

Appendix 16 : 2020 Mock Spill Scenario Report



AGNICO EAGLE

Mock Spill Itivia 2020



AEM, Meliadine project

2020/07/10

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PURPOSE

The annual mock spill is directed at operations where there is potential for either land-based or marine-based spills to occur. It is intended primarily for on-site first-responders who may or may not have any experience in managing spills of petroleum products. The mock spill attempts to demonstrate through the use of verbal instruction and a practical effective exercise which can be taken to prevent spills and/or reduce the damage that results from a potential spill. The mock spill emphasizes the need to avoid situations that are a potential danger to human health and safety.

As a significant portion of yearly spills in Nunavut involve petroleum products, emphasis is placed on “diesel” as this is the product that will be transferred at Itivia.

The mock spill attempts to capture the scenarios likely to be encountered by front line staff; due to COVID-19 our team needed to conduct more of a table top exercise as we were not able to include Rankin inlet fire department, Government of Nunavut or CIRNAC.

REVIEW OF EMERGENCY RESPONSE EQUIPMENT

14:00 The Environment Department reviewed the contents of the sea cans with Intertek and it was found that we were missing our drive pin anchors and slater anchors

14:18 Due to covid-19; only Agnico staff and Intertek were present; sign off sheet provided by Agnico

14:25 The Environmental technician explained all the equipment available in the sea cans. The following items were reviewed with attendees:

- Floating Hydrocarbon Booms
- Hydrocarbon Rolls
- Hydrocarbon Pads
- Lined Quatrex Bags
- Empty 205 L TDG drums
- Spill Trays
- Personal Protective Equipment
- Oil Skimmer
- Containment Booms
- Hand Tools
- Trophy boat/ 140hp engine and location of keys

15:00 Intertek proposed the sea cans to be turned towards the shore, this would ensure a fast response if needed. Agnico Eagle will leave the sea cans open during the fuel offloading and will evaluate alternate locations for the sea cans.

15:20 The Environmental technician asked for Intertek and ship personnel if they have radios programed with Meliadine channels similar to 2019. This will ensure rapid communication when needed. This action item has been communicated to the Energy and Infrastructure Department (E&I). E&I will supply a radio to Intertek but not to the boat, as Intertek and the boat will have their own internal radio communication.

15:37 Intertek suggested to move the marine boom sea-can closer to where the spud barge rather than the shore; shore line has large rocks covered in algae which could pose a health and safety risk (slippery rocks)

15:55 Intertek inquired if a small diesel pump could be purchased as an oil skimmer would not be efficient on days where weather had high winds. Agnico Eagle will evaluate purchasing a pump with the proper hoses (pump must be useable in saline water).

MOCK DRILL VERBAL SCENARIO

INTRODUCTION

On Wednesday July 10th 2020 at 16:15 the transfer from the fuel barge to Itivia has been completed. The ship has decided to blow/purge the line of diesel and go back to the mother ship for another load of fuel. When air is initially put into the line the cam-lock at the Itivia transfer failed almost immediately. At the time of the incident it is unclear if the line has failed or the cam-lock.

It is estimated that 2 lines contain about 1500L. One line is still functional so it is estimated that 750L are released from the system. The majority of the diesel sprays away from the containment but 250L is contained in the 400L concrete containment structure.

RESPONSE

16:15 Spill occurs when ship decides to purge the line of diesel and go back to mother ship; The cam lock was not locked on properly causing cam lock area to spray fuel; 250L is contained inside

the 400L concrete secondary containment and roughly 500L slowly migrating towards Melvin Bay. Intertek is currently at the connection point.

16:17 Intertek personnel called the ship's captain and requested an emergency stop of fuel transfer. Intertek called "CODE 1" to Rankin Inlet dispatch and requested environmental personnel to contact ERT on the radio for assistance. ERT indicated that it would be a minimum of 1 hour to mobilize the Meliadine ERT to Melvin Bay. Due to the COVID-19 regulations; support from the community was not called.

16:20 Intertek reached out to warehouse staff in area and asked for support; Intertek stated they would split into teams- Team A would roll spill absorbent rags along the shore line while team B attempts to dig a small trench to help prevent fuel entering the bay.

16:26 Intertek stated due to coarse rock/hard surface area that trenching would not likely be possible and asked if the 980 loader could drive closer to shore; tire tracks would potentially create a trench and collect remaining runoff of fuel.

16:30 Intertek informed that they would bring two empty drums closer to the concrete secondary; one for free liquid and one for all the rags used.

16:30 Verbal scenario was concluded, it was determined all group members had a sufficient understanding of the roles responsibilities of all spill responders.

16:33 Randy Schwandt reviewed the environmental ship to shore procedure with the group along with emergency contact list.

ACTIONS ITEMS

- Sea cans to be moved closer to potential spill origins and turned towards the shore. This is to be evaluated by Agnico Eagle; the best location for sea cans will be determined.

- Radios to be programmed with Meliadine channels for Intertek and ship. It was decided that only Intertek needs a radio as Intertek communicates to the boat on different channels. E&I to supply radio to Intertek.
- 2021 evaluate bringing a contractor similar to previous years to run a mock drill/spill response course
- As an alternative to the marine skimmer; we could look into purchasing an explosive proof pump which uses air to operate.
- Marine Boom Sea can to be moved closer to shore or docking area if possible this will allow better access for the marine booms to be attached to a boat and pulled into the Melvin Bay. This will be evaluated by Agnico Eagle.
- Have an as-built plan of Itivia area available. This will be evaluated by Agnico Eagle.
- Respond to Intertek questions;
 - How is the maximum capacity of a tank monitored during fuel transfer?
 - Who is going to manipulate the valves? Intertek will manipulate the valves according to their contract.
 - If trophy boat is needed; who will operate boat? An Agnico employee with a valid pleasure craft license will operate the boat.
 - Who will contact heavy equipment operators for assistance? An Agnico employee in the area can support you in communication with heavy equipment operators.
 - Will the OPEP always be inside the warehouse office at Itivia? Yes.
 - Does a pre-discharge checklist need to be completed prior to each load? Yes, pre-discharge check list must be completed and signed prior to each offload of fuel; these documents must be given to your Agnico point of contact or an environmental staff member.
 - Will the Environment Department be supporting Intertek with pre-discharge check list? The Environment Department will review the inventory and the initial pre-charge check list; Intertek will then complete forms solely on their own.

8.3 Contacts

Internal contact information is contained in Table 5 for all Agnico personnel involved in spill recovery. Table 6 contains contact information for contractor contacts, which can be called for assistance with spill recovery. Table 7 is a list of government officials and external contacts to notify and provide subsequent reporting.

Table 5 - Agnico Contacts

Title	Name	Telephone No.
Sr. Vice President, Sustainability	Carol Plummer	416.644.2056 Cell: 819.354.9877
Vice President of Environment and Critical Infrastructure Development	Michel Julien	416-947-1212 ext. 3738 Cell: 514.244.5876
Corporate director, Communications & Public Affairs	Dale Coffin	416.847.8669 Cell: 647.274.4154
Director Shared Services Nunavut Group	Jason Allaire	819.759.3555 ext. 4608004 Cell: 819.355.2608
Meliadine General Mine Manager	Frédéric Mercier-Langevin	819-759-3555 ext 4608058 Cell: 819.354.6676
H&S Acting Superintendent	Guillaume Bigue	819.759.3555 ext 4603074 Cell 514.805.7338
H&S General Supervisor	Nathalie Ledoux Charles-Andre Langevin	819.759.3555 Ext 4603968 819.759.3555 Ext 4603073 Cell: 819-239-8287
Emergency Measure Counsellor	Dave Loder Darren Wilcox	819.759.3555 ext.4603113
Environmental Superintendent	Jessica Huza	819.759.3555 ext.4608190 Cell: 819.856.5097
Environmental General Supervisor	Terry Ternes	819.759.3555 ext. 4603212 Cell: 819.860.4515
SR. Environmental Coordinator	Sean Arruda Daniel Gorton	819.759.3555 ext.4603996

Photo documentation



Photo 1 and 2: Complete inventory of spill response equipment



Photo 3: Teaching Intertek how to properly connect marine booms together and best route for deployment



Photo 4: Reviewing the ship to shore procedure ensuring secondary containments are placed under each connection joint.