



Project Title: Environmental Site Assessment and Rehabilitation, Fredericton, NB

Client: Sobeys

Project Description:

GEMTEC Limited conducted a Phase I/II Environmental Site Assessment of the former CP Rail Property (6-8 ha) in downtown Fredericton, NB. The property was contaminated with petroleum hydrocarbons, polyaromatic hydrocarbons (PAHs) and total metals. Both soil and groundwater impacts were found. Due to the high level of contamination a Risk Assessment was completed and site-specific target levels were developed. The approach used in this project was similar to the approach used by GEMTEC Limited to rehabilitate the Canada Lands Property in Moncton, which was awarded several awards including the 2002 Urban Institute "Brownie" Award and the 2003 USEPA "Phoenix Award".

Following the Risk Assessment, the remediation phase of the property began with the removal of 500 tonnes of contaminated soil and the encapsulation of 2000 tonnes of metal and PAHs impacted soil. The encapsulation included: 1) burial under parking areas (granulars and asphalt), and 2) disposal within a landscaped berm, covered with 0.3 metres of topsoil. An additional concern during the remediation phase was the fact that the property was located within the City of Fredericton's designated Wellfield Protected Area. The Wellfield Protected Area is an area surrounding a municipality's drinking water source that is protected under provincial legislation. Additional measured were taken to ensure that the recharge zone for the City's drinking water source was not affected. Site closure was obtained in 2003

and the site is currently used as a Sobeys Grocery Store.

The work involved the coordination of a number of disciplines including statisticians, toxicologists, biologists, and hydrogeologists. This project also required liaisons with citizen groups, municipal and provincial levels of government.