Follow Up Report: #2022701
March 5, 2022,
10L Diesel Fuel on Water Body A8 – Drill Rig#10

The following information refers to a spill reported by Agnico Eagle Mines Ltd. on March 5, 2022, and is being provided in accordance with:

- the Nunavut Water Board License 2BB-MEL1424 Water License, part H, item 4c
- the Fisheries Act subsection 38(7)

Description of Incident:

On March 5th, at approximately 9:00, Environment Technicians were conducting an inspection of the surface drill areas, operated by AEM's contractor Orbit Garant. During the inspection, a small amount of diesel fuel was observed by a 4000L overpack. The overpack released 10 L of diesel fuel on the surface of the lake ice. The coordinates of the spill are: 63° 0' 33" N, 92°12' 9"W, on the Water body A8, which is a lake. After further investigation it was determined that the spill occurred due to a combination of fuel expansion in the overpack due to drastic temperature changes and movement of the overpack itself. When the overpack was being moved, fuel was released out of the breather and contaminated snow located on the overpack. The snow then fell on the surface of the lake ice.

Figure 1: **Incident Location- A8 Lake**

Spill Response & Cleanup:

Environment technicians notified the Orbit Garant supervisor and the overpack was moved forward to allow a loader to remove contaminated material. The cleanup was then finalized following the movement of the overpack. The Environment Department was present during this time to ensure environmental compliance with clean up methods as per section 6.4 of Spill Contingency Plan (spills on snow and ice).

The contaminated ice and snow were disposed at the Snow Cell where it will be stored until snowmelt, at which point the contaminated water will be transferred for treatment at the oil-water separator, as per the Water Management Plan.

A composite sample was collected on the ice surface of Lake A8 on March 9th in the incident area. The ice sample was sent to an accredited laboratory for analysis of the following parameters: BTEX, F1-F4 Hydrocarbons, Oil & Grease, total metals, Conductivity, pH, and Total Suspended Solids (TSS).

Results showed concentrations below detection limit for BTEX and F1-F4 Hydrocarbons and total Oil & Grease. For reference, the maximum concentration of any grab sample applicable to Effluent discharge in Meliadine Lake at monitoring station MEL-7 is of 5 mg/L for Oil & Grease and no visible sheen, as per Water Licence 2BB-MEL1424 Part D Item 11. The certificate of analysis is attached and identified as Appendix A.

Impact Assessment:

Although the spill occurred on the lake ice, it is expected that minimal impacts occurred to the water body itself because all the contaminated ice was removed, as demonstrated by the quality of the post clean-up surface sample and because the contaminated material was not near a drill hole.

Corrective Measures:

As an immediate corrective action, overpacks will be given extra headspace to allow for expansion to occur. This has been communicated with fuel truck operators and supervisors have been asked to put a note on employee's health and safety work cards as a reminder.