Will be compared to background water quality levels
Lake J5	17103-J5-X	WEEKLY	BTEX, F1-F2, PAH, pH, TSS, TDS, turbidity	Will be compared to background water quality levels

*When water available

Figure 1: Proposed borehole locations around the spill site perimeter

AGNICO EAGLE
MELIADINE

APPENDIX A

SPILL REMEDIATION AND RECLAMATION REPORT
Meliadine Exploration Fuel Farm
Tank 18, 30 m^3 Diesel Spill

Meliadine, Nunavut
Release Date: April 8, 2017

PREPARED FOR:
Agnico Eagle Mines Ltd.

PREPARED BY:
SWAT Consulting Inc.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

APPENDICIES

INTRODUCTION

On April 8, 2016 Agnico Eagle Mines Ltd. (Agnico) encountered a release at the Meliadine Mine near Rankin Inlet, Nunavut. Diesel fuel flowed from a valve on fuel Tank 18 towards the southwest. The fluids were contained by a pre-existing berm and trench and the mine access road. Agnico personnel began immediate containment and recovery efforts. On April 12, SWAT Consulting Inc. (SWAT) arrived on site to evaluate spill containment, recovery and continue with clean-up efforts. The following report contains detailed information regarding the Tank 18 spill and clean-up actions.

OBJECTIVES AND SCOPE OF WORK

The objectives of the spill response and assessment activities were as follows:

- evaluate spill containment and ensure no further migration of the released fluid into the surrounding environment;
- evaluate the soil quality with reference to the Canadian Council of Ministries of the Environment *Canadian Soil Quality Guidelines for the Protection of the Environmental and Human Health; Industrial* (2008); and,
- coordinate with Agnico operations to remediate the release area.

The scope of work included:

- completing a background investigation of biophysical conditions in the area;
- delineating the impacted area through field screening and soil sampling;
- removing impacted snow covering the work area;
- excavating hydrocarbon impacted materials from the spill area;
- comparing laboratory analytical results with the Canadian Council of Ministries of the Environment *Canadian Soil Quality Guidelines for the Protection of the Environmental and Human Health; Industrial* (2008), and;
- preparing a report detailing remediation and reclamation activities.

BIOPHYSICAL INVENTROY

Understanding the biophysical surroundings and potential receptors is imperative to developing strategies suitable for long term remediation activities. The following section provides information on the environment in the vicinity of the fuel farm.

The spill site is within the Southern Artic ecozone of Canada. This ecozone covers approximately 8% of Canada's landmass and extends throughout parts of the Northwest Territories, Nunavut and northern Quebec. The area is characterized by rolling plains with some hills. The site is specifically located within the coastal plains where both moraine and marine deposits are common. The region experiences long, cold winters, and short, cool summers. Summers average three to four months. The annual precipitation varies from 200 to 400 mm from north to south.

The major controlling influence on hydrologic response is the presence of continuous permafrost underlying the landscape. Though the area receives relatively little precipitation, runoff is significant. Peak flows, which generally occur in June, occur very quickly because of the shallow active layer. Snowmelt generally moves into drainage channels quickly as evapotranspiration rates are low and infiltration is slow.

Vegetation

The Southern Arctic ecozone generally has warmer temperatures and extended growing seasons compared to areas further north. The area is dominated by shrubs, herbs and wetland species. Shrubs can range in size and generally decrease in height from a meter to a few centimetres from south to north. Shrub species may include dwarf birch, willows, Labrador tea and heath. Various herbs and lichens may also be present throughout the ecozone. Mosses and sedges are common in wetlands.

Soils and Groundwater

Most of the Southern Arctic ecozone is underlain by Precambrian granitic bedrock, and the terrain consists largely of broadly rolling rocky uplands and intermittent lowlands. Much of it is mantled with discontinuous moraine, except in coastal areas, where fine-textured marine or glaciomarine sediments cover the surface. Cryosols, the dominant soils, are underlain by continuous permafrost with active layers that remain moist or wet throughout the summer.

The active soil layer becomes thawed in the late spring to early autumn, when ambient air temperatures are above 0°C. The water table in this layer is generally a subdued replica of topography, with groundwater gradients in the layer similar to topographic gradients. Topographic gradients generally vary from 0.006 m to 0.05 m throughout the mine site. At the spill site, topography slopes towards the southwest. Groundwater in the active layer flows to local depressions and ponds that drain to larger lakes.

The active layer is generally about 1.7 m thick. The overburden material within the active layer generally consists of silty gravelly sand with a hydraulic conductivity on the order of 1×10^{-6} m/s. Groundwater velocities in the active layer are estimated to range from about 0.0025 to 0.02 m/day.

Permafrost reduces the hydraulic conductivity of the area by several orders of magnitude (McCauley et al. 2002; Burt and Williams 1976). Consequently, the permafrost in the soil at the site is highly impermeable to groundwater flow. The shallow groundwater flow regime, therefore, has little to no hydraulic connection with the groundwater regime located below the permafrost.

Based on thermistor data collected at the site, the depth of permafrost is estimated to be on the order of 360 to 495 m. Data from mine thermistors indicate that away from the influence of taliks, the base of the permafrost is between about 430 and 470 m below ground surface (bgs) at the Tiriganiaq deposit.

Waterbodies

There are numerous waterbodies in the vicinity of the spill. These waterbodies were iced over at the time of the spill. Waterbodies within the topographic downgradient (southwest) of the spill path and their approximate distances include:

- J5-201 m
- J4-498 m
- J3-711 m

Fish and Wildlife

Publicly available information was reviewed to determine if the spill area interacts with wildlife, and/or aquatic life. The following list provides a list of potential fish and wildlife species that may be present within the area:

Wildlife	Avian Species	Fish
Muskox	Whistling Swan	Forage species
Wolf	Snow Geese	Arctic Char
Artic Fox	Gyrfalcon	Arctic Grayling
Grizzly	Willow Ptarmigan	Northern Pike
Polar Bear	Rock Ptarmigan	
Artic Hare	Parasitic Jaeger	
Arctic Ground Squirrel	Snowy Owl	
Brown Lemming	Red Phalorope	
Barren Ground Caribou	Snow Bunting	
	Hoary Redpole	
	Red-throated Loon	
	Yellow-billed Loon	
	Arctic Loon	
	Long-tailed Duck	
	Snow Goose	
	Migratory Birds	

Archeological Sites

There are no recorded archeological resources within the vicinity of the spill site.

RESPONSE ACTIVITIES

The following section provides a chronological summary of events.

The spill occurred on April 8, 2017 from a valve failure on Tank 18 at the fuel farm, located approximately 1000 m southwest of the exploration camp. Approximately 30 m^3 of diesel fuel was released from a 100 m^3 tank (Tank 18). Spilled fluids migrated east and south saturating the snow, the fuel farm pad and the natural soil underneath of the pad. The Agnico Environment Department responded to the spill at 15:40 hr and immediately began containment and cleanup activities. Based on visual observations during the emergency response phase, the approximate area affected was 2000 m^2.

Initial response activities were conducted by the Agnico. On April 8, the spill was assessed as a Code 1 Emergency. The spill trailer was deployed to the site and the Environment Department developed and executed an initial response plan. Equipment was mobilized to the spill site and contaminated snow removal began. Agnico completed 4 test pits on the east side of the road to determine if spilled fluids had migrated under the road. Hydrocarbons were not observed in any of these test pits. An additional test pit was excavated in the berm area (within the spill path). This test pit contained free product. On April 9, four test pits were dug along the northeast edge of the fuel farm to determine if fuel had migrated north, potentially entering nearby waterbodies. There were no signs of hydrocarbons in any of these test pits.

Contaminated snow and soil removal continued east of Tank 18 from April 8 to April 10. On April 10, work with heavy equipment was suspended in preparation for a blizzard. On April 11, a Code Red Blizzard stopped all work at the spill site. Work did not resume until April 12 when SWAT arrived on site on.

On April 13, a new crew arrived on site and hand-over activities were completed. The snow within the License B Landfarm was moved and repacked to make room for additional material. A surface scrape was completed in the south excavation area. The material from the surface scrape was pushed into the excavation for storage until it was moved to the License B Landfarm later that day.

For the period of April 14-20, the clean-up activities were completed on both day and night shifts. During this time, routine inspections on both day and night shifts were completed by SWAT and Agnico (Environment Department) to ensure the clean-up plan was being followed. Equipment from the site's construction contractors were re-allocated to support these efforts.

On April 14, excavation activities continued south of Tank 18. using a hammer fitting on a 400 series excavator to loosen the frozen soil. This continued until the afternoon of April 15 when it was switched for a D9 dozer with a ripper tooth. On April 15, Tank 18 was also removed for storage near the exploration camp so clean-up activities under the former tank location could be completed. Impacted material from the tank area was removed with the dozer and sent to the License B Landfarm for storage. During excavation activities in the Tank 18 area, SWAT observed free product seeping from the boundary walls. Field observations and investigations indicated that the area under Tank 17 was also likely impacted by spilled fluids.

On April 17, Agnico Site Services emptied fuel from Tank 17 in preparation to demobilize it from the tank farm area. During this time, excavation activities continued in the former Tank 18 area to remove the contaminated soil to the permafrost layer (approximately 1.5 m below ground surface). The tank was demobilized from the tank farm on the evening of April 18. On April 18, Agnico also installed a geotextile cover on the contaminated snow stockpiled in the landfarm to prevent wind erosion of the contaminated snow.

During the night shift on April 18, excavation under the Tank 17 area began. The Tank 17 excavation area was completed on April 20. All of the excavated material, including material stockpiled beside the excavation was transported to the landfarm. On April 21, contaminated material on the platform and access routes was scraped and pushed to the landfarm. At this

point, an inspection of the site was completed and the preliminary clean-up was determined to be complete.

CONFIRMATORY SAMPLING

SWAT collected confirmatory soil samples from the base and walls of the excavations. The samples were sent for laboratory analysis of petroleum hydrocarbon fractions (F) 1-4, benzene, toluene, ethylene and xylene (BTEX) and polycyclic aromatic hydrocarbons (PAH). Select samples were also submitted for particle size analysis to determine contaminant transport pathways for criteria selection. The results were used to guide additional contaminated material removal. On April 29, confirmatory sampling determined that the excavation boundaries met applicable guidelines for hydrocarbon parameters of concern.

Excavation Protection

The north wall of the south excavation is shared with the fuel farm. To prevent potential contaminants from leaching from the fuel farm into the clean excavation area, Agnico installed a high density polyurethane (HDPE) liner along the north wall. Installation of the "poly-wall" was completed on May 2.

Snow Containment Cell

Agnico also built a snow storage cell (P1) and transferred snow that was stored in the landfarm to the new cell. The snow is currently stored at the P1 cell where it will be allowed to melt and remain until it can be treated.

METHODS

Safe Work Procedures

SWAT adhered to all legislated, Agnico, and internal safety policies throughout the duration of the work. Standard personal-protective equipment including a hard hat, steel-toed boots, safety glasses, and coveralls were worn by all personnel on site. SWAT personnel on site held valid safety certification (Orientation, Ground Disturbance Level II, Transportation of Dangerous Goods, Workplace Hazardous Material Information System and Standard Level First Aid.

Soil Sampling Procedures

Sampling procedures followed industry-recognized requirements throughout the sample collection process. Clean nitrile gloves were worn when handling soil and changed between sampling events and/or after handling potentially impacted soil to prevent cross-contamination. Select samples were packed into laboratory supplied glass jars and placed in coolers packed with ice to maintain a temperature as close to 4°C as possible for transport to an accredited laboratory for analysis. Standard chain-of-custody protocol was followed during the transportation of samples.

Soil samples were field screened for volatile organic compounds (VOCs) using an RKI Eagle (RKI) multi-gas meter. The RKI was calibrated prior to field screening activities with a hexane gas

standard. Samples were individually placed into plastic bags, sealed, and warmed to room temperature prior to testing. Organic vapour concentrations were then measured and recorded.

Samples were selected for laboratory analysis from specific COCs based on field observations, delineation objectives, and regulatory requirements.

Laboratory Quality Assurance and Quality Control

Select soil samples collected during remediation activities were submitted to Maxxam Canada Ltd. (Maxxam) in Ottawa, Ontario. The analytical suite was selected based on regulated compounds that are typically associated with diesel fuel, MSDS sheets, and the type of fluids stored at the site.

Maxxam is an ISO/IEC 17025, a SCC and a CALA accredited laboratory that uses Canadian recognized methods to conduct laboratory analyses. Method blanks, control standards samples, CRM standards, method spikes, replicates, duplicates and instrument blanks are routinely analyzed as part of the QA/QC program at the laboratory. Maxxam has indicated that analytical data is only released if it passes the laboratory QA/QC procedures.

Regulatory Framework

Regulatory guidelines vary depending on the land use category, soil grain size, and soil depth. Based on analytical results, the soil texture was determined to be coarse-grained with coarse grain guidelines being applied. The release site is located within an industrial landuse setting. Soil laboratory test results were, therefore, evaluated using the Canadian Council of Ministries of the Environment *Canadian Soil Quality Guidelines for the Protection of the Environmental and Human Health; Industrial* (2008).

RESULTS

The excavation was separated into two discrete areas: the south excavation and the east excavation. SWAT collected 4 soil samples from the walls of the east excavation (EN01, ES01, EE01 and EE02) and 7 soil samples from the walls of the south excavation (SN01, SE01, SS01, SS02, SS03, SW01, SW02 and SW03). The base of the excavation was also sampled at 6 locations (B01- B06).

Soil analytical tables are attached. Results of the initial sampling indicated exceedances over guideline at the following locations:

- EE01- anthracene, napthalene
- SW01- napthalene
- SW02- napthalene
- SS01- ethylbenzene
- B03- napthalene
- B04- napthalene
- B05- ethylbenzene

Additional material was excavated from all of the locations with the exception of SW02. Final confirmatory results determined that all soil within the excavation met guidelines with the exception of minor napthalene exceedances at SW02.

Napthalene was present in a number of samples. Although additional excavation did occur at some of the locations based on the presence of other contaminants of concern or proximity to sample locations with additional failures, napthalene exceedances may still be present in the excavation. CCME suggests that investigation and management of polycyclic aromatic hydrocarbons, particularly napthalene, are considered based on concentrations relative to other petroleum-derived-hydrocarbons. Based on limitations in calculating direct soil contact, soil quality guidelines for the majority of the PAHs are of little practical significance to the overall achievement of environmental protection goals at Canadian contaminated sites (CCME, 2010). In this case, associated hydrocarbon contaminants of concern were removed from within the excavation boundaries, but inputs of napthalene (combustion of wood products at the nearby woodpile, vehicle exhaust, etc.) are present within the immediate vicinity of the work area. Napthalene may have exceeded guidelines for reasons other than due to the spill. To maintain an overall net-environmental gain, napthalene was not chosen as a parameter of concern.

CONCLUSIONS

Approximately 30 m^3 of diesel fuel was released at the Meliadine tank farm on April 8, 2017. Agnico and SWAT completed response and remediation activities at the spill site. Final confirmatory soil samples indicated that contaminants relating to the spill have been remediated to meet CCME guidelines. A minor napthalene exceedances along the west all of the south excavation is present, however, napthalene has many common environmental and anthropogenic inputs. As the presence of napthalene may be the result of other factors such as proximity to the access road and the wood burning pile, it is not a parameter of concern.

The tank farm is currently still in use and is scheduled for decommissioning. It is possible that some impacts may still be present the existing pad and remaining fuel tanks. To prevent these contaminants from entering the clean excavation area, Agnico installed a HDPE liner along the north wall of the south excavation. The liner will be removed when the fuel farm is decommissioned.

Total estimated volumes removed from the spill area are as follows:

- Soil: 577 m^3
- Snow: 1271 m^3

CLOSURE

SWAT appreciated the opportunity to work on this project. Please do not hesitate to contact the undersigned at (780) 660-4883 for additional information.

This report was prepared by:

Sherree Dallyn, B.Sc., EP, QAES, P.Biol
Senior Environmental Scientist/Aquatic and Wetland Specialist
SWAT Consulting Inc.

DISCLOSURE

The material contained in this report reflects SWAT Consulting Inc.'s best judgment in light of the information available at the time of preparation. SWAT Consulting Inc. prepared this report for the sole use of Agnico Eagle Mines. Any use which a third party makes of this report, or any reliance on, or decisions based on this report, are the responsibility of such third parties. SWAT Consulting Inc. and Agnico Eagle Mines will not be held responsible or liable for any damages to the physical environment, any property, or to life, which may have occurred from actions of decisions based upon any of the information within this report.

REFERENCES

Canadian Council of Ministries of the Environment. *Polycyclic Aromatic Hydrocarbons. Canadian Soil Quality Guidelines for the Protection of Environmental and Human Health*. 2010.

Canadian Council of Ministries of the Environment. *Soil Quality Guidelines for the Protection of Environmental and Human Health, Industrial,* 2008.

Environment Canada. *The Ecological Framework of Canada: Southern Arctic Ecozone*. Accessed April 13, 2017. www.ecozones.ca.

McCauley, C.A., D.M. White, M.R. Lilly, and D.M. Nyman. 2002. *A comparison of hydraulic conductivities, permeability and infiltration rates in frozen and unfrozen soils. Cold Regions Science and Technology*, v. 34. Pp117-125.

Meliadine FEIS – Volume 7 Freshwater Environment. April 2014.Report No. Doc 314-1314280007 Ver. 0 7-21, Golder and Associates.

Migratory Birds Convention Act (MBCA) 1994b. *Technical Information.* Environnent Canada.https://www.ec.gc.ca/paom-itmb/default.asp?lang=En&n=8D910CAC-1#_03_1_1.

TABLES

Agnico Eagle
Table 1. Soil Quality Results - Petroleum Hydroc
Response & Remediation Report
Meliadine Project
May 2017 V1

SWAT Sample Name	Sample Depth (mbgl)	Sample Date (dd-mm-yy)	BTEX and PHC (F1-F4)							
			Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Total Xylenes (mg/kg)	Fraction 1 (mg/kg)	Fraction 2 (mg/kg)	Fraction 3 (mg/kg)	Fraction 4 (mg/kg)
CCME Soil Quality Guidelines Surface[1]			**0.03**	**0.37**	**0.082**	**NC**	**NC**	**NC**	**NC**	**NC**
CCME Soil Quality Guidelines Subsurface[1]			**0.03**	**0.37**	**0.082**	**NC**	**NC**	**NC**	**NC**	**NC**
EAST EXCAVATION NORTH WALL										
EN01	1.20 m	16-Apr-17	<0.0060	<0.020	<0.010	<0.020	<10	16	<50	<50
EAST EXCAVATION EAST WALL										
EE01	1.00 m	16-Apr-17	<0.012	<0.040	<0.020	<0.040	<20	64	320	150
EE02	0.60 m	19-Apr-17	<0.0050	<0.020	<0.010	<0.040	<10	97	94	<50
EAST EXCAVATION WEST WALL										
EW01	1.50 m	16-Apr-17	<0.0060	<0.020	<0.010	<0.020	<10	12	<50	<50
SOUTH EXCAVATION NORTH WALL										
SN01	1.30 m	20-Apr-17	<0.0050	<0.020	<0.010	<0.040	<10	35	<50	<50
SOUTH EXCAVATION EAST WALL										
SE01	0.80 m	20-Apr-17	<0.0050	<0.020	<0.010	<0.040	<10	<10	<50	<50
SOUTH EXCAVATION SOUTH WALL										
SS01	0.10 m	19-Apr-17	<0.010	0.059	***1.2***	7.5	590	4000	290	<100
SS01B	0.10 m	29-Apr-17			<0.020					
SS02	0.20 m	19-Apr-17	<0.0050	<0.020	<0.010	<0.040	<10	<10	100	<50
SS03	0.50 m	19-Apr-17	<0.0050	<0.020	<0.010	<0.040	<10	<10	<50	<50
SOUTH EXCAVATION WEST WALL										
SW01	1.30 m	19-Apr-17	<0.0050	<0.020	0.026	0.14	20	1100	69	<50
SW02	0.70 m	19-Apr-17	<0.0050	<0.020	0.022	0.11	16	630	71	<50
SW03	0.50 m	20-Apr-17	<0.0050	<0.020	<0.010	<0.040	<10	120	<50	<50
BASE										
B01	1.50 m	16-Apr-17	<0.0060	<0.020	<0.010	<0.020	<10	47	<50	<50
B02	1.50 m	16-Apr-17	<0.0060	<0.020	<0.010	<0.020	<10	110	<50	<50
B03	1.50 m	19-Apr-17	<0.0050	<0.020	<0.010	<0.040	<10	270	<50	<50
B03	1.70 m	20-Apr-17	<0.0050	<0.020	<0.010	<0.040	<10	15	<50	<50
B04	1.50 m	19-Apr-17	<0.0050	<0.020	0.012	<0.040	<10	260	<50	<50
B05	1.50 m	19-Apr-17	<0.0050	<0.020	***0.13***	0.63	56	560	52	<50
B05B	1.70 m	29-Apr-17			<0.020					
B06	1.50 m	20-Apr-17	<0.0050	<0.020	<0.010	<0.040	<10	35	<50	<50

Notes:
Land Use: **Industrial** Grain Size: **Coarse**
[1] - CCME Soil Quality Guidelines for Protection of Environmental and Human Health (2008)
Italics - value does not meet applicable guideline
- sample area was excavated - no longer in-situ
NC - not calculated

Agnico Eagle
Table 2. Soil Quality Results - Petroleum Hydrocarbons
Response & Remediation Report
Meliadine Project
May 2017 V1

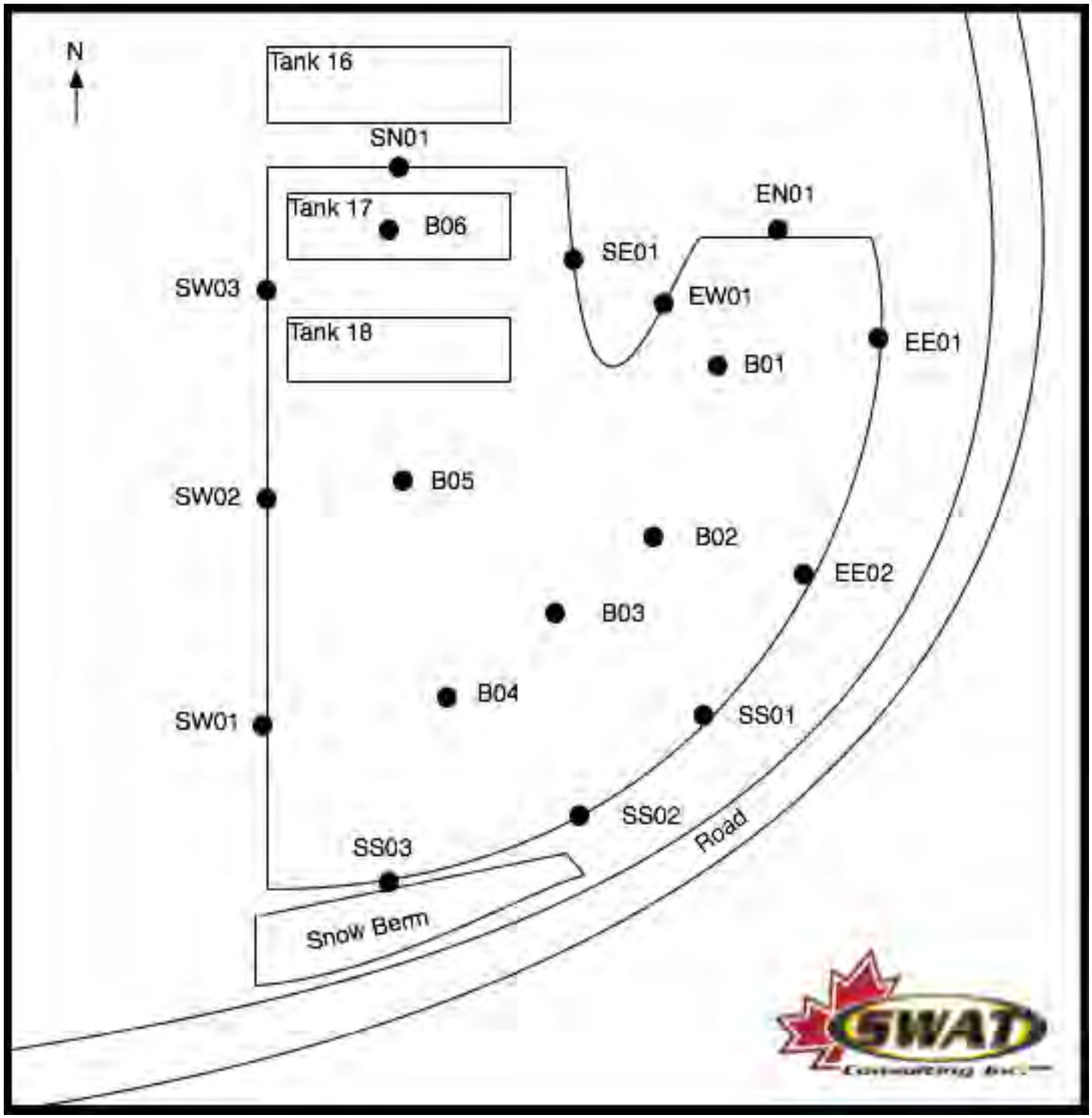
SWAT Sample Name	Sample Depth (mbgl)	Sample Date (dd-mm-yy)	Naphthalene	Acenaphthene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a)anthracene	Chrysene	Benzo(b+j)fluoranthene	Benzo(k)fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-c,d)pyrene	Dibenzo(a,h)anthracene	Benzo(g,h,i)perylene	IACR (Coarse)
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
CCME Soil Quality Guidelines[1]			**0.013**	**NC**	**NC**	**0.046**	**32**	**180**	**100**	**10**	**NC**	**NC**	**10**	**72**	**10**	**10**	**NC**	**NC**
EAST EXCAVATION EAST WALL																		
EE01	1.00 m	16-Apr-17	*<0.10*	<0.10	<0.10	*<0.10*	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
EE01B	1.00 m	29-Apr-17	<0.0050			<0.0050												
EE02	0.60 m	19-Apr-17	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
EAST EXCAVATION WEST WALL																		
EW01	1.50 m	16-Apr-17	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
SOUTH EXCAVATION NORTH WALL																		
SN01	1.30 m	20-Apr-17	0.0097	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
SOUTH EXCAVATION EAST WALL																		
SE01	0.80 m	20-Apr-17	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
SOUTH EXCAVATION SOUTH WALL																		
SS01	0.10 m	19-Apr-17	*0.39*	0.025	0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
SS01B	0.10 m	29-Apr-17	<0.0050															
SS02	0.20 m	19-Apr-17	0.0068	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
SS02B	0.20 m	29-Apr-17	<0.0050															
SS03	0.50 m	19-Apr-17	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
SOUTH EXCAVATION WEST WALL																		
SW01	1.30 m	19-Apr-17	*0.068*	0.0091	0.014	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
SW02	0.70 m	19-Apr-17	*0.054*	0.011	0.015	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
SW03	0.50 m	20-Apr-17	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
BASE																		
B02	1.50 m	16-Apr-17	0.0098	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
B03	1.50 m	19-Apr-17	*0.025*	<0.0050	0.0065	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
B03	1.70 m	20-Apr-17	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
B04	1.50 m	19-Apr-17	*0.025*	<0.0050	0.0083	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
B04B	1.70 m	29-Apr-17	<0.0050															
B05	1.50 m	19-Apr-17	*0.042*	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
B05B	1.70 m	29-Apr-17	<0.0050															
B06	1.50 m	20-Apr-17	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	

Notes:
Land Use: **Industrial** Grain Size: **Coarse**
[1] - *CCME Soil Quality Guidelines for Protection of Environmental and Human Health (2008) (analysis provided by maxxam analytics)*
Italics - value does not meet applicable guideline
- sample area was excavated - no longer in-situ
NC - not calculated
Blank - not analyzed

Agnico Eagle
Table 3. Soil Quality Results - Physical Properties
Response & Remediation Report
Meliadine Project
May 2017 V1

SWAT Sample Name	Sample Depth (mbgl)	Sample Date (dd-mm-yy)	Texture	Sand (% by weight)	Silt (% by weight)	Clay (% by weight)	Grain Size 75 µm Sieve	Moisture (%)
EAST EXCAVATION EAST WALL								
EE01	1.00 m	16-Apr-17	FINE				21	
EE01B	1.00 m	29-Apr-17						17
EAST EXCAVATION WEST WALL								
EW01	1.50 m	16-Apr-17	COARSE				85	
SOUTH EXCAVATION NORTH WALL								
SN01	1.30 m	20-Apr-17						21
SOUTH EXCAVATION EAST WALL								
SE01	0.80 m	20-Apr-17						8.9
SOUTH EXCAVATION SOUTH WALL								
SS01B	0.10 m	29-Apr-17						11
SS02	0.20 m	19-Apr-17	COARSE				63	
SS02B	0.20 m	29-Apr-17						16
SOUTH EXCAVATION WEST WALL								
SW03	0.50 m	20-Apr-17						10
BASE								
B02	1.50 m	16-Apr-17	COARSE				50	
B03	1.70 m	20-Apr-17						12
B04	1.50 m	19-Apr-17	COARSE				50	
B04B	1.70 m	29-Apr-17						11
B05B	1.70 m	29-Apr-17						12
B06	1.50 m	20-Apr-17						12

FIGURE


N
Tank 16
SN01
Tank 17
B06
EN01
SE01
SW03
EW01
Tank 18
EE01
B01
B05
SW02
B02
EE02
B03
B04
SW01
SS01
SS02
SS03
Road
Snow Berm

APPENDIX A

SITE PHOTOGRAPHS

April 15: Hammer and excavator working at approximately 0700hr to remove impacted material from south edge of spill area.

April 15: Free product accumulation at the interface between natural soil and permafrost near field screen location 1.

April 15: Area under Tank 18 after removal.

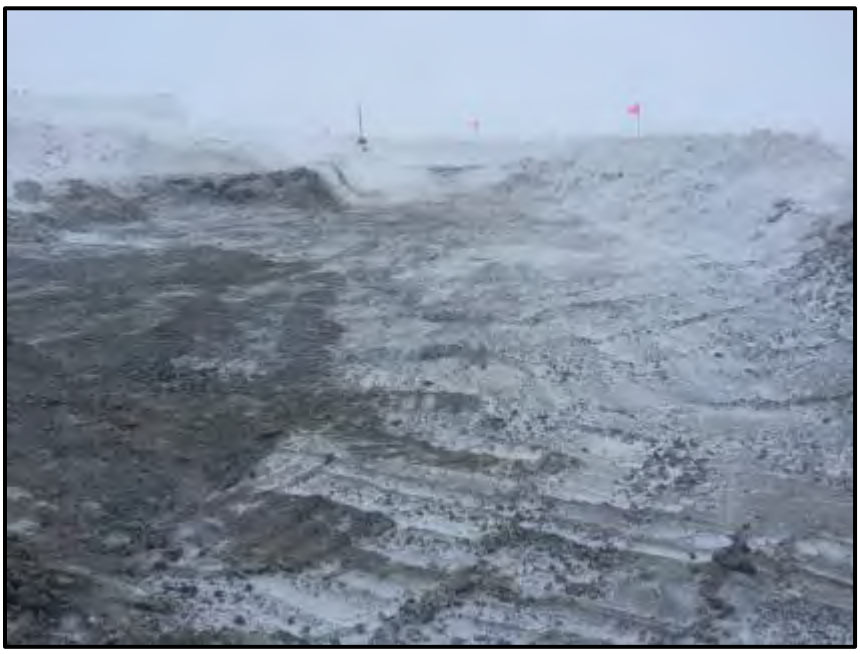
April 15: Using D9 dozer with ripper and 308 excavator for remediation efforts.

April 16: Excavator leveling snow pile in preparation for liner.

April 16: Preparing samples for lab analysis.

April 16: Leveled out snow pile.

April 16: Free product accumulating in a small bellhole on the north side of the south excavation in the former tank 18 area.



April 17: Excavation at 700hr.

April 17: Removing impacted material from south corner of south excavation.

April 17: Removing fuel from Tank 17.

April 17: Taking material to the landfarm with a loader to limit dust from blowing around the site.

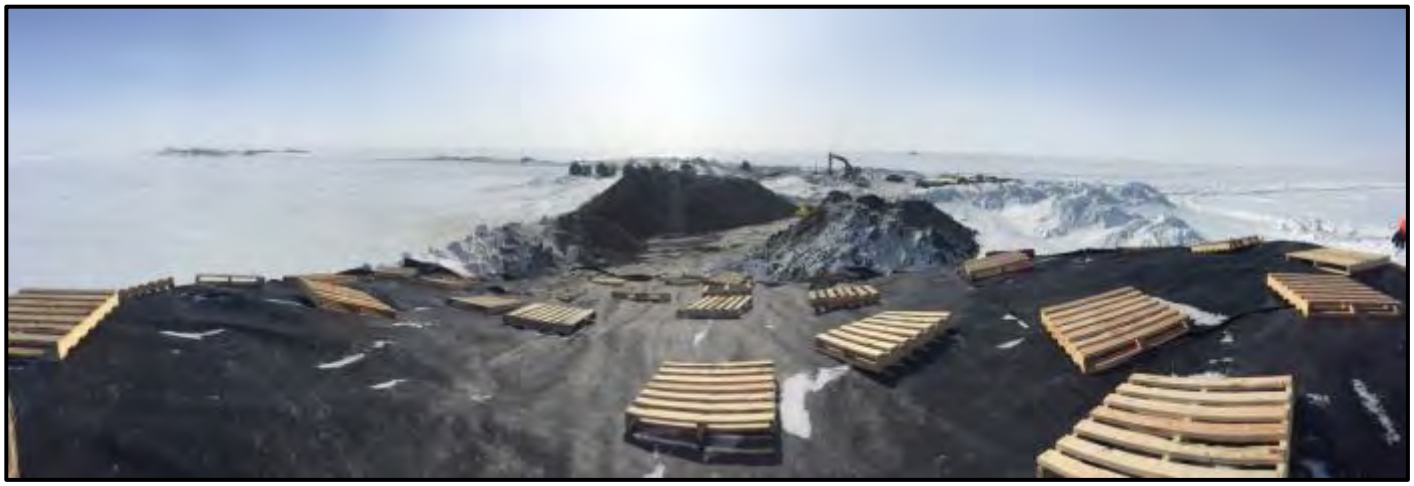
April 18: Panoramic view of the excavation area.

April 18: Covered snow pile.

April 18: Moving Tank 17.

April 18: Night shift excavating in tank 17 location.

April 19: Panoramic view of the site.



April 19: Panoramic view of landfarm from the top of the snow pile.

April 19: Stockpiling material at excavation. There is no more room at the landfarm.

April 19: Night shift activities.

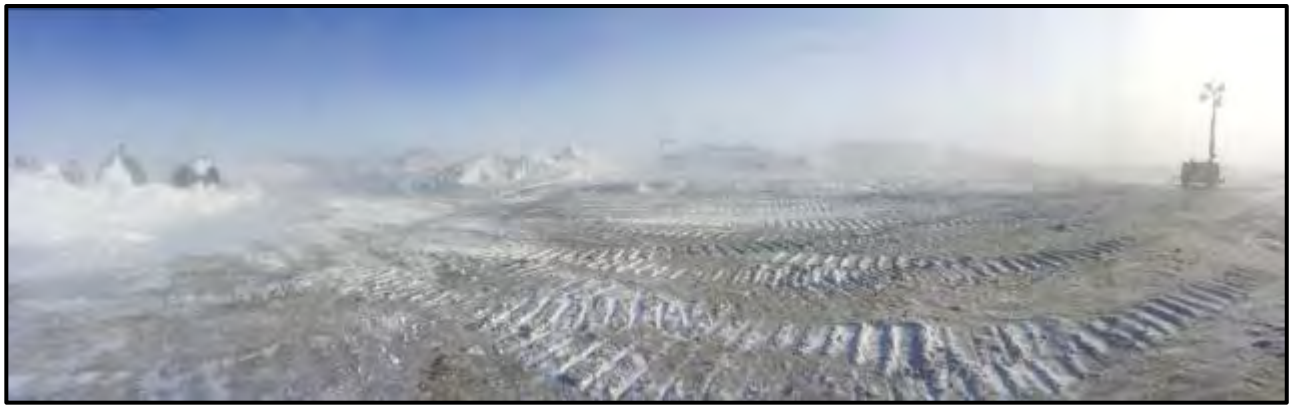
April 20: Landfarm as of 1700 hr.

April 20: Panoramic view of the site.

April 20: Dumping contaminated soil in the landfarm.

Photograph 20: Ripping north wall of south excavation.

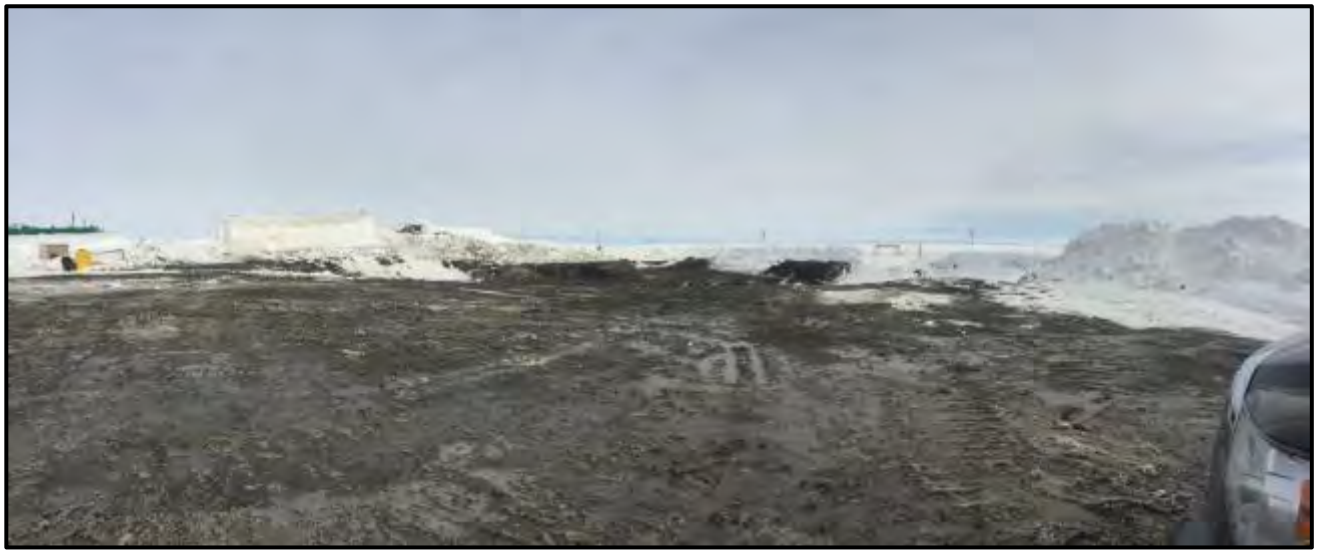
April 22: Excavation area at 0700 hr.



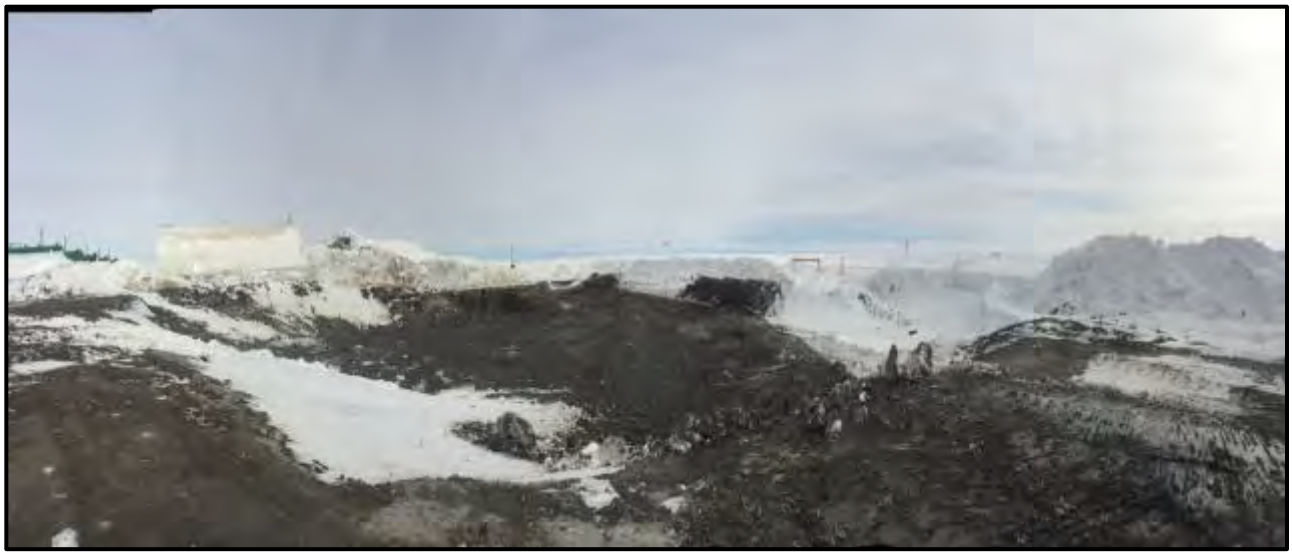
April 22: Surface scrape area at 0930 hr.

April 22: Remaining stockpile as of 0700hr.

April 22: Scraping platform with dozer at 0845hr.



April 27: Excavation area at after removing exceedances.



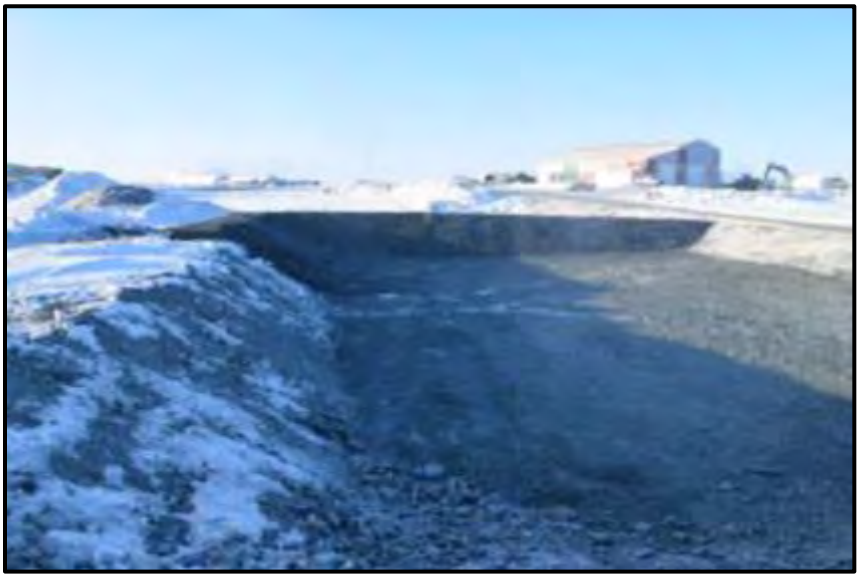
April 27: Overview of work area.

April 27: Removing exceedances with dozer.

April 27: Landfarm as of 15:00hr.

May 2: Backfill material over HDPE liner.

May 3: Clearing snow at P1 cell.



May 4: P1 Cell.

May 6: Installing liner at P1 cell.

May 10: Landfarm.

May 11: Moving snow from landfarm .

AGNICO EAGLE
MELIADINE

APPENDIX B

AGNICO-EAGLE

Accident/Incident Investigation Form

PERSON AND TIME

Name: Kimbo Okpatauya Employee #: 69980

Department: Site Services Work station:

Supervisor: Rejean Falardeau Witness: Luke Issaluk

Date: April 8, 2017 Time: 13:40 Overtime: ☐ Yes ☒ No

Shift: ☐ 8H ☐ 10H ☒ 12H ☒ Day ☐ Night

Supplementary details in the statement (if applicable) ☒ Appendix
See attcahed Statement and Spill Report

Witness statements (if any):
KIMBO : Friday night Reggie sent me to go fill up the fuel truck so I went with Luke. when we finsihed me and luke shut off the valve. Then tried to go fill up the fuel truck Saturday afternoon and we see spill.

TASK & ORGANIZATION

Task at the time of the accident: Loading Fuel Truck

Experience in this task: 6 years Frequency of this task: Weekly

Movement at the time of the accident:
N/A

Body position: N/A

Type of work: ☒ Team ☐ Solo

Is there a written work procedure: ☐ Yes ☒ No ☐ N/A

Was it followed: ☐ Yes ☐ No ☒ N/A

Training received for this task: ☒ Yes ☐ No Date: Dec. 1, 2015 Length: 84 hr

Information received for this task: ☐ Yes ☒ No Date: Length:

LOCATION AND ENVIRONMENT

Exact location of the accident: Fuel Farm area located west of Melaidine Exploartion Camp

Layout and cleanliness of the site:
Site well cleaned of snow April 7, 2017

Physical condition of the site (ground conditions, ventilation, temperature, lighting, dust, etc.):

☒ Compliant ☐ Non-Compliant ☐ N/A

Details (if non-compliant):
High winds. Winter conditions.

Photo: ☐ Yes ☐ No

EQUIPMENT, MATERIALS AND TOOLS

Identify equipment, materials or tools involved in the accident (if any):
- FUEL TRUCK #65TRK01
- FUEL DISTRIBUTION SYSTEM & FUEL TANK #18

Condition of equipment, materials or tools:

☒ Compliant ☐ Non-Compliant ☐ N/A

Details (if non-compliant):

Is there an equipment maintenance procedure? ☒ Yes ☐ No ☐ N/A

Date of last preventive maintenance: APRIL 6, 2017 (VISUAL INPSECTION ONLY)

Personal protective equipment involved (boots, hat, eyewear, mask, visor, gloves…):
STEEL TOE SAFETY BOOTS, HARD HAT, EYEWEAR, GLOVES, COAT

Condition of personal protective equipment involved: ☒ Compliant ☐ Non-Compliant ☐ N/A

Details (if non-compliant):

Were they appropriate to the task? ☒ Yes ☐ No ☐ N/A

Details (if non-compliant):

Photo: ☒ Yes ☐ No

ANALYSYS *(Investigation of immediate and fundamental (root) causes)*

Reconstruct the chronological order including the causes and effects of the accident:

Damage or Injury:

FUEL SPILL AT FUEL TANK #18 - LOCATED WEST OF THE MELAIDINE EXPLOARTION CAMP

Fact(s):
(Why?)

- MAIN GATE VALVE LEFT OPEN
-1ST BALL VALVE AT TANK NOT WORKING PROPERLY
- NEW MODIFICATION ON BARREL (SECONDARY CONTAINMENT), OPENING MADE TOO NARROW

Immediate Cause(s):
(Why?)

(36) - PROCEDURE DOES NOT EXIST
(24) - FAULTY EQUIPMENT (BALL VALVE)
(OTHER) - CHANGE MADE TO TO EQUIPMENT (NEW MODIFICATION) (Barrel)

Fundamental (Root) Causes(s):
(Why?)

- LACK OF KNOWLEDGE (62)
- INADEQUATE ENGINEERING (72)
- INADEQAUTE MAINTENANCE (74)
- INADEQAUTE TOOL/EQUIPMENT (74)
- NEW ROUTINE/TASK
- LACK OF PROCEDURE

CORRECTIVE MEASURES

Corrective measure # 1
Develop a specific procedure for refueling & fuel transfer

Responsibility: Guillaume Gemme Due Date: May 1, 2017
Corrective completed ☐ By: _____ Date: _____

Corrective measure # 2
Lock out white fuel tanks. No longer use them. Top feed tanks will only be used.

Responsibility: Rejaen Falardeau Due Date: April 12, 2017
Corrective completed ☒ By: Rejean Falardeau Date: April 12, 2017

Corrective measure # 3
All fuel associated modifications have to be done by filling the modification request document following the modification procedure

Responsibility: Guillaume Gemme Due Date: May 1, 2017
Corrective completed ☐ By: _____ Date: _____

Corrective measure # 4
Evaluate the requirments of having dedicated operators for fuel distribution, transfer, and monitoring until permanemnt fuel distribution system in place at Meliadine Site

Responsibility: Lonny Syvret Due Date: May 1, 2017
Corrective completed ☐ By: _____ Date: _____

Corrective measure # 5
Evaluate the live transfer & tank and the possibility of reducing it to a smaller amount of fuel liters and build a secondary containmnet. Evaluation to Technical Services Group and Construction.

Responsibility: Guillaume Gemme Due Date: May 15, 2017
Corrective completed ☐ By: _____ Date: _____

Employee Representative: _____ Employer Representative: _____
Signature Signature

Participant(s): Jeff Pratt
Rejean Falardeau

Date April 11,2017

The following tables contain a variety of possible causes. However, they should never limit the possibilities of accident causes. These tables are reference tools and should be considered as reminders in the investigation process and analysis.

IMMEDIATE CAUSES	TYPE	CATEGORY
Operate or act without a license or authorization (e.g. welding, confined space, driver's…)	Immediate	Work practice, behavior
Operate improperly (failure to warn, failure to stop, speeding, etc.)	Immediate	Work practice, behavior
Repair without shutting down or locking-out	Immediate	Work practice, behavior
Use defective equipment or material voluntarily	Immediate	Work practice, behavior
Use equipment/materials while not complying with procedure or existing method	Immediate	Work practice, behavior
Under the influence of drugs, alcohol, medication	Immediate	Work practice, behavior
Bad joke	Immediate	Work practice, behavior
Violence	Immediate	Work practice, behavior
Placed, loaded or lifted improperly	Immediate	Work practice, behavior
Work in an unsafe working posture	Immediate	Work practice, behavior
Failure to follow established work sequence and/or plans and specifications	Immediate	Work practice, behavior
Lack of communication between work teams	Immediate	Work practice, behavior
Use inappropriate equipment	Immediate	Work practice, behavior
Other	Immediate	Work practice, behavior
Improper storage and stacking	Immediate	Environmental condition, equipment/material
Defective tool, equipment, materials	Immediate	Environmental condition, equipment/material
Inadequate housekeeping	Immediate	Environmental condition, equipment/material
Hazardous environment (gas, dust, noise, heat, cold, etc.)	Immediate	Environmental condition, equipment/material
Poor or excessive lighting	Immediate	Environmental condition, equipment/material
Heavy traffic, heavy equipment, etc.	Immediate	Environmental condition, equipment/material
Ground instability	Immediate	Environmental condition, equipment/material
Confined space	Immediate	Environmental condition, equipment/material
Inadequate signage	Immediate	Environmental condition, equipment/material
Other	Immediate	Environmental condition, equipment/material
Failure to use or improper use of personal protective equipment (e.g. eyewear, mask, gloves, etc.)	Immediate	Use of protective equipment
Failure to use or improper use of collective protective equipment (e.g. hood, screen, vacuum, etc)	Immediate	Use of protective equipment
Render safety devices inoperative	Immediate	Use of protective equipment
Remove safety devices	Immediate	Use of protective equipment
Other	Immediate	Use of protective equipment
Defective or inadequate guard or barrier	Immediate	Condition of protective equipment
Defective or inadequate alarm system	Immediate	Condition of protective equipment
Defective or inadequate cab, screen, etc.	Immediate	Condition of protective equipment
Defective or inadequate cleaning system	Immediate	Condition of protective equipment
Defective, inadequate or unavailable personal protective equipment	Immediate	Condition of protective equipment
Defective or inadequate ventilation system	Immediate	Condition of protective equipment
Other	Immediate	Condition of protective equipment

FUNDAMENTAL (ROOT) CAUSES	TYPE	CATEGORY
Physical and/or psychological inability	Fundamental	Personal factors
Lack of training, knowledge and/or skill	Fundamental	Personal factors
Stress, pressure, work pace	Fundamental	Personal factors
Physical characteristics inadequate for the task (height, weight)	Fundamental	Personal factors
Other	Fundamental	Personal factors
Insufficient supervision	Fundamental	Organizational factors
Inadequate risk assessment (environment, equipment, method)	Fundamental	Organizational factors
Inadequate engineering, design, ergonomics, plans and specifications	Fundamental	Organizational factors
Non-standard purchasing or inadequate procurement	Fundamental	Organizational factors
Inadequate planning	Fundamental	Organizational factors
Inadequate or absence of preventive maintenance	Fundamental	Organizational factors
Badly designed or poorly adapted tool or equipment	Fundamental	Organizational factors
Missing, incomplete or inadequate work standard	Fundamental	Organizational factors
Missing or incomplete training program	Fundamental	Organizational factors
Inadequate communication of risk (pictogram, etc.)	Fundamental	Organizational factors
Improper storage (location, organization, etc.)	Fundamental	Organizational factors
Inadequate or underdeveloped work method or procedure not available	Fundamental	Organizational factors
Roles and responsibilities not defined/released	Fundamental	Organizational factors
Other	Fundamental	Organizational factors

AGNICO-EAGLE

Accident/Incident Investigation Form

APPENDIX

(See attached witness statements)
(See attached photos)

- April 6th Site Services has record of visual inspection completed of the fueling area. -- work order attached.

- Inspection reports from weeks prior show Environmnet asked for change of secondary containmnet for end of fuel hose. See inspection attached from March 29 asking for change and April 4th inspection showing change implemented.

- Internal Spill report attcahed.

- Supplier Fuel tank capacity level attached.

DRAWING

	Comments :

AGNICO EAGLE

DECLARATION FORM

☑ Incident	☐ Near miss	☐ Fire	☐ Accident
Work Related ☑		Not Work Related ☐	

The original of this document constitutes registration of the event in the official register of accidents. The supervisor must be notified of the event as soon as possible and shall complete this form with the worker who suffered the accident (W.C. Act 16). The immediate supervisor shall forward the form to the health care providers without delay.

WORKER EVENT DESCRIPTION

Name: fff KUMOO OKPAKNUYAK	Employee #: 69980	DOB:	☑ AEM ☐ Contractor
Department: SITE SERVICE	Exact Location (specific):	Event Date & Time: 2017-4-8 KOHKOO	
AEM Supervisor: TESEAN FALARDEAU	Contr. Supervisor:	Contr. Company Name:	

Name of Witnesses (if applicable): LUC ISSALUT

Description of Event: Friday night Reggie Sent me to go Fill up the Fuel truck so I went with luke when we Finish me and luke Shut off the Valve then tried to go Fill up the Fuel truck Saturday Afternoon and we see Spill

Nature of Injury and/or material damage:

Worker's Signature: [signature] Date & Time Reported: 2017-04-8 - KOHKOO

SPACE RESERVED FOR SUPERVISOR

First Aid Attendant:

Nature of First Aid Treatment:

Estimated Cost of Losses:

Potential:	☐ Level 1 (Major)	☑ Level 2 (Moderate)	☐ Level 3 (Low)	Greeting ☐
Severity:	☐ Frequent (Once per week)	☐ Occasional (Once per month)	☑ Rare (Once per year)	Inspection ☑ Planning ☑ Decision ☑ Execution ☑
Is an investigation required?		☑ Yes	☐ No	

Immediate Actions Taken: ALWAYS CLOSE ALL VALVE

Supervisor's Signature: [signature] AEM Superintendent's (designate) Signature: [signature] Lenny Syvret

SPACE RESERVED FOR HEALTHCARE PROVIDER'S

Nature of Treatment:		Reported Accident ☐
Healthcare Provider's Name :	Signature:	First Aid (FA) ☐ Medical Aid (MA) ☐ Modified Duty (MD) ☐ Lost Time (LT) ☐

"No Repeats" – Our Stepping Stone to ZERO HARM

April, 8, 2017

Friday at 7:00 pm Kimbo and luke went to go Fill up the Feul Truck After we where done luke Put the holes in the Barrow But the Value open in the Barrow so me and luke tried to take the holes out But it was stuck From the small hole on the Barrow then Finally I close the Valve then put it in the Barrow we close Both Valve and dip it a 164

Luke Issaluk April 08, 2017

After work Reggie ask me to help Kimbo to fuel up the fuel truck, I said, "After supper." After supper I went to the fuel farm with 65PCKIS. The big steering valve was open upon arrival. We proceeded to connect the hoses and start pumping fuel to the truck. After the pumping was done, we put the hose from the tank to the "secondary containment." We closed the valves and brought the truck to dome 3. We headed back to camp. Before dipping the tank at 164 cm.

AGNICO EAGLE

Work Order

Unit Number	65BLD42000

Order Number	1606604

Equipment Description:
EXPLO GENERAL BUILDING

Location:

Estimates:
Est. Hours: 1.00
Estimated Downtime Hours.

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

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: 01606604
Business Unit: 6534615
Subsidiary:

Dates :
Order Date: 2017-04-04
Requested Finish Date:
Planned Start Date: 2017-04-11
Planned Finish Date: 2017-04-11
Actual Start Date : 4-6-2017
Start time : 1:00 PM

Work to be done

FILL CHECKLIST ATTACHED

Work Done

Actual Finish Date 4-6-2017	Employee MARCO CHRISTIAN	Downtime
End Time 2:00 PM		

DONE

AGNICO EAGLE

MELIADINE TANK FARM
WEEKLY Inspection sheet

DATE: 04/06/2017 TIME: 12:30

Inspection done by: CHRISHAN BRAUMILER
MARCO CAPRIO

Equipment	Type of inspection: Visual	Type of inspection: Other :	Comments / Results
√ = 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	OK ✓		
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

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

AGNICO EAGLE

MELIADINE TANK FARM
WEEKLY Inspection sheet

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	✓		
Fuel Tank behind DOME 2	✓		

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

Environmental Inspection Report (Site Services Owner)

DATE : 2017-03-29 Inspected By : Justin MacMillan

Location : Fuel farm

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			X	
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.			X	
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	X			
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.	X			
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	X			
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.	X			
Type A Water licence No: 2AM-MEL1631 April 2016 Section: E6 License 2BB-MEL1424 July 2014 Section C5	The Licensee shall equip all Water intake hoses with a screen of an appropriate mesh size to ensure that fish are not entrained			X	

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	X			
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	X			
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			X	*Refer to clean wood burn pad inspection report
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,	X			
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.		X		There is a secondary containment underneath the valve/hose connection that is full of contaminated snow
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			X	
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.	X			
Licence 2BB-MEL1424 July 2014 Section H2	The Licensee shall prevent any chemicals, petroleum products or wastes associated with the project	X			

	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)	X			
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.	X			
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.	X			
Meliadine Water management plan February 2014, Section 4.2	The only domestic effluent is MEL-7			X	
Meliadine Water management plan February 2014, Section 4.4	P1 water pumping to the environment needs the received Meliadine environmental department approval.			X	
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.	X			
Meliadine Water management plan February 2014, Section 6.5	Environmental department need to authorise the pumping of the landfarm berm to the environment.	X			To be assessed in the spring/summer
Used Water Management Plan may 2013 Section 2.3.4	The sludge is pumped into 205 liters drums.			X	
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.	X			
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		X		There is an outstanding spill that has yet to be reported and fully remediated
Spill contingency plan Dec 2015, Section 4	Use of suitable secondary containment in transport, transfer and storage of Hazardous Material		X		See comment on secomdary containment full of contaminated snow
Spill contingency plan Dec 2015, Section 4 Waste management plan Nov.2013 main document	To prevent incident, good housekeeping practice is required.	X			
Spill contingency plan Dec 2015, Section 4	Fuel and chemical storage area are maintain in a way that make it possible to	X			

	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	X			
Spill contingency plan Dec 2015, Section 4	Hazardous material storage area is adequately protected from weather and physical damage.	X			
Spill contingency plan Dec 2015, Section 5 and 7	All mobile equipment have its own spill response kit			X	
Spill contingency plan Dec 2015, Section 7.	The mobile environmental emergency trailer will be easily accessible and transportable.	X			
Section 2 of Incinerator Waste Management Plan September 2012	Ash produced from the incineration process will be disposed according to best practice			X	
Section 4.1 and 5.2 of Incinerator Waste Management Plan September 2012	Number of incinerator load per day is documented			X	
Section 4.1 and 5.2 of Incinerator Waste Management Plan September 2012	Number of Ash drum generated by the incineration process is documented			X	
Waste management plan Nov.2103, Section 2.1	Waste is properly segregated at the source (Domestic, Hazardous waste, Recycled, General)			X	
Waste management plan Nov.2103, Section 2.1	Scrap metal and scrap tire (under 24.5in rime size) are to be stocked in containers.			X	
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.			X	*Refer to clean wood burn pad inspection report
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.			X	
Waste management plan Nov.2103, Section 2.1	All Hazardous waste are to be properly package, label before being put in containers.			X	
Waste management plan Nov.2103, Section 2.1	Waste containers (seacan) need to be properly label			X	
Meliadine Gold Project Wildlife protection and response plan July 2013, Section 2.2.3	Littering is prohibited on, in the vicinity of the site, and along access roads.	X			
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)			X	

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)			X	
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	X			
Meliadine Gold Project Wildlife protection and response plan July 2013, Section 2.2.6	Building will have skirt to avoid having wildlife under building.			X	
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			X	

Comments / Recommendations

- **The spill that occurred (date unknown) at tank 18 has yet to be reported and properly remediated/cleaned**
- **The secondary containment underneath the valve of tank 18 is full of contaminated snow. This will need to be removed and placed in a HAZMAT drum (I placed one beside the tank to be used for this purpose – the containment now just needs to be cleaned out)**

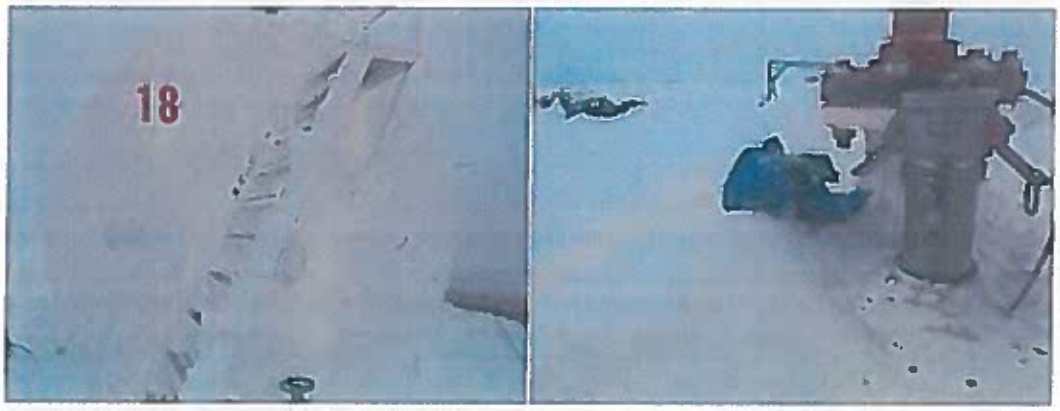
Environmental Personnel Name : **Justin MacMillan**

Signature : JM

Actions Corrected: _
All spill reported, and cleanup done.

Supervisor Name: _____Guillaume Gemme_____

Signature: _____



Picture 1: Spill at tank 18 that has yet to be reported and cleaned properly
Done

Picture 2: The secondary containment berm underneath the valve is full of contaminated snow – a drum for "fuel contaminated water" has been placed beside the tank for the placement of this contaminated snow

Done

AGNICO EAGLE
MELIADINE

Environmental Inspection Report (Site Services Owner)

DATE :	2017-04-05	Inspected By :	Justin MacMillan and Philip Roy
Location :	Clean Wood Open fire Pit + Landfarm + Fuel farm		

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			x	
Type A Water licence No: 2AM-MEL1631 April 2016 Section: D10	The License shall construct and maintain all containment and runoff control structures to prevent escape of Wastes to surface Waters.		x		Maintain secondary containment at the fule farm.
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			x	
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.			x	
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.			X	
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.			X	
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			x	

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			X	
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			X	
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		X		Plywood/pressed wood found in the burn area – Needs to be removed prior to ignition and placed in construction waste/landfill
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,			X	
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.			X	
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			X	
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.			X	

Licence 2BB-MEL1424 July 2014 Section H2	The Licensee shall prevent any chemicals, petroleum products or wastes associated with the project from entering Water.			X	
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)			X	
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.			X	
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.			X	
Meliadine Water management plan February 2014, Section 4.2	The only domestic effluent is MEL-7			X	
Meliadine Water management plan February 2014, Section 4.4	P1 water pumping to the environment needs the received Meliadine environmental department approval.			X	
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.			X	
Meliadine Water management plan February 2014, Section 6.5	Environmental department need to authorise the pumping of the landfarm berm to the environment.			X	
Used Water Management Plan may 2013 Section 2.3.4	The sludge is pumped into 205 liters drums.			X	
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.			X	
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			X	
Spill contingency plan Dec 2015, Section 4	Use of suitable secondary containment in transport, transfer and storage of Hazardous Material			X	
Spill contingency plan Dec 2015, Section 4 Waste management plan Nov.2013 main document	To prevent incident, good housekeeping practice is required.			X	

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)			X	
Spill contingency plan Dec 2015, Section 4	All drum/containers are kept sealed or close			X	
Spill contingency plan Dec 2015, Section 4	Hazardous material storage area is adequately protected from weather and physical damage.			X	
Spill contingency plan Dec 2015, Section 5 and 7	All mobile equipment have its own spill response kit			X	
Spill contingency plan Dec 2015, Section 7.	The mobile environmental emergency trailer will be easily accessible and transportable.			X	
Section 2 of Incinerator Waste Management Plan September 2012	Ash produced from the incineration process will be disposed according to best practice			X	
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			X	
Waste management plan Nov.2103, Section 2.1	Waste is properly segregated at the source (Domestic, Hazardous waste, Recycled, General)			X	
Waste management plan Nov.2103, Section 2.1	Scrap metal and scrap tire (under 24.5in rime size) are to be stocked in containers.			X	
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.			X	
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.			X	
Waste management plan Nov.2103, Section 2.1	All Hazardous waste are to be properly package, label before being put in containers.			X	
Waste management plan Nov.2103, Section 2.1	Waste containers (seacan) need to be properly label			X	
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.			X	

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)			X	
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)			X	
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			X	
Meliadine Gold Project Wildlife protection and response plan July 2013, Section 2.2.6	Building will have skirt to avoid having wildlife under building.			X	
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			X	

Comments / Recommendations

- **Pressed wood/plywood boxes found in the burn area; these will need to be removed prior to ignition and placed in construction waste/landfill**
- **Secondary containment to maintain free of snow or other liquids at the fuel farm.**

Environmental Personnel Name : **Philip Roy**

Signature :

Actions Corrected: Adresse contractor and explain clean wood with no glue like we have on plywood

Secondary containment been change for another one with hole on the side

Supervisor Name: Jean-Marc Fournier

Signature:

Picture 1: Pressed/plywood will need to be removed prior to ignition. Orbit stickers on the crates. Been removed by Orbit the day after construction put lots and removed the same day

Picture 2: Fuel farm, hose connected to the thank's secondary containment need to be contained. Done , barrel been replace with a hole on the side to prevent snow or water to get in

SOUDURE F.M. WELDING
INTERNATIONAL

http://www.soudurefminternational.com

TANK 18

TABLE DE CAPACITÉ D'ENTREPOSAGE

S M CONSTRUCTION INC.
Rankin Inlet (Agnico Eagle)

Type de réservoir: Horizontal

Diamètre	**132 po.**	**335,28 cm.**
Longueur	**446 po.**	**1132,84 cm.**
Volume	**22001 (G.I.)**	**99995 (litres)**

Haut (cm)	Volume (G.I.)	Volume (L)	Haut (cm)	Volume (G.I.)	Volume (L)	Haut (cm)	Volume (G.I.)	Volume (L)	Haut (cm)	Volume (G.I.)	Volume (L)
1	6,08	27,63	45	1761,07	8004,24	89	4680,73	21274,38	133	8128,71	36945,81
2	17,18	78,09	46	1818,31	8264,39	90	4754,66	21610,41	134	8210,53	37317,67
3	31,53	143,33	47	1876,07	8526,94	91	4828,85	21947,63	135	8292,45	37689,99
4	48,51	220,47	48	1934,35	8791,83	92	4903,30	22286,01	136	8374,46	38062,77
5	67,73	307,83	49	1993,14	9059,04	93	4978,01	22625,54	137	8456,57	38435,97
6	88,95	404,29	50	2052,43	9328,51	94	5052,96	22966,19	138	8538,78	38809,60
7	111,99	509,00	51	2112,21	9600,21	95	5128,15	23307,95	139	8621,07	39183,64
8	136,70	621,32	52	2172,47	9874,11	96	5203,58	23650,80	140	8703,45	39558,07
9	162,97	740,71	53	2233,21	10150,17	97	5279,25	23994,73	141	8785,92	39932,87
10	190,70	866,74	54	2294,42	10428,35	98	5355,15	24339,70	142	8868,46	40308,05
11	219,80	999,03	55	2356,08	10708,62	99	5431,28	24685,71	143	8951,08	40683,57
12	250,22	1137,27	56	2418,20	10990,95	100	5507,63	25032,74	144	9033,78	41059,43
13	281,88	1281,18	57	2480,76	11275,30	101	5584,20	25380,76	145	9116,55	41435,61
14	314,73	1430,50	58	2543,76	11561,64	102	5660,99	25729,77	146	9199,38	41812,10
15	348,73	1585,01	59	2607,19	11849,94	103	5737,99	26079,74	147	9282,28	42188,89
16	383,82	1744,51	60	2671,04	12140,16	104	5815,20	26430,66	148	9365,24	42565,95
17	419,97	1908,82	61	2735,32	12432,29	105	5892,61	26782,51	149	9448,26	42943,29
18	457,15	2077,78	62	2800,00	12726,28	106	5970,22	27135,27	150	9531,34	43320,88
19	495,31	2251,22	63	2865,09	13022,11	107	6048,04	27488,92	151	9614,46	43698,70
20	534,42	2429,00	64	2930,57	13319,75	108	6126,04	27843,46	152	9697,64	44076,76
21	574,46	2611,00	65	2996,45	13619,17	109	6204,23	28198,86	153	9780,87	44455,02
22	615,41	2797,09	66	3062,72	13920,35	110	6282,61	28555,10	154	9864,14	44833,49
23	657,22	2987,15	67	3129,36	14223,25	111	6361,17	28912,18	155	9947,45	45212,14
24	699,89	3181,08	68	3196,38	14527,86	112	6439,92	29270,06	156	10030,79	45590,96
25	743,39	3378,78	69	3263,77	14834,14	113	6518,83	29628,75	157	10114,18	45969,94
26	787,69	3580,14	70	3331,51	15142,07	114	6597,92	29988,21	158	10197,59	46349,06
27	832,78	3785,09	71	3399,62	15451,62	115	6677,18	30348,44	159	10281,03	46728,31
28	878,64	3993,53	72	3468,08	15762,77	116	6756,60	30709,42	160	10364,50	47107,68
29	925,26	4205,38	73	3536,89	16075,50	117	6836,18	31071,14	161	10447,99	47487,16
30	972,60	4420,56	74	3606,03	16389,77	118	6915,92	31433,57	162	10531,50	47866,72
31	1020,66	4639,00	75	3675,51	16705,57	119	6995,82	31796,70	163	10615,03	48246,36
32	1069,42	4860,63	76	3745,32	17022,87	120	7075,87	32160,52	164	10698,57	48626,06
33	1118,87	5085,38	77	3815,46	17341,66	121	7156,06	32525,01	165	10782,12	49005,81
34	1168,99	5313,19	78	3885,92	17661,89	122	7236,40	32890,16	166	10865,68	49385,60
35	1219,77	5543,98	79	3956,69	17983,57	123	7316,88	33255,95	167	10949,24	49765,41
36	1271,20	5777,71	80	4027,78	18306,65	124	7397,50	33622,37	168	11032,81	50145,23
37	1323,25	6014,31	81	4099,17	18631,12	125	7478,25	33989,39	169	11116,38	50525,04
38	1375,93	6253,73	82	4170,86	18956,96	126	7559,13	34357,02	170	11199,94	50904,83
39	1429,21	6495,91	83	4242,84	19284,15	127	7640,14	34725,22	171	11283,49	51284,60
40	1483,09	6740,80	84	4315,12	19612,66	128	7721,28	35093,99	172	11367,04	51664,31
41	1537,56	6988,36	85	4387,69	19942,48	129	7802,54	35463,31	173	11450,57	52043,97
42	1592,60	7238,53	86	4460,53	20273,58	130	7883,91	35833,17	174	11534,08	52423,56
43	1648,21	7491,26	87	4533,66	20605,94	131	7965,40	36203,55	175	11617,58	52803,06
44	1704,37	7746,51	88	4607,06	20939,55	132	8047,00	36574,43	176	11701,05	53182,46

Spill >100 L need to be declared to Env. Dept. Immediately

Meliadine Gold Project
Internal Spill Report Form

Everyone is responsible of cleaning their spills

AGNICO EAGLE

Date of spill	8-4-2017
Date of spill report	8-4-2017
Date at the end of cleanup/incident	ONGOING
* special note :	

Reported by / Unreported	KEVAN FALARDEAU
Contractor Involved	
Employee Involved	KUMBO OKATAHOYAK
Supervisor Involved	
Equipment Involved	FUEL TRUCK 65TK001
Nature of Contaminant	FUEL
Quantity of Contaminant	39.000 LITRES
Exact Location (Easting / Northing)	TANK FARM #18
Environmental Personnel Contacted	PHILIP ROY

Select one Cause for the incident In the selection under :

- ☐ Chec Equipment Breakdown
- ☑ Chec Equipment malfunction
- ☑ Chec Human error
- ☐ Chec Improper storage
- ☐ Chec Act of god
- ☐ Chec Non respect of procedure
- ☐ Chec Other

Description of the incident

FRIDAY NIGHT IN THE BLIZZARD VCEVANATION I ASK KUMBO TO REFILL FUEL TRUCK AND PARK THE FUEL TRUCK IN DOME 3, THE DAY AFTER APRIL 8 ON THE WAY TO REFILLING HE SAW THE SPILL FROM THE FILLING HOSE SECONDARY CONTAINMENT WAS COMPLETELY FULL AND SPILL ON THE GROUND

Immediate Corrective Action

CALLING ENVIRONMENT TO START THE CLEANING

Action to be taken to reduce/eradicate risk of similar incident in the future

WE HAVE TO PUT IN PLACE A CLEAR PROCEDURE AND ONLY USE TANK WITH OUT VALVE AT THE BOTTOM THAT CAN BE FORGET OPEN AND CREATE ANOTHER EVEN LIKE THIS

Report Completed by KEVAN FALARDEAU

For Environmental Department Purpose Only

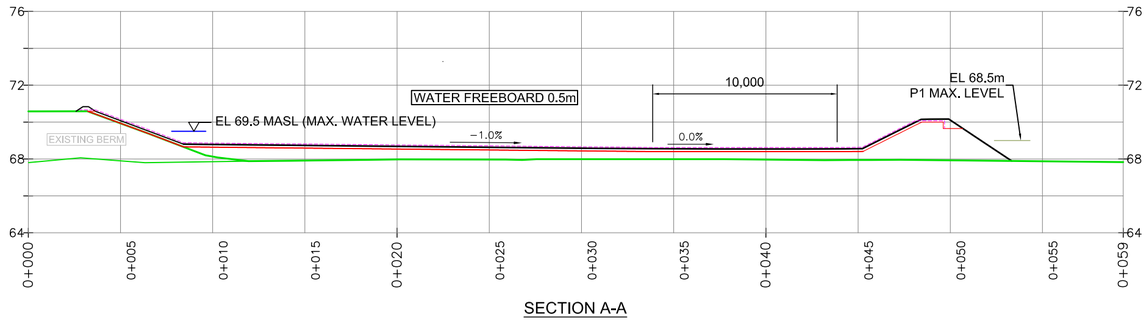
Incident Investigation Recommended	YES!!
Government agency notified	YES!
Date of notification to government agency	April 8, 2017
Comment :	3rd party Spill Response Group to assist in clean-up.
Environment Personnel Signature	Jeff Pratt [signature]

AGNICO EAGLE
MELIADINE

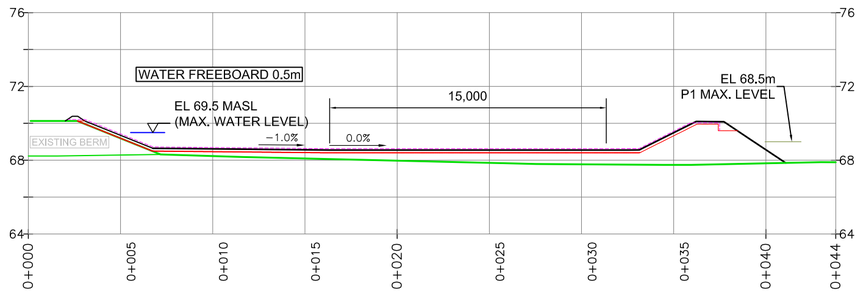
APPENDIX C

NO. DESSIN
DRAWING NO.

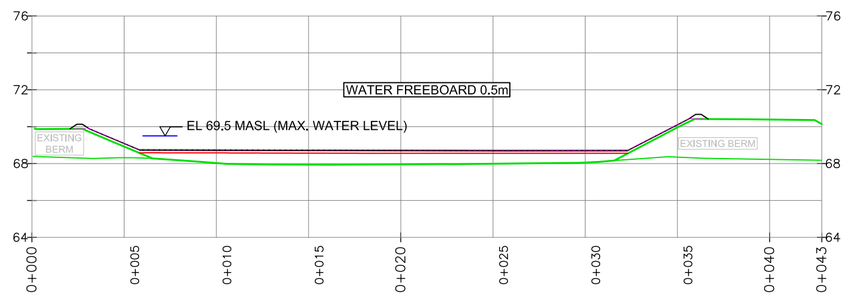
FORMAT ANSI C



SECTION A-A

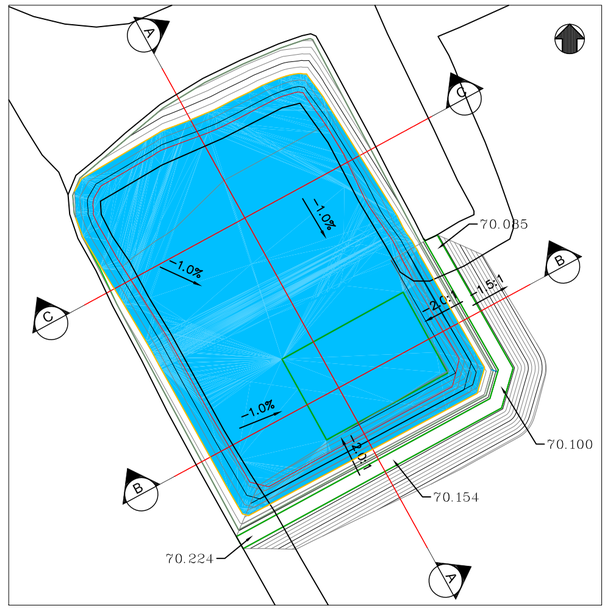


SECTION B-B



SECTION C-C

LEGEND:
- ORIGINAL GROUND
- FINE FILL
- LINERS



TOP VIEW (N.T.S.)

NOTES FOR CONSTRUCTION

1) This cell is for temporary storage of contaminated snow during summer 2017. Depending on its performance and condition, it could be used for other usages beyond summer 2017. If so, the liner need to be weighted to prevent liner lift up.

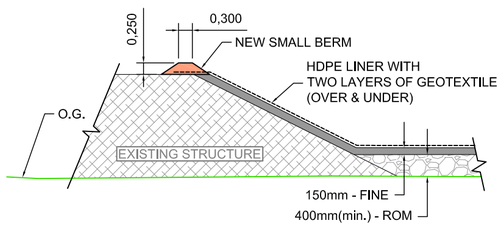
2) Placement of snow will have to be done carefully to avoid damage to the liner.

3) Water level in the snow containment cell should be maintained 0.5 m below the minimum liner elevation.

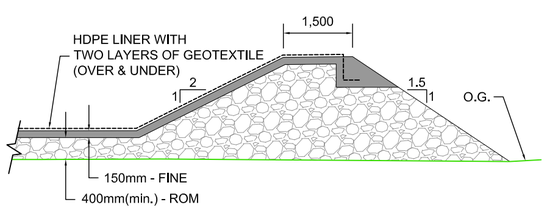
4) The maximum elevation of P1 pond should be ajusted to prevent water inflow in the snow all and should not exceed the elevation 68.5 MASL.

5) Geotextile : TEXEL 160E (or equivalent) placed with an overlap of 0.3m between each width. Needlepunched nonwoven short staple fibers geotextile; polypropylene made

6) Liner : HDPE 1.5mm, TYPE SOLMAX 460 (or equivalent) placed with proper overlap to allow welding to take place. The installer is to provide detailed QC information describing the placement and welding.

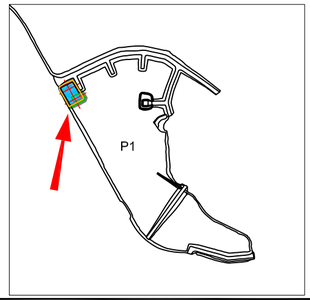


DETAIL #1 - INFRASTRUCTURE WITH EXISTING BERM



DETAIL #2 - NEW BERM & INFRASTRUCTURE DETAILS

PLAN CLÉ
KEY PLAN



NOTES GÉNÉRALES / GENERAL NOTES

POUR APPROBATION
FOR APPROVAL
AGNICO EAGLE
DATE : 2017-05-24

DESSINS EN RÉFÉRENCE / REFERENCE DRAWINGS

TITRE / TITLE	# DWG
–	–
–	–
–	–
–	–

AGNICO EAGLE
MELIADINE

REV.	DATE	DESCRIPTION	PAR/BY	APP.	CLIENT
2	2017-05-24	ISSUED FOR APPROBATION	J.C.	T.L.	M.R.J.
1	2017-05-10	ISSUED FOR APPROBATION	J.C.	T.L.	M.R.J.

REVISIONS

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

DESSINÉ PAR / DRAWN BY	JOCELYN CRETE	DATE 2017-05-04
VERIFIÉ PAR / CHECKED BY	THOMAS LEPINE	2017-05-08
APPROUVÉ PAR / APPROVED BY	MICHEL JULIEN	2017-05-08
ÉCHELLE / SCALE	N/A	DATE 2017-05-04

NO. DESSIN / DRAWING NO.
65-695-230-001

NO. PROJET / PROJECT NO.	REVISION	FEUILLE / SHT
65	2	1 / 1

I:\Regional\Groupe\Meliadine\020 Operation support\Snow Containment\65-695-230-001_R2(SnowCont)(C3D).dwg, 24 Mai 2017

AE-CART-ANSI C

I:\Regional\Groupe\Meliadine\020 Operation support\Snow Containment\65-695-230-001_R2(SnowCont)(C3D).dwg-2017-05-24 08:05:38

FILE NO. .DWG