Kiggavik Project

7 Day Spill Report

June 18, 2015

June 2015

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF PHOTOGRAPHS

1 INTRODUCTION

On June 17, 2015 a spill was detected on the AREVA Resources Canada Inc. Kiggavik Lease, which is located 80 km west of the community of Baker Lake, Nunavut. The detected spill involved the transport of potentially contaminated drill return water into a nearby water body. The unauthorized discharge of the drill return water was located during a daily rig inspection by the SHEQ Supervisor and the Project Geologist in the 85 West area.

The incident was reported to the NT-NU Spill Report Line at approximately 8:30 pm on June 17, 2015. This 7 day report is required in accordance with Nunavut Water Board (NWB) License No. 2BE-KIG1318 and AREVA's Spill Contingency Plan. Reporting is completed in accordance with the NWB License Part H item five and the Aboriginal Affairs and Northern Development Canada (AANDC) Land Use Permit N2014C001 item 32. This report was distributed to AANDC, NWB, the Kivalliq Inuit Association (KIA), and Environment Canada (EC) within 7 days of the incident. The following sections describe the incident and the corrective and preventative measures implemented.

2 INCIDENT SUMMARY

During a routine drill inspection conducted by the SHEQ Supervisor and Project Geologist, a spill was detected in a waterbody near Drill 1 at approximately 4:30 pm on June 17, 2015. Potentially contaminated drill return water and cuttings from underneath the drill were not properly contained and were washed downhill away from the drill. The excess clean water line further facilitated the downhill migration of the drill cuttings into a water body 120 m to the west. The spill site is located at 64°25'18" N, 97°48'17" W (14W 557576 7144542).

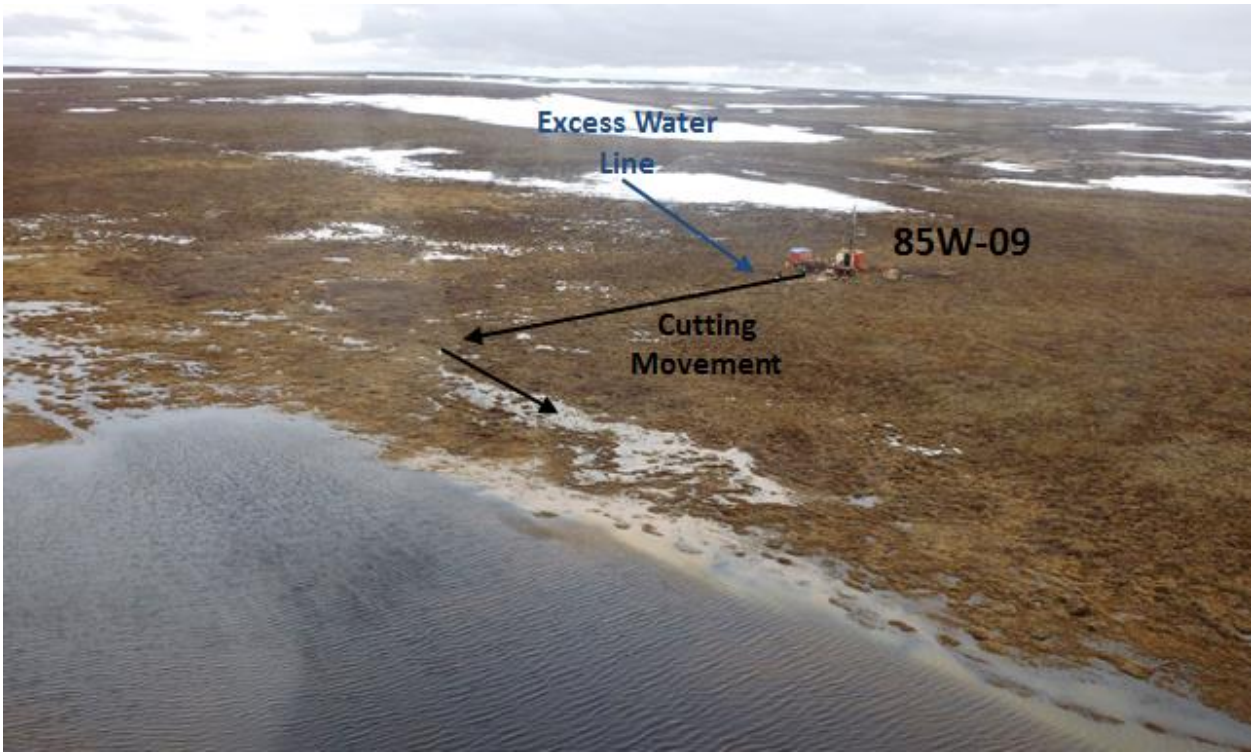


Figure 1. Discharge of Potentially Contaminated Return Water (June 17, 2015)

3 CORRECTIVE AND PREVENTATIVE MEASURES

Following the identification of the spill, various corrective and preventative measure were implemented at the spill site. The excess clean water discharge line was immediatey extended away from the site in order to reduce the amount of water flowing through the affected area. Socks filled with wood chips were placed at a bottleneck of the spill to reduce the transport of sediments towards the small water body. A sump pump was placed below the drill to intercept all new water and drill cuttings. Another sump pump was used to clean up affected areas around the drill and was then placed in the containment area to remove excess water and drill cuttings. Both sump pumps were set up to discharge water into the contained discharge area 200 m East of the drill and 320 m away from the small lake.

Figure 2. Installation of Filter Socks and Sump Pump on June 17, 2015

Following the installation of the filter socks, a water sample from the small lake was obtained and forwarded to SRC for analysis. Results will be included in the 30 day report. A radiation detection device was used to scan the spill area, and indicated no radioactive contamination was present.

Aerial surveys of the area were conducted on June 18 and 19 which illustrate substantial improvement to the affected water body.

Figure 3. Aerial Survey of Spill Area on June 18, 2015

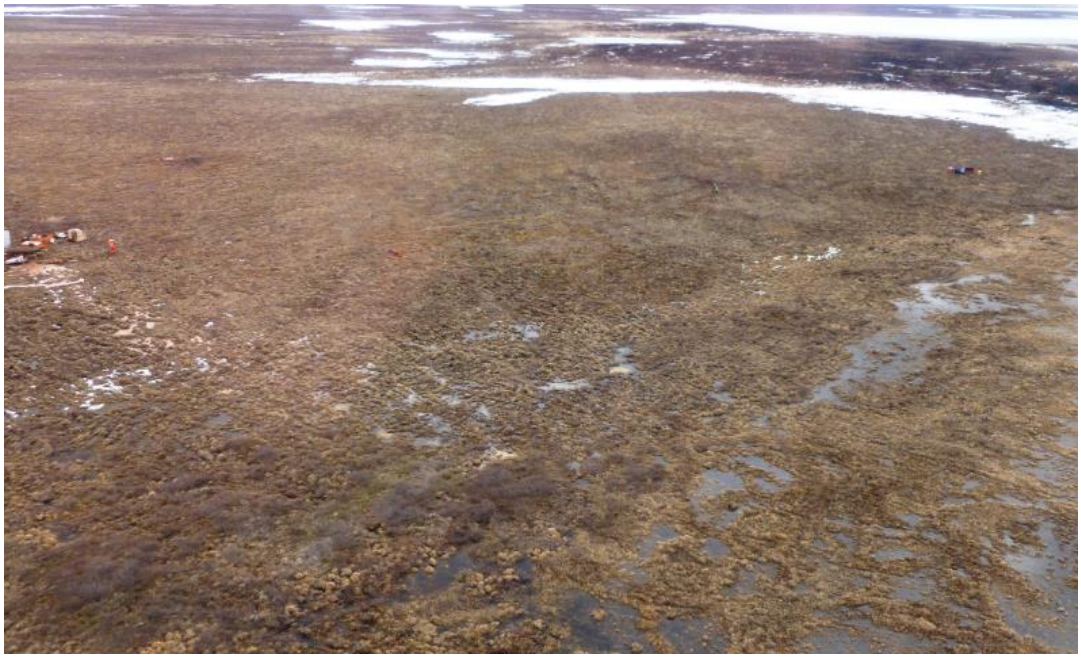
Figure 4. Aerial Survey of Spill Area on June 19, 2015

4 CONCLUSION

On June 17, 2015 a spill involving potentially contaminated drill return water occured on the Kiggvik lease in the 85W area. Return water and cuttings entered a water body after being washed down the hill due to the placement of the excess clean water line and presence of runoff water in the area. This facilitated the cuttings to migrate down the hill and enter the small water body. The excess water line was relocated away from the spill site to reduce water flow through the area. A sock berm was constructed to mitigate further impact on the small water body. A sump pump was placed at the drill hole to collect return water and cuttings. A second sump pump was used to clean up affected areas and placed in front of the sock berm to control excess water buildup. Both sumps pumped water to the dischare area which is contained and located away from any water bodies present in the area. Future drill discharge sites will utilize a sump pump near the drill hole during all operations where potentially contaminated drill return water is a risk.

5 PHOTOGRAPHS

Photograph 1. Discharge of Potentially Contaminated Drill Return Water (June 17, 2015)



Photograph 2. Aerial Survey on June 18, 2015

Photograph 3. Drill Return Water Discharge to Small Water Body (June 17, 2015)

Photograph 4. Containing the Spill on June 17, 2015