



PROJECT PROFILE SPILL RESPONSE, REMEDIATION, AND RESTORATION

Undisclosed Location | February - October 2018

Incident

Sage Environmental Consulting Ltd. was retained to provide environmental consulting services following a 4000-litre diesel spill in a remote mountainous area in BC, with regulatory involvement by the Provincial and Federal Governments. At the time of the spill the soil surface at the Site was covered in approximately 4m of snow and was experiencing ongoing accumulation. The diesel flowed through preferential pathways in previously disturbed soils resulting in impacts being observed up to 2m below ground surface. The diesel flowed down a drainage ditch towards a creek that connects to fish bearing waters further downstream.

Response

Sage coordinated and conducted an initial site visit with the client and a spill response contractor to ensure that nearby drinking water sources were secure and collected samples to characterize the spill boundaries. Emergency measures such as underflow weirs were constructed and installed to intercept the diesel in water flowing down the drainage ditch before entering the creek. Regular water quality monitoring was conducted with adaptations to the collections systems made when necessary.

Remediation and Restoration

Remedial excavation of the spill area and impacted ditch were conducted followed by habitat restoration of the ditch. The site was remediated to numerical standards under the BC Contaminated Sites Regulation, using Wildland Standards, with the exception of 2 locations. These locations were secured for over wintering in 2018/2019. A multi-year benthic invertebrate monitoring program was initiated to track the impacts and recovery from the spill on water quality. Under direction of the Provincial and Federal Governments, Sage worked with contaminated sites resources to model contaminant recovery in soil and water and estimate the remaining contaminants in the environment. Restoration of all disturbed areas from the spill response was undertaken and will be monitored for effectiveness under adaptive management principles going forward.



Water Quality



Remote Access



Environmental Sampling



Remediation and
Restoration