



**DRAFT  
REPORT ON  
PHASE ONE ENVIRONMENTAL SITE ASSESSMENT  
2477 QUEENSWAY DRIVE  
BURLINGTON, ONTARIO**

**REPORT NO.: 4328-16-E-SHA-A  
REPORT DATE: MAY 19, 2016**

**PREPARED FOR  
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**Toronto Inspection Ltd**

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## 1. EXECUTIVE SUMMARY

*Toronto Inspection Ltd.* was retained by **1937570 Ontario Inc.** to conduct a Phase One Environmental Site Assessment (Phase One ESA) for the property located at 2477 Queensway Drive in Burlington, Ontario. The Phase One ESA was conducted in accordance to Ontario Regulation 153/04, as amended, Records of Site Condition – Part XV.1 of the Environmental Protection Act, for purposes of filing a Record of Site Condition, due to change in land use, from commercial to institutional use.

Phase One Property information includes

Municipal Address : 2477 Queensway Drive, Burlington, Ontario, L7R 0C9

Site Area : Approximately 3,030m<sup>2</sup>

Current Activity : Offices for a business service provider and a health service provider.

All the other offices have been vacant from a week to six months.

Current Land Use : commercial

Proposed Land Use : institutional

Property Coordinates (centroid) : E 597045 N 4800383

The Site is developed with a two-storey commercial building with a basement (Building A) and a single-storey commercial building (Building B). A parking area which is partially covered with asphalt and gravel is provided at the southern portion of the Site. Landscape areas are provided to the north, east, and west of the building.

A topographic map available online from the website of Natural Resources of Canada – Toporama indicated that the Site is at an average geodetic elevation of 105m above mean sea level. The contours indicated a down-gradient orientation in the southeasterly direction towards Lake Ontario, located at a distance of approximately 2.8 km from the site boundary. Groundwater flow is anticipated to be in a southeasterly direction.

At the time of this Phase One ESA, Building A was occupied by a business service provider (bluepoint Valuations) as well as a health service provider (Phenom Naturopaths). All the other offices have been vacant from a week to six months. Building B was unoccupied and was formerly occupied by a software company ('Moveware'). Thus, the current land use of the property is considered commercial. It is *Toronto Inspection Ltd.*'s understanding the Site will be converted to a day-care centre and the land use will be institutional in the future.

At the time of this Phase One ESA, Building A was occupied by a business service provider (bluepoint Valuations) as well as a health service provider (Phenom Naturopaths). All the other offices have been vacant from a week to six months.

Building B was unoccupied and was formerly occupied by a software company ('Moveware'). Thus, the current land use of the property is considered commercial. It is *Toronto Inspection Ltd.*'s understanding the Site will be converted to a day-care centre and the land use will be institutional in the future.

County Map from 1878 indicated that a structure was present at the Site. In addition, based on a review of the City of Burlington By-Law Number 85-1993, the building at the Site was built in circa 1838 and was one of the oldest farm houses in Burlington. Thus, the Site was first developed in circa 1838.

Based on the City of Burlington Schedule B – Comprehensive Land Use (Urban Planning Area), no areas of natural significance were anticipated on the Site or within the Phase One Study Area.

Based on information obtained through records review and visual observations during site reconnaissance, the Phase One ESA has revealed the following Potentially Contaminating Activities (PCAs) within the Site and Phase One Study Area :

**Table 7.2-1 : Table of PCAs**

Location	Source*	Listing Information	O. Reg. PCA**	APEC onto SITE
On Site	Others, SR	– Since the building was constructed circa 1838, historical fuel sources may have included use of coal, wood, and/or fuel oil (with a fuel oil tank).	28, 30, 40	YES
3011-3027 Harvester Road  Approximately 70 - 145 m east of Site	FIP	Presence of a century farm (Fisher Orchards) with two 1,890L (500 gal) fuel oil tanks, a 3,785L (1,000gal) diesel tank, and an underground storage tank (UST) with unknown capacity and content at the central portion of the property	28, 31	YES
	CD	1979-1996: Pretsell Jack Holiday B P Serv. Sta./Pretsell Jack Holiday Petro Canada Serv. Sta./Petro Canada Serv. Sta.		
	EcoLog	– Petro Canada/RTJ Enterprises Michele Saunders/Pretsell's Petro Canada were listed as expired gas stations with USTs having a total capacity of 136,800L – 3025 Harvester Rd. was listed as a retail fuel outlet		



Location	Source*	Listing Information	O. Reg. PCA**	APEC onto SITE
		<ul style="list-style-type: none"> <li>- 8/3/1988: Gasoline leaking from underground tank to sewers and ground</li> <li>- 1988-1998: Sanexen International Inc. was listed as a waste transfer station with photoprocessing wastes</li> </ul>		
901 Guelph Line  Approximately 70m southeast, with the structures approximately 160 m southeast of Site	CD	1965-2013: International Truck And Engine Corp. Canada/Navistar Canada Inc./Int'l Harvester Canada (auto parts and engine parts manufacturing activities) Listings indicated that the operation was a parts distribution centre in 1965 to 1985	57	No, due to trans-/down-gradient orientation
	EcoLog	<ul style="list-style-type: none"> <li>- 2013: Waste generated by Navistar Canada Inc. included organic laboratory chemicals, waste oil &amp; lubricants, inorganic laboratory chemicals, paint/pigment/coating residues, waste compressed gases, and petroleum distillates (auto parts and engine parts manufacturing activities)</li> </ul>		
QEW at Guelph Line  Approximately 190m northeast of Site	EcoLog	<ul style="list-style-type: none"> <li>- 11/7/2012: A spill of 30L of diesel to ditch from a truck.</li> <li>- 8/25/2014: A spill of 150L of diesel to the road from a garbage truck</li> <li>- 9/3/1993: A spill of 200L of diesel to the highway from a transport truck</li> <li>- 8/30/1990: A spill of 150L of diesel to the highway from a transport truck</li> <li>- 9/19/1997: A spill of small quantity of gasoline to the ditch from a motor vehicle</li> <li>- 8/7/2008: A spill of 3.79L of coolant to the sewer</li> </ul>	---	No, due to small amount of spillage and considerable distance from the Site

\*Source – FIP : Fire Insurance Plan; CD : City Directories; EcoLog : EcoLog ERIS Report; Others : Government historical documents; SR : Site Reconnaissance

\*\*Ontario Regulation 153/04, as amended, Records of Site Condition – Part XV.1 of the Act, Table 2 : Potentially Contaminating Activities

Identified PCAs of concern that may influence the subsoil and groundwater conditions at the subject site include potential fill material, use of deicing salts in asphalt paved areas as well as potential use of pesticides in the past, and fuel oil AST, at the subject site. Within the study area, PCAs of concern include former retail fuel outlets, leakage of gasoline from UST, and ink related activities to the east.

PCAs within the Site include :

PCA#28 : Gasoline and associated products storage in fixed tanks

PCA#30 : Importation of Fill Material of Unknown Quality

PCA#40: Pesticide Manufacturing, Processing, Bulk Storage and Large-Scale Applications

PCAs within the study area include :

PCA#28 : Gasoline and associated products storage in fixed tanks

PCA#31 : Ink Manufacturing, Processing and Bulk Storage

Based on Potentially Contaminating Activities (PCAs) within the Site and Phase One Study Area, a total of three Areas of Potential Environmental Concern identified within the Phase One Property are summarized below :

APEC-1 : across entire site due to potential of fill material and deicing activities. Furthermore, pesticides may have been used in the landscape areas.

APEC-2: in the vicinity of Building A due to historical fuel sources which may consist of fuel oil

APEC-3 : at the eastern portion of site, due to former retail fuel outlets, leakage of gasoline from UST, and ink related activities across Guelph Line to the east

**Table of Area of Potential Environmental Concern**

APEC	LOCATION OF APEC ON SITE	PCA (O.Reg. 153/04 Table 2)*	LOCATION OF PCA	CONTAMINANT OF POTENTIAL CONCERN	MEDIA POTENTIALLY IMPACTED
1	Entire Site	30 : Importation of Fill Material of Unknown Quality 40: Pesticide Manufacturing, Processing, Bulk Storage and Large-Scale Applications	onsite	Metals and Inorganics, PAH, OC Pesticides	Soil, groundwater
2	In the vicinity of Building A	28 : Gasoline and associated products storage in fixed tanks	onsite	PHC, BTEX	Soil, groundwater
3	Eastern portion of site	28 : Gasoline and associated products storage in fixed tanks	offsite	PHC, BTEX, Metals and Inorganics	Soil, groundwater



APEC	LOCATION OF APEC ON SITE	PCA (O.Reg. 153/04 Table 2)*	LOCATION OF PCA	CONTAMINANT OF POTENTIAL CONCERN	MEDIA POTENTIALLY IMPACTED
		31 : Ink Manufacturing, Processing and Bulk Storage			

\*Ontario Regulation 153/04, as amended, Records of Site Condition – Part XV.1 of the Act, Table 2 : Potentially Contaminating Activities

Based on records review and site reconnaissance of the Site and Study Area, and interviews conducted during this Phase One ESA, Areas of Potential Environmental Concern (APEC) have been identified on the Site. It is *Toronto Inspection Ltd.* opinion that a Phase Two Environmental Site Assessment will be required before a Record of Site Condition is submitted.

## 2. INTRODUCTION

*Toronto Inspection Ltd.* was retained by **1937570 Ontario Inc.** to conduct a Phase One Environmental Site Assessment (Phase One ESA) for the property located at 2477 Queensway Drive in Burlington, Ontario. The Phase One ESA was conducted in accordance to Ontario Regulation 153/04, as amended, Records of Site Condition – Part XV.1 of the Environmental Protection Act, for purposes of filing a Record of Site Condition, due to change in land use, from commercial to institutional use.

Client contact information is provided below :

1937570 Ontario Inc.  
250 Consumer Road  
North York, Ontario  
M2J 4V6

### 2.1. Phase One Property Information

Municipal Address : 2477 Queensway Drive, Burlington, Ontario, L7R 0C9

Site Area : Approximately 3,030m<sup>2</sup>

Current Activity : Offices for a business service provider and a health service provider.  
All the other offices have been vacant from a week to six months.

Current Land Use : commercial

Proposed Land Use : institutional

Property Coordinates (centroid) : E 597045 N 4800383

### 2.2. Site Description

The Site is developed with a two-storey commercial building with a basement (Building A) and a single-storey commercial building (Building B). A parking area which is partially covered with asphalt and gravel is provided at the southern portion of the Site. Landscape areas are provided to the north, east, and west of the building. An aerial view of the Phase One property is presented in Image No. 1 below.



Image No. 1 : Aerial image from Google Earth

### 2.3. Legal Description

No legal survey was provided at the time of this Phase One ESA.

### 2.4. Adjacent and Surrounding Areas

The Site is bounded to the north by a vegetated area followed by the ramp of Queen Elizabeth Way, to the south by Queensway Drive, to the east by a vegetated area



followed by Guelph Line, and to the west by Queensway Drive. Surrounding areas consisted of a mix of residential and commercial usage.

## **2.5. General Hydrogeology**

A topographic map available online from the website of Natural Resources of Canada – Toporama indicated that the Site is at an average geodetic elevation of 105m above mean sea level. The contours indicated a down-gradient orientation in the southeasterly direction towards Lake Ontario, located at a distance of approximately 2.8 km from the site boundary. Groundwater flow is anticipated to be in a southeasterly direction.

## **2.6. Property Use**

At the time of this Phase One ESA, Building A was occupied by a business service provider (bluepoint Valuations) as well as a health service provider (Phenom Naturopaths). All the other offices have been vacant from a week to six months. Building B was unoccupied and was formerly occupied by a software company ('Moveware'). Thus, the current land use of the property is considered commercial. It is *Toronto Inspection Ltd.*'s understanding the Site will be converted to a day-care centre and the land use will be institutional in the future.

### 3. SCOPE OF INVESTIGATION

The purpose of this Phase One ESA is to identify potential environmental impacts due to historical activities within and around the Site and to support filing a Record of Site Condition (RSC). The scope of work of this Phase One ESA was to develop a determination of the likelihood that one or more contaminants have affected any land or water on, in or under the Phase One property by :

- obtaining and conducting a review of reasonably accessible records pertaining to the current and/or past uses of the Site and within the Phase One study area – including
  - Fire Insurance Plans,
  - City Directories,
  - EcoLog ERIS report review,
  - aerial photographs,
  - topographic maps,
  - Freedom of Information office and
  - Technical Standards & Safety Authority information request.
- conducting interviews with personnel having knowledge of on-site activities and operations,
- conducting site visit(s) to document the current activities on site,
- evaluating the above information to identify and determine Potentially Contaminating Activity (PCA) on the site, adjacent properties and within the Study Area, that may potentially cause Areas of Potential Environmental Concern (APEC) within the Site
- preparing a Phase One ESA report, incorporating the findings.

## 4. RECORDS REVIEW

A comprehensive records research was conducted to determine if area(s) of actual and potential environmental concern exist on the Site and within the Phase One study area. Details of the findings are provided in the following sections.

### 4.1. General

#### 4.1.1. Phase One Study Area Determination

Records review indicated that there were no waste disposal sites, coal/tar processing or using sites or former gas manufacturing plants within 1km of the subject Site. Records review indicated that the vicinity of the Site was generally a mix of residential and commercial land use. A distance of 250m from the site boundaries was established as the Phase One Study Area. The Site and Phase One Study Area are presented in Figure No. 1.

#### 4.1.2. First Developed Use Determination

County Map from 1878 indicated that a structure was present at the Site. In addition, based on a review of the City of Burlington By-Law Number 85-1993, the building at the Site was built in circa 1838 and was one of the oldest farm houses in Burlington. Thus, the Site was first developed in circa 1838.

#### 4.1.3. Fire Insurance Plans (FIP)

A search for Fire Insurance Plans for the Site was conducted at Toronto Reference Library and on the internet (City of Toronto Archives). FIPs dated 1971 were available for review at the Toronto Reference Library. However, the Site was out of the FIPs coverage area. The characteristics of the surrounding properties are summarized in the table below.

**Table 4.1.3-1: Summary of FIP 1971 Plate 42/43/48**

Direction	Address and Description	PCA/APEC
<b>SITE</b>		
Site	No FIP was available for the Site	N/A
<b>STUDY AREA PROPERTIES OF INTEREST</b>		
3027 Harvester Road Approximately 60 m east of Site with the	Presence of a century farm (Fisher Orchards) with two 1,890L (500 gal) fuel oil tanks, a 3,785L (1,000gal) diesel tank, and an underground storage tank (UST) with unknown capacity and content at the central portion	Considered a PCA



structures approximately 70m east of Site	of the property	
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Due to down-gradient orientation, other listings are not considered to pose an environmental concern onto the subject Site.

#### 4.1.4. Chain of Title

A chain of title was not researched.

#### 4.1.5. Environmental site assessment reports and other reports

No previous environmental reports were provided for review at the time of this ESA.

### 4.2. Environmental Source Information

#### 4.2.1. City Directories

The Vernon's Burlington, Ancaster, Dundas, Stoney Creek, Waterdown City Directory and Vernon's Burlington and Hamilton Suburban City Directory, from 1965 to 2013, were available for review at the Toronto Reference Library. It should be noted that the original Site address, 2477 Glenwood School Drive was changed to 2477 Queensway Drive in 2013. Therefore, the records for the Site were listed under the original Site address, 2477 Glenwood School Drive. Listings for the Site addresses are summarized in the table 4.2.1-1.

**Table 4.2.1-1 : City Directories for Subject Site**

Year	Site of Interest	PCA
	<b>2477 Queensway Drive (Formerly known as 2477 Glenwood School Drive)</b>	
2013	<ul style="list-style-type: none"> <li>- A Future+Realty Inc.</li> <li>- Bounty Enterprises Inc.</li> <li>- Burlington Osteopaths</li> <li>- Chem-Dry Golden Horseshoe</li> <li>- Express Business Finance</li> <li>- Gigs Entertainments Inc.</li> <li>- Life Chemicals Inc.</li> <li>- Royal Reef Resort</li> <li>- Verico Designer Mortgages</li> </ul>	<p>Awaiting response from Chem-Dry Golden Horseshoe</p> <p>Based on a phone interview with Ms. Irina Chabanny, the Director of Administration and Finance of Life Chemicals Inc.(905-634-5212), there was no production/processing of chemicals at 2477 Glenwood School Drive and</p>
2010	<ul style="list-style-type: none"> <li>- A Future+Realty Inc.</li> <li>- Bounty Enterprises Inc.</li> <li>- Burlington Osteopaths</li> </ul>	

	<ul style="list-style-type: none"> <li>- Chem-Dry Golden Horseshoe</li> <li>- Express Business Finance</li> <li>- Gigs Entertainments Inc.</li> <li>- Life Chemicals Inc.</li> <li>- Royal Reef Resort</li> <li>- Verico Designer Mortgages</li> <li>- Lorenz A</li> </ul>	the unit was only used as an office. Therefore, this was not considered a PCA.
2005	No listings	N/A
1965-2000	- Residential	None identified
Prior to 1965	No directories were available	N/A

The City Directory listings for the surrounding areas, within 250m from the Site boundary, indicated commercial, industrial, and residential usage. Given that the inferred groundwater flow is in the southeasterly direction, properties up-gradient and within the immediate vicinity of the Site would be considered to have more potential for environmental concern than those in other directions. Listings of Potentially Contaminating Activity (PCA) located within the Phase One Study Area are summarized in Table 4.2.1-2. The complete past occupancy listings for the surrounding areas are enclosed in Appendix E.

**Table 4.2.1-2 : Summary of PCAs in City Directories in the Phase One Study Area**

Orientation/Address	Listing Information	PCA
3025 Harvester Road  Approximately 85m east of Site	1979-1996: Pretsell Jack Holiday B P Serv. Sta./Pretsell Jack Holiday Petro Canada Serv. Sta./Petro Canada Serv. Sta.	Considered a PCA.
901 Guelph Line  Approximately 70m southeast, with the structures approximately 160 m southeast of Site	1965-2013: International Truck And Engine Corp. Canada/Navistar Canada Inc./Int'l Harvester Canada (auto parts and engine parts manufacturing activities) Listings indicated that the operation was a parts distribution centre in 1965 to 1985	Considered as PCAs.

Due to down-gradient orientation, other listings are not considered to pose an environmental concern onto the subject Site.

#### 4.2.2. EcoLog ERIS Databases

*Toronto Inspection Ltd.* requested a complete environmental database search from EcoLog ERIS Ltd.. The Environmental Risk Information Service (ERIS) database includes MOE- Inventory of Coal Gasification Plant Waste Sites (June 1991), Ministry

of Environment (MOE) – Polychlorinated Biphenyls (PCB) Inventory (2003), MOE – National Pollutant Release Inventory (NPRI) (2010), MOE – Waste Disposal Site Inventory (June 1991), Brownfields Environmental Site Registry and several other federal, provincial and private databases that are frequently updated by Ecolog ERIS Ltd.. The complete Ecolog ERIS report is included in Appendix J. A summary of findings in the databases is provided in Table 4.2.2-1.

**Table 4.2.2-1 : Summary of Listings at Site and Within Study Area**

Database / Name	Subject Site	Within 250m (Study Area)
AAGR / Abandoned Aggregate Inventory	-	-
AGR / Aggregate Inventory	-	-
AMIS / Abandoned Mine Information System	-	-
ANDR / Anderson's Waste Disposal Sites	-	-
AUWR / Automobile Wrecking & Supplies	-	-
BORE / Borehole	-	7
CA / Certificates of Approval	-	2
CFOT / Commercial Fuel Oil Tanks	-	-
CHEM / Chemical Register	3	-
COAL / Inventory of Coal Gasification Plants and Coal Tar Sites	-	-
CONV / Compliance and Convictions	-	-
CPU / Certificates of Property Use	-	-
DRL / Drill Hole Database	-	-
EASR / Environmental Activity and Sector Registry	-	-
EBR / Environmental Registry	-	-
ECA / Environmental Compliance Approval	-	-
EEM / Environmental Effects Monitoring	-	-
EHS / ERIS Historical Searches	-	4
EIIS / Environmental Issues Inventory System	-	-
EXP / List of TSSA Expired Facilities	-	15
FCON / Federal Convictions	-	-
FCS / Contaminated Sites on Federal Land	-	-
FOFT / Fisheries & Oceans Fuel Tanks	-	-
FST / Fuel Storage Tank	-	-
FSTH / Fuel Storage Tank - Historic	-	-



Database / Name	Subject Site	Within 250m (Study Area)
GEN / Ontario Regulation 347 Waste Generators Summary	-	8
HINC / TSSA Historic Incidents	-	-
IAFT / Indian & Northern Affairs Fuel Tanks	-	-
INC / TSSA Incidents	-	1
LIMO / Landfill Inventory Management Ontario	-	-
MINE / Canadian Mine Locations	-	-
MNR / Mineral Occurrences	-	-
NATE / National Analysis of Trends in Emergencies System (NATES)	-	-
NCPL / Non-Compliance Reports	-	-
NDFT / National Defence & Canadian Forces Fuel Tanks	-	-
NDSP / National Defence & Canadian Forces Spills	-	-
NDWD / National Defence & Canadian Forces Waste Disposal Sites	-	-
NEES / National Environmental Emergencies System (NEES)	-	-
NPCB / National PCB Inventory	-	-
NPRI / National Pollutant Release Inventory	-	1
OGW / Oil and Gas Wells	-	-
OOGW / Ontario Oil and Gas Wells	-	-
OPCB / Inventory of PCB Storage Sites	-	-
ORD / Orders	-	-
PAP / Canadian Pulp and Paper	-	-
PCFT / Parks Canada Fuel Storage Tanks	-	-
PES / Pesticide Register	-	-
PINC / TSSA Pipeline Incidents	-	-
PRT / Private and Retail Fuel Storage Tanks	-	4
PTTW / Permit to Take Water	-	-
REC / Ontario Regulation 347 Waste Receivers Summary	-	1
RSC / Record of Site Condition	-	-
RST / Retail Fuel Storage Tanks	-	-
SCT / Scott's Manufacturing Directory	-	1
SPL / Ontario Spills	-	8
SRDS / Wastewater Discharger Registration Database	-	-
TANK / Anderson's Storage Tanks	-	-

Database / Name	Subject Site	Within 250m (Study Area)
TCFT / Transport Canada Fuel Storage Tanks	-	-
VAR/TSSA Variances for Abandonment of Underground Storage Tanks	-	-
WDS / Waste Disposal Sites - MOE CA Inventory	-	-
WDSH/Waste Disposal Sites - MOE 1991 Historical Approval Inventory	-	-
WWIS / Water Well Information System	-	3
<b>Total</b>	<b>3</b>	<b>55</b>

There were three listings for the subject site and fifty-five (55) listings were identified within the Study Area.

Based on an inferred groundwater flow in the southeasterly direction, properties up-gradient and within the immediate vicinity of the Site would be considered to have more potential for environmental concern than those in other directions, subject to the nature of activity. The Ecolog ERIS properties of potential environmental interest, i.e. with Potentially Contaminating Activity (PCA) located within the Phase One Property and Phase One Study Area are summarized in Table 4.2.2-2.

**Table 4.2.2-2 : Summary of PCAs in Ecolog ERIS**

Address Orientation/ Distance	ERIS Category	Database Related Information	PCA
Unit 203 – 2477 Queensway Drive  Site	CHEM	– Life Chemicals Inc. was listed as a chemical related activity	Not considered a PCA, as indicated in City Directories Table 4.2.1-1
3011 Harvester Road (3025 Harvester Road)  Approximately 85m east of Site	EXP, NEES, PRT, SPL	– Petro Canada/RTJ Enterprises Michele Saunders/Pretsell's Petro Canada were listed as expired gas stations with USTs having a total capacity of 136,800L – 3025 Harvester Rd. was listed as a retail fuel outlet – 8/3/1988: Gasoline leaking from underground tank to sewers and ground	Considered a PCA
3019 Harvester Road  Approximately 85m east of Site	SCT	– De Nederlandse Courant was listed as a newspaper publisher established in 1990	According to aerial photograph of 1998, a gas bar was present at the location of 3019 Harvester Road. The city directory search did not reveal any

Address Orientation/ Distance	ERIS Category	Database Related Information	PCA
			listings with street number lesser than 3025 Harvester Road (retail fuel outlet). Therefore, this is not considered a PCA.
3027 Harvester Road  Approximately 145m east of Site	CA, GEN, NPRI, REC	– 1988-1998: Sanexen International Inc. was listed as a waste transfer station with photoprocessing wastes	Considered as PCA
901 Guelph Line  Approximately 70m southeast, with the structures approximately 160 m southeast of Site	GEN	– 2013: Waste generated by Navistar Canada Inc. included organic laboratory chemicals, waste oil & lubricants, inorganic laboratory chemicals, paint/pigment/coating residues, waste compressed gases, and petroleum distillates (auto parts and engine parts manufacturing activities)	Considered a PCA
QEW at Guelph Line  Approximately 190m northeast of Site	SPL	<ul style="list-style-type: none"> <li>– 11/7/2012: A spill of 30L of diesel to ditch from a truck.</li> <li>– 8/25/2014: A spill of 150L of diesel to the road from a garbage truck</li> <li>– 9/3/1993: A spill of 200L of diesel to the highway from a transport truck</li> <li>– 8/30/1990: A spill of 150L of diesel to the highway from a transport truck</li> <li>– 9/19/1997: A spill of small quantity of gasoline to the ditch from a motor vehicle</li> <li>– 8/7/2008: A spill of 3.79L of coolant to the sewer</li> </ul>	Considered a PCA

Due to trans-gradient and down-gradient orientation, other listings are not anticipated to pose an environmental concern onto the subject site.

#### 4.2.3. Ministry of the Environment and Climate Change - Freedom of Information (MOECC FOI)

*Toronto Inspection Ltd.* submitted a request to the MOECC Freedom of Information and Privacy Office to search their files for records pertaining to the Site. The request

and response from MOECC FOI Office indicated that there were no records available for the Site and the response letter is enclosed in Appendix H.

#### 4.2.4. Technical Standards & Safety Authority (TSSA)

Technical Standards & Safety Authority (TSSA) was contacted to check their records for any fuel storage tanks that may have been present at the Site and the surrounding properties. An email correspondence (attached in Appendix I) from a TSSA representative indicated no fuel storage tanks at the Site or surrounding properties. It should be noted that the TSSA does not have fuel storage tanks records readily available for search prior to 1987. Since the years in which the records were available for searching were limited, the presence of underground storage tanks (USTs) was investigated through FIPs (Section 4.1.), Ecolog ERIS searches (Section 4.2.2), Site Reconnaissance (Section 6.2.5.2) and Interviews (Section 5).

### 4.3. Physical Setting Sources

#### 4.3.1. Aerial Photographs

Aerial photograph of 1954 was available for review from the University of Toronto Map & Data Library website. Aerial photograph of 1998 and 2013 were available for review from the City of Burlington Interactive Mapping Application. These aerial photographs are enclosed in Appendix F. Additionally, two copyrighted aerial photographs of 2004 and 2015 were available from “Google” online mapping for review. These aerial photographs/images are enclosed in Appendix F, and summarized in Table 4.3.1-1.

**Table 4.3.1-1 : Observations in Aerial Photographs**

Year	Observations
1954, 1998, 2004, 2013, 2015	<p><u>Site</u> Aerial photograph of 1954 indicated that the Site was developed with a building similar to the present day Building A and trees were present in the vicinity of the building. Aerial photographs from 1998 to 2015 revealed that Building A and Building B were present at the southwest portion of the Site and a parking area was present at the southern portion of the Site. The Site was developed to its present day configuration prior to 1998.</p> <p><u>Surrounding Area</u> Aerial photograph of 1954 indicated that the surrounding area of the Site was mainly farmland or open fields, except Queen Elizabeth Way was present to the north of the Site and a large structure was present across Queensway Drive to the south of the Site. Aerial photographs from 1998 to 2015 indicated that the surrounding area remained similar throughout the years and was occupied by a mix of residential and commercial/industrial structures, similar to the configuration seen today.</p>

## **4.3.2. Topography, Hydrology, and Geology**

### **4.3.2.1. Site Drainage**

The aerial photographs did not indicate ponds, swales or ditches around the Site. Surface drainage is expected to infiltrate into the ground and/or run off onto the catchbasins/roadways.

### **4.3.2.2. Groundwater Flow**

Groundwater flow is anticipated to be southeasterly direction towards Lake Ontario, located at a distance of approximately 2.8 km from the site boundary.

### **4.3.2.3. Topography of Phase One Study Area**

A topographic map was available on line from the website of Natural Resources of Canada – Toporama, for review. The topographic map is attached in Appendix G. The topographic map illustrated no building structures on Site. Adjacent to the north of the Site there was a ramp of Highway 403. The elevation contours indicated a downward gradient to the southeast towards the Lake Ontario.

### **4.3.2.4. Physiography and Geology of Phase One Study Area**

According to the Ontario Geophysical Survey “OGS Earth” application, the Phase One Study Area was situated within an area with Paleozoic bedrock. The bedrock geology in the vicinity of the Study Area generally consisted of shale, limestone, dolostone, and siltstone of the Queenston Formation.

### **4.3.3. Fill Materials**

The aerial photographs did not indicate significant topography changes in the vicinity of the Site. The present day building was constructed in circa 1838. Fill material of unknown quality may be present in the underlying subsoils.

### **4.3.4. Water Bodies and Area of Natural Significance**

According to Natural Resources of Canada – The Atlas of Canada – Toporama and the City of Burlington Interactive Map identified no water bodies on Site or the Phase One Study Area.

Based on the City of Burlington Schedule B – Comprehensive Land Use (Urban Planning Area), no areas of natural significance were anticipated on the Site or within



the Phase One Study Area.

#### 4.3.5. Well Records

Identified monitoring/test holes in the Water Well Information System (WWIS) of the Ecolog ERIS report are summarized below :

Well ID/Date of Construction	Well Type	Location	Soil Stratigraphy	Water Table
7181971 27/02/12	Test hole	E 597196 N 4800448	Silt, sand, fill to 0.6m, underlain by clay, silt, dense to 6.0m	N/A
2810322 10/08/05	Observation well	E 597161 N 4800218	Bedrock at 0m to 4.5m	N/A
7174562 04/11/11	Test hole	E 597269 N 4800472	Topsoil to 0.6m, underlain by dense clay to 1.5m and fractured shale to 2.4m	N/A

#### 4.3.5.1. Bedrock

Bedrock in the vicinity of the study area is anticipated to be between 0m and 1.5m below grade.

#### 4.4. Site Operating Records

There was no auto garage, dry cleaner, retail fuel outlet or industrial activity at the subject site. Therefore, the site is not considered an enhanced investigation property. Reviewed site operating records during this Phase One ESA are summarized below :

**Table 4.4-1 : Summary of Site Operating Records**

Record Type	Remarks	APEC Identified
Regulatory Permits	No site operating records were provided for review. Interview was conducted during the site visit.	None identified.
APEC Related Records		
Material Safety Data Sheets		
Underground Utility Drawings		
Chemical Inventories, Storage, Usage		
AST Inventory		
UST Inventory		
Environmental Monitoring Data		
Waste Management Records		



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Record Type	Remarks	APEC Identified
Process, production and maintenance documents		
Spills, Discharges Records		
Emergency Response, Contingency Plan		
Environmental Audit Reports		
Site Plan		

## 5. INTERVIEW

### 5.1. Purpose

The purpose of the interview was to corroborate and/or augment the findings of the records review, and site reconnaissance.

### 5.2. Content

The content of the interview included questions pertaining to the current and past activities of the Site that may have an affect on the environmental conditions of the Site.

### 5.3. Methodology

Interviews were conducted with persons having knowledge of site activities through email.

### 5.4. Limitations - Interview

None

### 5.5. Interview Participants

#### 5.5.1. Site Personnel

Mr. Brad Borkwood, Site owner since November 2012, was interviewed via an email sent to the agent Mr. Brian Madigan on March 8, 2016. Findings from the interviews are incorporated into the contents of the report.

Mr. Fred Paatz from Express Business Funding, former Site owner, was contacted by phone (905-639-9711) on May 18, 2016. Awaiting response from former owner

Chem-Dry Golden Horseshoe, former tenant at the Site, was contacted by phone (1-866-511-5421) on May 18, 2016. Awaiting response

Ms. Irina Chabanny from Life Chemicals Inc., former tenant of the Site, was contacted by phone (905-634-5212) on May 18, 2016. According to Ms. Chabanny, there was no production or processing of chemicals at 2477 Glenwood School Drive (former address of Phase One property) and the unit was only used as an office during her occupancy circa 2010 to 2013.



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### **5.5.2. Third Parties**

No interview was conducted with third parties.

### **5.5.3. Government Officials**

No interview with government officials was conducted.

## **6. SITE RECONNAISSANCE**

### **6.1. General**

#### **6.1.1. Date and Time of Investigation**

The subject Site and the adjoining properties were visited by a representative from *Toronto Inspection Ltd.* on March 3, 2016.

#### **6.1.2. Weather Conditions**

The weather was sunny, with temperature at -5°C.

#### **6.1.3. Length of Time of Investigation**

1 hour on site, 0.75 hour for surrounding areas

#### **6.1.4. Methodology**

The Site visit included conducting a walk through of the subject Site in all accessible areas to document and photograph details pertinent to the Phase One requirements. Adjoining properties were visually observed from the boundaries of the subject site and publicly accessible areas.

#### **6.1.5. Facility Operation**

At the time of this Phase One ESA, Building A was occupied by a business service provider (bluepoint Valuations) as well as a health service provider (Phenom Naturopaths). All the other offices have been vacant from a week to six months.

Building B was unoccupied and was formerly occupied by a software company ('Moveware').

#### **6.1.6. Name and Qualifications of Investigators**

The site visit was conducted by Fanny Luk, M.E.S., B.E.S. of *Toronto Inspection Ltd.*

Fanny Luk, B.E.S., M.E.S. has been with Toronto Inspection Ltd since 2012. She has been trained in conducting Phase One and Two ESAs, and has completed numerous ESAs in the GTA area.

### **6.1.7. Limitations – Site Reconnaissance**

Inspection of the ground surfaces was limited due to snow cover on the exterior area of the Site at the time of the site visit. Subsequent visit required during a phase two

### **6.1.8. Photographs**

Photographs taken during the site visit are included in Appendix B.

## **6.2. Specific Observations at Phase One Property**

### **6.2.1. General Site Features**

At the time of the Site reconnaissance, the Site was developed with two buildings at the southwestern portion of the Site. A parking area which is partially covered with asphalt and gravel is provided at the southern portion of the Site. Landscape areas are provided to the north, east, and west of the buildings.

#### **6.2.1.1. Surface Structures**

The Site contained a two-storey commercial building (Building A) and a single storage garage building, which was converted to a commercial building (Building B) at the southwestern portion of the Site.

#### **6.2.1.2. Subsurface Structures**

A full basement was present at Building A.

#### **6.2.1.3. Roads, Parking Facilities, and Rights of Way**

The site is accessible from Queensway Drive to the south. A parking area is provided at the southern portion of the Site.

#### **6.2.1.4. Exterior**

At the time of site reconnaissance, landscaped areas with grass, shrubs, and trees were present to the north, east, and west of the buildings. An empty storage shed was present to the south of Building A.

An asphalt paved driveway is present at the central southern portion of the Site and a parking area, which is partially covered with asphalt and gravel, is provided at the southern portion of the Site.

### **6.2.1.5. Interior**

#### Building A

The ground floor and second floor consisted of office spaces and examination/treatment rooms and the basement consisted of storage areas and furnace room. Interior finishes, except the basement, generally included wood flooring, ceramic floor tiles, drywall partitions, and ceiling tiles. The basement was unfinished and consisted of concrete floor, rubble foundation walls, plaster walls, and wood lathe ceiling. A gas fired furnace and hot water tank were present at the northern portion of the basement and a disconnected boiler was present at the central portion of the basement. Lighting throughout the interior consisted of LED, fluorescent, and incandescence light fixtures.

#### Building B

Building B consisted of office spaces that was generally finished with wood/carpet flooring and drywall partitions. A wall-mounted air conditioning unit and electrical basement heaters were present in the building. Lighting throughout the interior consisted of LED light fixtures.

### **6.2.2. Utilities**

Overhead hydro lines from Queensway Drive were connected to the south elevation of Building A and central portion of Building B. Incoming gas main was located on the west side of Building A. Water, storm and sanitary services are expected to be off Queensway Drive to the south or west of the Building A.

Water and sanitary services were not available at Building B.

Due to the age of development, water supply well and septic system may have been present on Site in the past. In addition, given that the building was constructed in circa 1838, historical fuel sources may consist of coal, wood, and/or fuel oil, which represent an environmental concern.

### **6.2.3. Enhanced Investigation Property**

#### **6.2.3.1. General**

There was no auto garage, dry cleaner, retail fuel outlet or industrial activity at the subject site. Therefore, the site is not considered an enhanced investigation property.

### 6.2.3.2. Site Operations

Offices for a business service provider and a health service provider. All the other offices have been vacant from a week to six months.

### 6.2.3.3. Hazardous Materials

Hazardous materials identified at the site are summarized in Table 6.2.3.3-1.

**Table 6.2.3.3-1 : Summary of Hazardous Materials Identified at the Subject Site**

Material Type	Identified On Site	Remarks
Class A : Compressed Gas	None identified.	N/A
Class B : Flammable and Combustible Material	None identified.	N/A
Class C : Oxidizing Material	None identified.	N/A
Class D : Poisonous and Infectious Material	None identified.	N/A
Class E : Corrosive Material	None identified.	N/A
Class F : Dangerously Reactive Materials	None identified.	N/A

### 6.2.3.4. Products Manufactured

No products are manufactured within the premises.

### 6.2.3.5. By-Products and Wastes

Wastes and recyclables were collected and disposed off-site by the tenants.

Awaiting response from Chem-Dry

### 6.2.3.6. Raw Materials – Handling and Storage

Not Applicable

### 6.2.3.7. Drums, Totes and Bins

No drums, totes or bins were observed during the site reconnaissance.



#### **6.2.3.8. Separators – Oil/Water**

No oil/water separators were observed during the site reconnaissance.

#### **6.2.3.9. Maintenance Areas – Vehicle/Equipment**

Not Applicable

#### **6.2.3.10. Spills**

There was no evidence of spills inside the buildings. the visible area of the Site, at the time of site reconnaissance.

#### **6.2.3.11. Drains, Pits and Sumps - Liquid Discharge Points**

No drains, pits, or sumps were observed during site reconnaissance.

#### **6.2.3.12. Hydraulic Equipment – Elevators, Hoists, Docks**

No hydraulic equipment was observed during site reconnaissance.

#### **6.2.4. Unidentified Substances**

No unidentified substances were observed at the time of site reconnaissance.

#### **6.2.5. Storage Tanks**

##### **6.2.5.1. Aboveground Storage Tanks (ASTs)**

A void was present in the basement at the central northern portion of Building A indicating possible location of vent/fill pipes for a fuel oil tank. An abandoned boiler was present in the basement of Building A, which according to the Site owner, was removed by a licensed contractor. The boiler may have been serviced by a fuel oil tank in the past, which represents an environmental concern.

##### **6.2.5.2. Underground Storage Tanks (USTs)**

At the time of the site reconnaissance, no evidence of fill or vent pipes indicating the presence of an UST were identified. The Site owner was not aware of the presence of underground storage tanks on the premises.

### **6.2.6. Odours**

During our inspection, there was no offensive odour or detectable sources of air emissions that may impact the ambient air quality at the Site.

### **6.2.7. Potable Water Supply**

At the time of the site reconnaissance, the Site was municipally serviced by the City of Burlington, with treated water obtained from Lake Ontario. Therefore, the Site would be considered as having a non-potable groundwater condition.

## **6.3. Interior Observations**

### **6.3.1. Heating and Cooling Systems**

#### Building A

Heating and cooling in the building were provided by gas-fired furnace and air conditioning units.

#### Building B

Heating and cooling in the building were provided by electrical baseboard heaters and a wall-mounted air conditioning unit.

### **6.3.2. Stains**

No stains were evident on the floor at the time of site visit.

## **6.4. Exterior Observations**

### **6.4.1. Surface Cover**

The exterior surface is generally consisted of landscaped areas with grass, trees, and shrubs. The southern portion of the Site was partially covered with asphalt and gravel. No staining of concern was identified in the visible area of the Site. Inspection of the ground surfaces was limited due to snow cover on the exterior area of the Site at the time of the site visit.

### **6.4.2. Railway Evidence**

There was no evidence of current or former railway lines or spurs within the Site.

#### **6.4.3. Topographic, Geologic, and Hydrogeologic Conditions**

The Site was relatively flat and soil conditions could not be inferred due to surface cover.

#### **6.4.4. Site Drainage**

Surface water from precipitation is expected to infiltrate into the ground at the landscaped areas or drain towards the catch basins located along Queensway Drive and into the regional storm sewer system.

#### **6.4.5. Wells**

No wells were observed on Site at the time of site reconnaissance. However, based on the age of development, a well water may have been present in the past.

#### **6.4.6. Sewage Disposal**

The sewage system is connected to the municipal network. However, based on the age of development, a septic system may have been present in the past.

#### **6.4.7. Waste Water**

Waste water is expected to discharge to the storm/sanitary system connected to the City services.

#### **6.4.8. Pits and Lagoons**

No natural pit or lagoon was observed on Site at the time of site reconnaissance.

#### **6.4.9. Stained Materials**

No stained materials were observed on Site at the time of site reconnaissance.

#### **6.4.10. Stressed Vegetation**

No stressed vegetation was observed on Site at the time of site reconnaissance.

#### **6.4.11. Fill and Debris Material**

No evidence of fill material or debris was identified within the Site during site reconnaissance.

Due to the age of development of the site, fill material can be expected in the underlying subsoil. In addition, ash and cinders may also be present at the Site due to the usage of coal/wood as the former source of fuel.

Furthermore, pesticides may have been used in the landscape areas in the past.

#### 6.4.12. Unidentified Substances

There were no unidentified substances on the Site at the time of site reconnaissance.

#### 6.4.13. Watercourses, Ditches, or Standing Water

No watercourses or standing water was observed on Site at the time of the site reconnaissance.

#### 6.4.14. Potential Contaminating Activity at Site

PCAs identified within the Site include

- PCA#28 : Gasoline and associated products storage in fixed tanks
- PCA#30 : Importation of Fill Material of Unknown Quality
- PCA#40: Pesticide Manufacturing, Processing, Bulk Storage and Large-Scale Applications

#### 6.4.15. Site Reconnaissance – Phase One Study Area

##### 6.4.15.1. Observation of Adjacent Properties

The adjacent property uses are summarized in Table 6.4.15-1.

**Table 6.4.15-1 : Adjacent Property Uses**

Orientation Address	Name of Owner/Tenant	Observations	PCA
<b>North of Site</b>			
N/A	Ramp of Queen Elizabeth Way	No evidence of environmental concern was observed from publicly accessible areas	None identified
<b>South of Site (Across Queensway Drive)</b>			
910 Guelph Line	Vacant land	No evidence of environmental	None identified

Orientation Address	Name of Owner/Tenant	Observations	PCA
		concern was observed from publicly accessible areas	
<b>East of Site (Across Guelph Line)</b>			
3027 Harvester Road	Multi-tenant commercial building	A monitoring well cover was observed at the southwest portion of the parking lot to the southwest of the building. No AST or evidence of UST was observed from publicly accessible areas	None identified
<b>West of Site (Across Queensway Drive)</b>			
2421-2449 Glenwood School Drive	Private dwellings	No AST or evidence of UST was observed from publicly accessible areas	None identified

#### 6.4.15.2. Observation of Study Area

The surrounding areas, within 250m of the Site, consisted of a mix of residential, commercial and industrial land uses.

#### 6.4.15.3. Potentially Contaminating Activity – Study Area

PCAs identified within the study area include

- presence of an auto dealer with auto repair at 888 Guelph Line, approximately 150m south of Site.

Due to significant distance and trans and/or down-gradient orientation, this was not considered to have an environmental concern onto the subject Site.

#### 6.4.15.4. Water Bodies

No water bodies are present within the Study Area.

#### 6.4.15.5. Areas of Natural Significance

No areas of natural significance are present within the study area.

### 6.5. Written Description of Investigation

#### 6.5.1. Details of Investigation



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Details of the investigation are provided in the previously described sections.

### **6.5.2. Findings of Investigation**

PCAs identified within the Site include

- PCA#28 : Gasoline and associated products storage in fixed tanks
- PCA#30 : Importation of Fill Material of Unknown Quality
- PCA#40: Pesticide Manufacturing, Processing, Bulk Storage and Large-Scale Applications

## 7. REVIEW AND EVALUATION OF INFORMATION AND FINDINGS

### 7.1. Current and Past Uses at the Site

Table 7.1-1 : Table of Current and Past

YEAR	NAME OF OWNER	DESCRIPTION OF PROPERTY USE	PROPERTY USE	OTHER OBSERVATIONS FROM AERIAL PHOTOGRAPHS, FIRE INSURANCE PLANS ETC.
To be completed upon Chain of Title search.				

### 7.2. Potentially Contaminating Activity (PCA)

Based on information obtained through records review and visual observations during site reconnaissance, the Phase One ESA has revealed the following Potentially Contaminating Activities (PCAs) within the Site and Phase One Study Area :

Table 7.2-1 : Table of PCAs

Location	Source*	Listing Information	O. Reg. PCA**	APEC onto SITE
On Site	Others, SR	– Since the building was constructed circa 1838, historical fuel sources may have included use of coal, wood, and/or fuel oil (with a fuel oil tank).	28, 30, 40	YES
3011-3027 Harvester Road  Approximately 70 - 145 m east of Site	FIP	Presence of a century farm (Fisher Orchards) with two 1,890L (500 gal) fuel oil tanks, a 3,785L (1,000gal) diesel tank, and an underground storage tank (UST) with unknown capacity and content at the central portion of the property	28, 31	YES
	CD	1979-1996: Pretsell Jack Holiday B P Serv. Sta./Pretsell Jack Holiday Petro Canada Serv. Sta./Petro Canada Serv. Sta.		
	EcoLog	<ul style="list-style-type: none"> <li>– Petro Canada/RTJ Enterprises Michele Saunders/Pretsell's Petro Canada were listed as expired gas stations with USTs having a total capacity of 136,800L</li> <li>– 3025 Harvester Rd. was listed as a retail fuel outlet</li> <li>– 8/3/1988: Gasoline leaking from underground tank to sewers and</li> </ul>		

Location	Source*	Listing Information	O. Reg. PCA**	APEC onto SITE
		ground – 1988-1998: Sanexen International Inc. was listed as a waste transfer station with photoprocessing wastes		
901 Guelph Line  Approximately 70m southeast, with the structures approximately 160 m southeast of Site	CD	1965-2013: International Truck And Engine Corp. Canada/Navistar Canada Inc./Int'l Harvester Canada (auto parts and engine parts manufacturing activities) Listings indicated that the operation was a parts distribution centre in 1965 to 1985	57	No, due to trans-/down-gradient orientation
	EcoLog	– 2013: Waste generated by Navistar Canada Inc. included organic laboratory chemicals, waste oil & lubricants, inorganic laboratory chemicals, paint/pigment/coating residues, waste compressed gases, and petroleum distillates (auto parts and engine parts manufacturing activities)		
QEW at Guelph Line  Approximately 190m northeast of Site	EcoLog	– 11/7/2012: A spill of 30L of diesel to ditch from a truck. – 8/25/2014: A spill of 150L of diesel to the road from a garbage truck – 9/3/1993: A spill of 200L of diesel to the highway from a transport truck – 8/30/1990: A spill of 150L of diesel to the highway from a transport truck – 9/19/1997: A spill of small quantity of gasoline to the ditch from a motor vehicle – 8/7/2008: A spill of 3.79L of coolant to the sewer	---	No, due to small amount of spillage and considerable distance from the Site

\*Source – FIP : Fire Insurance Plan; CD : City Directories; EcoLog : EcoLog ERIS Report; Others : Government historical documents; SR : Site Reconnaissance

\*\*Ontario Regulation 153/04, as amended, Records of Site Condition – Part XV.1 of the Act, Table 2 : Potentially Contaminating Activities

Identified PCAs are presented in Figure No. 2.



Identified PCAs of concern that may influence the subsoil and groundwater conditions at the subject site include potential fill material, use of deicing salts in asphalt paved areas as well as potential use of pesticides in the past, and fuel oil AST, at the subject site. Within the study area, PCAs of concern include former retail fuel outlets, leakage of gasoline from UST, and ink related activities to the east.

PCAs within the Site include :

PCA#28 : Gasoline and associated products storage in fixed tanks

PCA#30 : Importation of Fill Material of Unknown Quality

PCA#40: Pesticide Manufacturing, Processing, Bulk Storage and Large-Scale Applications

PCAs within the study area include :

PCA#28 : Gasoline and associated products storage in fixed tanks

PCA#31 : Ink Manufacturing, Processing and Bulk Storage

### 7.3. Areas of Potential Environmental Concern (APEC)

Based on Potentially Contaminating Activities (PCAs) within the Site and Phase One Study Area, Areas of Potential Environmental Concern identified within the Phase One Property are summarized below :

APEC-1 : across entire site due to potential of fill material and deicing activities. Furthermore, pesticides may have been used in the landscape areas.

APEC-2: in the vicinity of Building A due to historical fuel sources which may consist of fuel oil

APEC-3 : at the eastern portion of site, due to former retail fuel outlets, leakage of gasoline from UST, and ink related activities across Guelph Line to the east

7.3-1 : Table of Area of Potential Environmental Concern

APEC	LOCATION OF APEC ON SITE	PCA (O.Reg. 153/04 Table 2)*	LOCATION OF PCA	CONTAMINANT OF POTENTIAL CONCERN	MEDIA POTENTIALLY IMPACTED
1	Entire Site	30 : Importation of Fill Material of Unknown Quality 40: Pesticide Manufacturing, Processing, Bulk Storage and Large-Scale Applications	onsite	Metals and Inorganics, PAH, OC Pesticides	Soil, groundwater
2	In the vicinity of Building A	28 : Gasoline and associated products storage in fixed tanks	onsite	PHC, BTEX	Soil, groundwater

APEC	LOCATION OF APEC ON SITE	PCA (O.Reg. 153/04 Table 2)*	LOCATION OF PCA	CONTAMINANT OF POTENTIAL CONCERN	MEDIA POTENTIALLY IMPACTED
3	Eastern portion of site	28 : Gasoline and associated products storage in fixed tanks 31 : Ink Manufacturing, Processing and Bulk Storage	offsite	PHC, BTEX, Metals and Inorganics	Soil, groundwater

\*Ontario Regulation 153/04, as amended, Records of Site Condition – Part XV.1 of the Act, Table 2 : Potentially Contaminating Activities

#### 7.4. Phase One Conceptual Site Model

1	Existing buildings and structures	A two-storey commercial building with a basement and a single storage garage building, which was converted to a commercial building
2	Water bodies in the Study Area	None present
3	Areas of natural significance in the Study Area.	None present
4	Drinking water wells at the Phase One property	None present
5	Roads within Study Area	Indicated in Figure No. 2
6	Property uses adjacent to Phase One Property	Indicated in Figure No. 2
7	Areas of Potentially Contaminating Activity (PCA)	PCAs within the Site include : PCA#28 : Gasoline and associated products storage in fixed tanks PCA#30 : Importation of Fill Material of Unknown Quality PCA#40: Pesticide Manufacturing, Processing, Bulk Storage and Large-Scale Applications  PCAs within the study area include : PCA#28 : Gasoline and associated products storage in fixed tanks PCA#31 : Ink Manufacturing, Processing and Bulk Storage
8	Areas of Potential Environmental Concern (APEC)	A total of 3 APECs were identified. APEC-1 and APEC-2 are due to onsite activities, while APEC-3 is from offsite PCAs. Contaminants of concern include Petroleum Hydrocarbons, Volatile Organic Compounds, Metals and Inorganics, Polycyclic Aromatic Hydrocarbons, Organochlorine Pesticides in the soil and groundwater.
9	Description of PCAs	Identified PCAs of concern that may influence the subsoil and groundwater conditions at the subject site include potential fill material, use of deicing salts in asphalt paved areas as well as

		<p>potential use of pesticides in the past, and fuel oil AST, at the subject site.</p> <p>Within the study area, PCAs of concern include former retail fuel outlets, leakage of gasoline from UST, and ink related activities to the east.</p>
10	Description of APECs and Contaminants of Concern (COC)	<p>APECs and related PCAs are summarized below :</p> <p>APEC-1 : across entire site due to potential of fill material and deicing activities. Furthermore, pesticides may have been used in the landscape areas.</p> <p>APEC-2: in the vicinity of Building A due to historical fuel sources which may consist of fuel oil</p> <p>APEC-3 : at the eastern portion of site, due to former retail fuel outlets, leakage of gasoline from UST, and ink related activities across Guelph Line to the east</p>
11	Underground utilities	<p>Overhead hydro lines from Queensway Drive were connected to the south elevation of Building A and central portion of Building B. Incoming gas main was located on the west side of Building A. Water, storm and sanitary services are expected to be off Queensway Drive to the south or west of the Building A.</p> <p>Water and sanitary services were not available at Building B.</p>
12	Regional or site specific geological and hydrogeological information	<p>According to the Ontario Geophysical Survey “OGS Earth” application, the Phase One Study Area was situated within an area with Paleozoic bedrock. The bedrock geology in the vicinity of the Study Area generally consisted of shale, limestone, dolostone, and siltstone of the Queenston Formation. Based on borehole information provided in the EcoLog ERIS report, bedrock is expected to be present between depths of 0m to 1.5m below grade, in the vicinity of the Site.</p>
13	Uncertainty or absence of information.	<p>Inspection of the ground surfaces was limited due to snow cover on the exterior area of the Site at the time of the site visit.</p>

## **8. CONCLUSIONS**

### **8.1. Whether Phase Two Environmental Site Assessment Required Before Record of Site Condition Submitted**

Based on records review and site reconnaissance of the Site and Study Area, and interviews conducted during this Phase One ESA, Areas of Potential Environmental Concern (APEC) have been identified on the Site. It is *Toronto Inspection Ltd.* opinion that a Phase Two Environmental Site Assessment will be required before a Record of Site Condition is submitted.

#### **8.1.1. Discussion**

#### **8.1.2. Data Sources**

*Toronto Inspection Ltd.* has based its conclusion after a review of environmental sources information including Fire Insurance Plans, EcoLog ERIS search records, City Directory records and site reconnaissance.

### **8.2. Record of Site Condition Based on Phase One Environmental Site Assessment Alone**

Areas of Potential Environmental Concern were identified on the Site. A Phase Two Environmental Site Assessment will be required before a Record of Site Condition is submitted.

### **8.3. Deviations**

This Phase One ESA was conducted in accordance to Ontario Regulation 153/04, as amended. There was no deviation from the principal components of the standard.

### **8.4. Limitations – Phase One ESA**

No limitations were encountered during this ESA.



## 8.5. Participants

This Phase One Environmental Site Assessment has been conducted under the direct supervision of a Qualified Person, Mr. Rakesh Koneru P.Eng., who is registered with the Ministry of Environment. The findings and conclusions in this report are formed on the basis of historical and current document reviews, interviews with personnel knowledgeable of site operations and site reconnaissance to identify site and surrounding activities for potential environmental concerns.

Participants involved in the preparation of this Phase One Environmental Site Assessment are provided below :

- Records Review : Fanny Luk B.E.S., M.E.S.
- Site Visit : Fanny Luk B.E.S., M.E.S.
- Interview : Fanny Luk B.E.S., M.E.S.
- Evaluation of Information and Reporting : Fanny Luk B.E.S., M.E.S., Rakesh Koneru, P.Eng., CESA, QP<sub>ESA</sub>

## 8.6. Company Qualifications

The *Toronto Inspection Ltd.* staff have extensive experience over the years in conducting Phase One and Two Environmental Audits, ranging from single-storey industrial buildings of several thousand square feet to mega malls of over several million square feet. They have gained experience that extends across Canada, viewing a variety of operations such as, scrap yards, gas stations, chemical factories, dry cleaners, gravel pits, parklands, various manufacturing plants, food producers, office buildings, apartments, residential homes, grocery stores, schools and shopping malls.



## 8.7. Certification

*Not applicable, since a Phase Two ESA is required.*

I, Rakesh Koneru P.Eng, am a qualified person and have the qualifications required by Section 5 of Ontario Regulation, 153/04, Records of Site Condition, Part XV.1 of the Environmental Protection Act and do hereby certify that

1. A phase one environmental site assessment of the RSC property, which includes the evaluation of the information gathered from a records review, site reconnaissance, interviews, a report and any updates as required, has been conducted in accordance with the regulation by or under the supervision of a qualified person as required by the regulation.
2. As of [insert the certification date], no phase two environmental site assessment is required by the regulation for the RSC property and based on the phase one environmental site assessment for the RSC property, in my opinion, it is not necessary for any other reason to conduct a phase two environmental site assessment for the RSC property.
3. As of [insert the certification date], in my opinion, based on the phase one environmental site assessment, there is no evidence of any contaminants in the soil, ground water or sediment on, in or under the RSC property that, if the RSC property were put to any of the types of property uses listed in subsection 1 (2) of the regulation, are likely to interfere with any of those types of property uses.



Toronto Inspection Ltd

## 9. REFERENCES

1. Ontario Regulation 153/04, as amended Records of Site Condition – Part XV.1 of the Environmental Protection Act.
2. City of Burlington By-Law Number 85-1993
3. Google Earth Maps
4. City of Burlington Interactive Maps
5. Natural Resources of Canada – Atlas of Canada – Toporama
6. City Directories from City of Toronto Library Archives
7. Aerial Photographs from University of Toronto Map & Data Library website, City of Burlington Interactive Mapping Application, Google Earth Application
8. Environmental Risk Information Service (ERIS) database from Ecolog ERIS Ltd.
9. Ontario Geophysical Survey “OGS Earth” application



## 10. GENERAL STATEMENT OF LIMITATION

This Phase One Environmental Site Assessment was conducted in general compliance with currently acceptable practices for environmental site investigations, and specific client requests, as applicable to this property. It is based on documents and oral information supplied to *Toronto Inspection Ltd.* There is no warranty expressed or implied or representations by *Toronto Inspection Ltd.* that this investigation uncovered all potential environmental risks or liabilities associated with the subject site.

This report was prepared by *Toronto Inspection Ltd.* for the account of **1937570 Ontario Inc.** and cannot be used or submitted to any other agents/authorities. The material in this report reflects *Toronto Inspection Ltd.*'s judgement in light of the information available to them at the time of preparation. Any use which a Third Party makes of this report, or any reliance on decisions to be made based on it, is the responsibility of these Third Parties. *Toronto Inspection Ltd.* accepts no responsibility for damages, if any, suffered by any Third Party as a result of decisions made or actions based on this report.

*Toronto Inspection Ltd.* did not provide any service to investigate or detect the presence of moisture, mould or other biological contaminants in or around any structure, or any service that was designed or intended to prevent or lower the risk of the occurrence of the amplification of the same. Mould is ubiquitous to the environment with mould amplification occurring when building materials are impacted by moisture. Site conditions are outside of *Toronto Inspection Ltd.*'s control, and mould amplification will likely occur, or continue to occur, in the presence of moisture. As such, *Toronto Inspection Ltd.* cannot and shall not be held responsible for the occurrence or recurrence of mould amplification.

Any legal actions arising directly or indirectly from this work and/or *Toronto Inspection Ltd.*'s performance of the services shall be filed no longer than two years from the date of *Toronto Inspection Ltd.*'s substantial completion of the services. *Toronto Inspection Ltd.* shall not be responsible to the client for lost revenues, loss of profits, cost of content, claims of customers, or other special indirect, consequential, or punitive damages.

To the fullest extent permitted by law, the client's maximum aggregate recovery against *Toronto Inspection Ltd.*, its directors, employees, sub-contractors and representatives, for any and all claims by clients for all causes including, but not limited to, claims of breach of contract, breach of warranty and/or negligence, shall be limited to the amount of fees paid.

Yours sincerely,  
Toronto Inspection Ltd.

**DRAFT**

Fanny Luk, B.E.S., M.E.S.  
Environmental Project Manager

**DRAFT**

Rakesh Koneru, P.Eng., CESA, QP<sub>ESA</sub>  
Project Engineer