

Appendix 17: 2021 Mock Scenario Spill Report



AGNICO EAGLE

Mock Spill Itivia 2021



Agnico Eagle Mines Limited

Meliadine Gold Mine

2021/09/26

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Reviewed by: Sara Savoie

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 Rankin inlet fire department, Government of Nunavut or CIRNAC were not able to physically attend the mock spill exercise.

REVIEW OF THE EMERGENCY RESPONSE EQUIPMENT

16:00 The Environment Department reviewed the contents of the sea cans with Intertek personnel.

16:30 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.

16:40 Due to Covid-19 restrictions; only Agnico Eagle staff and Intertek were present; sign off sheet were provided by Agnico Eagle.

16:50 Intertek proposed that new labels are put on emergency response sea-cans for better identification. Intertek also proposed that all emergency spill response equipment be moved to one specific area.

16:53 Environmental tech contacted Energy and Infrastructure (E&I) water management team to pump the cement secondary prior to the fuel transfer occurring (the secondary containment was full due to the rain fall from the previous day)

16:55 Agnico Eagle Emergency Response Team (ERT) captain recommend that the cement secondary be lifted and put on even ground.

16:68- ERT inquired if a trench could be constructed so in the event of a spill; contaminated material could be collected in the trench and pumped to a drum.

MOCK DRILL SCENARIO

DESCRIPTION OF THE FICTIVE SPILL

On Sunday September 26th, 2021, at 17:00 the transfer from the fuel barge to Itivia is being completed. Diesel fuel is being transferred through the fuel line when a collision between a fuel truck and fuel line occurs and results in the release of diesel fuel from the fuel line. The fuel is flowing across the tundra toward Melvin Bay. The release area is 20 m wide by 50 m long and increasing.

It is estimated that the line contains about 3500L of diesel.

RESPONSE

17:00 Intertek personnel calls the ship's captain and requested an emergency stop of fuel transfer. Intertek calls "CODE 1" to Rankin Inlet dispatch and requested environmental personnel to contact ERT on the radio for assistance. ERT indicates 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 is not called.

17:05 Intertek reaches out to warehouse staff in area and asks for support; the warehouse team arrives with a pick-up truck and inquires what they can do for support; Intertek asks for the warehouse to drive to the emergency response sea-cans to collect absorbent booms and penguin axes.

17:20 ERT and Environment Department arrive to the scene (ERT would likely take 1 to 1.5 hours to arrive).

17:22 ERT starts using the penguin axes and attempts making a trench but states that due to coarse rock/hard surface area that trenching would not likely be possible and asks if heavy equipment is available; Environment Technician informs ERT that a loader is on his way from the Itivia laydown.

17:30 Intertek and ERT deploy absorbent booms along the shore and use rags in small pockets of water (these would fill with diesel in a real scenario) from the Itivia laydown.

17:35 Steel drums are brought to the scene of the spill but are not used; in a real scenario ERT/Intertek inform the Environment Technician that they would use the drum to dispose the rags if needed.

17:40 Fuel pump starts after several attempts; this pump would be used to collect free liquid on the surface; if a trench or sump was made- the pump could be placed there.

17:50 Practical scenario is concluded; overall the participants' actions and response to the spill are deemed satisfactory and it is determined all group members have a sufficient understanding of the role's responsibilities of all spill responders.

17:55 Environmental Technician reviews the environmental ship to shore procedure with the group along with emergency contact list.

ACTIONS ITEMS

- Sea cans to be moved closer to one area; having equipment in multiple areas causes a delay for a spill response.
- 2022 evaluate bringing a contractor like previously done in 2017/2018 to run a mock drill/spill response course.
- As an alternative to the marine skimmer, purchase a fuel transfer pump and have it stationed at Itivia during the fuel transfer season (inquiry with supervisor).
- Marine Boom Sea can 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.

RESPOND TO INTERTEK QUESTIONS.

- 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/OPPP always be inside the warehouse office at Itivia?
 - Yes.
- Does a pre-discharge checklist need to be completed prior to each load?
 - Yes

RESPOND TO ERT QUESTIONS.

- During a non-Covid-19 period, would government agencies or the local municipality give AEM support?
 - Yes, Mark Wyatt (fire chief) has informed the team several that his team would give us support; as well as CIRNAC regulators and GN conservation officers.
- Is it possible to put a liner underneath the entirety of the fuel line?
 - As construction has already been completed; it could be very costly; we currently have secondary containment placed under each connection joint.
- Do scenarios change every year? Is there a possibility that a mock spill response on water could occur?
 - Yes, the mock spill could occur on land or water.
- Is it possible to extend the road where the saltwater discharge line currently is to store the sea-can containing the large marine boom?
 - I am not sure about this as we would likely be withing 31m of the shore; Randy Schwandt to Inquiry with Sean Arruda if this is possible.

GENERAL COMMENTS/THOUGHTS

- Anchors need to be ordered (some anchors have disappeared over the summer during the fuel transfer season).
- Inquire if Mark Wyatt, GN and CIRNAC can observe next year from a safe distance and provide feedback.
- Lock emergency response sea-cans when fuel transfer season is complete to prevent equipment from disappearing.



AGNICO EAGLE
MELIADINE

Safety Meeting Topic:

Meck Spill

Name (Print)

Signature

Randy Schwandt

Chris Flumerfelt

GERALD ZARESKI

Dana Veigeanu

MARCO FRANCOEUR

Benoit Quinn

KEVIN LAUNDE

TEIK GAUTHIER

David Lussier

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Photo documentation



Photo 1: Mock spill scenario drill location (broken fuel pipe)



Photo 2&3: Teaching Intertek how to properly connect marine booms together and best route for deployment



Photo 4: Deploying absorbent booms and sediment control logs



Photo 5: ERT attempting to build trench (surrounding terrain is bedrock)