

November 16, 2007

Mr. Jackson Lindell Lands Use Inspector Kivalliq Inuit Association P.O. Box 340 Rankin Inlet, Nunavut X0B 0G0

Email: jlindell@kivalliqinuit.ca

## Re: November 11<sup>th</sup> Diesel Fuel Spill on Third Portage Lake - Cleanup Update

Dear Mr. Lindell:

I am writing in response to the letter received by AEM on November 14th from Kimberley Gilson at the KIA concerning the spill of approximately 400 liters of diesel fuel on the frozen surface of Third Portage Lake that occurred late on November 11<sup>th</sup>. The spill occurred while two 45 gallon drums of fuel were being transported by snow mobile and sled from the end of the Meadowbank All Weather Private Access Road (at ~ km 86) to the Meadowbank camp. When the snowmobile arrived at the camp, the operators found that the caps on the two drums had not been properly sealed and the contents of the drums had been spilled along their travel route. The two drums were empty consequently we know that the ~ 400 litres of diesel fuel contained in these two drums had leaked primarily on to the frozen surface of Third Portage Lake along an almost 7 km trail from the south end of the middle of the lake (see figure 1) to the camp. The lake was entirely frozen. Consequently, the diesel did not mix with the water in the lake (see photo 1) but remained as a frozen trail across the lake. The enclosed picture shows a darker area that was visible all along the trail used for hauling this fuel and is relatively easy to visually follow. Our site crew has back tracked the fuel trail from the Meadowbank site. It is visible on Third Portage Lake but not on the tundra or smaller ponds that were crossed between the end of the road (Km 86) and Third Portage Lake. Consequently we believe the spill was restricted to the 6,900 meter trail as shown in Figure 1.

Photo 1: Fuel spill visible on the ice



## Remediation plan

After considering alternatives AEM personnel have decided that the only viable clean up plan is to use a scrapper to scrape off both the ice and the fuel along this 6,900 track along Third Portage Lake. We will pick up the scrapped up mix of ice and fuel using shovels and place this mix in 45 gallon drums. We will then transport the mix of ice and fuel recovered and transport it to the Meadowbank site. We will place the drums inside our HDPE lined waste oil storage area and hold until next summer. To date we have scrapped up the fuel trail from ~ 3,500 meters of the track and have recovered approximately 150 liters of ice and fuel. We are towing a metal scrapper behind a snowmobile at low speeds scrapping up both snow fuel and ice which is then periodically transferred into drums. We had to suspend clean up activity today (Friday November 16<sup>th</sup>) because of unfavourable weather conditions on the lake but will resume as soon as the weather allows. The clean up activity began on November 15<sup>th</sup> once we had figured out a game plan and we estimate (weather permitting) that by the end of this weekend (November 18<sup>th</sup>) we will have as much of the spill recovered as practically possible.

We will allow the snow, ice and fuel mix to melt in the drums next summer and will then decant off what fuel we can recover. This recovered fuel will be used at camp for heating purposes. We will then use adsorbent pads placed on top of the water in the drums to recover as much remaining fuel as possible. These adsorbent pads will be destroyed in the camp incinerator. The remaining water will then be pumped through an oil water separator with the "clean" water placed into new drums for water quality sampling. Once the water quality results have been returned and the water verified as being "clean" then we will release the water slowly onto the tundra in an area where there is a long pathway towards any natural water body to allow the vegetation to further remediate the water.

## **Prevention plan**

To prevent similar occurrences the following procedures has been implemented effective immediately:

- 1. The crew who are transporting the fuel by snowmobile will be required to check all drum caps to ensure that they are tightly secured even if they were not the people who filled the drums. They will also be responsible for conducting a second inspection of the drums once they are loaded onto the sled. They are to check condition of the drums, condition of the caps and only start out if they are satisfied that the drums are secure.
- 2. The crews filling the drums are responsible for checking the condition of the drums and for ensuring that they are properly capped and secured before leaving them for transport.
- 3. The crew who are transporting the fuel by snowmobile will always travel with a barrel wrench so that they can ensure that the drums are fully sealed before loading onto the sleds and at all times during transit.

I have attached a series of photographs that show the condition of the spill along the 6,900 track on Third Portage Lake. Our crews are photographing the clean up activities and I will forward these to you as they become available.

Please feel free to call on me for any further information or clarification. I will keep you advised as to our ongoing clean up activity as it unfolds.

Regards,

Larry Connell Regional Manager: Environment, Social and Government Affairs Agnico-Eagle Mines Limited

cc: Martin Bergeron, AEM
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NWB Water Board
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