

Attachment A — Area Map

ATTACHMENT B

ENVIRONMENTAL MANAGEMENT PLAN

FORMER THORNHILL FURNACE OIL SYSTEM AREA ROYAL ORCHARD BOULEVARD BETWEEN YONGE & BAY STREET, CITY OF MARKHAM, REGIONAL MUNICIPALITY OF YORK

Background

In April 2010, the City of Markham (the "City") notified the Ministry of the Environment (the "MOE") of fuel oil impacts discovered during 2009 sanitary sewer work. The source of the contamination was attributed by the City to the former Gulf Homes residential heating system supplying approximately 500 homes in the Royal Orchard Boulevard area between Yonge Street and Bayview Avenue. This system was decommissioned by Petro Canada (now Suncor Energy Products Partnership, or "Suncor") in 1987-88 under a plan approved by the Ministry of Consumer and Commercial Relations, the precursor to the TSSA. The decommissioning included the removal of the fuel tanks and draining, depressurizing and capping the underground supply pipeline.

Based on the impacts encountered during the 2009 sanitary sewer work, the City commissioned a supplemental environmental study at the intersection of Colonsay road and Silver Aspen drive in June 2010. This work determined that the historic impacts were localized in the immediate area of the pipeline.

The Ministry of the Environment (MOE), Suncor and the City collected historic information about the extent, operation and decommissioning of the furnace oil system. These records indicate that the system included approximately 8 km of 1" and 2" diameter piping under the sidewalk or in the road allowance to supply furnace oil to more than 500 homes. System leaks were historically noted at joints, dead-ends and low-lying areas. Operational issues and declining demand led to the system decommissioning in the late 1980's. Methane generation had been encountered during the decommissioning and was attributed to the microbial breakdown associated with furnace oil impacted soil. Methane monitoring has been included in the more recent site assessment programs and these results, existing utility backfill and native soil conditions indicate no significant methane risks.

Based on historic records, Suncor developed a soil and groundwater investigation program to assess the former tank area, low-lying areas, or where historic issues were encountered when the pipeline system was in service. This work was completed in spring 2011 and no impacts attributable to the furnace oil system were identified. The City has also been working to compile records and contacted utility providers to confirm that no other impacted areas were found in previous roadwork projects.

To date, there has been no record found of any similar contamination encountered during other construction projects on the former Thornhill furnace oil system area (the 'Subject Lands').

Environmental Management Plan

The MOE, Suncor and the City have worked together to implement a long-term Environmental Management Plan ("EMP") for the Subject Lands.

The Subject Lands are illustrated on the attached figure (see Appendix A) and include the following streets:

Apple Orchard Path	Baythorn Drive	Blue Spruce Lane
Cherry Blossom Lane	Colonsay Road	Iverlochy Boulevard
Kindle Way	Kirk Drive	Knotty Pine Trail
Romfield Circuit	Royal Orchard Boulevard	Shady Lane Crescent
Silver Aspen Drive	Weeping Willow Lane	Wild Cherry Lane

The purpose of the EMP is to describe Suncor and the City's roles and potential contingency plans in the event that future road or utility work discovers new pockets of contamination. This includes measures to ensure construction projects, road work and area utility providers are made aware of the presence of the furnace oil system.

Stages of the EMP

#	Stage	Action Taken	
1.	Communication	The City ensures construction projects, road work and area utility providers made aware of the presence of the furnace oil system.	
		The MOE and the City develop their own internal system to ensure that any report of a new discovery they receive regarding the subject lands are communicated to each other.	
2.	Notification	The City or the MOE ensures forthwith that Suncor is notified of the discovery (see contact information provided on page 4).	
3.	Information Gathering	The City or the MOE provides Suncor with any information it has gathered about the discovery at the time of the notification.	
		Typically, the information that Suncor will be seeking includes:	
		(a) The date and location of the new discovery;	
		(b) The type/scope of work that was underway when the discovery occurred;	
		(c) Whether any laboratory analysis of the discovery has been completed, and if so, the results;	
		(d) Who the contacts for the City will be;	
		(e) Who the on-site contacts will be; and	
		(f) The status of the project undertaken at the time of the discovery (i.e. on hold,	

		progressing, etc.). Suncor reviews the information in a timely manner and gathers any additional information it requires.	
4.	Investigation	Suncor immediately mobilizes its environmental consultant to conduct investigative work using its standard procedure for potentially impacted land. Once the investigative work has been completed, the next steps will depend on the results of such investigations.	
5.	Ongoing Communication	Suncor will keep the City and the MOE updated on its progress on the above steps as the investigation unfolds as appropriate.	

THE CORPORATION OF THE CITY OF MARKHAM

FRANK SCARPITTI, MAYOR

KIMBERLEY KITTERINGHAM, CLERK

DATE:

DATE:

SUNCOR ENERGY PRODUCTS PARTNERSHIP

NAME: BRAD BEAMAN

TITLE: MANAGER, SITE REMEDIATION

DATE:

CONTACTS

City of Markham – Soran Sito, P. Eng.

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Suncor Energy Products Limited – Brad Beaman P.Eng

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The Ministry of the Environment – Andrea Brown, District Engineer

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APPENDIX A — THE SUBJECT LANDS



April 28, 2010

GEOTECHNICAL INVESTIGATION (at the intersection of Colonsay Road and Silver Aspen Drive)

Dear Resident,

While excavating for the installation of a sanitary sewer, contaminated soil was found within the trench (approximately 40 metres in length) at the intersection of Silver Aspen Drive/Colonsay Road. Laboratory tests indicated that the soil was contaminated with petroleum hydrocarbon. The contaminated material within the trench was removed and disposed at an approved dump site as per Ministry of the Environment requirements.

Town carried out extensive investigation and found that the cause of the soil contamination was due to an abandoned fuel oil distribution system owned by Petro Canada (presently Suncor Energy) that distributed furnace oil to the homes in the area. This system was abandoned in late 1980s.

The Town has retained GENIVAR Consultants LP to undertake Environmental Site Assessment (ESA) to delineate the extent of the contamination according to applicable MOE guidelines and regulations. As part of the investigation, boreholes will be drilled within the Town's road allowance and soil and groundwater samples will be taken.

The testing process will commence in the week of May 3, 2010 and pending on the results of the borehole tests and the extent of the contamination (if any), this may take between 2 - 3 months. The Town has informed the Ministry of the Environment regarding this contamination and will work with the Ministry in identifying mitigation strategies. The Town will communicate the results, next steps to the area residents in the near future.

If you have any question, please contact Prathapan Kumar at (905) 477-7000 ext. 2989.

Sincerely, Prathapan Kumar, P.Eng., PMP Acting Manager of Capital Right-of-Way Asset Management Department Tel: (905) 477-7000 ext. 2989

cc: Councillor Valerie Burke, Ward 1 Brenda Librecz - Commissioner, Community & Fire Services Steve Andrews - Director, Asset Management Peter Loukes - Director, Operations Ernie Ting - Manager, Waterworks Diogo Oliveira - Supervisor, Waterworks Paul Ingham - General Manager, Operations Morgan Jones - Manager, Operations John Hoover - Supervisor, Operations Soran Sito - Senior Environmental Engineer Lisa Riegel - Legal Rose Cozis - Town's Contact Centre Muin Husain - Genivar

Encl: Key Map



SANITARY SEWER EXTENSIONS IN THORNHILL AREA Contract No: 144-T-09