



CONSTRUCTION  
ENERGY  
MAINTENANCE



December 22, 2015

Greetings,

Sears Canada Inc. (Sears) and Clifton Associates Ltd. (Clifton) are pleased to provide this quarterly update on the environmental assessment and remediation activities that are ongoing in the community of Hounsfield Heights – Briar Hill (the community). This work is related to soil and groundwater contamination which originated from an accidental leak of petroleum at the former gas station site on the Sears North Hill mall site. The petroleum storage tanks were removed from the gas station in 1995. Petroleum hydrocarbons and constituents associated with gas station operations migrated under the community.

As discussed in our previous updates, Sears, with the help of its consultant Clifton, has conducted additional detailed environmental site investigation in 2014 and 2015 in order to better understand the subsurface geology and where the contamination from the former gas station is located in the soil and groundwater. This included sampling from numerous locations on the Sears North Hill mall site and in the community. A report on this investigation will be submitted to Alberta Environment and Parks by January 2016 and will be made available to interested residents through the Hounsfield Heights Gas Plume Committee web site.

Information from the detailed environmental site investigation is being used for a number of purposes including:

1. reassessing the risks to human health and the environment;
2. identifying areas that need further investigation to fill in any data gaps; and,
3. developing and implementing additional remedial approaches to supplement the existing remediation system located to the north of the community in Lions Park.

A draft human health and ecological risk assessment was completed by Intrinsik Environmental Sciences Inc. and was submitted in December 2015 to Alberta Environment and Parks and Alberta Health Services for regulatory review. The review will take time because of the complexity, and once the risk assessment report is finalized it will be made available to the public through the Hounsfield Heights Gas Plume Committee web site and the Environmental Site Assessment Repository (ESAR) government web site.

Based on data collected to date, the risk assessment indicates that risks to human health are negligible. While the risk is considered fairly low over much of the community, there are some data gaps to fill near the southern edge of the plume; this area in particular will be targeted for work in 2016. Further data will be collected in 2016 and in subsequent years to check the conclusions to date, and accordingly any adjustments needed to the management plan will be made.

A key component to help verify the risk assessment is vapour sampling. Some of the contaminants in the soil and groundwater can be released as vapours, which can then migrate into buildings if the conditions are right. Limited vapour sampling occurred in the 2014/2015 investigation work, and a community wide soil-vapour monitoring program is planned to start 2016.

Clifton was recently in the community completing a door to door survey requesting that residents voluntarily participate in planned and future monitoring and remedial programs. This included asking for access to properties, and asking about the construction of homes. For those who have not yet confirmed their participation and would like to do so, please contact Stephen d'Abadie at Clifton using the contact information below.

In the coming year, you will see Clifton in the community conducting additional investigation drilling in some areas where more information needs to be gathered in addition to the ongoing, groundwater monitoring program.

Sears and Clifton are working on an expanded remediation plan for implementation in 2016, which will consist of the continued operation of the Dual Phase Vapor Extraction system located in Lion's Park, as well as other options which will be submitted to Alberta Environment and Parks. One of the proposed options is to inject materials into the subsurface which are designed to clean the contaminants as the groundwater passes through them. This should also provide a barrier to help prevent further hydrocarbon plume expansion in the community. Monitoring will be used to check the effectiveness of remedial actions.

Sears and Clifton appreciate the opportunity to provide this information to the residents of the Hounsfeld Heights – Briar Hill community and look forward to being able to issue our next progress report in the coming months. In the interim, if you have any questions or concerns, please feel free to contact one of the Sears or Clifton representatives listed below.

Yours sincerely,

**Greg Paliouras**, Divisional Vice-President,  
Construction, Energy and Maintenance Sears Canada Inc.  
700 - 290 Yonge Street, Toronto, Ontario. M5B 2B6 T (416) 941 4037  
[Greg.Paliouras@Sears.ca](mailto:Greg.Paliouras@Sears.ca)

Clifton Contact: **Stephen d'Abadie**, MEng  
Environmental Engineer/Regional Manager Clifton Associates  
2222 – 30th Avenue NE, Calgary, Alberta. T2E 7K9 T (403) 263 2556 Ext. 4139  
[Stephen\\_dAbadie@Clifton.ca](mailto:Stephen_dAbadie@Clifton.ca)