

**2021 Atlantic Reclamation Conference (ARC2021)
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Presentation Title: Assessment, Remediation, Capping and Closure of a Former Construction & Debris Landfill Site, Harrietsfield Nova Scotia

Authors: Rob McCullough (rob.mccullough@aecom.com) and Rory McNeil (rory.mcneil@aecom.com) AECOM Canada Ltd.

Background/Objectives: The objective of this presentation is to discuss the project AECOM is completing with NS Lands Inc. to remediate a long-standing public concern with respect to the development of and the impact from a construction and debris landfill site located adjacent to a residential location near Halifax, Nova Scotia. The purpose of the study was to assess the current environmental condition both onsite and offsite in part resulting from the existence of a former Construction & Debris Landfill Site located in Harrietsfield, Nova Scotia. The study includes the review of several years of monitoring data and site works, a significant field assessment program to examine waste locations, types and characteristics as well as to study and understand site geological, geochemical and hydrogeological conditions for the purpose of providing to the crown a recommendation for an effective site closure strategy within the Nova Scotia Contaminated Site regulations pursuant to the Nova Scotia Environment Act. This area has had a significant history of poor-quality groundwater prior to any development at the site although it is likely the site has contributed to the problem.

Following the closure approach recommendation and selection, project work included leachate removal and treatment within the existing cell and the design and tender specification development for the site remediation and closure. Subsequent site remediation involving the excavation, collection and sorting of waste onsite for diversion, the proper disposal both on site in the cell and off site at approved waste facilities, the site reclamation, regrading, re-vegetation, drainage control, leachate management and capping of the landfill cell with an impermeable synthetic turf.