



## International Canada

**Client**  
City of Hamilton

**Location**  
Hamilton, Ontario, Canada

## Wellington Development Block Hamilton Health Sciences

Hamilton Health Sciences (HHS) retained CH2M HILL to conduct detailed Phase I and Phase II ESAs, a designated substance and building waste survey, risk assessment, and a remedial action plan on the Wellington Development Block located immediately west of Hamilton General Hospital, in support of plans for the potential acquisition of the site from the City of Hamilton. CH2M HILL also prepared all demolition and remediation specifications for this project and oversaw the abatement, demolition, remediation, and restoration work. CH2M HILL also assisted in redevelopment options for the various parcels of land that make up the larger property.

Phase I activities included a site history review, site inspections, interviews, an evaluation of information, and reporting. The Phase I ESA concluded that the Block had the potential for soil and groundwater contamination, with 19 potential areas of concern noted, including metals, PCBs, asbestos-containing materials, gasoline, diesel, and USTs.

The goal of the Building Waste and Designated Substance Survey was to identify wastes and substances that would present health and safety or environmental concerns and the associated management and abatement requirements for these substances.

The Phase II environmental site assessment characterized the Block's geology and hydrogeology, to support a remedial action plan and associated cost estimate. It involved the collection of chemical data associated with subsurface soil and groundwater, and assessed the potential impacts to the subsurface based on MOE criteria. Tasks included the review and interpretation of previous environmental reports, site reconnaissance and the development of a borehole drilling program, and the development of a soil and groundwater analytical program to provide additional characterization of the Block.

A site-specific risk assessment (SSRA) feasibility study was performed as part of the Phase II environmental site assessment to provide a preliminary determination if contaminants at the Block could be managed in place.

Based on the screening-level SSRA, it was demonstrated that there was no need for supplemental risk management measures beyond isolation of contaminants of concern, groundwater monitoring, and maintenance of barriers, as required. It was determined that the application of an SSRA approach as part of the remedial plan was likely to provide a successful, cost-effective approach to the management of soil and groundwater impacts identified at the site. A comprehensive SSRA and a Record of Site Condition were completed prior to property transfer in 2005.