Background

CLIENT: National Retailer  
DURATION: Ongoing, 3 Years  
LOCATION: Barrie Ontario  
PROJECT VALUE: $255,000 CDN  

At an active gas bar on a high-profile, busy commercial site in a populated urban area, petroleum hydrocarbon impacts, in the form of BTEX (Benzene, Toluene, Ethylbenzene, and Xylenes) and PHC (Petroleum Hydrocarbons) F1 & F2 compounds were discovered in the unsaturated zone beneath and near underground storage tanks. The busy location, combined with the thick vadose zone, created a challenging remediation environment.

Approach

The operator, a large national retailer, contracted IRSL directly to complete initial pilot testing and recommend a remedial solution. IRSL then earned the project based on their superior design, which incorporated numerical modeling, and a detailed analysis of the distribution of the compounds of concern within the vadose zone of the source area.

SOIL VAPOUR EXTRACTION

To control and reduce the mass of BTEX and PHC F1 & F2 impacts within the vadose zone, IRSL designed, implemented, maintained, and continuously optimized, a soil vapour extraction system. The extracted vapours were then destroyed using an electric Catalytic Oxidizer, which was monitored on a continual basis to ensure no fugitive emissions were released.
InSitu Remediation Services Ltd. (IRSL) is one of Canada’s most experienced remediation companies. Our team has designed, implemented, and optimized, soil and groundwater remediation programs in diverse geological environments in North, Central, and South America, Asia, Europe, and the Middle East.

We confidently implement innovative solutions, based on sound knowledge, using seasoned field staff. Our pragmatic, flexible approach reduces effort, cost to our clients, and environmental risk.