REPORT
TO
CITY OF GUELPH

PHASE ONE ENVIRONMENTAL SITE ASSESSMENT
200 BEVERLEY STREET
GUELPH, ONTARIO

Prepared by:

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February 2014

701996-001

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11 February 2014

City of Guelph
1 Carden Street
Guelph, Ontario
N1H 3A1

Attention: Mr. Prasoon Adhikari, M.Sc., P.Eng., QP_{ESA}
Environmental Engineer

Re: **Phase One Environmental Site Assessment**
200 Beverley Street
Guelph, Ontario

Dear Mr. Adhikari:

Decommissioning Consulting Services (DCS) is pleased to provide the following report on the completion of a Phase One Environmental Site Assessment (ESA) of the property located at 200 Beverley Street in Guelph, Ontario.

The Phase One ESA has identified the potential for impacted soil and groundwater to be underlying the subject property resulting from the presence of fill soils of unknown origin across the site; the former presence of a underground storage tank (UST) at the northeast corner of the site; former capacitor room; former sand mixer and foundry sumps; former maintenance garage; former core room, boiler and power house; the former storage of PCBs; the use adjacent lands as a rail way and for the storage of bulk chemicals.

It is recommended that a Phase Two ESA be completed at the site to address these concerns and that the soil and groundwater be tested for metals, petroleum hydrocarbons (PHCs), BTEX (benzene, toluene, ethylbenzene and xylenes), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and polychlorinated biphenyls (PCBs).

We trust that the enclosed report is suitable for your current requirements. If you have any questions or require further information, please do not hesitate to contact us.

Yours very truly,

DECOMMISSIONING CONSULTING SERVICES

Richard Browne, M.A.Sc., P.Eng.
Senior Vice President

Stephen R. Prior, P.Eng.
Senior Project Manager

Tu-Anh Nguyen, M.Eng.
Environmental Specialist

Encl.

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AT REAR OF REPORT

1.0 EXECUTIVE SUMMARY

Decommissioning Consulting Services Limited (DCS) has been retained by the City of Guelph to complete a Phase One Environmental Site Assessment (ESA) at 200 Beverley Street, Guelph, Ontario. It should be noted that for the purposes of this report, "Phase I" and "Phase One" as well as "Phase II" and "Phase Two" are used interchangeably.

The Phase One property, approximately 52,000 square meters (m^2) in area, is currently owned by the City of Guelph. The site is bounded by Guelph Rail Line to the north, Kingsmill Avenue to the east, Beverley Street to the south, and Stevenson Street South to the west. The Phase One Study Area includes the site and surrounding properties within 250 metres of the site boundaries. The Phase One Study Area is bound by Guelph Rail Line and a bulk chemical warehouse facility to the north, just east of Victoria Street to the east, York Road to the south and Morris Street to the west.

The purpose of the investigation was to assess the existing site conditions from an environmental perspective and to identify the presence of potential environmental concerns that might affect the continued or future use of the site.

The Phase One ESA included a review of previous environmental reports concerning the site; a review of historical information including aerial photographs, Ontario Ministry of the Environment (MOE) documents, fire insurance plans, chain of title information and numerous historical databases; a site reconnaissance; and preparation of a report summarizing the results of the investigation and making recommendations for further investigations at the site.

International Malleable Iron Company (IMICO) purchased the site at 200 Beverley Street in 1912 for development as a foundry. No evidence of previous commercial or industrial land use has been found. The foundry operated as an iron-jobbing facility for the production of various metallic forms using malleable and ductile iron. The site was vacant at the time of the inspection and is slated for redevelopment by the City of Guelph.

Preliminary site assessments were completed by Proctor and Redfern (P&R) in 1989 and 1991. In the 1989 report, P&R made seventeen recommendations to characterize and delineate contaminants at the property as well as disposal and/or storage of polychlorinated biphenyl (PCB)-containing equipment and materials. In 1991, P&R brought forth remediation options and provided a preliminary site remediation cost estimate following an intrusive program consisting

55 test pits, 16 core samples, and the installation of 5 groundwater observation wells. The site has been under MOE Director's Order since 1994. A hydrogeologic study to gain understanding of groundwater flow at the property has been carried out, in addition to the remediation of sumps and a PCB storage area. Furthermore, the former IMICO building was demolished in 1999. A Phase I ESA and a Phase II ESA were carried out by DCS in 2007. The intrusive investigation found soil and groundwater impacted by metals across the property and impacts from petroleum hydrocarbons (PHCs), PCBs, polycyclic aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs) present in three main areas, the eastern side of the property, in the vicinity of the former power house and capacitor room, and in the vicinity of the former maintenance garage, with occasional occurrences elsewhere.

Potentially contaminating activities (PCAs) identified at the site include:

- Historic placement of fill of unknown origin across the site.
- Former underground storage tank in the northeast corner of the site.
- Former iron and steel manufacturing and processing
- Former metal treatment, coating, and finishing
- Historic use and storage of PCBs.

Potentially contaminating activities in the Phase One Study Area include:

- Chemical manufacturing, processing, and bulk storage
- Rail yard, tracks, and spurs.

APECs resulting from these PCAs include the fill soils across the site, the subsurface soil and groundwater underlying the site.

Potential contaminants of concern associated with these PCAs include metals, petroleum hydrocarbons, BTEX compounds, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, and volatile organic compounds. Media potentially impacted includes the soil and groundwater underlying the site.

It is recommended by DCS that a Phase Two Environmental Site Assessment be carried out on the site before submission of a Record of Site Condition (RSC).

2.0 INTRODUCTION

2.1 PHASE ONE PROPERTY INFORMATION

Decommissioning Consulting Services (DCS) was retained by the City of Guelph to conduct a Phase One Environmental Site Assessment (ESA) of the property located at 200 Beverley Street in the City of Guelph.

The site is located on the north side of Beverley Street, east of Stevens Street South. At the time of the inspection the site was vacant. This property was formerly occupied by the International Malleable Iron Company (IMICO). The buildings were demolished in 1999.

The work was completed as part of an evaluation of the property in preparation for its redevelopment. Future property use may include residential, institutional, parkland and commercial activities. The location of the site is shown on the Key Plan in Figure 1, which follows page 2-1 and on DCS Drawing No. 701996-001-1, entitled *Site Plan*, provided in Appendix A.

The site is currently owned by the City of Guelph. The service address for the owner is provided below:

City of Guelph
1 Carden Street
Guelph, Ontario
N1H 3A1

The contact information for the City of Guelph is provided below:

Mr. Prasoon Adhikari, M.Sc., P.Eng., QP_{ESA}
City of Guelph
1 Carden Street
Guelph, Ontario
N1H 3A1

A Plan of Survey should be appended to this report should it be submitted to support the application of a Record of Site Condition (RSC).

DCS

DECOMMISSIONING CONSULTING SERVICES

CITY OF GUELPH

200 BEVERLEY STREET, CITY OF GUELPH

PHASE I ESA

KEY PLAN

Project No. 701996-000-001	JAN. 2014	N.T.S.	FIGURE 1

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3.0 SCOPE OF INVESTIGATION

The scope of work for the assessment included:

i) a review of any previous environmental reporting concerning the site;
ii) a review of historical data in order to identify potentially contaminating activities on the site and on adjacent properties, through an evaluation of past land use;
iii) a site reconnaissance and preliminary examination of the property to document the presence of readily observable wastes, staining, plant kills or other readily observable evidence of contamination that might be present;
iv) interviews with current, and where available, past tenants or employees at the facility; and,
v) preparation of a report on the results of the work undertaken, including provision of recommendations for additional investigations as may be required.

DCS conducted a review of records and files including computer databases and aerial photographs.

The survey included:

- a review of title information provided by the City of Guelph;
- a review of historical aerial photographs dated 1930, 1964, 1972, 1981, 1990, and 1995 from the National Air Photo Library, an aerial photograph dated 2006 from Google Earth;
- a review of DCS' 2007 correspondence with CGI Information Systems and Management Consultants Inc. (CGI) Historical Environmental Reporting System (HEIRS®) for acquisition of historical fire insurance mapping, reports and site specific plans;
- correspondence with EcoLog Environmental Risk Information Services (ERIS) Ltd.;
- correspondence with the Technical Standards & Safety Authority (TSSA) Fuels Safety Branch;
- a review of the Ontario Ministry of Environment's (MOE) *Brownfields Environmental Site Registry*, under Part XV.I of the Environmental Protection Act (O.Reg. 153/04 - Records of Site Condition);
- a review of the MOE's *Environmental Registry*, under the 1994 Province of Ontario Environmental Bill of Rights (EBR);

- a review of the MOE's *Hazardous Waste Information Network* (HWIN) database (O.Reg. 347 - General - Waste Management);
- a review of the Ontario Ministry of Natural Resource's (MNR) database of species at risk;
- a review of the City of Guelph's *Natural Heritage Strategy* for Areas of Natural and Scientific Interest (ANSI);
- a review of the MOE *Waste Disposal Site Inventory*, dated June 1991;
- a review of the MOE *Inventory of Coal Gasification Plant Waste Sites in Ontario*, dated 1987; and
- submission of a freedom of information (FOI) request form to the MOE.

This report has been prepared on the basis of our observations in the field, results of a historical review and on information made available to our staff by the client. This report constitutes a preliminary assessment of site conditions, intended to address readily-evident issues and to identify such potential concerns as may warrant further study. As such, the study did not include subsurface investigation work.

4.0 RECORDS REVIEW

4.1 GENERAL

4.1.1 Phase One Study Area Determination

The Phase One study area includes the site and surrounding properties within 250 metres of the site boundaries. The Phase One Study Area is bound by Guelph Rail Line and a bulk chemical warehouse facility to the north, just east of Victoria Street to the east, York Road to the south and just shy of Morris Street to the west. The Phase One Study Area is shown on the Site Plan in DCS Drawing N$^{o.}$ 701996-001-1 (Appendix A).

4.1.2 First Developed Use Determination

IMICO purchased the site at 200 Beverley Street in 1912 for development as a foundry. No evidence of previous commercial or industrial land use has been found. The foundry operated as an iron-jobbing facility for the production of various metallic forms using malleable and ductile iron.

4.1.3 Fire Insurance Plans

CGI was contacted and requested to review their files for any information available on the subject property as part of the DCS 2007 Phase I ESA. DCS was advised that CGI has no fire insurance plans (FIP) available for the site. As no new developments have occurred at the property, no new FIPs were requested.

The December 2006 letter from CGI advising is provided in Appendix D at the rear of this report.

One FIP for 1960 was located in the City of Toronto Reference Library. The FIP indicated that there were numerous buildings on the site. Coal and sand were stored in the central portion of the site. An underground storage tank (UST) was identified in the northeastern portion of the property. The FIP also indicated the adjacent lands east and northeast of the property were occupied by a stove manufacturer. The operation included machine shops, an enamelling building, presses and assembly operations. No other FIPs were available for this area of Guelph in the Toronto Reference Library.

4.1.4 Chain of Title

According to available land title information the subject property is legally described as:

Part of Lot 2, Division F, Concession III, Guelph, County of Wellington

A review of the available information provided by the City of Guelph indicates that the property was initially purchased by the IMICO in approximately 1912 when the company was formed. The property was sold to Mr. John H. Long on April 10, 1992 and subsequently sold to the Assembly of the Church of the Universe on December 31, 1993. The property was transferred to the City of Guelph on May 5, 1997 as consideration for the non-payment of taxes and has remained in the possession of the City of Guelph since that time.

A chronological event timetable showing previous owners and dates of ownership at the Phase One property back to the purchase of the property, as supplied by the City of Guelph, is provided in Appendix F.

4.1.5 Environmental Reports

DCS reviewed the following reports relating to the subject property:

Sections of "*Environmental Investigations, Report Recommendations*", prepared for International Malleable Iron Company Limited by Proctor & Redfern Limited (P&R), dated August 1989.

"*Draft Environmental Investigation, International Malleable Iron Company, 200 Beverley Street, Guelph, Ontario*", prepared for the Bank of Montreal by P&R, dated 10 June 1991.

"*Final Draft for Discussion, Hydrogeologic Site Investigation, Former IMICO Foundry Site, Guelph, Ontario*", prepared for the City of Guelph by Gartner Lee Limited (Gartner Lee), dated August 1998.

"*Supplemental Hydrogeologic Investigation, Former IMICO Site*", prepared for the City of Guelph by Gartner Lee, dated March 1999.

"*City of Guelph, Former IMICO Facility, Demolition and Waste Removal Report*", prepared for the City of Guelph by Earth Tech (Canada) Inc. (Earth Tech), dated October 1999.

Additionally, DCS reviewed a letter (*Progress Report #6*) from the City of Guelph to the MOE dated 23 August 2001, a letter (*Progress Report #7*) from the City of Guelph to the MOE date 6 March 2002 and a technical memorandum ("Summary of Environmental Conditions and Resultant Redevelopment Constraints at 200 Beverley Street, Guelph") prepared by CH2M HILL Canada Limited dated 13 November 2003.

"*Phase I Environmental Site Assessment, Former IMICO Property, 200 Beverley Street, Guelph, Ontario*", prepared for the City of Guelph by DCS dated December 2007.

"*Phase II Environmental Site Assessment, Former IMICO Property, 200 Beverley Street, Guelph, Ontario*", prepared for the City of Guelph by DCS dated December 2007.

"*Preliminary Remedial Action Plan, Former IMICO Property, 200 Beverley Street, Guelph, Ontario*", prepared for the City of Guelph by DCS dated March 2008.

"*2011 Annual Groundwater Monitoring Report, Former IMICO Site, 200 Beverley Street, Guelph, Ontario*", prepared for the City of Guelph by AECOM dated August 2013.

P&R Environmental Investigation, August 1989

P&R was retained by IMICO to perform an environmental investigation of its property located at 200 Beverley Street in Guelph, Ontario. P&R collected surface and near surface soil samples, swab samples for the analysis of polychlorinated biphenyls (PCBs), nitric acid swap samples for the analysis of heavy metals, and dust samples for the analysis of heavy metals. Results of the analysis performed found heavy metals contamination, namely cadmium, hexavalent chromium, and zinc, exceeding applicable criteria by up to 20 times. In addition to high oil and grease concentrations, polycyclic aromatic hydrocarbons (PAHs) were also found. Seventeen recommendations were made by P&R to IMICO to characterize and delineate the contaminants at the property as well as disposal and/or storage of PCB-containing equipment and materials.

P&R Environnemental Investigation, June 1991

P&R was retained by the Bank of Montreal to conduct an environmental investigation to determine the nature and extent of soil and shallow groundwater contamination and to provide preliminary cost estimates for site remediation and redevelopment activities, as required. Recommendations and results of the 1989 were included in this investigation. P&R completed an intrusive program at the site that consisted of 55 test pits to investigate the horizontal and vertical extent of soil contamination, 16 core samples to investigate conditions underlying the plant, and five groundwater observation wells in addition to sampling process wastes on site to identify disposal options. The location of work carried out is shown on DCS Drawing No. 701996-001-2, Appendix A. Analysis of the soil and groundwater samples found:

- Soils defined as leachate toxic with respect to lead under O.Reg. 309 were found in the northeast portion of the site;
- Soils containing highly elevated concentrations of zinc were found on the northeast and southeast portions of the site;
- Several areas of elevated metals, oil and grease and PCBs were identified over the remainder of the site;
- A layer of fill, consisting of foundry sands, slag and cinders, averaging 0.2 to 1.0 m in thickness was found across the majority of the site;
- Significant levels of organic and inorganic parameters were identified in an observation well located in the north east corner of the site;
- Over 400 cubic metres of foundry sand were still on site;
- Several catch basins and waste water sumps containing sludge materials that required off-site disposal; and
- Asbestos and small quantities of PCB contaminated electrical equipment were still present on the site.

P&R brought forth remediation options and provided a preliminary site remediation cost estimate.

Gartner Lee, Hydrogeologic Site Investigation, August 1998

Gartner Lee was retained by the City of Guelph to conduct a hydrogeologic investigation of the property. The scope of work included providing engineering services to assess if the

contamination found by P&R in their 1989 and 1991 work could affect or potentially the adjacent lands, to address MOE groundwater concerns, and to determine any changes in groundwater quality since 1991.

All-Terrain Drilling Limited was retained by Gartner Lee to advance twelve boreholes, nine of which were completed as monitoring wells. Soils at the property were characterized as dolostone overlain by native silty fine sand till and 1.4 to 2.8 meters (m) of fill (foundry sand and slag). The water table was assessed to be flat with the principal direction of flow to the east and southeast, based on monitoring events in June 1998. Soil samples were collected and analysed for metals, pH, volatile organic, total petroleum hydrocarbons (TPH), as well as base/neutral extractables. Groundwater samples collected from the monitoring wells were analysed for general chemistry and metals, volatile organics, petroleum hydrocarbons, base/neutral extractables, and PCBs. The location of work carried out is shown on DCS Drawing No. 701996-001-2, Appendix A.

Zinc and TPH concentrations in soil exceeded then current MOE 1997 Table A Standards for commercial and industrial land use. It was found that zinc and TPH contamination extends off site to the north and east, however the extent of the impacted area had not been established.

Analysis of groundwater collected found lead and zinc concentrations exceeding Table A Standards, similar to P&R, in addition to the concentrations of arsenic, beryllium, and thallium in the eastern portion of the site. Hydrocarbon odours were detected while purging monitoring wells OW1, OW1-II, OW6, and OW9-II. Sheen was observed in purge water from monitoring well location OW1 and OW1-II. TPH concentrations were detected in all groundwater samples with the exception of monitoring well location OW4. Groundwater samples from monitoring well locations OW1, OW1-II, OW2, OW5, OW9-II, OW10, OW11-I, and OW12 exceeded Table A TPH Heavy Oil Standards. Groundwater concentrations for benzene and total xylenes were found to exceed Table A Standards in samples from OW9-II and OW1, respectively. Several PAH compounds were found to exceed Table A groundwater Standards, notably in samples from monitoring well locations OW1, OW1-II, PW6, and OW11-I.

It should be noted that volatile organic compound (VOC) concentrations were detected in the drill water (sampled from the holding tank on the drill rig) as well in the trip blank.

Gartner Lee outlined five issues and recommendations:

Issue/Action Item 1:

The presence of VOC concentrations in drill water and subsequent detection of chlorination by-products in groundwater samples collected from monitoring well location OW3-II and OW9-I introduces a variable that renders some of the analytical data as suspect. Metals concentrations in groundwater, notably arsenic, beryllium, lead, and thallium, were detected at twice the Table A Standards. It is recommended that an additional round of groundwater samples be collected to verify results, along with a trip blank and blind duplicate.

Issue/Action Item 2:

Soil and groundwater sample results in the east area of the building that previously housed the annealing oven confirm the findings of the 1991 investigation. However, due to the uncertainty of the data, it was recommended that additional data be collected.

Issue/Action Item 3:

Benzene and methylene chloride concentrations were detected in groundwater samples from monitoring well location OW9-II. The source of benzene and methylene chloride has not been determined. The extent of the benzene and methylene chloride contamination should be assessed.

Issue/Action Item 4:

Quantities of TPH were detected in or exceeded Table A Standards at all monitoring well locations with exception to monitoring well location OW4. The potential for off-site migration of TPH-impacted groundwater exists at monitoring well location OW5, as it is in close proximity to the property line. It is recommended that the extent of the TPH contamination in the vicinity of monitoring well location OW5 be sasses through further soil and groundwater sampling.

Issue/Action Item 5:

Routine groundwater monitoring program should be implemented. The program should include water level measurements from both on-site monitoring wells in addition to any accessible off-site monitoring wells in the vicinity.

Gartner Lee, Supplemental Hydrogeologic Site Investigation, March 1999

This supplemental investigation was recommended in the 1998 Gartner Lee investigation. Twelve test pits and thirteen boreholes, ten of which were completed to monitoring wells, were advanced at the property. Slug tests were performed at monitoring well locations OW15 and OW16 to confirm previous hydraulic conductivity estimates. Soil and groundwater samples were collected and analysed for pH, total dissolved solids (TDS), as well as metals, TPH (purgeable and extractable), VOC, and PAH concentrations. The location of work carried out is shown on DCS Drawing N$^{o.}$ 701996-001-2, Appendix A.

Issue/Action Item 1 (analytical anomalies in groundwater):

1. No chlorination by-products were detected in the samples collected and analysed.
2. Methylene chloride detected at low concentrations in a number of samples is attributed to laboratory-induced contamination.
3. Arsenic detected in groundwater at monitoring well location OW3-II indicative that it is indeed present at this location.
4. The concentration of thallium in groundwater collected at monitoring well locations OW1-I and OW9-I were compared to concentrations obtained in the previous phase of work. The previously elevated thallium concentrations were found to be anomalous.
5. Beryllium concentrations were not detected in any groundwater samples submitted for analysis. Previously recorded beryllium concentrations from groundwater samples and from drill water were found to be anomalous.

Issue/Action Item 2 (area east of the former annealing oven building):

Soil chemistry:

1. Soil analysis of samples taken immediately east of the building confirm the soil is impacted by metals, primarily zinc and lead, TPH, VOCs, and PAH/phthalates. Contamination extends from ground surface to bedrock.
2. The extent of zinc and TPH impacted soil has not been delineated but is likely to encompass the property to the north and east in this area.
3. Trichloroethylene was detected in a soil sample from test pit location TP7. The irregular distribution of VOC implies that contamination is localized pockets thus not widespread across the property.
4. The concentration of PAH and phthalates was found to be below Table A Standards.
5. Based on O.Reg. 347, soil and fill in the vicinity of the former annealing oven building are classified as non-registerable, non-hazardous waste.

Groundwater chemistry in the area east of the former annealing oven building:

1. Sample analysis confirmed groundwater was impacted with metals, TPH, VOCs, and PAH/phthalates.
2. Analytical results from groundwater at monitoring well location OW1-II showed deeper groundwater also impacted by the aforementioned contaminants.
3. Non-aqueous liquid (free product) was observed at monitoring well location OW21-1 within bedrock. The fuel oil free product comprises PAHs/phthalates.

Groundwater chemistry in the area east down-gradient of the boundary:

1. Nested monitoring wells were installed at location OW18 and a shallow well was installed at monitoring well location OW19 in order to assess the potential for contamination extending beyond the east property line. The concentration of TPH heavy oil in groundwater at monitoring well locations OW18-I and OW19 was equal or greater than the Table A criteria.
2. The concentration of trichloroethylene in groundwater at monitoring well location OW18-I was found to be above Table A Standards. Vinyl chloride concentrations exceeding Table A were found at monitoring well location OW18-I and OW19.
3. PAH compounds were detected at concentrations above Table A Standards at monitoring well location OW18-I and OW18-II.
4. Based on the data collected from the well nest, the source of TPH, VOC and PAH contamination may be located beyond the eastern boundary.

Groundwater chemistry in the vicinity of the former cooling tower:

1. The concentration of zinc in groundwater at monitoring well location OW17 was found to be lower than the concentration of zinc in the area east of the former annealing oven building, thus zinc contamination east of the former annealing oven building can be attributed to manufacturing processes rather than spills from the former cooling tower.

Issue/Action Item 3 (area of former underground storage tank):

1. The concentration of benzene above Table A Standards was detected in groundwater from monitoring well location OW9-II in May 1998. In September, analysis of groundwater did not detect any benzene at monitoring well location OW9-II nor in any wells in the vicinity of OW9, i.e. OW13 and OW14. Analysis of groundwater samples carried out in December 1998 found the concentration of benzene exceeding

Table A Standards. It is concluded that the area is benzene-impacted however the source of benzene is unknown.

2. The concentration of zinc in groundwater collected from monitoring well location OW9-II, OW13, and OW14 was found to exceed Table A Standards.

Issue/Action Item 4 (area of former maintenance garage):

1. The concentration of TPH in groundwater exceeded Table A potable water Standards at monitoring well location OW5. This parameter was also detected in groundwater at monitoring well locations OW15 and OW16, installed between monitoring well location OW5 and the property boundary.
2. Lead and zinc were detected in groundwater at monitoring well location OW16, at concentrations greater than Table A potable water Standards.

Issue/Action Item 5 (groundwater quality):

1. Groundwater at the site is impacted primarily by TPH heavy oil, lead, and zinc.
2. VOCs were detected in samples but below applicable Standards with exception to well nest location OW18 and monitoring well locations OW19 and OW12.
3. PAH concentrations exceeded Table A Standards at well nest location OW1 and monitoring well locations OW9-II, OW20, and OW21.

Recommendations for the removal of hydrocarbon impacted and leachate toxic soils in the northeast corner were made in a letter sent by Gartner Lee to the City of Guelph on 14 April 1999. The recommendations included the removal of all soil that exhibited free product or the observance of significant hydrocarbon staining at the soil/bedrock contact and the removal of all soil that has zinc concentrations exceeding the concentration of 10,000 μg/g.

Earthtech, Demolition and Waste Removal Report, October 1999

Earth Tech (Canada) Inc. (Earth Tech, previously P&R) was retained by the City of Guelph to undertake the contract tendering and project administration for an Interim Remedial Work Plan, specifically the demolition of the building and clean-up of waste materials from the site. Philip Environmental Services (PES) was awarded the contract and was retained as a demolition contractor.

From November 1998 to July 1999 waste materials removal was undertaken by PES. During this time waste materials consisting of Asbestos Containing Material (ACM), PCB contaminated

material, various liquid wastes, leachate toxic wastes, registerable wastes and non-registerable solid wastes and other waste debris were removed from the site.

Wastes removed and disposed of from the site consisted approximately 1,600 tonnes of various ACMs, approximately 1,700 tonnes of non-registerable foundry sands, 100 tonnes of registerable foundry sands and dust, 160 kilograms of leachate toxic materials, 27 tonnes of soot and contaminated bricks, 465 litres (L) of waste oils and sludges, as well as Bunker C residues found in the bottom of a 45,000 L aboveground storage tank (AST).

Demolition of all buildings at the property was also carried out, in addition to remediation of PCB contaminated materials. Materials with a PCB concentration less than 35 parts per million (ppm) were disposed along with demolition waste; materials containing more than 35 ppm of PCBs were placed in poly-lined drums and were awaiting disposal.

Excavation of contaminated soils identified in previous investigations was carried out in June 1999. Approximately 9,387 tonnes of contaminated soils, 36 tonnes of leachate toxic soils, and 925 tonnes of contaminated concrete were excavated from the northeast corner of the site. Excavation of soils proceeded to bedrock, between 1.3 and 2.0 meters below ground surface (m bgs). Confirmatory soil samples collected at the excavation limits found zinc and TPH concentration exceeding Table A Standards at the excavation walls.

The sumps and pits, as well as the excavations were backfilled in June 1999. Approximately 2,500 tonnes of Granular "B" fill was used to backfill the sump and pits network and 8,469 tonnes of the same fill material was used to backfill the soil excavations. The backfill was sampled and analysed for metals, TPH, and VOCs. The results of the analysis found the concentration of all parameters analysed to be below Table A Standards.

Earth Tech recommended that groundwater monitoring be conducted down-gradient of the former Capacitor Room to assess whether or not PCBs had penetrated into underlying bedrock and impacted groundwater quality in addition to groundwater monitoring in the northeastern part of the site to determine any effects on groundwater quality from residual metal and hydrocarbon contamination.

City of Guelph, Progress Report #6, August 2001

Progress Report #6 is prefaced with a letter from the City of Guelph to the MOE. The letter is a follow-up to earlier correspondence between the MOE and the City. The City of Guelph requested the modification of the groundwater monitoring program and the withdrawal of the MOE Director's Order date 14 July 1994.

Groundwater Monitoring Program:
Gartner Lee carried out groundwater monitoring and sampling at the property in December 2000, March 2001, and June 2001. Analytical results found the contaminant concentrations in groundwater chemistry to be generally stabilized. Contaminants endemic to the site are zinc, petroleum hydrocarbons (PHCs) and associated constituents including PAHs and benzene, toluene, ethylbenzene, and xylene (BTEX). The contaminated area was restricted to the eastern portion of the property, with localized outlines occurring elsewhere on the property. Gartner Lee recommended:

- Reducing the frequency of groundwater monitoring to two events per year;
- Samples from monitoring well location OW22S and OW23S no longer be analysed for concentrations of PAHs and TPH;
- Groundwater from monitoring well location OW6 be samples and analysed for concentrations of zinc, TPH, and VOCs; and
- Elimination of PCBs in groundwater analysis provided the concentration of PCBs remain undetected.

MOE Director's Order date 14 July 1994:
The City of Guelph has completed a detailed investigation of the IMICO property and undertaken clean-up of the site since 1994. In a letter dated 25 June 2001, the MOE raised the following issues and conditions of the Director's Order:

- Groundwater contaminated with metals, PHCs, PAHS, and VOC at concentrations above Table A Standards;
- Compounds exceeding Table A Standards in groundwater collected from monitoring well location OW6; and
- The extent of off-site soil and groundwater contamination.

The City of Guelph addressed the following:

- *Remaining contaminants:* based on monitoring and sampling events, the City believed that PHC and metal contamination was restricted to the site. Free product in the form of weathered oil was determined to be a localized occurrence. Gartner Lee made an effort to remove the product but it was deemed that the recovery of product would be impractical.
- *Contamination in vicinity of monitoring well location OW6:* contamination of soil and groundwater in the vicinity of monitoring well OW6 has been attributed to contaminated soil and fill. The source of the contamination was determined to be a blind sump in the former IMICO galvanizing room and wind drift from the air exchange vents. As the sumps in the former IMICO plant have been remediated and the building demolished, the contamination in the area is attributed to leaching of zinc from the neighbouring property.
- *Off-site contamination:* high concentrations of VOCs in groundwater are found in samples collected from the eastern portion of the property. The highest concentrations are found to be from groundwater samples collected from monitoring wells installed immediately adjacent to the east property boundary. Groundwater flow has been inferred to be onto the IMICO property. Given the available information, it is thought that the source of the contamination is east of the property.

City of Guelph, Progress Report #7, March 2002

The MOE met with City of Guelph representatives and its consultants on 4 January 2002 in order to determine how to proceed with the site specific risk assessment (SSRA) required to fulfil the Director's Order for the site cleanup. The MOE's concerns included:

- Uncertainty regarding groundwater flow in the eastern portion of the site;
- Potential off-site impacts and receptors to the northeast of the site;
- Potential off-site impacts associated with petroleum hydrocarbons; and
- Incomplete understanding of the trichloroethylene (TCE) on site.

The City of Guelph believed that groundwater and flow and contaminant occurrence was completely characterized and a screening level risk assessment should proceed. Groundwater flow had been determined to be from the north-northeast towards the south-southeast. Residual contaminants are present but are unlikely to cause off site effect. The areas of greatest concern were the northeast and southeast perimeters of the property.

Localized outward groundwater flow was observed in the northeast corner of the property. However, there appeared to be no nearby receptors on the receiving City of Guelph-owned adjacent railway lands. If no potable water wells were found in the vicinity, the City would conduct a screening level risk assessment to evaluate any unacceptable human health or ecological risks that exist in the area.

Natural water level fluctuations may cause temporal changes in the groundwater flow direction but the City of Guelph believed that groundwater flow in the southeast corner of site flowed towards the centre of the site. As a result, any TCE and other VOC occurrences are considered by the City of Guelph to have an off-site source. In order to delineate the extent of the contamination, access to the neighbouring properties is required.

The City of Guelph proposed the following tasks:

- Summarize available regional groundwater flow information;
- Determine if there are any private wells in use in the vicinity;
- Resurvey the monitoring well locations on the eastern side of the property in attempt to tie in any monitoring well locations on the adjacent northern property;
- Installation of a cluster of monitoring wells down-gradient from monitoring well location OW25;
- Continue groundwater and hydrocarbon monitoring; and
- Conduct a screening level risk assessment.

CH2M HILL, Technical Memorandum, November 2003

CH2M HILL found three concerns for redevelopment of the property: the elevated zinc concentration in soil and groundwater, elevated concentrations of chlorinated solvents in groundwater, and TPH and PAH contamination in the subsurface. CH2M HILL concluded the rehabilitation options for the elevated zinc concentration across the site would require minimal remediation efforts. The TCE and associated chlorinated solvent impacts in the northeastern corner of the property, pose two restrictions in developing the property: the first being the vapour transport to the surface has a potential for human health impacts, and the second being that access to that portion of the property may be required for assess and/or remediate off-site issues. Additionally, other soil handling requirements may be needed in some areas of the property in order to limit contact with impacted soils.

DCS, Phase I ESA, December 2007

DCS reviewed available environmental data. In order to determine existing conditions at the property, it was recommended that additional boreholes and monitoring wells be advanced. Additional boreholes were recommended in the eastern portion of the property to assess the documented VOC and TPH contamination. The installation of monitoring wells was recommended for the centre portion of the property, in the vicinity of the former capacitor room, to assess PCB concentration in groundwater. DCS recommended the installation of monitoring wells off-site to assess any potential contamination as well as the advancement of boreholes across the entire property in hot spots identified in previous works.

DCS, Phase II ESA, December 2007

A field program was carried out at the property by DCS in early 2007. The investigation program consisted of the advancement of 32 shallow boreholes to bedrock, completion of eight boreholes to shallow monitoring wells to a maximum depth of seven meters, and completion of two boreholes to deep monitoring wells to a maximum depth of ten meters.

Soil and groundwater samples were submitted for the analysis of metals and inorganic parameters, PHCs, PCBs, and PAHs. Analytical data was compared to applicable MOE Table 1 and Table 2 Standards. Regardless whether Table 1 or Table 2 Standards were chosen for the property, impacts from metals concentrations in exceedance of soil and groundwater Standards are present across the entire property and impacts from PHCs, PCBs, PAHs, and VOCs were present in three main areas, the eastern side of the property, in the vicinity of the former power house and capacitor room, and in the vicinity of the former maintenance garage, with occasional occurrences elsewhere.

DCS concluded that given of the soil and groundwater impacts, an extensive soil remediation program would be required to meet generic standards suitable for residential/parkland/institutional land use while risk assessment approach to manage contaminated soil would suffice for industrial/commercial/community land use.

DCS, Preliminary Remedial Action Plan, March 2008

Based on the December 2007 Phase II ESA, DCS prepared a preliminary remedial action plan that brought forth four options:

1. Completing a soil and groundwater remediation program using the currently applicable (2008) MOE Table 1 background Standards;
2. Completing a Limited Scope Risk Assessment (LSRA) to allow for the use of MOE Table 2 Standards, applicable in a potable groundwater use scenario, to reduce remediation costs;
3. Completing a LSRA for the use of MOE Table 2 Standards as well as using the elevated lead and zinc background values; and
4. Completing a full scope Risk Assessment (RA) for the proposed site-specific land use.

At the time of writing, the generic clean up requirements were 2008 MOE Table 1 Standards. Site remediation using these Standards would require the removal of approximately 79,200 cubic meters (m^3) of impacted soil.

Completion of a LSRA would potentially allow for the use of 2008 MOE Table 2 potable groundwater standards to govern site remediation requirements. The site could then be remediated with approximately 50,000 to 54,000 m^3 of soil requiring removal.

The concentration of zinc in the Guelph area has been found to be elevated with respect to MOE-established standards. The third option was the completion of a LSRA to meet MOE Table 2 potable groundwater standards for all parameters with the exception of zinc concentration. The LSRA would allow the concentration of zinc to be evaluated to elevated values. As zinc was the primary contaminant of concern on the property, the quantity of soil requiring remediation would be reduce to approximately 23,000 m^3.

The final option was the completion a full-scale risk assessment as permitted by the MOE with no special local restrictions or limitations. Some soil remediation activities may be required on the site, however, the quantity of soil involved was not possible to accurately predict without completing risk analyses. It was anticipated that many soil impacts could be managed on site by placement of asphalt and concrete hard surfacing, clean soil barriers, controls on surface water infiltration and similar risk management measures. The RA would likely be required to ensure that groundwater discharging from the site meet MOE potable groundwater quality standards.

Groundwater impacts relative to the 2008 MOE Table 1 background Standards were present throughout most of the western portion of the site and may locally extend off-site. Groundwater remediation to MOE Table 1 background levels would difficult. A more practical approach would be to complete a LSRA justifying the use of MOE Table 2 potable groundwater

Standards. Based on the 2007 DCS Phase II ESA, the contaminant impacts exceeding MOE Table 2 Standards were primarily within the limits of the property, however, some PAH impacts were present near the west property boundary. In order to prevent the impacted groundwater from reaching the property lines, the installation of recovery well(s) was suggested. Water recovered would be directed to a treatment system and typically discharged to the municipal sewer.

Even with the completion of a full scope risk assessment potentially not requiring MOE Table 2 standards to be met within the western portion of the site, it is anticipated that some pump and treat activities will be required to be installed, if only for use on a standby bases, to ensure that groundwater leaving the site meets MOE Table 2 potable groundwater standards.

Ex situ methods would likely be the most effective groundwater clean-up approach within the eastern portion of the site. These methods could include a series of recovery wells leading to a treatment system which would consist of filtration, precipitation and granulated activated carbon polishing.

Given the findings in the DCS 2007 Phase II ESA, it was suggested that groundwater quality issues within the eastern portion of the site be dealt with separately from the western portion of the property. Both groundwater treatment and/or risk assessment approaches may be required to manage the groundwater impacts.

AECOM, 2011 Annual Groundwater Monitoring Report, August 2013

AECOM collected groundwater quality data from the existing monitoring wells, on five separate occasions throughout 2011. In their report, they included measurements and analytical results of groundwater quality within the property and in the vicinity of the property.

1. AECOM found groundwater quality measurements and analytical results to be consistent with historical data and shallow groundwater flow direction to be southerly. The groundwater level was found to be high in the deeper zone near monitoring well OW23D, and groundwater direction was found to flow away from this location across the site. Vertical hydraulic gradients in the shallow zone were generally downward.
2. The zinc concentrations continued to be slightly above Table 2 Standards at monitoring wells located at the western portion of the property. The concentration of lead was also detected just above the Table 2 Standard at monitoring well location OW9-II.

3. Overall TCE concentrations were decreasing. The highest concentrations of TCE observed were in September of 4,600 µg/L at monitoring well locations OW30D (at 490 York Road) and OW24D (on the eastern portion of the site) at 5,300 µg/L.
4. PAH concentrations were below Table 2 Standard at all wells at the property. However, benzo(a)pyrene, benzo(k)fluoranthene, chrysene, and fluoranthene were detected slightly above Table 2 Standard at monitoring well location OW30S in 2011 during monitoring events.
5. Four monitoring wells had PHC concentrations above the applicable standard located at the property, and at the 490 York Road property. Non-aqueous phase liquid (NAPL) was measured at monitoring well location OW23S and was not analyzed for PHCs, as PHCs dissolved in groundwater were expected to be present above Table 2 Standard at this location.
6. PCB concentrations have been below the detection limit at monitored locations since 2005. PCBs were no longer a contaminant of concern at the property.

AECOM recommended that the City of Guelph continue groundwater monitoring at the Former IMICO site in 2012, however, that the program be reduced to annually with the analytical program outlined in the table below:

Well ID	General Chemistry	Metals	VOCs	PAHs	PHCs
OW2	X	X	X	X	X
OW3	X	X		X	
OW3-I	X	X		X	
OW6	X	X	X	X	
OW9-I	X	X	X		X
OW9-II	X	X	X		X
OW16	X				
OW18-I	X	X	X	X	X
OW18-II	X	X	X	X	X
OW19	X	X		X	
OW22 (s)	X	X		X	X
OW22 (d)	X	X		X	X
OW23 (s)	X	X	X	X	X
OW23 (d)	X	X	X	X	X
OW24 (s)	X	X	X	X	X
OW24 (d)	X	X	X	X	X
OW25	X	X	X	X	X
OW26 (s)	X	X	X	X	X

Well ID	General Chemistry	Metals	VOCs	PAHs	PHCs
OW26 (d)	X	X	X	X	X
OW27 (s)	X	X	X	X	X
OW27 (d)	X	X	X	X	X
OW28 (s)	X	X	X	X	X
OW28 (d)	X	X	X	X	X
OW29 (s)	X	X	X		
OW29 (d)	X	X	X		
OW30 (s)	X	X	X	X	
OW30 (d)	X	X	X	X	X
OW07-34D	X	X	X	X	
OW07-36S	X	X	X		X
OW07-36D	X	X	X		X

AECOM recommended that groundwater elevations be collected in 2012 semi-annually as compared to quarterly in 2011. This was recommended based on consistent groundwater elevation and flow trends from year to year.

4.2 ENVIRONMENTAL SOURCE INFORMATION

4.2.1 EcoLog ERIS Database Search

A search of provincial and private databases for records pertaining to properties within 250 metres of the site boundaries was conducted by EcoLog ERIS. DCS has relied upon the EcoLog ERIS database information to be complete and accurate for the study area. A copy of the EcoLog ERIS report is provided as Appendix E. Relevant information is summarized below.

The EcoLog ERIS search found fourteen records associated with the site and one hundred thirty-four records were reported for surrounding properties. However, two records associated with the surrounding properties pertained to the site, thus were summarized in the Phase One Site section below.

4.2.1.1 *Phase One Site*

Two O.Reg. 347 waste generator numbers were found associated with the site. A waste generator number (ON0103000) associated with IMICO from 1986 until 1989 and from 1992 until 1998 was for the generation of paints/pigments/coating residue, other specified organics,

PCBs, and oil skimmings and sludges. The City of Guelph has been registered as a waste generator of other specified organics, PCBs, light fuels, oil skimmings and sludges since 1998.

Ontario Spill records indicated that a fire took place on 15 May 1992 at the site. The site was recorded as Ontario PCB storage site number 20289A044 in 1992.

The IMICO property was acquired by The Assembly of the Church of the Universe in 1993, however, records indicate IMICO was charged with and convicted of six counts of failing to "comply with Director's orders to remediated the property due to illegal activities and environmental contamination involving PCB waste" on 27 January 1997 and fined $4,000 for each charge.

One water well record was found, dated 13 March 2007, for observation wells at the site. Two historical EcoLog ERIS searches were also recorded for the site.

4.2.1.2 *Phase One Study Area*

Certificates of Approval

Eleven Certificates of Approval (CofAs) were found within the Phase One Study Area; the majority were for air emissions and not thought to have impacted the quality of the soil or groundwater underlying the property. However, one CofA was for industrial wastewater. Foseco Canada Inc. was issued a CofA on 26 September 1989 for the clean-up of contaminated groundwater at its plant on Alice Street, approximately 85 m west of the site. As the Foseco plant is inferred to be hydraulically cross-gradient, it is not thought to have impacted the soil or groundwater at the property.

Environmental Registry

Seven Environmental Registry records were issued within the Phase One Study Area. Three records were associated with Insitu Contractors Inc. (Insitu Contractors), located across Beverley Street from the property. In 2008 Insitu Contractors obtained approval for sewage works as well in addition to obtaining approval for discharge into the natural environment other than water in 2008 and 2009 for its mobile facility. The Insitu Contractors facility is located approximately 180 m south of the Phase Two property and is inferred to be down-gradient of the property thus not thought to have impacted the soil or groundwater underlying the property. ABS Friction

Corp. (ABS) had four records associated with its plant adjacent to the property. ABS had obtained approval for the discharge into the natural environment other than water in 1997, 2000, 2003 and 2009. The ABS plant is located approximately 200 m west of the site and is inferred to be down-gradient of the property thus wastes generated are not thought to have impacted the soil or groundwater underlying the property.

Ontario Regulation 347 Waste Generators Summary

The EcoLog ERIS search returned eight Ontario Waste Generator records for various commercial and light industrial businesses located at 24 Hayes Avenue, approximately 40 m southeast of the property and inferred to be down gradient of the property. Wastes generated at this location included inorganic laboratory chemicals, organic laboratory chemicals, paint/pigment/coating residues, emulsified oils as well as waste oils and lubricants. The property located at 24 Hayes Avenue is inferred to be down-gradient of the property; wastes generated at the property are not expected to have impacted the soil or groundwater underlying the property.

Five O.Reg. 347 waste generator records were associated with Insitu Contractors, located across Beverley Street from the site. Insitu Contractors have been generators of water oils and lubricants, and oil skimmings and sludges since 2002. As the Insitu Contractors facility is located approximately 180 m south of the property and is inferred to be down-gradient of the property, it is not thought to have impacted the soil or groundwater underlying the property. Choice Enterprises and Transportation Services have been waste generators of emulsified oils since 2003. Located at 143 Stevenson Street South, the facility is located approximately 180 west of the Phase Two property and is inferred to be cross-gradient of the property thus wastes generated are not thought to have impacted the soil or groundwater underlying the property.

Four waste generator records for alkaline wastes – other metals and oil skimmings and sludges were associated with Guelph Hydro for the intersection of Beverley Street and Stevenson Street South from 1989 until 1990, from 1992 until 2001, and from 2003 until 2003. The intersection of Beverley Street and Stevenson Street South is approximately 180 m south of the site and is inferred to be down-gradient of the property thus any wastes generated at this location are not thought to have impacted the soil or groundwater underlying the property.

Eleven waste generator records were found associated with various commercial tenants at 10 Kingsmill Avenue. Dating back to 1986 until 2012, the various tenants at this location have generated paints/pigments/coating residues, waste oils and sludges, waste crankcase oils and

lubricants, emulsified oils, oil skimmings and sludges, waste compressed gases, petroleum distillates, and aromatic solvents. 10 Kingsmill Avenue adjacent to the property on the southeast side (approximately 120 m from the property), it is inferred to be down-gradient of the property thus wastes generated are not thought to have impacted the soil or groundwater underlying the property. From 2009 until 2011, 212 Alice Street had three waste generator records associated with the property for the generation of light fuels. As of 2012, Stantec Consulting Inc. is recorded as a generator of inert organic wastes at the property.

Nine waste generator records were found to be associated with 201 Alice Street, located approximately 220 m west of 200 Beverly Street. From 1986 until 1990 and from 1992 until 1998, Foseco was a waste generator of alkaline wastes – other metals, neutralized wastes – other metals, paint/pigment/coating residues, other specified organics, inorganic laboratory chemicals, aromatic solvents, aliphatic solvents, petroleum distillates, polymeric resins, other polymeric wastes, halogenated solvents, oil skimmings and sludges, organic laboratory chemicals, amines, and other inorganic acid wastes. Since 2004, BP Canada Energy Company has been registered waste generators of aromatic solvents and residues at 201 Alice Street. The property at 201 Alice Street is inferred to be hydraulically cross-gradient, as such, wastes generated at this location are not thought to have impacted the soil or groundwater at the property.

No waste generator records were found associated to properties inferred to be hydraulically up-gradient to the site.

TSSA Expired Facilities, Private and Retail Fuel Storage Tanks, Retail Fuel Storage Tanks

Records for TSSA Expired Facilities, Private and Retail Fuel Storage Tanks, and Retail Fuel Storage Tanks are associated with two properties within the Phase One Study Area: Maple Leaf Gas and Fuels and Quality Auto Glass (Maple Leaf Gas) located at 390 York Road (250 m south of the property) and the property located at 408 York Road (250 m south of the Phase Two property). Three records of private and retail fuel storage tanks were found: one record was associated with a 100,000 L retail storage tank at Maple Leaf Gas and two records, pertaining to one 2,640 L and one 54,552 L retail storage tanks, for the property located at 408 York Road. Additionally, two TSSA Expired Facilities records were found associated with the property located at 408 York Road. The properties associated with private and retail storage tanks are inferred to be hydraulically down-gradient to the property and are not expected to have impacted the quality of the soil or groundwater at the site.

National Pollutant Release Inventory

Five National Pollutant Release Inventory records were found associated with ABS, located at 10 Kingsmill Avenue - adjacent to the property, for air releases of copper, PM10, and PM2.5. This is not thought to have impacted the soil or groundwater at the property.

Scott's Manufacturing Directory

Twenty-four records were found in Scott's Manufacturing Directory. Eight records were associated with the building located at 10 Kingsmill Avenue, five records were associated with 24 Hayes Avenue, four records were associated with Georges Furniture and Cabinet and Giorgio's Galeria, three records were associated with Steele Bros. located at 60 Johnston Street 250 m, west of the property), and records associated with Clear Choice Window Manufacturing (145 Stevenson Street South), Insitu (145 Stevenson Street South), Choice Enterprises Inc. (143 Stevenson Street South), and Lewis Upholstery (404 York Road, 250 m west of the site).

Ontario Spills

Two Ontario Spills records were found in the Phase One Study Area: a fire at 10 Kingsmill Avenue in which 1,200 L of water was used to put out the blaze and an unknown quantity of gasoline to the ground due to container overflow at 408 York Road. Neither spill is thought to have impacted the soil or groundwater quality at 200 Beverley Street.

Water Well Information System

Fifteen well records found for properties in the Phase One Study Area. The wells were utilized as monitoring and testing wells. The soil in the area was generally described as sandstone or bedrock overlain by sand and gravel, sand or peat fill soils.

4.2.2 TSSA Records Review

The TSSA Fuels Safety Branch was contacted and requested to review their files for any information available on the property regarding aboveground or underground storage tanks. The TSSA reported that they have no information in their records for the subject property.

It should be noted that the Fuels Safety Division of the TSSA did not license or register private fuel underground or aboveground storage tanks prior to January 1990 or fuel oil tanks prior to May 1, 2002. Further, private fuel oil or waste oil tanks in apartments, office buildings, residences, etc. and aboveground gas or diesel tanks are not registered with the TSSA.

4.2.3 Brownfields Environmental Site Registry

An on-line search of the MOE Brownfields Environmental Site Registry was performed by DCS. The search indicated no properties with Records of Site Condition (RSC) filed on lands within an estimated 500 metres of the site.

4.2.4 Environmental Registry

An on-line search of the MOE Environmental Registry was performed by DCS. The search indicated that there are no records on file for the site and seven records on file for properties within the vicinity of the site. The records were for approvals to discharge into the natural environment other than water (air) and sewage works.

4.2.5 HWIN Database Search

A search of the MOE HWIN database was performed by DCS on 2 December 2013 for current records of the site. The search returned one active waste generator number associated with the site; the City of Guelph was registered as a waste generator of light fuels and other specified inorganics. A comprehensive search of the MOE database for the site and vicinity is included in the EcoLog ERIS report (see Appendix E).

4.2.6 PCB Storage Sites

Searches of the MOE's inventory of PCB storage sites and Environment Canada's National PCB inventory were completed by EcoLog ERIS (see Section 4.2.1). The IMICO site was recorded as a PCB Storage Site in 1992. No current records were found pertaining to 200 Beverley Street as a PCB Storage Site.

4.2.7 National Pollutant Release Inventory

A search of Environment Canada's National Pollutant Release Inventory (NPRI) was completed by EcoLog ERIS (see Section 4.2.1). Five records were associated with ABS located at 10 Kingsmill Avenue, adjacent to the property, for air releases of copper, PM10, and PM2.5.

4.2.8 Waste Disposal Site Inventory

Review of the MOE *Waste Disposal Site Inventory*, dated June 1991, indicates that there are no active waste disposal sites on or near the subject property. The nearest closed waste disposal sites are over 5 km from the subject property, to the east. It is considered unlikely that the closed waste disposal sites would have any impact on the subject property.

4.2.9 Coal Gasification Sites

No coal gasification plant sites were identified in the vicinity of the subject property in the Inventory of Coal Gasification Plant Waste Sites in Ontario, Volume 1 (MOE 1987).

4.2.10 MOE FOI Request

A Freedom of Information (FOI) request was forwarded to the MOE for documents that are in the Ministry's files pertaining to any environmental concerns, orders, spills, charges/prosecutions, Certificates of Approval and waste sites on the subject property in 2007, at the time of the previous DCS Phase I ESA. The records obtained from the FOI were summarized in Section 4.1.5 *Environmental Reports*.

A new FOI request was forwarded to the MOE for documents dating from 2007 until present day. A response has not been received from the MOE at the time of reporting. Any response received after reporting will be forwarded to the City of Guelph.

4.3 PHYSICAL SETTING SOURCES

4.3.1 Aerial Photographs

Aerial photographs of the subject site were reviewed for the years 1930, 1964, 1972, 1981, 1990, and 1995. Photographs were chosen to provide approximately a ten year time period or less

between photographs to gain a general understanding of the site history. Copies of the aerial photographs are provided in Appendix C. The scale of the photographs does not allow for detailed description of the subject property. Observations made from each of the photographs are provided in the table below:

YEAR	DESCRIPTION
1930	Given the scale of the aerial photograph, the site features were not fully discernable. However, within the Phase One Study Area, the following was noted: • Rail line along the northern property boundary. • The land to the north is unoccupied. • The lands to the east of the property are unoccupied.
1964	• All buildings are completed. Ground surface at the eastern end appears to be slighter darker than the ground surface at the western end of the site. • The land to the north is unoccupied. • There is a plant to the northeast
1972	• There is now a parking area located in the northwest corner of the property • The land to the north is still not developed.
1981	• The lands are similar to previous years. • There is a new building located to the north of the machine shop and warehouse. This is identified as a storage building in previous documentation.
1990	• There are no cars in the parking lot (may indicate that plant is closed). Plant layout and surrounding lands are very similar to previous years. The plant to the north has expanded its operations and is using more of the lands to the north for a laydown yard.
1995	• It appears as if some of the buildings are in the process of being demolished. Buildings (shipping, storage, finishing and annealing and the machine shop and warehouse) in the northeast corner of the property do not have roofs. Also the offices at the front of the plant are in the process of being demolished.
2013	• All buildings have been demolished.

4.3.2 Topography, Hydrology and Geology

A review of the Ministry of Natural Resources (Ontario Geological Survey) Toronto and Surrounding Area Quaternary Geology Map (Map P.2204, 1980) indicates that the native soil conditions local to the site consist Port Stanley till; silt to sandy silt matrix that is strongly calcareous with moderate to low clast content from the Pleistocene Epoch.

A review of the Ministry of Natural Resources (Ontario Geological Survey) Geological Highway Map of Southern Ontario (Map 2441, 1979) indicates that the bedrock conditions local to the site consist sandstone, shale, dolostone, and siltstone. Depth to bedrock at the site was determined to be between approximately 1.14 and 2.66 m during the 2007 DCS Phase II ESA.

Groundwater is expected to flow to the east and southeast, towards the Eramosa River, approximately 550 m southeast of the site, but may be affected locally by such features as buried utilities/services.

A topographic map of the site is provided in Appendix G. The regional topography in the area of the site slopes to the southeast toward Eramosa River.

4.3.3 Fill Materials

Fill was encountered from surface to depths ranging from 0.3 - 1.78 metres at locations investigated by DCS in 2007. The fill was generally described as sand, gravel, coal and clinker, and silty sand.

4.3.4 Water Bodies and Areas of Natural Significance

The nearest water body to the site is the Eramosa River, which is located about 550 m southeast of the site.

An on-line search of the MNR Species at Risk database performed by DCS on 22 November 2013 indicated that there are potentially several sensitive species within the Wellington region, including Jefferson's Salamander, three fish species: the Black Redhorse, the Redside Dace, and the Silver Shiner, a mussel known as the Wavy-Rayed Lampmussel, Blanding's Turtle, the Northern Map Turtle, the Snapping Turtle, the Rusty-patched Bumble Bee, the following bird species: Bald Eagle, Barn Swallow, Black Tern, Bobolink, Eastern Meadowlark, Henslow's Sparrow, Least Bittern, Loggerhead Shrike, Short-eared Owl, and Yellow-breasted Chat, as well as the following plant species: American Chestnut, Hart's-tongue Fern, False Hop Sedge, and Hill's Pondweed. Most of these species have not been observed in the area for decades and the current habitat on and near the site is not generally suitable to support the listed species. No sensitive species of mammals were identified within the site Wellington region. Limitations on the location of the MNR database are due to the accuracy of the information provided. Should a Phase Two ESA be undertaken, care should be taken to identify and protect any threatened plant species and its habitat. Additionally communication with local conservation authorities is recommended.

According to *City of Guelph, Natural Heritage Strategy* published June 2002, the site is not located in a designated Environmentally Significant Area nor is it an Area of Natural and Scientific Interest.

4.3.5 Well Records

A search of water well records was completed as part of the EcoLog ERIS search. It was reported one well record associated with the site and fifteen well records for properties in the vicinity of the site for monitoring and testing.

There are a number of monitoring wells on the property that are used for groundwater monitoring and sampling.

The soil in the area was generally described as sandstone or bedrock overlain by sand and gravel, sand or peat fill soils.

4.4 SITE OPERATING RECORDS

No operating records were available for the site.

5.0 INTERVIEWS

Mr. Grant Ferguson, C.E.T., Program Manager, Technical Services for the City of Guelph was interviewed as part of this Phase One ESA.

Mr. Ferguson was interviewed by telephone on 2 December 2013. He has been working for the City of Guelph since 1991. Mr. Ferguson has overseen the remedial work undertaken by the City of Guelph since the Director's Order in 1994.

Mr. Ferguson indicated that the only entrance to the property it at the intersection of Kingsmill Avenue and Beverley Street. However, the fencing at along the northern border the property, along the train tracks, has been vandalized over the years and an opening had been cut in the area of the former employee parking lot. Trespassers often use the property to build dirt bike jumps areas or drawing graffiti in the former storage area on the northeast portion of the property. On occasion, there have been bush fires in the vicinity of the cut out opening in the fence.

Mr. Ferguson indicated the City of Guelph is working to redevelop the site as soon as possible.

The overall information obtained from the interviews was considered to be reliable and consistent with other information sources.

Copies of the completed interview forms are provided in Appendix I.

6.0 SITE RECONNAISSANCE

6.1 GENERAL REQUIREMENTS

An inspection of the site was undertaken by Ms. Tu-Anh Nguyen, M. Eng. (see Appendix J for Ms. Nguyen's qualifications) of DCS at 8:00 am on 7 November 2013. Ms. Nguyen was at the site and its vicinity for about 2.5 hours. The weather was cloudy with gusts of wind and about 10ºC during the site inspection. Observations made during the site inspections are presented below. The completed Phase One ESA site reconnaissance form is provided in Appendix I.

The locations of any significant land features identified during the inspection are shown on DCS Drawing N$^{o.}$ 701996-001-1. Photographs taken during the site visit are provided in Appendix B. Brief summaries of each photograph are provided below and in Appendix B.

Photograph No.	Description
1	View of debris and discarded spray paint cans on the western boundary of the property, looking west.
2	View of drums along foundation wall of the former machine shop and warehouse, looking north.
3	Debris along the northeastern perimeter of the property, looking northeast.
4	View of debris observed entering the property, looking north.
5	View of drums observed at the time of the site inspection, looking east.
6	View looking north on the property.
7	View looking south on the property
8	View looking east on the property.
9	View of the adjacent properties (railway and bulk storage facility) to the north.
10	View of adjacent properties (Kingsmill Avenue) to the east

6.2 SPECIFIC OBSERVATIONS AT PHASE ONE PROPERTY

6.2.1 Buildings

At the time of the site reconnaissance, no buildings were observed.

6.2.2 Open Lands

The site was covered with fill soils, debris, and was overgrown at the time of the site inspection on 7 November 2013. Soils appeared to be relatively undisturbed across the site with the exception of an area on the western portion of the site. Vegetation present at the site did not appear stressed. Some staining was observed on remnant foundation slabs, however, they appeared weathered. It is assumed the stains are from the previous use of the property as a foundry and waste storage site. No potentially contaminating activities were observed on the site during the site inspection.

No railway lines or spurs were observed on site. There is a rail corridor immediately adjacent to the north of the site.

No potable water wells were observed on the site. The site is serviced by municipal water from the City of Guelph. It is assumed the water supply is no longer connected. Several monitoring wells were observed at the time of the site inspection, they are assumed to have been installed during previous investigations.

No unidentified substances were observed on the site during the site visit of 7 November 2013.

6.2.3 Storage Tanks

No storage tanks or evidence of former storage tanks were observed during the site inspection. A UST was reportedly formerly present in the eastern corner of the site. One 45,000 L AST was removed by PES in 1999 as part of the demolition work.

6.2.4 Water Sources

The site was previously supplied with municipal drinking water from the City of Guelph, which is sourced from groundwater wells and a shallow groundwater collection system.

6.2.5 Utilities

There are currently no utilities present on the site as all services were disconnected prior to demolition.

6.2.6 PCBs

No evidence of transformers or PCB containing equipment was observed on the site. Historically, capacitors containing PCBs were present on site.

6.2.7 Asbestos

A designated substances survey was completed by PES prior to demolition of the building. Friable materials asbestos containing materials were identified in thermal insulation applied to pipe fittings and straights.

6.2.8 Refrigerants

No equipment containing refrigerants were observed at the property at the time of the site reconnaissance.

6.2.9 Hazardous and/or Waste Materials

Debris along the fenced perimeter was observed across the site during the inspection. Additionally, spray paint cans and construction material were observed on the western boundary of the property, debris and construction rubble pile was observed along the northeastern boundary of the property.

6.2.10 Sumps, Pits and Drains

No sumps, pits or drains were observed during the site inspection although it is known that pits were present when the plant was in operation.

6.2.11 Waste Water

No waste water is currently associated with the site. The site was previously serviced by the City of Guelph sewer systems; however, all services were disconnected prior to demolition.

6.2.12 Air Emission Sources

No sources of air emissions were observed during the site inspections.

6.2.13 Chemical Handling

No inventories of chemicals were observed during the site inspections.

6.2.14 Designated Substances

A designated substances survey was completed by PES in 1998 prior to demolition of the building. Friable and non-friable materials containing asbestos were identified by PES. PCBs and PCB-contaminated materials were also identified.

6.2.15 Mould

No mould was observed during the site inspection.

6.2.16 Investigation of Phase One Study Area

The adjacent land uses at the time of the site visit on 7 November 2013 were as follows:

North: Guelph Rail Line

South: Beverley Street followed by mainly industrial and commercial properties: ABS Friction was previously located at 10 Kingsmill Avenue, Dresco Plumbing and Supply is located at 24 Hayes Avenue, residential dwellings are located at 201, 203, and 205 Beverley Street, Stan's Plumbing and Heating Supplies is located at 101 Beverley Street, and In-Situ Contractors are located at 150 Stevenson Street South (at the intersection of Beverley Street and Stevenson Street South).

West: Stevenson Street South followed by Steele Bros. located at 60 Johnston Street, Choice Enterprises and Transportation Services is located at 143 Stevenson Street South, Sign Art Centre of Guelph Inc. is located at 145 Stevenson Street South, 147 Stevenson Street South houses WYGA Construction Ltd., as well as George's Furniture & Giorgio's Galleria, residential dwellings are located at 109 and 111 Stevenson Street South.

East: Former industrial facility currently used for commercial purposes.

No unusual conditions were observed on the adjacent lands. It should be noted that observations were made, for the most part, from the site or from publicly accessible areas.

Other property uses within the Phase One Study Area consist mainly of low-rise commercial and industrial properties with some residential dwellings. Most of the properties just outside of the Phase One Study Area are residential homes.

The nearest water body to the site is the Eramosa River, which is located about 550 m southeast of the site. Several sensitive species of turtles, fish, snakes, insects, and plants were identified within Wellington region as discussed in Section 4.3.4 *Water Bodies and Areas of Natural Significance*. Most of these species have not been observed in the area of the site for decades and the site and surrounding area is not generally suitable to provide habitat for these species.

Three well nests were installed by Gartner Lee (now AECOM) in 2004 at 490 York Road (located immediately to the north east of the property) to better define the groundwater flow conditions and groundwater quality in order to establish the source of VOC contamination observed in the wells located along the property boundary between the two properties.

6.3 ENHANCED INVESTIGATION PROPERTY

The site is considered to be an enhanced investigation property as it was previously used for operations including processing or manufacturing and storage of hazardous materials. The former plant also had equipment maintenance areas. As the building has been torn down, records required by O.Reg. 153/04, as amended, for an enhanced investigation were not available. Every reasonable inquiry was made to obtain records relating to the operation of the foundry and as a waste storage facility, however, no records were available.

One underground storage tank was previously present at the site, but removed in the mid-1980s, as discussed in Section 4.1.5 *Environmental Reports*. The UST was located in the northeastern section of the property. One 45,000 L AST was removed when the building was demolished in 1999.

The site was previously registered as a waste generator under Generator Number ON0103000 to IMICO. The City of Guelph has an active Generator Number (ON3323094) associated with the site. Wastes generated at the property were paints/pigment/coating residues, other specified inorganics, PCBs, oil skimmings and sludges, and light fuels.

There are no Certificates of Approval associated with the property.

Ontario Spills records indicated that a fire took place on 15 May 1992 at the site. And records indicate the site was an Ontario PCB storage site (number 20289A044) in 1992. IMICO was charged with and convicted of six counts of failing to "comply with Director's orders to remediated the property due to illegal activities and environmental contamination involving PCB waste" on 27 January 1997 and fined $4,000 for each charge.

The former buildings have been demolished and the property is currently vacant. No chemicals were observed at the property at the time of the site reconnaissance.

The site plan provided in DCS Drawing N$^{o.}$ 701996-001-2 shows the approximate former locations of foundry activities on the site.

6.4 WRITTEN DESCRIPTION OF INVESTIGATION

At the time of the site visit on 7 November 2013, the property was vacant. The building was demolished in 1999 but building foundation slabs remain at the property. Soils appeared to be relatively undisturbed across the site with exception of an area on the western portion of the site. Vegetation present at the site did not appear stressed. Some staining was observed on remnant foundation slabs, however, they appeared weathered, it is assumed the stains are from the previous use of the property as a foundry and waste storage site. No potentially contaminating activities were observed on the site during the site reconnaissance.

Potentially contaminating activities that have previously taken place on the site included gasoline and associated products storage in fixed tanks, historic importation of fill of unknown origin across the site, iron and steel manufacturing and processing, metal treatment, coating, and finishing, as well as the use and storage of PCBs.

Potentially contaminating activities were observed adjacent to the site, these activities include chemical manufacturing, processing, and bulk storage, and rail yard, tracks, and spurs.

As the fill soils were historically across all of 200 Beverley Street, the entire property is considered to be an area of potential environmental concern (APEC 1). APEC 2 comprises the eastern portion of the property that formerly housed a gasoline UST and a machine shop. The

centre portion of the former IMICO foundry in the vicinity of the capacitor room, cooling tower and offices is considered APEC 3. The southern portion of the property formerly housing the sand mixer, foundry sumps, and the electrical shop is considered APEC 4. The area in western portion of the property, where the maintenance garage was previously located comprises APEC 5. APEC 6 consists of the area of the former core room, power house, and boiler house. The northeastern portion of the property was previously used for storage and warehousing, including storage of PCBs, and as a machine shop, this is considered APEC 7.

7.0 REVIEW AND EVALUATION OF INFORMATION

7.1 CURRENT AND PAST USES

The site was first developed as a foundry in 1912. The site was used as a foundry until 1989, when the plant was abandoned. The site building was torn down in 1999. The site is slated to be redeveloped by the City of Guelph. The current and past uses of the site are summarized in the table below:

YEAR	NAME OF OWNER	DESCRIPTION OF PROPERTY USE	PROPERTY USE	OTHER OBSERVATIONS FROM AERIAL PHOTOGRAPHS, FIRE INSURANCE PLANS, ETC.
1912 to 1992	International Malleable Iron Company Limited	Foundry	Industrial	None
1992 to 1993	John H. Long	Chemical storage	Industrial	None
1993 to 1997	Church of the Universe	Inactive	Community	None
1997 to present	City of Guelph	Vacant	None	None

7.2 POTENTIALLY CONTAMINATING ACTIVITY

Potentially contaminating activities (PCAs) identified at the site include:

1) Placement of fill of unknown origin across the site.
2) Former underground storage tank in the northeast corner of the site.
3) Former iron and steel manufacturing and processing at the site.
4) Former metal treatment, coating, and finishing at the site.
5) Former use and storage of PCBs at the site.

Potentially contaminating activities in the Phase One Study Area include:

6) Chemical manufacturing, processing, and bulk storage adjacent to the site.
7) Rail yard, tracks, and spurs adjacent to the site.

7.3 AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

The Areas of Potential Environmental Concern (APEC) on the site are summarized in the table below:

APEC	LOCATION OF APEC ON PHASE ONE PROPERTY	POTENTIALLY CONTAMINATING ACTIVITY	LOCATION OF PCA (ON OR OFF-SITE)	CONTAMINANTS OF POTENTIAL CONCERN	MEDIA POTENTIALLY IMPACTED (GROUND WATER, SOIL AND/OR SEDIMENT)
APEC 1	Entire property	Importation of Fill Material of Unknown Quality (30)	On-site	Metals and inorganic parameters	Soil and Groundwater
APEC 2	Eastern portion, former location of UST and machine shop	Gasoline and Associated Product Storage in Fixed Tanks (28), Metal Treatment, Coating and Finishing (33)	On-site	Metals and inorganic parameters PHCs and BTEX VOCs	Soil and Groundwater
APEC 3	Central portion of the site, in the vicinity of the former capacitor room, cooling tower and offices	Iron and Steel Manufacturing and Processing (32), Use and storage of PCBs at the site	On-Site	PHCs and BTEX PCBs PAHs VOCs	Soil and Groundwater
APEC 4	Southern portion of the site, formerly housing the sand mixer, foundry sumps, and the electrical shop	Iron and Steel Manufacturing and Processing (32)	On-Site	PHCs and BTEX PCBs PAHs VOCs	Soil and Groundwater
APEC 5	Western portion of the property, former maintenance garage	Garage, Maintenance and Repair Area	On-Site	PHCs and BTEX PAHs VOCs	Soil and Groundwater
APEC 6	Former core room, power house, and boiler house	Use and storage of PCBs	On-Site	PHCs and BTEX PCBs PAHs VOCs	Soil and Groundwater

APEC	LOCATION OF APEC ON PHASE ONE PROPERTY	POTENTIALLY CONTAMINATING ACTIVITY	LOCATION OF PCA (ON OR OFF-SITE)	CONTAMINANTS OF POTENTIAL CONCERN	MEDIA POTENTIALLY IMPACTED (GROUND WATER, SOIL AND/OR SEDIMENT)
APEC 7	Northeastern portion of the property, former storage and warehousing, including storage of PCBs, and as a machine shop	Iron and Steel Manufacturing and Processing (32), Metal Treatment, Coating and Finishing (33), Use and Storage of PCBs.	On-Site	PHCs and BTEX PCBs PAHs VOCs	Soil and Groundwater
APEC 8	Northwestern property boundary	Chemical manufacturing, processing, and bulk storage (8)	Off-Site	PHCs and BTEX PCBs PAHs VOCs	Soil and Groundwater
APEC 9	Northwestern property boundary	Rail yard, tracks, and spurs adjacent to the site (46)	Off-Site	Metals and inorganics PHCs and BTEX PAHs	Soil and Groundwater

Note: Number in brackets refers to Potentially Contaminating Activities referenced in Schedule D, Table 2, O.Reg. 153/04

It should be noted that contamination is present in the groundwater on the eastern property boundary and on the adjacent property located at 460 York Street. The MOE and the City of Guelph are conducting an on-going investigation on the source of contamination. At the time of writing, no source has been identified.

7.3.1 Assessment of APECs

The APECs listed in Section 7.3 of greatest concern on the site include those associated with on-site activities (PCAs 1 to 6). Contaminants of concern associated with these PCAs include metals and inorganic parameters, BTEX, PHCs, PCBs, PAHs, and VOCs, as listed above.

The rationale for the conclusion that these APECs are considered to be of greatest concern to the site is provided below.

PCA 1: Placement of fill across the site from an unknown source (APEC 1)

- Metal concentrations exceeding MOE Table 1 industrial/commercial/community land use Standards were previously reported in the fill across the site by DCS in 2007.
- DCS found metals impacts in soil and groundwater in 2007.

PCA 2: Former UST in the northeast corner of the site (APEC 2)

- The UST reportedly contained gasoline.
- DCS identified PHC impacts in soil in this area during the 2007 investigation as well as PAHs.

PCA 3: Former iron and steel manufacturing and processing at the site (APECs 3, 4, and 7)

- The site was previously owned by IMICO and used as a foundry from its purchase in 1912 until the plant closed in 1989.
- Previous demolition and remediation work have occurred at the property.
- DCS found PHC, PAH, PCB, VOC soil and groundwater contamination across the entire property in 2007.

PCA 4: Former metal treatment, coating, and finishing at the site (APECs 2 and 7)

- The site was previously owned by IMICO and used as a foundry from its purchase in 1912 until the plant closed in 1989.
- Previous demolition and remediation work have occurred at the property.
- DCS found PHC, PAH, PCB, VOC soil and groundwater contamination across the entire property in 2007.

PCA 5: Former use and storage of PCBs at the site (APEC 6)

- The former PCB storage area was identified in the northeast portion of the property.
- PCB impacts were found by DCS in the 2007 Phase II ESA.

PCA 6: Former garage, maintenance and repair area (APEC 5)

- Two maintenance garages were previously located on the north western portion of the property.
- DCS found PAH and metals soil contamination in 2007 during the Phase II ESA.

PCAs which are believed to have resulted in negligible APECs include PCAs 7 and 8. The rationale for the conclusion that these APECs are of negligible concern is provided below:

PCA 7: Chemical manufacturing, processing, and bulk storage (APEC 8)

- While the bulk chemical storage facility is of concern and adjacent to the property, it is not thought to impact the quality of the soil and groundwater at the property.

PCA 8: Rail yard, tracks, and spurs (APEC 9)

- While the Guelph Rail Line is of concern and adjacent to the property, it is not thought to impact the quality of the soil and groundwater at the property.

7.4 PHASE ONE CONCEPTUAL SITE MODEL

A conceptual site model (CSM) is provided as DCS Drawing N$^{o.}$ 701996-001-3 at the rear of this report. The CSM covers the Phase One property and Phase One Study Area and indicates APECs on the site and the locations of PCAs potentially affecting the site. The property uses in the Phase One Study Area are also shown.

The PCAs indicated on the CSM which may potentially have affected the site include the placement of fill of unknown origin across the site; the former presence of a UST at the northeast corner of the site; former capacitor room; former sand mixer and foundry sumps; former maintenance garage; former core room, boiler and power house; and the former storage of PCBs.

APECs resulting from these PCAs include the fill soils across the site, the subsurface soil and groundwater underlying the site.

Potential contaminants of concern associated with these PCAs include metals, petroleum hydrocarbons, BTEX compounds, polychlorinated biphenyls, polycyclic aromatic hydrocarbons, and volatile organic compounds. Media potentially impacted includes the soil and groundwater underlying the site.

Based on the current findings, no changes were observed with respect to site conditions between the previous Phase I ESA completed by DCS and the present Phase One ESA.

8.0 CONCLUSIONS

8.1 WHETHER PHASE TWO ESA REQUIRED BEFORE RECORD OF SITE CONDITION SUBMITTED

Based on observations made during the site visit and information gathered during the review of historic information, there is a potential that the soil and groundwater underlying the site may have been adversely affected by the presence of fill soils of unknown origin across the site; the former presence of a UST at the northeast corner of the site; former capacitor room; former sand mixer and foundry sumps; former maintenance garage; former core room, boiler and power house; and the former storage of PCBs.

It is recommended by DCS that a Phase Two Environmental Site Assessment be carried out on the site before submission of a Record of Site Condition (RSC).

8.2 RECORD OF SITE CONDITION BASED ON PHASE ONE ESA ALONE

Based on the results of this investigation it has been determined that the site is not suitable for submission of a RSC based on the Phase One ESA alone. The presence of APECs on the site and PCAs both on the site and up-gradient of the site warrant the completion of a Phase Two ESA prior to submission of a RSC.

8.3 SIGNATURES

The data review, facility investigation and interviewing for this Phase One ESA program was undertaken by Ms. Tu-Anh Nguyen, M. Eng. Ms. Nguyen reviewed, evaluated and interpreted the data. This report was prepared by Ms. Nguyen and reviewed by Mr. Stephen R. Prior, P.Eng. (QP_{ESA}), and Mr. Richard W. Browne, M.A.Sc., P.Eng. (QP_{ESA}, QP_{RA})

Résumés detailing the qualifications and technical experience of the site assessors are included in Appendix J.

Respectfully submitted,

DECOMMISSIONING CONSULTING SERVICES

Tu-Anh Nguyen, M.Eng.
Environmental Specialist

Stephen R. Prior, P.Eng. QP_{ESA}
Senior Project Manager

Richard W. Browne, M.A.Sc., P.Eng. QP_{ESA}, QP_{RA}
Senior Vice President

9.0 REFERENCES

Inventory of Coal Gasification Plant Waste Sites, Volume 1, prepared for Ontario Ministry of the Environment, Waste management Branch, 40 St. Clair Avenue West, Toronto, Ontario, prepared by Intera Technologies, Ltd, Ottawa,, dated April 1987.

Ontario Regulation 153/04, made under Environmental Protection Act, (Records of Site Condition — Part XV.1 of the Act) Consolidation Period: From September 5, 2006

Ontario Regulation 511/09 made under the Environmental Protection Act, Amending O.Reg 153/04 (Records of Site Condition – Part XV.1 of the Act), filed December 29, 2009.

Sections of *Environmental Investigations, Report Recommendation*, prepared for International Malleable Iron Company Limited by Proctor & Redfern Limited (P&R), dated August 1989.

Draft Environmental Investigation, International Malleable Iron Company, 200 Beverley Street, Guelph, Ontario, prepared for the Bank of Montreal by P&R, dated 10 June 1991.

Final Draft for Discussion, Hydrogeologic Site Investigation, Former IMICO Foundry Site, Guelph, Ontario, prepared for the City of Guelph by Gartner Lee Limited (Gartner Lee), dated August 1998.

Supplemental Hydrogeologic Investigation, Former IMICO Site, prepared for the City of Guelph by Gartner Lee, dated March 1999.

City of Guelph, Former IMICO Facility, Demolition and Waste Removal Report, prepared for the City of Guelph by Earth Tech (Canada) Inc. (Earth Tech), dated October 1999.

Progress Report #6 from the City of Guelph to the MOE dated 23 August 2001

Progress Report #7 from the City of Guelph to the MOE date 6 March 2002

Summary of Environmental Conditions and Resultant Redevelopment Constraints at 200 Beverley Street, Guelph, prepared by CH2M HILL Canada Limited dated 13 November 2003.

Phase I Environmental Site Assessment, Former IMICO Property, 200 Beverley Street, Guelph, Ontario, prepared for the City of Guelph by DCS dated December 2007.

Phase II Environmental Site Assessment, Former IMICO Property, 200 Beverley Street, Guelph, Ontario, prepared for the City of Guelph by DCS dated December 2007.

Preliminary Remedial Action Plan, Former IMICO Property, 200 Beverley Street, Guelph, Ontario, prepared for the City of Guelph by DCS dated March 2008.

2011 Annual Groundwater Monitoring Report, Former IMICO Site, 200 Beverley Street, Guelph, Ontario, prepared for the City of Guelph by AECOM dated August 2013.

10.0 USE AND LIMITATIONS OF THIS PHASE ONE ESA REPORT

The Phase One ESA scope of work involves inspection and the recording of readily observable environmental conditions on the Site that were available for direct observation at the time of the site visit and provides preliminary professional opinions about the likely environmental status of these portions of the Site based on our observations and experience, as well as by reference to historical records prepared by others. The Phase One ESA reports on conditions at the date the work was performed (November 2013) and as site conditions and other information presented can change, the Phase One ESA findings and interpretations may be altered with time.

The scope of a Phase One ESA inspection does not include systematic sampling and analysis of soil, groundwater or other materials. A Phase One ESA does not therefore provide definitive conclusions as to subsurface conditions and in particular whether these are within regulatory guidelines for soil and groundwater; nor can the potential for environmental issues be evaluated in inaccessible areas. Unless specifically requested by the client, a Phase One ESA does not include the testing of building materials or waste materials in on-site tanks or containers nor does it verify the completeness or accuracy of historical records referenced, e.g., as to historical uses on and around the Site and historical environmental incidents, if any, which could provide further insights into site conditions.

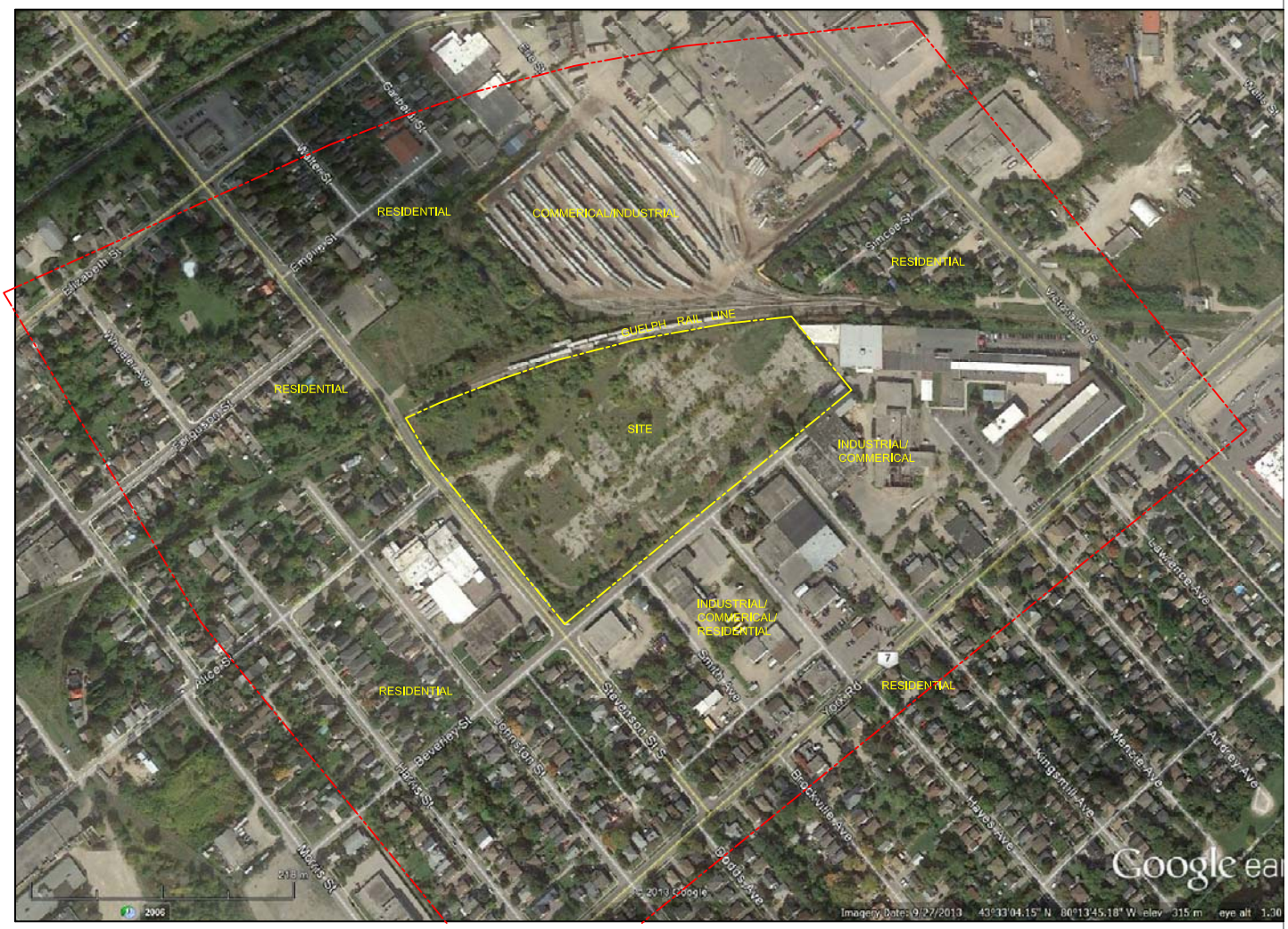
Due to these limitations on the scope of work for a Phase One ESA, it is possible that environmental conditions which affect the use or value of the Site are not referred to in this report. The Phase One ESA usually can only describe the likelihood of contamination being present or absent at a property. It is intended to reduce, but not necessarily eliminate, uncertainty regarding the potential for contamination of a property. Where this potential has been identified, the further reduction or elimination of uncertainty requires the performance of a Phase Two ESA.

This report has been prepared by DCS for the City of Guelph. DCS accepts no liability, whether in negligence, contract or arising on any other basis for damages or for indemnification arising from decisions or actions by others based on this report.

APPENDIX A

SITE PLAN

DCS



DCS

DECOMMISSIONING CONSULTING SERVICES

CITY OF GUELPH

200 BEVERLEY STREET, CITY OF GUELPH

PHASE I ESA

SITE PLAN

Project No.701996-001	JAN. 2014	N.T.S.	701996-001-1

RESIDENTIAL

ALICE STREET

SIB

SAN

INDUSTRIAL/COMMERICAL

STEVENSON STREET SOUTH

SAN

BH07-71

EMPLOYEE PARKING LOT

SPOILS PILE

COMMERICAL / INDUSTRIAL

BH07-59

BH07-70

BH07-69

TIME OFFICE

HW16

OW07- 31

HNE19

10

10E10

H

HE16

10S70

GUELPH RAIL LINE

11/2 STOREY BUILDING

BH07-68

SHED

BH07-66

EW8

E

ESW8

BH07-67

OW15

OW5

OW16

MAINTENANCE GARAGE

11E25

11

OW2

12

BH07-60

G

12SE10

SILOS COAL STORAGE

BH07-58

INW30

SHIPPING

C14

9N15

SHED

OW07- 37

INE15

C13

STORAGE

KNW10

OW17

K

KE13

BH07-42

BH07-43

OW3-II

I

OW3-I

OW07- 38S

KW32

BH07-51

TP12

CORE ROOM

9

8N10

J

IE15

TRIMMING AND GRINDING

FINISHING AND ANNEALING OVEN

PCB STORAGE

TP9

BH07-45

SUB STATION

BH07-65

8

BH07-63

SAND

COAL

OW07- 32

POWER HOUSE

BOILER HOUSE

BH07-46

TP11

C5

TP8

C15

C12

STORAGE

BH8

D

DSW7

7

BH07-56

JS15

JSE25

JE15

OW22S

OW22D

TP10

TP6

TP7

LN2

C9

TP5

LW23

LW14

L

BH07-44

ELECTRICAL SHOP

STORAGE AND SHOWERS

OW 07-33

C11

C10

C6

C7

OW19

BH22

C8

BH24

BH23

BH07-40

OW12

6

BH07-50

C2

C1

SAND MIXER

COOLING TOWER

FORMER IMICO FOUNDRY

FORMER GASOLINE UST

BH07-48

BH07-52

MACHINE SHOP AND WAREHOUSE

GRINDING AND ELECTRIC ANNEALING OVEN

5 4 3 2 1

CAPACITOR ROOM

OW25

BH07-49

C4

C3

FOUNDRY SUMPS (PREVIOUSLY REMEDIATED)

BH07-47

TP9

OW23-S

OW18-I

OW18-II

OW23D

OW28D

OW28-S

TP1

TP2

AN21

TP3

FOUNDRY SUMPS (PREVIOUSLY REMEDIATED)

OW07-34D

BH07-57

BH07-41

FITTING AND WAREHOUSE

5

BH07-64

BH07-61

CW10

C

CE10

OFFICES

OW07- 34S

1

1W9

BH07-54

OW30-S

OW30D

BH07-55

FORMER GASOLINE UST

OW4

TP2

TP3

BH07-53

OW24-S

OW24D

TP6

B

MACHINE SHOP

4

OW11-II

OW11-I

3

BH07-62

OW26D

OW26S

OW10

2

BW11

OW14

TP1

TP4

ASW14

ASE13

OW9-I

OW13

TP8

BEVERLEY STREET

SAN

SAN

OW07- 35

TP4

TP5

TP7

EXISTING MACHINE SHOP

OW07- 36S

OW07- 36D

OW29D

OW29-S

SIB

SMITH AVE.

HAYES AVE.

RESIDENTIAL HOUSING

KINGSMILL AVE.

RESIDENTIAL / COMMERICAL / INDUSTRIAL

Jan 31, 2014 - 5:24pm - USER pflemming
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Project No. 701996-001

LEGEND:

SAMPLING LOCATIONS - DCS

OW 07-36S — SHALLOW MONITORING WELL IN ROCK

OW07- 36D — DEEP MONITORING WELL IN ROCK

BH07-39 — SHALLOW BOREHOLE

SAMPLING LOCATIONS - OTHERS

L — TEST PIT LOCATION (BY PROCTOR & REDFERN),1990.

10S70 — TEST PIT LOCATION (ADDITIONAL BY PROCTOR & REDFERN),1990.

C10 — COREHOLE LOCATON (BY PROCTOR & REDFERN),1990.

OW3-I — MONITORING WELL (BY PROCTOR & REDFERN), 1990.

OW6 — MONITORING WELL (BY GARTNER LEE), VARIOUS YEARS.

TP9 — TEST PIT (BY GARTNER LEE), 2000.

TP10 — TEST PIT (BY GARTNER LEE), 1999.

BH7 — BOREHOLE LOCATION (BY GARTNER LEE), VARIOUS YEARS.

REFERENCE:

* ENVIRONMENTAL INVESTIGATION, INTERNATIONAL MALLEABLE IRON COMPANY, 200 BEVERLEY STREET, CITY OF GUELPH - BY PROCTOR AND REDFERN LIMITED, JUNE 1991.

* SUPPLEMENTAL HYDROGEOLOGIC INVESTIGATION, FORMER IMICO SITE - BY GARTNER LEE LIMITED, MARCH 1999.

* INTRUSIVE (TEST PIT) INVESTIGATION, FORMER IMICO FOUNDRY SITE - BY GARTNER LEE LIMITED, JULY 2000.

* INTERIM GROUNDWATER MONITORING REPORT, FORMER IMICO SITE, SUMMER 2006 GROUNDWATER MONITORING EVENTS - BY GARTNER LEE LIMITED, OCTOBER 2006.

DCS

DECOMMISSIONING CONSULTING SERVICES

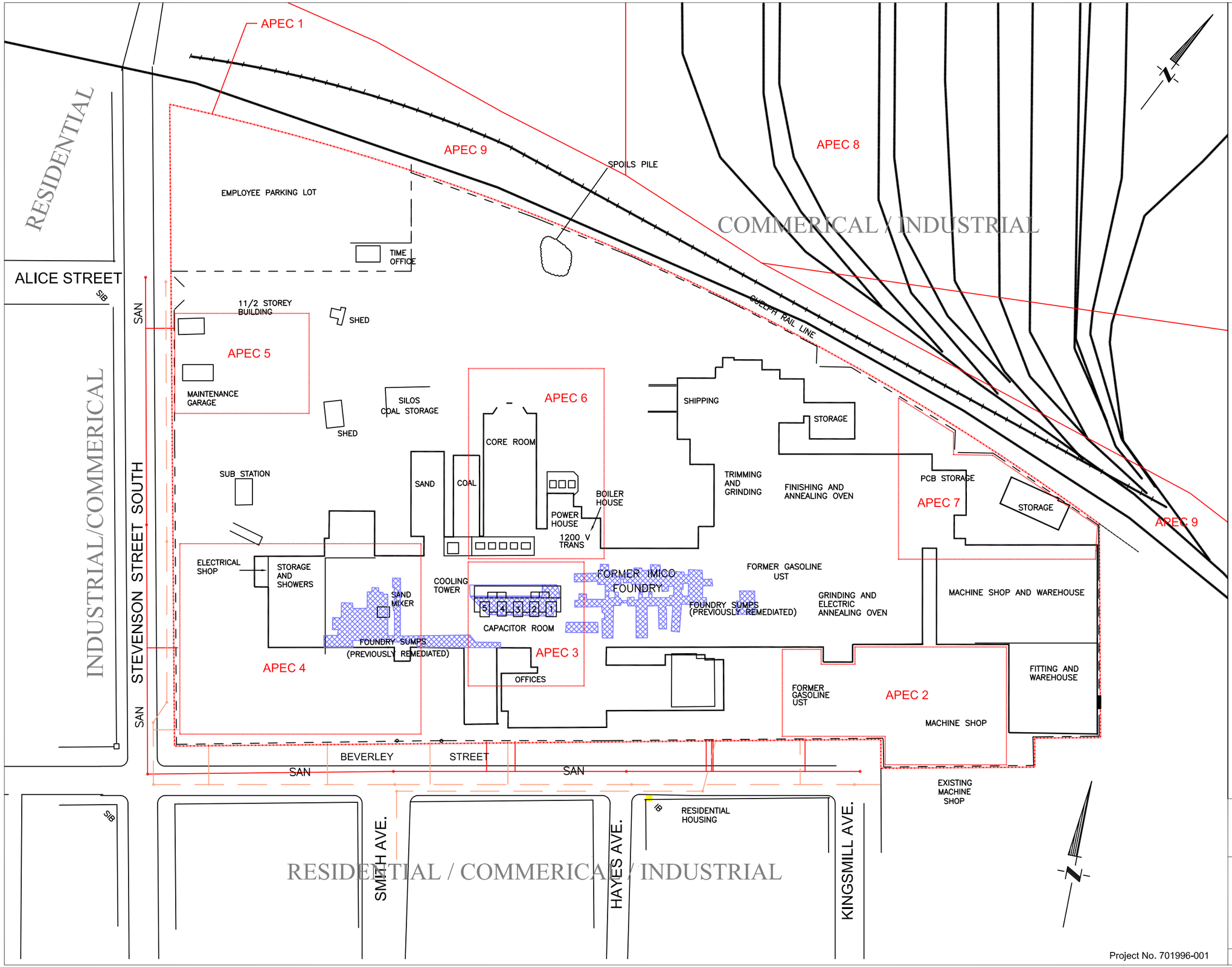
CITY OF GUELPH

200 BEVERLEY STREET, CITY OF GUELPH

PHASE I ESA

BOREHOLE AND MONITORING WELL LOCATIONS

JAN. 2014	1:1250	701996-001-2



LEGEND:

EXTENT OF FOUNDRY SUMPS

AREAS OF POTENTIAL ENVIRONMENTAL CONCERNS

APEC 1	HISTORIC IMPORTATION OF FILL OF UNKNOWN QUALITY
APEC 2	HISTORIC GASOLINE AND ASSOCIATED PRODUCT STORAGE IN FIXED TANKS, METAL TREATMENT, COATING AND FINISHING.
APEC 3	HISTORIC IRON AND STEEL MANUFACTURING AND PROCESSING, USE AND STORAGE OF PCBs.
APEC 4	HISTORIC IRON AND STEEL MANUFACTURING AND PROCESSING.
APEC 5	HISTORIC GARAGE AND MAINTENANCE AND REPAIRS.
APEC 6	HISTORIC USE AND STORAGE OF PCBs.
APEC 7	HISTORIC IRON AND STEEL MANUFACTURING AND PROCESSING METAL TREATMENT, COATING AND FINISHING, USE AND STORAGE OF PCBs.
APEC 8	CHEMICAL MANUFACTURING, PROCESSING AND BULK STORAGE
APEC 9	RAIL YARD, TRACKS AND SPURS ADJACENT TO THE SITE

REFERENCE:

CITY OF GUELPH, FORMER IMICO FACILITY, DEMOLITION AND WASTE REMOVAL REPORT - BY EARTH TECH, OCTOBER 1999

DCS

DECOMMISSIONING CONSULTING SERVICES

CITY OF GUELPH
200 BEVERLEY STREET, CITY OF GUELPH

PHASE I ESA

CONCEPTUAL SITE MODEL

Project No. 701996-001

JAN. 2014	1:1250	701996-001-3

APPENDIX B

SITE PHOTOGRAPHS

Photograph No. 1: View of debris and discarded spray paint cans on the western boundary of the property, looking west.

Photograph No. 2: View of drums along foundation wall of the former machine shop and warehouse, looking north.

Photograph No. 3: Debris along the northeastern perimeter of the property, looking northeast.

Photograph No. 4: View of debris observed entering the property, looking north.

Photograph No. 5: View of drums observed at the time of the site inspection, looking east.

Photograph No. 6: View looking north on the property.

Photograph No. 7: View looking south on the property.

Photograph No. 8: View looking east on the property.

Photograph No. 9: View of the adjacent properties (railway and bulk storage facility) to the north.

Photograph No. 10: View of adjacent properties (Kingsmill Avenue) to the east

APPENDIX C

AERIAL PHOTOGRAPHS

DCS

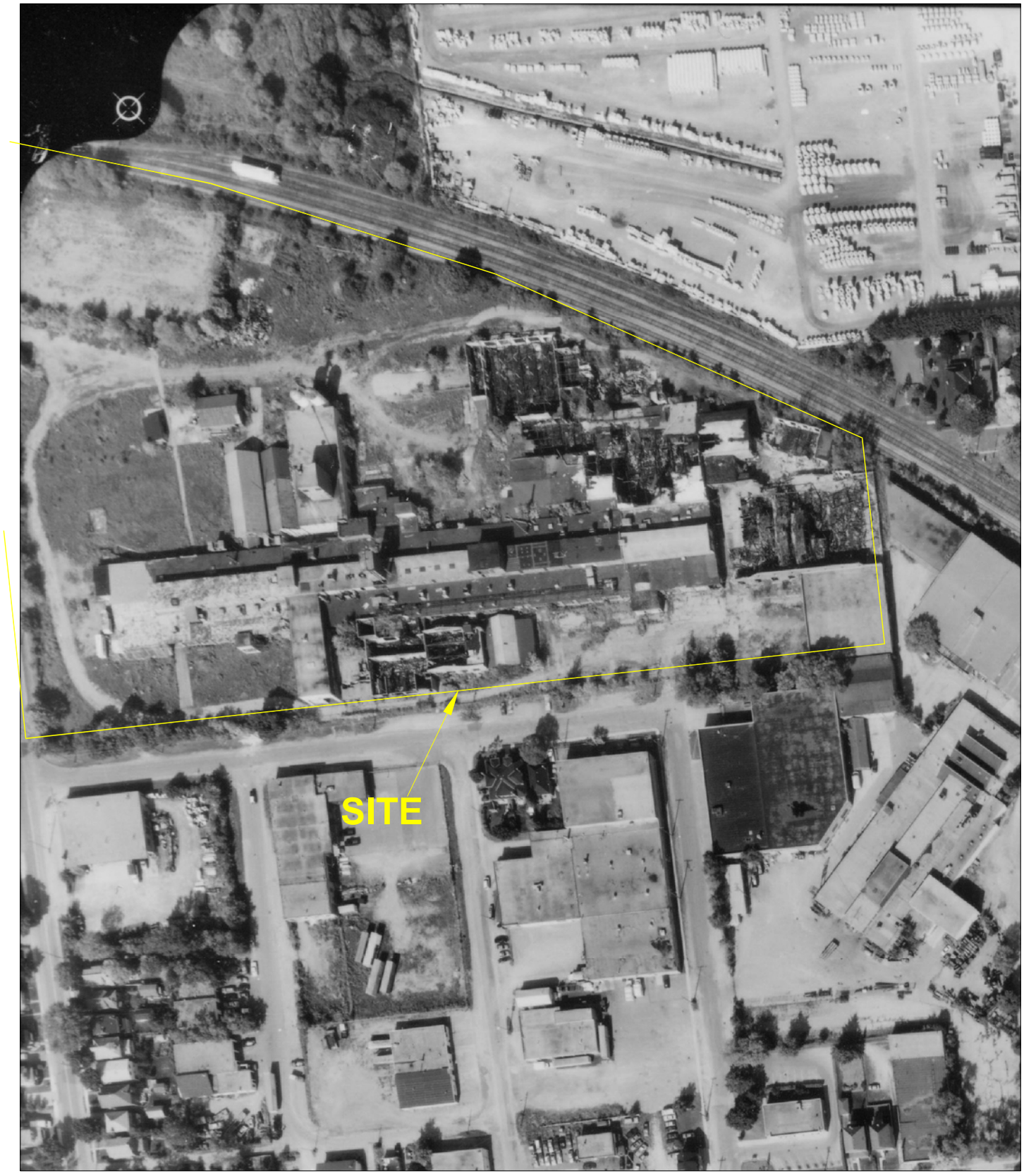
1930 AERIAL PHOTO
Scale N.T.S.

1964 AERIAL PHOTO
Scale N.T.S.

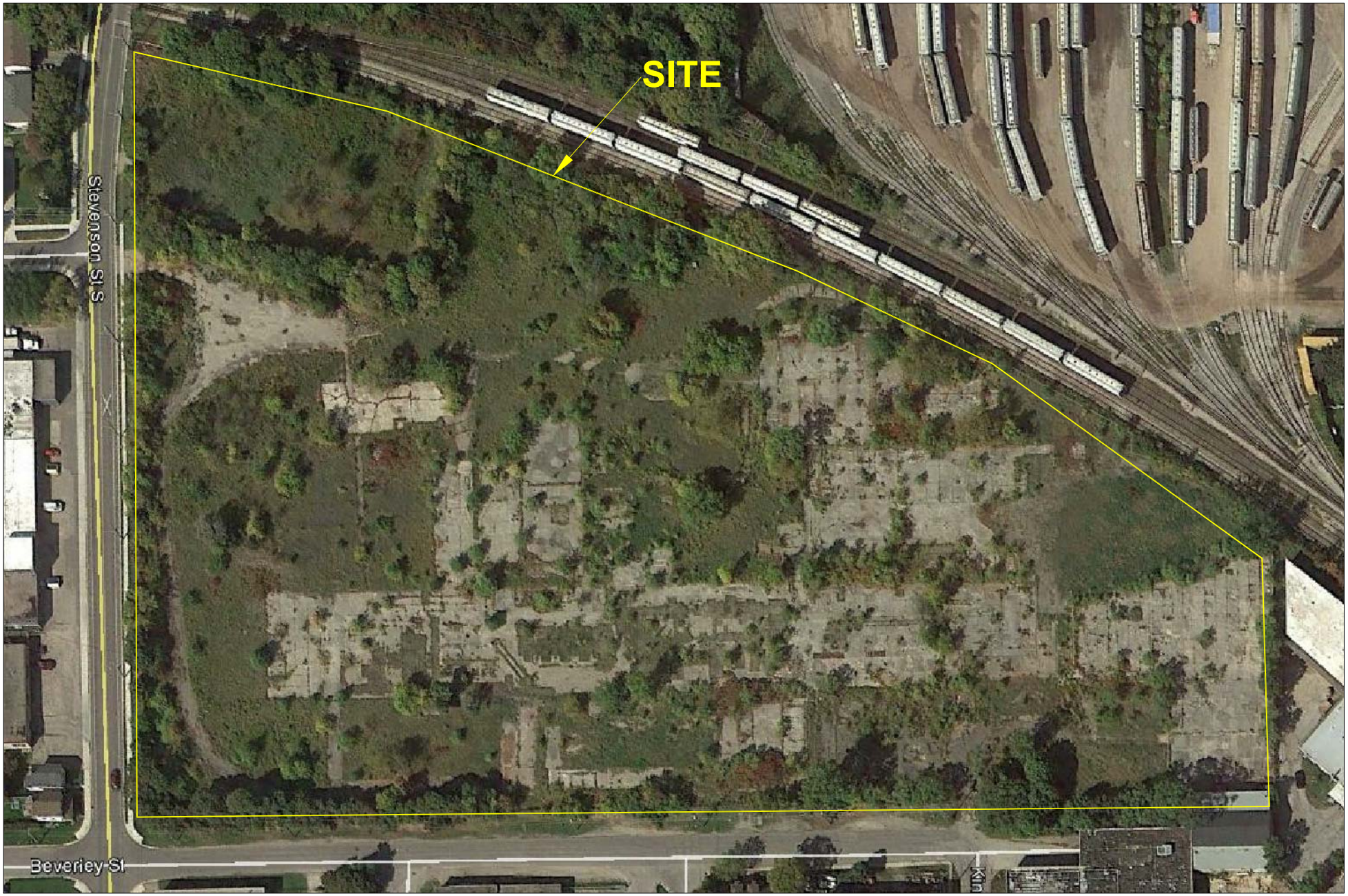
1972 AERIAL PHOTO
Scale N.T.S.

1981 AERIAL PHOTO
Scale N.T.S.

1990 AERIAL PHOTO
Scale N.T.S.



1995 AERIAL PHOTO
Scale N.T.S.



2013 AERIAL PHOTO
Scale N.T.S.

APPENDIX D

FIRE INSURANCE PLANS

DCS

Business solutions through information technology

ISO 9001 Certified

CGI – Risk Management Services

9MAllstate Parkway
R[th] Floor
Markham, Ontario
i 3R S[e]3

Tel. (9MR) 474-MMMB
Fax. (9MR) 474-RSM4
www.cgi.com

CGI Environmental Services

Historical Environmental Reporting System (HEIRS™)

December 5, 2006

Kathryn Shaw-Edmond
EcologERIS
12 Concorde Place, Suite 800
Toronto, ON
M3C 4J2

Regarding: 200 Beverly St, Guelph, ON

As requested, we have searched our records concerning the above site and the following information as listed below is appended hereto:

Information	Date(s)
Fire Insurance Plan(s)	NRF
Property Underwriters' Report(s)	NO
Property Underwriters' Plan(s)	NO

NRF: No Records Found NO: Not Ordered

Our invoice in the amount of $ 40.00 (+ GST) for the information provided will follow in due course.

Thank you for employing the services of CGI.

Joan Majchrowski
Environmental Services

1 ew : eEsite – www.cJi-iEs.cRP /iDR

TERMS AND CONDITIONS

Report. The documents (hereinafter referred to as the "Documents") to be released as part of the report (hereinafter referred to as the "Report") to be delivered to the purchaser as set out above are documents in CGI's records relating to the described property (hereinafter referred to as the "Property"). CGI makes no representations or warranties respecting the Documents whatsoever, including, without limitation, with respect to the completeness, accuracy or usefulness of the Documents, and does not represent or warrant that these are the only plans and reports prepared in association with the Property. The Documents are current as of the date(s) indicated on them. Interpretation of the Documents, if any, is by inference based upon the information which is apparent and obvious on the face of the Documents only. CGI does not represent, warrant or guarantee that interpretations other than those referred to do not exist from other sources. The Report will be prepared for use by the purchaser of the services as shown above hereof only.
Disclaimer. CGI disclaims responsibility for any losses or damages of any kind whatsoever, whether consequential or other, however caused, incurred or suffered, arising directly or indirectly as a result of the services (which services include, but are not limited to, the preparation of the Report provided hereunder), including but not limited to, any losses or damages arising directly or indirectly from any breach of contract, fundamental or otherwise, from reliance on CGI Reports or from any tortious acts or omissions of CGI's agents, employees or representatives.
Entire Agreement. The parties hereto acknowledge and agree to be bound by the terms and conditions hereof. The request form constitutes the entire agreement between the parties pertaining to the subject matter hereof and supersedes all prior and contemporaneous agreements, negotiations and discussions, whether oral or written, and there are no representations or warranties, or other agreements between the parties in connection with the subject matter hereof except as specifically set forth herein. No supplement, modification, waiver, or termination of the request shall be binding, unless confirmed in writing by the parties hereto.
Governing Document. In the event of any conflicts or inconsistencies between the provisions hereof and the Reports, the rights and obligations of the parties shall be deemed to be governed by the request form, which shall be the paramount document.
Law. This agreement shall be governed by and construed in accordance with the laws of the Province of * and the laws of Canada applicable therein.

APPENDIX E

ECOLOG ERIS REPORT

DCS

ERIS

REPORT

Project Property:	*701996 - Phase One ESA* *200 Beverley St* *Guelph ON N1E3C4*
Report Type:	*Standard Report*
Order #:	*20131028018*
Date:	*November 4, 2013*

EcoLog ERIS Ltd.
Environmental Risk
Information Service Ltd. (ERIS)
A division of Glacier Media Inc.
P: 1.866.517.5204
E: info@erisinfo.com

www.erisinfo.com

Table of Contents

Executive Summary

Property Information:

Project Property:		*701996 - Phase One ESA* *200 Beverley St Guelph ON N1E3C4*
Coordinates:		
	Latitude:	*43.551327*
	Longitude:	*-80.229462*
	UTM Northing:	*4,822,330.08*
	UTM Easting:	*562,240.90*
	UTM Zone:	*UTM Zone 17T*
Elevation:		*1,033 FT* *315.00 M*

Order Information:

Order No.:	*20131028018*
Date Requested:	*05/11/2013*
Requested by:	*Decommissioning Consulting Services Ltd.*
Report Type:	*Standard Report*

Additional Products:

Topographic Map	*Ontario Base Map (OBM)*

Executive Summary: Report Summary

Database	Name	Selected	On Site	Within 0.25KM	Total
AAGR	Abandoned Aggregate Inventory	Y	0	0	0
AGR	Aggregate Inventory	Y	0	0	0
AMIS	Abandoned Mine Information System	Y	0	0	0
ANDR	Anderson's Waste Disposal Sites	Y	0	0	0
AUWR	Automobile Wrecking & Supplies	Y	0	0	0
BORE	Borehole	Y	0	0	0
CA	Certificates of Approval	Y	0	11	11
CFOT	Commercial Fuel Oil Tanks	Y	0	0	0
CHEM	Chemical Register	Y	0	0	0
COAL	Inventory of Coal Gasification Plants and Coal Tar Sites	Y	0	0	0
CONV	Compliance and Convictions	Y	0	1	1
CPU	Certificates of Property Use	Y	0	0	0
DRL	Drill Hole Database	Y	0	0	0
EASR	Environmental Activity and Sector Registry	Y	0	0	0
EBR	Environmental Registry	Y	0	7	7
ECA	Environmental Compliance Approval	Y	0	0	0
EEM	Environmental Effects Monitoring	Y	0	0	0
EHS	ERIS Historical Searches	Y	2	4	6
EIIS	Environmental Issues Inventory System	Y	0	0	0
EXP	List of TSSA Expired Facilities	Y	0	3	3
FCON	Federal Convictions	Y	0	0	0
FCS	Contaminated Sites on Federal Land	Y	0	0	0
FOFT	Fisheries & Oceans Fuel Tanks	Y	0	0	0
FST	Fuel Storage Tank	Y	0	7	7
GEN	Ontario Regulation 347 Waste Generators Summary	Y	10	47	57
HINC	TSSA Historic Incidents	Y	0	0	0
IAFT	Indian & Northern Affairs Fuel Tanks	Y	0	0	0
INC	TSSA Incidents	Y	0	0	0
LIMO	Landfill Inventory Management Ontario	Y	0	0	0
MINE	Canadian Mine Locations	Y	0	0	0
MNR	Mineral Occurrences	Y	0	0	0
NATE	National Analysis of Trends in Emergencies System (NATES)	Y	0	0	0
NCPL	Non-Compliance Reports	Y	0	0	0
NDFT	National Defence & Canadian Forces Fuel Tanks	Y	0	0	0
NDSP	National Defence & Canadian Forces Spills	Y	0	0	0
NDWD	National Defence & Canadian Forces Waste Disposal Sites	Y	0	0	0
NEES	National Environmental Emergencies System (NEES)	Y	0	0	0
NPCB	National PCB Inventory	Y	0	0	0

Database	Name	Selected	On Site	Within 0.25KM	Total
NPRI	National Pollutant Release Inventory	Y	0	5	5
OGW	Oil and Gas Wells	Y	0	0	0
OOGW	Ontario Oil and Gas Wells	Y	0	0	0
OPCB	Inventory of PCB Storage Sites	Y	1	0	1
ORD	Orders	Y	0	0	0
PAP	Canadian Pulp and Paper	Y	0	0	0
PCFT	Parks Canada Fuel Storage Tanks	Y	0	0	0
PES	Pesticide Register	Y	0	2	2
PINC	TSSA Pipeline Incidents	Y	0	0	0
PRT	Private and Retail Fuel Storage Tanks	Y	0	3	3
PTTW	Permit to Take Water	Y	0	0	0
REC	Ontario Regulation 347 Waste Receivers Summary	Y	0	0	0
RSC	Record of Site Condition	Y	0	0	0
RST	Retail Fuel Storage Tanks	Y	0	2	2
SCT	Scott's Manufacturing Directory	Y	0	24	24
SPL	Ontario Spills	Y	1	2	3
SRDS	Wastewater Discharger Registration Database	Y	0	0	0
TANK	Anderson's Storage Tanks	Y	0	0	0
TCFT	Transport Canada Fuel Storage Tanks	Y	0	0	0
VAR	TSSA Variances for Abandonment of Underground Storage Tanks	Y	0	0	0
WDS	Waste Disposal Sites - MOE CA Inventory	Y	0	0	0
WDSH	Waste Disposal Sites - MOE 1991 Historical Approval Inventory	Y	0	0	0
WWIS	Water Well Information System	Y	0	16	16
	Total:		14	134	148

Executive Summary: Site Report Summary – Project Property

Map Key	DB	Company/Site Name	Address	Dis m	Elev diff m	Page Number
2	EHS		200 Beverley St Guelph ON	73.1	0.00	14
2	EHS		200 Beverley Street Guelph ON	73.1	0.00	14
2	GEN	INTERNTN'L MALLEABLE IRON CO LTD 21-131	200 BEVERLY ST. GUELPH ON N1E 3C4	73.1	0.00	14
2	GEN	INTERNTN'L MALLEABLE IRON CO. LIMITED	200 BEVERLY STREET GUELPH ON N1E 3C4	73.1	0.00	14
2	GEN	INTERNTN'L MALLEABLE IRON CO LTD	200 BEVERLY ST. GUELPH ON N1E 3C4	73.1	0.00	15
2	GEN	INTERNTN'L MALLEABLE IRON CO LTD	200 BEVERLY ST. P.O. BOX 180 GUELPH ON N1H 6K1	73.1	0.00	15
2	GEN	City of Guelph	200 Beverley Street GUELPH ON	73.1	0.00	15
2	GEN	City of Guelph	200 Beverley Street GUELPH ON	73.1	0.00	16
2	GEN	GUELPH, CITY OF	200 BEVERLEY STREET GUELPH ON N1E 3C4	73.1	0.00	16
2	GEN	City of Guelph Engineering	200 Beverley Street GUELPH ON N1E 3C4	73.1	0.00	16
2	GEN	City of Guelph	200 Beverley Street GUELPH ON N1E 3C4	73.1	0.00	16
2	GEN	City of Guelph	200 Beverley Street GUELPH ON	73.1	0.00	17
2	OPCB	INTERNATIONAL MALLEABLE IRON	BEVERLY STREET GUELPH ON	73.1	0.00	17
2	SPL	INTERNATIONAL MALLEABLE IRON C	200 BEVERLEY STREET GUELPH PLANT 200 BEVERLY STREET GUELPH CITY ON	73.1	0.00	17

Executive Summary: Site Report Summary – Surrounding Properties

Map Key	*DB*	*Company/Site Name*	*Address*	*Dis m*	*Elev Diff m*	*Page Number*
1	WWIS		ON	58.2	0.00	17
2	CONV	INTERNATIONAL MALLEABLE IRON C	ON	73.1	0.00	18
3	NPRI	ABS FRICTION	10 Kingsmill Avenue Guelph ON N1E 5V9	118.2	0.00	19
3	NPRI	ABS Friction Corp.	10 Kingsmill Avenue Guelph ON N1E 5V9	118.2	0.00	19
3	NPRI	ABS Friction Corp.	10 Kingsmill Avenue Guelph ON N1E 5V9	118.2	0.00	19
3	NPRI	ABS FRICTION	10 Kingsmill Avenue Guelph ON N1E 5V9	118.2	0.00	20
4	CA	LINREAD CANADA LTD.	24 HAYES AVE. GUELPH CITY ON N1E 5V5	139.1	0.00	20
4	CA	LINREAD CANADA LTD.	24 HAYES AVE. GUELPH CITY ON N1E 5V5	139.1	0.00	20
4	EHS		24 Hayes Avenue Guelph ON N1E 5V5	139.1	0.00	21
4	GEN	702920 ONTARIO INC./GATTO/VANPOUCKE	24 HAYES AVENUE UNIT #1 GUELPH ON N1E 5V5	139.1	0.00	21
4	GEN	DALTEC INDUSTRIES LTD.	24 HAYES AVENUE GUELPH ON N1E 5V5	139.1	0.00	21
4	GEN	LINREAD CANADA LTD 24-021	24 HAYES AVE. P.O. BOX 540 GUELPH ON N1E 5V5	139.1	0.00	22
4	GEN	702920 ONTARIO INC./GATTO/VANPOUCKE	24 HAYES AVENUE, UNIT #1__ GUELPH ON N1E 5V5	139.1	0.00	22
4	GEN	702920 ONTARIO INC./GATTO/VANPOUCKE	24 HAYES AVENUE, UNIT #1__ GUELPH ON N1E 5V5	139.1	0.00	22
4	GEN	702920 ONTARIO INC./GATTO/VANPOUCKE	24 HAYES AVENUE, UNIT #1__ GUELPH ON N1E 5V5	139.1	0.00	22
4	GEN	JET (OUT OF BUS)	24 HAYES AVENUE UNIT #2 GUELPH ON N1E 5V5	139.1	0.00	23
4	GEN	LINREAD CANADA LTD	24 HAYES AVE. P.O. BOX 540 GUELPH ON N1E 5V5	139.1	0.00	23
4	SCT	INDUSTRIAL PROCESS EQUIPMENT	24 HAYES AVE GUELPH ON N1E 5V5	139.1	0.00	23
4	SCT	KERSTING INDUSTRIES LTD.	24 HAYES AVE UNIT 1 GUELPH ON N1E 5V5	139.1	0.00	23
4	SCT	DALTEC INDUSTRIES LTD	24 HAYES AVE GUELPH ON N1E 5V5	139.1	0.00	24
4	SCT	Daltec Industries Ltd.	24 Hayes Ave Guelph ON N1E 5V5	139.1	0.00	24
4	SCT	ALLEN SIMPSON MARKETING & DSGN	24 HAYES AVE GUELPH ON N1E 5V5	139.1	0.00	24

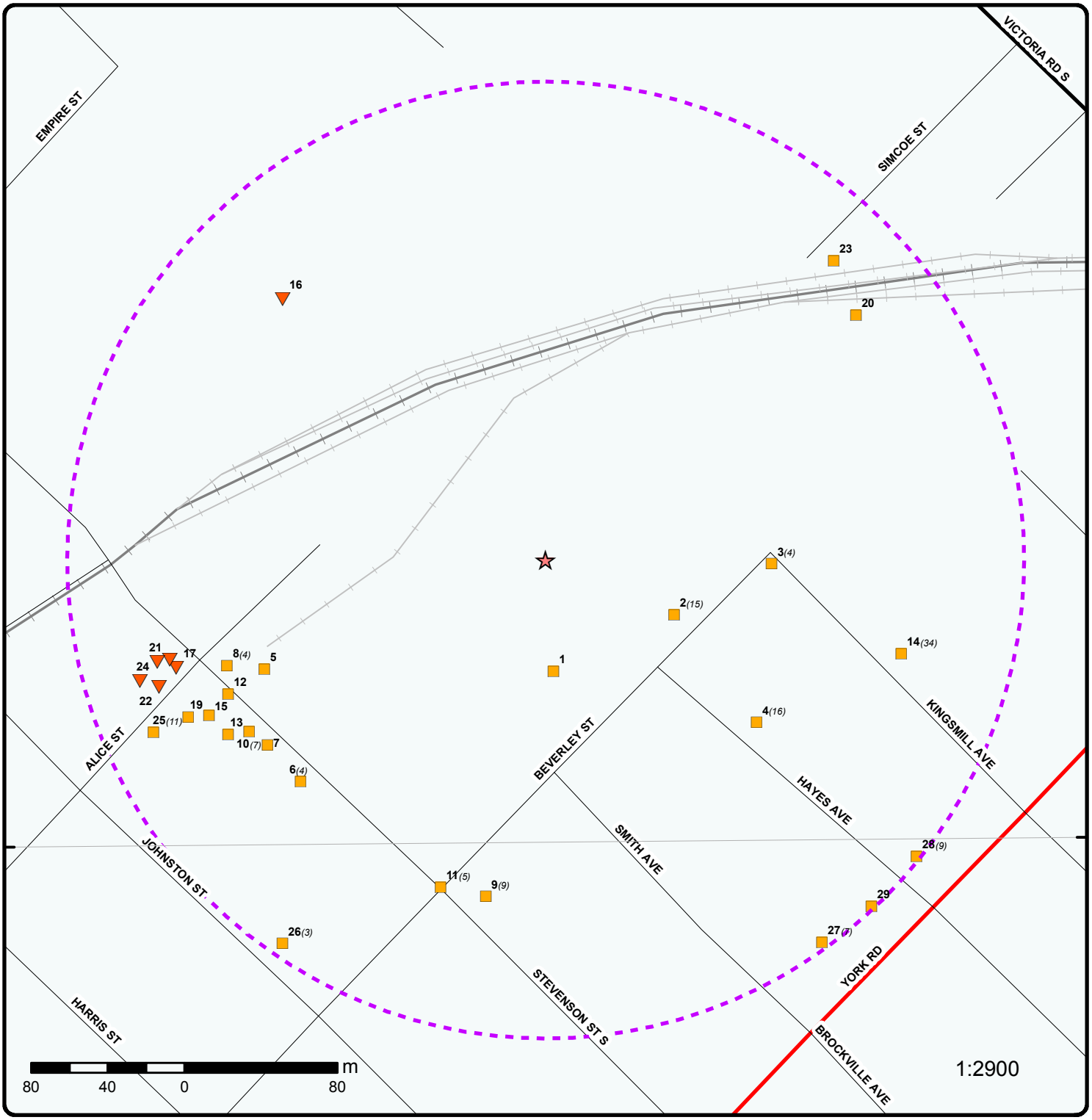
Map Key	DB	Company/Site Name	Address	Dis m	Elev Diff m	Page Number
5	WWIS		ON	157.6	0.00	24
6	SCT	GEORGE'S FURNITURE & CABINET	147 STEVENSON ST S GUELPH ON N1E 5N6	172.6	0.00	25
6	SCT	GEORGE'S GALERIA	147 Stevenson St S Guelph ON N1E 5N6	172.6	0.00	25
6	SCT	Giorgio's Galeria	147 Stevenson St S Guelph ON N1E 5N6	172.6	0.00	25
6	SCT	George's Furniture	147 Stevenson St S Guelph ON N1E 5N6	172.6	0.00	26
7	SCT	CLEAR CHOICE WINDOW MFG.	145 STEVENSON ST S GUELPH ON N1E 5N6	174.5	0.00	26
8	WWIS		ON	175.3	0.00	26
8	WWIS		ON	175.3	0.00	27
8	WWIS		ON	175.3	0.00	27
8	WWIS		ON	175.3	0.00	28
9	EBR	Insitu Contractors Inc.	Guelph ON	178.5	0.00	28
9	EBR	Insitu Contractors Inc.	Guelph ON N1E 5N7	178.5	0.00	29
9	EBR	Insitu Contractors Inc.	Guelph ON N1E 5N7	178.5	0.00	29
9	GEN	Insitu Contractors Inc.	150 Stevenson St S Guelph ON N1E 5N7	178.5	0.00	29
9	GEN	Insitu Contractors Inc.	150 Stevenson St S Guelph ON N1E 5N7	178.5	0.00	29
9	GEN	Insitu Contractors Inc.	150 Stevenson St S Guelph ON N1E 5N7	178.5	0.00	30
9	GEN	Insitu Contractors Inc.	150 Stevenson St S Guelph ON N1E 5N7	178.5	0.00	30
9	GEN	Insitu Contractors Inc.	150 Stevenson St S Guelph ON N1E 5N7	178.5	0.00	30
9	SCT	Insitu Contractors Inc.	150 Stevenson St S Guelph ON N1E 5N7	178.5	0.00	30
10	CA	Choice Enterprises & Transportation Services Inc.	143 Stevenson St S Guelph ON N1E 5N6	178.9	0.00	31
10	GEN	Choice Enterprises + Transportation Services Inc.	143 Stevenson St. South Guelph ON N1E 5N6	178.9	0.00	31
10	GEN	Choice Enterprises + Transportation Services Inc.	143 Stevenson St. South Guelph ON N1E 5N6	178.9	0.00	31
10	GEN	Choice Enterprises + Transportation Services Inc.	143 Stevenson St. South Guelph ON	178.9	0.00	32
10	GEN	Choice Enterprises + Transportation Services Inc.	143 Stevenson St. South Guelph ON N1E 5N6	178.9	0.00	32
10	GEN	Choice Enterprises + Transportation Services Inc.	143 Stevenson St. South Guelph ON N1E 5N6	178.9	0.00	32
10	SCT	Choice Enterprises Inc.	143 Stevenson St S Guelph ON N1E 5N6	178.9	0.00	32

Map Key	DB	Company/Site Name	Address	Dis m	Elev Diff m	Page Number
11	CA	TALLON METAL TECHNOLOGIES INC. - LOT 1	STEVENSON ST./BEVERLY ST. GUELPH CITY ON	179.6	0.00	33
11	GEN	GUELPH HYDRO 18-344	BEVERLEY ST. AT STEVENSON ST. SOUTH C/O 104 DAWSON ROAD GUELPH ON N1H 1A7	179.6	0.00	33
11	GEN	GUELPH HYDRO	BEVERLEY ST. AT STEVENSON ST. SOUTH GUELPH ON N1H 1A7	179.6	0.00	33
11	GEN	GUELPH HYDRO	BEVERLEY STREET AT STEVENSON STREET SOUTH GUELPH ON	179.6	0.00	33
11	GEN	GUELPH HYDRO	BEVERLEY ST. AT STEVENSON ST. SOUTH C/O 104 DAWSON ROAD GUELPH ON N1H 1A7	179.6	0.00	34
12	WWIS		ON	180.1	0.00	34
13	WWIS		ON	189.2	0.00	35
14	CA	ABS Friction Corp.	10 Kingsmill Avenue Guelph ON	192.3	0.00	35
14	CA	ABS Friction Inc.	10 Kingsmill Ave Guelph ON	192.3	0.00	36
14	CA		10 Kingsmill Avenue Guelph ON N1E 5V9	192.3	0.00	36
14	CA	ABS FRICTION INC.	10 KINGSMILL AVENUE GUELPH CITY ON N1E 5V9	192.3	0.00	36
14	CA	ABS Friction Corp.	10 Kingsmill Ave Guelph ON	192.3	0.00	37
14	EBR	ABS Friction Inc.	10 Kingsmill Avenue Guelph ON N1E 5V9	192.3	0.00	37
14	EBR	ABS Friction Corp.	10 Kingsmill Avenue Guelph ON N1E 5V9	192.3	0.00	37
14	EBR	ABS Friction Inc.	City of Guelph ON	192.3	0.00	37
14	EBR	ABS Friction Inc	10 Kingsmill Avenue Guelph ON N1E 5V9	192.3	0.00	38
14	EHS		10 Kingsmill Avenue Guelph ON N1E 5V9	192.3	0.00	38
14	EHS		10 Kingsmill Ave Guelph ON N1E 5V9	192.3	0.00	38
14	GEN	2049936 Ontario Ltd	10 Kingsmill Ave Guelph ON N1E 5V9	192.3	0.00	38
14	GEN	ABS FRICTION INC.	10 Kingsmill Avenue Guelph ON	192.3	0.00	39
14	GEN	GUELPH (OUT OF BUSINESS)D	10 KINGSMILL AVENUE GUELPH ON N1E 5V9	192.3	0.00	39
14	GEN	ABS FRICTION INC.	10 Kingsmill Avenue Guelph ON	192.3	0.00	39
14	GEN	ABS FRICTION INC.	10 Kingsmill Avenue Guelph ON	192.3	0.00	39
14	GEN	GUELPH TOOL & DIE LIMITED	10 KINGSMILL AVE. GUELPH ON N1E 5V9	192.3	0.00	40
14	GEN	ABS FRICTION CORP.	10 Kingsmill Avenue Guelph ON N1E 5V9	192.3	0.00	40
14	GEN	GUELPH TOOL & DIE LIMITED	10 KINGSMILL AVENUE GUELPH ON N1E 5V9	192.3	0.00	40

Map Key	DB	Company/Site Name	Address	Dis m	Elev Diff m	Page Number
14	GEN	CAMPBELL-COX FABRICATIONS	10 KINGS MILL ROAD C/O 367 WOODLAWN ROAD WEST GUELPH ON N1E 5V9	192.3	0.00	41
14	GEN	CAMPBELL-COX(OUT OF BUS) 07-111	10 KINGS MILL ROAD C/O 367 WOODLAWN ROAD WEST GUELPH ON N1E 5V9	192.3	0.00	41
14	GEN	ABS FRICTION INC.	10 KINGSMILL AVENUE GUELPH ON N1E 5V9	192.3	0.00	41
14	NPRI	ABS Friction Inc.	10 Kingsmill Avenue Guelph ON N1E 5V9	192.3	0.00	42
14	PES	KROSHERRA CORPORATION (17528 - 04/2014)	10 KINGSMILL AVE GUELPH ON N1E 5V9	192.3	0.00	42
14	PES	KROSHERRA CORPORATION (17528 - 04/2014)	10 KINGSMILL AVE GUELPH ON N1E5V9	192.3	0.00	42
14	SCT	ABS Friction Inc.	10 Kingsmill Ave Guelph ON N1E 5V9	192.3	0.00	42
14	SCT	Superior Steel Fabricators	10 Kingsmill Ave Guelph ON N1E 5V9	192.3	0.00	43
14	SCT	ABS Friction Corp.	10 Kingsmill Ave Guelph ON N1E 5V9	192.3	0.00	43
14	SCT	EASTWING WOOD SPECIALTIES	10 KINGSMILL AVE REAR BLDG GUELPH ON N1E 5V9	192.3	0.00	43
14	SCT	THOMPSON DIV OF VALCOM LTD H I	10 KINGSMILL AVE GUELPH ON N1E 5V9	192.3	0.00	43
14	SCT	WENA MFG. CO. LTD.	10-A KINGSMILL AVE GUELPH ON N1E 5V9	192.3	0.00	43
14	SCT	Wena Manufacturing Co. Ltd.	10 Kingsmill Rd Guelph ON N1E 5V9	192.3	0.00	44
14	SCT	Wena Manufacturing Co. Ltd.	10 Kingsmill Ave Guelph ON N1E 5V9	192.3	0.00	44
14	SPL	Superior Steel Fabricators	10 Kingsmill Ave Guelph ON N1E 5V9	192.3	0.00	44
15	WWIS		ON	193.7	0.00	44
16	WWIS		ON	193.7	-1.00	45
17	WWIS		ON	200.9	-0.01	45
18	EHS		212 Alice Street Guelph ON N1E 3A8	203.0	-0.17	46
18	GEN	Aim Waste Management	212 Alice Street Guelph ON N1E 3A8	203.0	-0.17	46
18	GEN	EARL SMITH	212 ALICE STREET GUELPH ON N1E 3A8	203.0	-0.17	46
18	GEN	EARL SMITH	212 ALICE STREET GUELPH ON N1E 3A8	203.0	-0.17	46
18	GEN	STANTEC CONSULTING INC.	212 ALICE STREET GUELPH ON N1E 3A8	203.0	-0.17	47
19	WWIS		ON	203.9	0.00	47
20	WWIS		ON	206.5	0.00	47
21	WWIS		ON	209.7	-0.31	48

Map Key	DB	Company/Site Name	Address	Dis m	Elev Diff m	Page Number
22	WWIS		ON	212.4	-0.05	48
23	GEN	Bentley Mobile Veterinary Service	1 Simcoe Street Guelph ON N1E 3B7	217.2	0.00	49
24	WWIS		ON	221.1	-0.54	49
25	CA	FOSECO CANADA INC.	ALICE STREET GUELPH CITY ON	223.9	0.00	50
25	CA	FOSECO CANADA INC.	ALICE STREET GUELPH CITY ON	223.9	0.00	50
25	GEN	BP CANADA ENERGY COMPANY	201 ALICE STREET GUELPH ON N1E 3A7	223.9	0.00	50
25	GEN	FOSECO CANADA INC. 15-151	201 ALICE STREET GUELPH ON N1E 3A7	223.9	0.00	50
25	GEN	FOSECO CANADA INC.(OUT OF BUSINESS)	201 ALICE STREET GUELPH ON N1E 3A7	223.9	0.00	51
25	GEN	FOSECO CANADA INC.	201 ALICE STREET C/O 361 SPEEDVALE AVENUE WEST GUELPH ON N1E 3A7	223.9	0.00	52
25	GEN	BP CANADA ENERGY COMPANY	201 ALICE STREET GUELPH ON N1E 3A7	223.9	0.00	53
25	GEN	BP CANADA	201 ALICE STREET GUELPH ON N1E 3A7	223.9	0.00	53
25	GEN	Bryco Construction Management	201 Alice St Guelph ON N1E 3A7	223.9	0.00	53
25	GEN	BP CANADA ENERGY COMPANY	201 ALICE STREET GUELPH ON N1E 3A7	223.9	0.00	53
25	GEN	BP CANADA ENERGY COMPANY	201 ALICE STREET GUELPH ON N1E 3A7	223.9	0.00	53
26	SCT	STEELE BROS (GUELPH-1986) LTD	60 JOHNSTON ST GUELPH ON N1E 5T6	243.0	0.00	54
26	SCT	Steele Bros. (Guelph, 1986) Ltd.	60 Johnston St Guelph ON N1E 5T6	243.0	0.00	54
26	SCT	Steele Bros.	60 Johnston St Guelph ON N1E 5T6	243.0	0.00	54
27	FST	MAPLE LEAF GAS	390 YORK RD GUELPH ON N1E 3H4	246.5	0.00	54
27	FST	MAPLE LEAF GAS	390 YORK RD GUELPH ON N1E 3H4	246.5	0.00	55
27	FST	MAPLE LEAF GAS	390 YORK RD GUELPH ON N1E 3H4	246.5	0.00	55
27	FST	MAPLE LEAF GAS	390 YORK RD GUELPH ON N1E 3H4	246.5	0.00	56
27	FST	MAPLE LEAF GAS	390 YORK RD GUELPH ON N1E 3H4	246.5	0.00	56
27	PRT	MAPLE LEAF GAS & FUELS LTD AND QUALITY AUTO GLASS	390 YORK RD GUELPH ON N1E3H4	246.5	0.00	57
27	RST	MAPLE LEAF GAS & FUELS LTD	390 YORK RD GUELPH ON N1E 3H4	246.5	0.00	57
28	EXP	1028119 ONTARIO LIMITED	408 YORK RD GUELPH ON N1E 3H5	248.1	0.00	57
28	EXP	1028119 ONTARIO LIMITED	408 YORK RD GUELPH ON N1E 3H5	248.1	0.00	58

Map Key	DB	Company/Site Name	Address	Dis m	Elev Diff m	Page Number
28	EXP	1028119 ONTARIO LIMITED	408 YORK RD GUELPH ON N1E 3H5	248.1	0.00	58
28	FST	SHAMLOW SERVICE O/A GAS STN	408 YORK RD GUELPH ON N1E 3H5	248.1	0.00	58
28	FST	SHAMLOW SERVICE O/A GAS STN	408 YORK RD GUELPH ON N1E 3H5	248.1	0.00	59
28	PRT	1028119 ONTARIO LIMITED	408 YORK RD GUELPH ON N1E 3H5	248.1	0.00	59
28	PRT	SAMS AUTO SERVICE LTD	408 YORK RD GUELPH ON N1E 3H5	248.1	0.00	59
28	RST	HILTON GROUP GAS	408 YORK RD GUELPH ON N1E 3H5	248.1	0.00	59
28	SPL	CANGO PETROLEUMS LTD.	408 YORK RD. SERVICE STATION GUELPH CITY ON N1E 3H5	248.1	0.00	59
29	SCT	LEWIS UPHOLSTERY	404 YORK RD GUELPH ON N1E 3H4	248.5	0.00	60

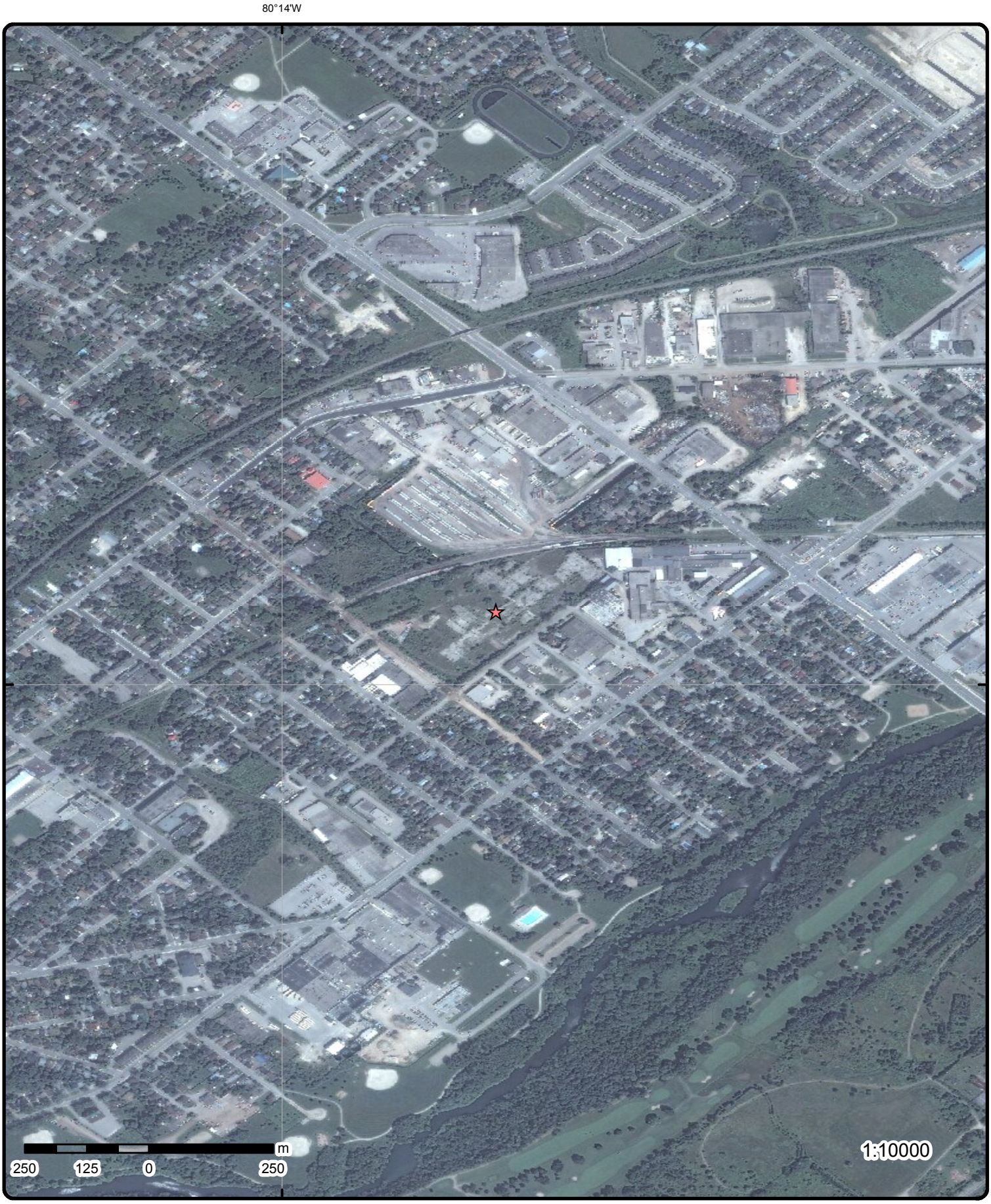


Map

Order No: 20131028018

Address: 200 Beverley St, Guelph, ON, N1E3C4

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Expressway
- Principal Highway
- Secondary Highway
- Major Road
- Local road
- Trail
- Proposed Road
- Ferry Route/Ice Road
- Industrial and Resource - Regions
- Main Line
- Sidetrack
- Transit Line
- Abandoned Line
- Pipelines and Transmission
- National Park
- Provincial or Territorial Park
- Other Park
- Golf Course or Driving Range
- Park or Sports Field
- Other Recreation Area



Aerial

Order No: 20131028018

Address: 200 Beverley St, Guelph, ON, N1E3C4

Source: ESRI World Imagery, Updated December 2012

Detail Report

Map Key	Number of Records	Distance m	Elevation m	Site	DB
2	2 of 15	73.1	315.0	200 Beverley St Guelph ON	EHS

Order No.: 19991202001
Report Date: 12/9/99
Report Type: Complete Report
Search Radius (km): 0.35
Addit. Info Ordered:

Map Key	Number of Records	Distance m	Elevation m	Site	DB
2	3 of 15	73.1	315.0	200 Beverley Street Guelph ON	EHS

Order No.: 20061127027
Report Date: 12/1/2006
Report Type: Complete Report
Search Radius (km): 0.5
Addit. Info Ordered: Fire Insur. Maps And /or Site Plans

Map Key	Number of Records	Distance m	Elevation m	Site	DB
2	4 of 15	73.1	315.0	INTERNTN'L MALLEABLE IRON CO LTD 21-131 200 BEVERLY ST. GUELPH ON N1E 3C4	GEN

SIC Code: 2941
SIC Description: IRON FOUNDARIES
Generator #: ON0103000
Approval Yrs: 92,93,94,95,96,97

--- Details ---
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 146
Waste Description: OTHER SPECIFIED INORGANICS
+
Waste Code: 243
Waste Description: PCB'S
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
2	5 of 15	73.1	315.0	INTERNTN'L MALLEABLE IRON CO. LIMITED 200 BEVERLY STREET GUELPH ON N1E 3C4	GEN

SIC Code: 2941
SIC Description: IRON FOUNDARIES

Map Key	Number of Records	Distance m	Elevation m	Site	DB

Generator #: ON0103000
Approval Yrs: 98

--- Details ---
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 146
Waste Description: OTHER SPECIFIED INORGANICS
+
Waste Code: 243
Waste Description: PCB'S
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
2	6 of 15	73.1	315.0	INTERNTN'L MALLEABLE IRON CO LTD 200 BEVERLY ST. GUELPH ON N1E 3C4	GEN

SIC Code: 2941
SIC Description: IRON FOUNDARIES
Generator #: ON0103000
Approval Yrs: 89

--- Details ---
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 146
Waste Description: OTHER SPECIFIED INORGANICS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
2	7 of 15	73.1	315.0	INTERNTN'L MALLEABLE IRON CO LTD 200 BEVERLY ST. P.O. BOX 180 GUELPH ON N1H 6K1	GEN

SIC Code: 2941
SIC Description: IRON FOUNDARIES
Generator #: ON0103000
Approval Yrs: 86,87,88

--- Details ---
Waste Code: 146
Waste Description: OTHER SPECIFIED INORGANICS

Map Key	Number of Records	Distance m	Elevation m	Site	DB
2	8 of 15	73.1	315.0	City of Guelph 200 Beverley Street GUELPH ON	GEN

SIC Code: 913910
SIC Description: Other Local Municipal and Regional Public Administration
Generator #: ON3323094
Approval Yrs: 2009

--- Details ---
Waste Code: 146

Map Key	Number of Records	Distance m	Elevation m	Site	DB
Waste Description:		OTHER SPECIFIED INORGANICS			
+					
Waste Code:		243			
Waste Description:		PCBS			

2	**9 of 15**	**73.1**	**315.0**	**City of Guelph** **200 Beverley Street** **GUELPH ON**	**GEN**

SIC Code: 913910
SIC Description: Other Local Municipal and Regional Public Administration
Generator #: ON3323094
Approval Yrs: 2011

--- Details ---

Waste Code: 146
Waste Description: OTHER SPECIFIED INORGANICS
+
Waste Code: 243
Waste Description: PCBS
+
Waste Code: 221
Waste Description: LIGHT FUELS

2	**10 of 15**	**73.1**	**315.0**	**GUELPH, CITY OF** **200 BEVERLEY STREET** **GUELPH ON N1E 3C4**	**GEN**

SIC Code: 8359
SIC Description: OTHER GEN. ADMIN.
Generator #: ON0349018
Approval Yrs: 98,99,00,01

--- Details ---

Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

2	**11 of 15**	**73.1**	**315.0**	**City of Guelph Engineering** **200 Beverley Street** **GUELPH ON N1E 3C4**	**GEN**

SIC Code:
SIC Description:
Generator #: ON3323094
Approval Yrs: As of Apr 2012

--- Details ---

Waste Code: 146
Waste Description: Other specified inorganic sludges, slurries or solids
+
Waste Code: 221
Waste Description: Light fuels

2	**12 of 15**	**73.1**	**315.0**	**City of Guelph** **200 Beverley Street** **GUELPH ON N1E 3C4**	**GEN**

SIC Code:

Map Key	Number of Records	Distance m	Elevation m	Site	DB
SIC Description:					
Generator #:		ON3323094			
Approval Yrs:		02,03,04,05,06,07,08			
--- Details ---					
Waste Code:		146			
Waste Description:		OTHER SPECIFIED INORGANICS			
+					
Waste Code:		243			
Waste Description:		PCB'S			
2	**13 of 15**	**73.1**	**315.0**	**City of Guelph** **200 Beverley Street** **GUELPH ON**	**GEN**
SIC Code:		913910			
SIC Description:		Other Local Municipal and Regional Public Administration			
Generator #:		ON3323094			
Approval Yrs:		2010			
--- Details ---					
Waste Code:		146			
Waste Description:		OTHER SPECIFIED INORGANICS			
+					
Waste Code:		221			
Waste Description:		LIGHT FUELS			
+					
Waste Code:		243			
Waste Description:		PCBS			
2	**14 of 15**	**73.1**	**315.0**	**INTERNATIONAL MALLEABLE IRON** **BEVERLY STREET** **GUELPH ON**	**OPCB**
Year:		1992			
Site Number:		20289A044			
2	**15 of 15**	**73.1**	**315.0**	**INTERNATIONAL MALLEABLE IRON C** **200 BEVERLEY STREET GUELPH PLANT** **200 BEVERLY STREET** **GUELPH CITY ON**	**SPL**
Ref No.:		70643			
Incident Dt:		5/15/1992			
MOE Reported Dt:		5/15/1992			
Contaminant Name:					
Contaminant Quantity:					
Incident Summary:		IMICO-LARGE FIRE ON SITE;SMOKE TO ATM;REQUEST MOE;LEVEL II VAN ALSO ON SITE			
Incident Cause:		OTHER CAUSE (N.O.S.)			
Incident Reason:		FIRE/EXPLOSION			
Nature of Impact:		Human Health or Safety			
Receiving Medium:		AIR			
Environmental Impact:		POSSIBLE			
1	**1 of 1**	**58.2**	**315.0**	**ON**	**WWIS**

Well Id:	7043094	**Lot:**	
Concession:		**Concession Name:**	
County:	WELLINGTON	**Municipality:**	GUELPH
Easting Nad83:	562245	**Northing Nad83:**	4822272
Zone:	17	**Utm Reliability:**	margin of error : 10 - 30 m
Primary Water Use:		**Construction Date:**	13-MAR-07
Sec. Water Use:		**Well Depth:**	5 ft
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Observation Wells
Construction Method:	Diamond	**Flowing (y/n):**	
Elevation (m):	315.07	**Elevation Reliability:**	
Depth to Bedrock:	16	**Overburden/Bedrock:**	Bedrock
Water Type:		**Casing Material:**	PLASTIC

--- Details ---

Thickness:	5 ft	**Original Depth:**	5 ft
Material Colour:	BROWN	**Material:**	GRAVEL
+			
Thickness:	25 ft	**Original Depth:**	30 ft
Material Colour:	BROWN	**Material:**	ROCK

2	***1 of 15***	***73.1***	***315.0***	***INTERNATIONAL MALLEABLE IRON C ON***	***CONV***

File No.:	
Crown Brief No.:	94-0247-0018
Ministry District:	GUELPH
Region:	WEST CENTRAL REGION
Description:	FAILED TO COMPLY WITH A DIRECTORS ORDER TO REMEDIATE PROPERTY DUE TO ILLEGAL ACTIVITIES AND ENVIRONMENTAL CONTAMINATION INVOLVING PCB WASTE

--- Details ---

Date Charged:	1/21/97
Fine:	$4,000.00
Act/Regulation/Section:	EPA- -186(2)
Charge Disposition:	SUSPENDED SENTENCE
+	
Date Charged:	1/21/97
Fine:	$4,000.00
Act/Regulation/Section:	EPA- -186(2)
Charge Disposition:	SUSPENDED SENTENCE
+	
Date Charged:	1/21/97
Fine:	$4,000.00
Act/Regulation/Section:	EPA- -186(2)
Charge Disposition:	SUSPENDED SENTENCE
+	
Date Charged:	1/21/97
Fine:	$4,000.00
Act/Regulation/Section:	EPA- -186(2)
Charge Disposition:	SUSPENDED SENTENCE
+	
Date Charged:	1/21/97

Map Key	Number of Records	Distance m	Elevation m	Site	DB
Fine:		$4,000.00			
Act/Regulation/Section:		EPA- -186(2)			
Charge Disposition:		SUSPENDED SENTENCE			
+					
Date Charged:		1/21/97			
Fine:		$10,000.00			
Act/Regulation/Section:		EPA- -186(2)			
Charge Disposition:		SUSPENDED SENTENCE			
3	**1 of 4**	**118.2**	**315.0**	**ABS FRICTION** **10 Kingsmill Avenue** **Guelph ON N1E 5V9**	**NPRI**
NPRI #:		7671			
Year:		2005			
Longitude:		-80.228			
Latitude:		43.5513			
--- Details ---					
Air:		0.57			
Water:					
Land:					
Units:		tonnes			
Substances Released:		PM10 - Particulate Matter <= 10 Microns			
3	**2 of 4**	**118.2**	**315.0**	**ABS Friction Corp.** **10 Kingsmill Avenue** **Guelph ON N1E 5V9**	**NPRI**
NPRI #:		7671			
Year:		2002			
Longitude:					
Latitude:					
--- Details ---					
Air:		0.023			
Water:		0			
Land:		0			
Units:		tonnes			
Substances Released:		Copper (and its compounds)			
+					
Air:		3.369			
Water:		0			
Land:		0			
Units:		tonnes			
Substances Released:		PM10 - Particulate Matter <= 10 Microns			
+					
Air:		1.688			
Water:		0			
Land:		0			
Units:		tonnes			
Substances Released:		PM2.5 - Particulate Matter <= 2.5 Microns			
3	**3 of 4**	**118.2**	**315.0**	**ABS Friction Corp.** **10 Kingsmill Avenue** **Guelph ON N1E 5V9**	**NPRI**
NPRI #:		7671			
Year:		2003			

Map Key	Number of Records	Distance m	Elevation m	Site	DB
Longitude:					
Latitude:					
--- Details ---					
Air:	4.73				
Water:	0.00				
Land:	0.00				
Units:	tonnes				
Substances Released:	PM10 - Particulate Matter <= 10 Microns				
+					
Air:	2.37				
Water:	0.00				
Land:	0.00				
Units:	tonnes				
Substances Released:	PM2.5 - Particulate Matter <= 2.5 Microns				
3	**4 of 4**	**118.2**	**315.0**	**ABS FRICTION** **10 Kingsmill Avenue** **Guelph ON N1E 5V9**	**NPRI**
NPRI #:	7671				
Year:	2004				
Longitude:	-80.228				
Latitude:	43.5513				
--- Details ---					
Air:	2.18				
Water:					
Land:					
Units:	tonnes				
Substances Released:	PM10 - Particulate Matter <= 10 Microns				
+					
Air:	1.10				
Water:					
Land:					
Units:	tonnes				
Substances Released:	PM2.5 - Particulate Matter <= 2.5 Microns				
4	**1 of 16**	**139.1**	**315.0**	**LINREAD CANADA LTD.** **24 HAYES AVE.** **GUELPH CITY ON N1E 5V5**	**CA**
Certificate #:	8-2032-87-				
Application Year:	87				
Issue Date:	2/17/1987				
Approval Type:	Industrial air				
Status:	Cancelled				
Application Type:					
Client Name:					
Client Address:					
Client City:					
Client Postal Code:					
Project Description:	SEE #8-2022-87				
Contaminants:					
Emission Control:					
4	**2 of 16**	**139.1**	**315.0**	**LINREAD CANADA LTD.** **24 HAYES AVE.**	**CA**

Map Key	Number of Records	Distance m	Elevation m	Site	DB
				GUELPH CITY ON N1E 5V5	

Certificate #: 8-2022-87-
Application Year: 87
Issue Date: 10/21/1988
Approval Type: Industrial air
Status: Cancelled
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description: SOUND ENCLOSURE FOR OIL COOLING UNIT
Contaminants:
Emission Control:

4	**3 of 16**	**139.1**	**315.0**	**24 Hayes Avenue Guelph ON N1E 5V5**	**EHS**

Order No.: 20090610036
Report Date: 6/16/2009
Report Type: Standard Report
Search Radius (km): 0.25
Addit. Info Ordered: Fire Insur. Maps and/or Sire Plans; Title Searches; Aerial Photos; City Directory; Topographic Maps

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4	**4 of 16**	**139.1**	**315.0**	**702920 ONTARIO INC./GATTO/VANPOUCKE 24 HAYES AVENUE UNIT #1 GUELPH ON N1E 5V5**	**GEN**

SIC Code: 7215
SIC Description: HOLDING COMPANIES
Generator #: ON1778300
Approval Yrs: 93,94,95,96,97,98

--- Details ---
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 263
Waste Description: ORGANIC LABORATORY CHEMICALS

4	**5 of 16**	**139.1**	**315.0**	**DALTEC INDUSTRIES LTD. 24 HAYES AVENUE GUELPH ON N1E 5V5**	**GEN**

SIC Code: 3199
SIC Description: OTHER MACHINERY
Generator #: ON1634801
Approval Yrs: 95,96,97,98,99,00,01,02,03,04,05,06

--- Details ---
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES

Map Key	Number of Records	Distance m	Elevation m	Site		DB
+						
Waste Code:		211				
Waste Description:		AROMATIC SOLVENTS				
4	**6 of 16**	**139.1**	**315.0**	**LINREAD CANADA LTD 24 HAYES AVE. P.O. BOX 540 GUELPH ON N1E 5V5**	**24-021**	**GEN**
SIC Code:		3053				
SIC Description:		INDUSTRIAL FASTENER				
Generator #:		ON0114600				
Approval Yrs:		92,93,94,95,96,97				
--- Details ---						
Waste Code:		253				
Waste Description:		EMULSIFIED OILS				
4	**7 of 16**	**139.1**	**315.0**	**702920 ONTARIO INC./GATTO/VANPOUCKE 24 HAYES AVENUE, UNIT #1__ GUELPH ON N1E 5V5**		**GEN**
SIC Code:						
SIC Description:						
Generator #:		ON1778300				
Approval Yrs:		04				
4	**8 of 16**	**139.1**	**315.0**	**702920 ONTARIO INC./GATTO/VANPOUCKE 24 HAYES AVENUE, UNIT #1__ GUELPH ON N1E 5V5**		**GEN**
SIC Code:		7215				
SIC Description:		HOLDING COMPANIES				
Generator #:		ON1778300				
Approval Yrs:		99,00,01,03				
--- Details ---						
Waste Code:		148				
Waste Description:		INORGANIC LABORATORY CHEMICALS				
+						
Waste Code:		252				
Waste Description:		WASTE OILS & LUBRICANTS				
+						
Waste Code:		263				
Waste Description:		ORGANIC LABORATORY CHEMICALS				
4	**9 of 16**	**139.1**	**315.0**	**702920 ONTARIO INC./GATTO/VANPOUCKE 24 HAYES AVENUE, UNIT #1__ GUELPH ON N1E 5V5**		**GEN**
SIC Code:						
SIC Description:						
Generator #:		ON1778300				
Approval Yrs:		02				

Map Key	Number of Records	Distance m	Elevation m	Site	DB
4	10 of 16	139.1	315.0	JET (OUT OF BUS) 24 HAYES AVENUE UNIT #2 GUELPH ON N1E 5V5	GEN

SIC Code: 3062
SIC Description: METAL DIES, ETC. IND
Generator #: ON1749500
Approval Yrs: 93,94,95,96,97,98

--- Details ---
Waste Code: 232
Waste Description: POLYMERIC RESINS
+
Waste Code: 253
Waste Description: EMULSIFIED OILS

Map Key	Number of Records	Distance m	Elevation m	Site	DB
4	11 of 16	139.1	315.0	LINREAD CANADA LTD 24 HAYES AVE. P.O. BOX 540 GUELPH ON N1E 5V5	GEN

SIC Code: 3053
SIC Description: INDUSTRIAL FASTENER
Generator #: ON0114600
Approval Yrs: 86,87,88,89,90,98

--- Details ---
Waste Code: 253
Waste Description: EMULSIFIED OILS

Map Key	Number of Records	Distance m	Elevation m	Site	DB
4	12 of 16	139.1	315.0	INDUSTRIAL PROCESS EQUIPMENT 24 HAYES AVE GUELPH ON N1E 5V5	SCT

Established: 1991
Plant Size (ft²): 2500
Employment: 20

--- Details ---
SIC/NAICS Code: 3556
Description: FOOD PRODUCTS MACHINERY
+
SIC/NAICS Code: 3567
Description: INDUSTRIAL PROCESS FURNACES AND OVENS

Map Key	Number of Records	Distance m	Elevation m	Site	DB
4	13 of 16	139.1	315.0	KERSTING INDUSTRIES LTD. 24 HAYES AVE UNIT 1 GUELPH ON N1E 5V5	SCT

Established: 1970
Plant Size (ft²): 5000
Employment: 3

--- Details ---
SIC/NAICS Code: 3599
Description: INDUSTRIAL AND COMMERCIAL MACHINERY AND EQUIPMENT, NOT ELSEWHERE CLASSIFIED

Map Key	Number of Records	Distance m	Elevation m	Site	DB
4	14 of 16	139.1	315.0	DALTEC INDUSTRIES LTD 24 HAYES AVE GUELPH ON N1E 5V5	SCT

Established: 1984
Plant Size (ft²): 20000
Employment: 18

--- Details ---
SIC/NAICS Code: 3564
Description: INDUSTRIAL AND COMMERCIAL FANS AND BLOWERS AND AIR PURIFICATION EQUIPMENT

Map Key	Number of Records	Distance m	Elevation m	Site	DB
4	15 of 16	139.1	315.0	Daltec Industries Ltd. 24 Hayes Ave Guelph ON N1E 5V5	SCT

Established: 1984
Plant Size (ft²): 20000
Employment: 30

--- Details ---
SIC/NAICS Code: 333413
Description: Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing

---

Map Key	Number of Records	Distance m	Elevation m	Site	DB
4	16 of 16	139.1	315.0	ALLEN SIMPSON MARKETING & DSGN 24 HAYES AVE GUELPH ON N1E 5V5	SCT

Established: 1975
Plant Size (ft²): 14000
Employment: 20

--- Details ---
SIC/NAICS Code: 3423
Description: HAND & EDGE TOOLS, EXCEPT MACHINE TOOLS & HAND SAWS
+
SIC/NAICS Code: 3499
Description: FABRICATED METAL PRODUCTS, N.E.C.

Map Key	Number of Records	Distance m	Elevation m	Site	DB
5	1 of 1	157.6	315.0	ON	WWIS

Well Id:	7167947	**Lot:**	
Concession:		**Concession Name:**	
County:	WELLINGTON	**Municipality:**	GUELPH
Easting Nad83:	562094	**Northing Nad83:**	4822273
Zone:	17	**Utm Reliability:**	margin of error : 10 - 30 m
Primary Water Use:		**Construction Date:**	20-JUN-11
Sec. Water Use:	Monitoring	**Well Depth:**	
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Abandoned-Other
Construction Method:		**Flowing (y/n):**	
Elevation (m):		**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:		**Casing Material:**	

Map Key	Number of Records	Distance m	Elevation m	Site	DB

--- Details ---

Thickness: m **Original Depth:** m
Material Colour: **Material:**

---

6 **1 of 4** **172.6** **315.0** **GEORGE'S FURNITURE & CABINET**
147 STEVENSON ST S
GUELPH ON N1E 5N6
SCT

Established: 1962
Plant Size (ft²): 5000
Employment: 2

--- Details ---

SIC/NAICS Code: 2431
Description: MILLWORK
+
SIC/NAICS Code: 2434
Description: WOOD KITCHEN CABINETS
+
SIC/NAICS Code: 2499
Description: WOOD PRODUCTS, NOT ELSEWHERE CLASSIFIED
+
SIC/NAICS Code: 2511
Description: WOOD HOUSEHOLD FURNITURE, EXCEPT UPHOLSTERED

---

6 **2 of 4** **172.6** **315.0** **GEORGE'S GALERIA**
147 Stevenson St S
Guelph ON N1E 5N6
SCT

Established: 1962
Plant Size (ft²): 5000
Employment: 2

--- Details ---

SIC/NAICS Code: 321911
Description: Wood Window and Door Manufacturing
+
SIC/NAICS Code: 321919
Description: Other Millwork
+
SIC/NAICS Code: 337110
Description: Wood Kitchen Cabinet and Counter Top Manufacturing
+
SIC/NAICS Code: 337123
Description: Other Wood Household Furniture Manufacturing
+
SIC/NAICS Code: 339990
Description: All Other Miscellaneous Manufacturing

---

6 **3 of 4** **172.6** **315.0** **Giorgio's Galeria**
147 Stevenson St S
Guelph ON N1E 5N6
SCT

Established: 01-NOV-62
Plant Size (ft²): 5000
Employment:

Map Key	Number of Records	Distance m	Elevation m	Site	DB
--- Details ---					
SIC/NAICS Code:	712111				
Description:	Non-Commercial Art Museums and Galleries				
6	4 of 4	172.6	315.0	George's Furniture 147 Stevenson St S Guelph ON N1E 5N6	SCT
Established:	01-SEP-62				
Plant Size (ft²):	5000				
Employment:					
--- Details ---					
SIC/NAICS Code:	321919				
Description:	Other Millwork				
+					
SIC/NAICS Code:	337110				
Description:	Wood Kitchen Cabinet and Counter Top Manufacturing				
+					
SIC/NAICS Code:	337123				
Description:	Other Wood Household Furniture Manufacturing				
7	1 of 1	174.5	315.0	CLEAR CHOICE WINDOW MFG. 145 STEVENSON ST S GUELPH ON N1E 5N6	SCT
Established:	1990				
Plant Size (ft²):	1600				
Employment:	4				
--- Details ---					
SIC/NAICS Code:	2431				
Description:	MILLWORK				
+					
SIC/NAICS Code:	3089				
Description:	PLASTICS PRODUCTS, NOT ELSEWHERE CLASSIFIED				
+					
SIC/NAICS Code:	3231				
Description:	GLASS PRODUCTS, MADE OF PURCHASED GLASS				
+					
SIC/NAICS Code:	321911				
Description:	Wood Window and Door Manufacturing				
+					
SIC/NAICS Code:	326198				
Description:	All Other Plastic Product Manufacturing				
+					
SIC/NAICS Code:	327215				
Description:	Glass Product Manufacturing from Purchased Glass				
+					
SIC/NAICS Code:	332321				
Description:	Metal Window and Door Manufacturing				
8	1 of 4	175.3	315.0	ON	WWIS
Well Id:	7174598			Lot:	
Concession:				Concession Name:	
County:	WELLINGTON			Municipality:	GUELPH
Easting Nad83:	562074			Northing Nad83:	4822275

Map Key	Number of Records	Distance m	Elevation m	Site	DB

Zone:	17	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:		**Construction Date:**	27-OCT-11
Sec. Water Use:		**Well Depth:**	
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	
Construction Method:		**Flowing (y/n):**	
Elevation (m):		**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:		**Casing Material:**	
--- Details ---			
Thickness:	m	**Original Depth:**	m
Material Colour:		**Material:**	

8 **2 of 4** **175.3** **315.0** **ON** **WWIS**

Well Id:	7174597	**Lot:**	
Concession:		**Concession Name:**	
County:	WELLINGTON	**Municipality:**	GUELPH
Easting Nad83:	562074	**Northing Nad83:**	4822275
Zone:	17	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Not Used	**Construction Date:**	20-OCT-11
Sec. Water Use:		**Well Depth:**	
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Abandoned-Other
Construction Method:		**Flowing (y/n):**	
Elevation (m):		**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:		**Casing Material:**	PLASTIC
--- Details ---			
Thickness:	m	**Original Depth:**	m
Material Colour:		**Material:**	

8 **3 of 4** **175.3** **315.0** **ON** **WWIS**

Well Id:	7174596	**Lot:**	
Concession:		**Concession Name:**	
County:	WELLINGTON	**Municipality:**	GUELPH
Easting Nad83:	562074	**Northing Nad83:**	4822275
Zone:	17	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Test Hole	**Construction Date:**	26-OCT-11
Sec. Water Use:	Monitoring	**Well Depth:**	4.57 m
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Observation Wells
Construction Method:	Air Precussion	**Flowing (y/n):**	

Map Key	Number of Records	Distance m	Elevation m	Site	DB

Elevation (m):		**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:		**Casing Material:**	PLASTIC
--- Details ---			
Thickness:	.31 m	**Original Depth:**	.31 m
Material Colour:	GREY	**Material:**	GRAVEL
+			
Thickness:	.9 m	**Original Depth:**	1.21 m
Material Colour:		**Material:**	
+			
Thickness:	3.36 m	**Original Depth:**	4.57 m
Material Colour:		**Material:**	

8 **4 of 4** **175.3** **315.0** **ON** **WWIS**

Well Id:	7174594	**Lot:**	
Concession:		**Concession Name:**	
County:	WELLINGTON	**Municipality:**	GUELPH
Easting Nad83:	562075	**Northing Nad83:**	4822275
Zone:	17	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Test Hole	**Construction Date:**	26-OCT-11
Sec. Water Use:	Monitoring	**Well Depth:**	4.57 m
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Observation Wells
Construction Method:	Air Precussion	**Flowing (y/n):**	
Elevation (m):		**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:		**Casing Material:**	PLASTIC
--- Details ---			
Thickness:	.31 m	**Original Depth:**	.31 m
Material Colour:	BROWN	**Material:**	TOPSOIL, STONES, SOFT
+			
Thickness:	1.67 m	**Original Depth:**	1.98 m
Material Colour:	BROWN	**Material:**	STONES, SAND, LOOSE
+			
Thickness:	2.59 m	**Original Depth:**	4.57 m
Material Colour:	BROWN	**Material:**	SANDSTONE, , HARD

9 **1 of 9** **178.5** **315.0** **Insitu Contractors Inc.** **Guelph ON** **EBR**

Year:	2008
EBR Registry No.:	010-2469
Ministry Ref. No.:	8959-798SJQ
Type:	Instrument Decision
Instrument Type:	(OWRA s. 53(1)) - Approval for sewage works

Map Key	Number of Records	Distance m	Elevation m	Site	DB

Proposal Date: January 03, 2008
Location: CITY OF GUELPH
Proponent Address: 150 Stevenson Street South Guelph Ontario Canada N1E 5N7

---

9 **2 of 9** **178.5** **315.0** **Insitu Contractors Inc.** **EBR**

Guelph ON N1E 5N7

Year: 2009
EBR Registry No.: 010-5850
Ministry Ref. No.: 2213-7NWR99
Type: Instrument Proposal
Instrument Type: (EPA s. 9) - Approval for discharge into the natural environment other than water (i.e. Air)
Proposal Date: 2/9/2009
Location: Mobile Facility Guelph, County of Wellington, N1E 5N7
Proponent Address: 150 Stevenson Street South Guelph Ontario Canada N1E 5N7

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9 **3 of 9** **178.5** **315.0** **Insitu Contractors Inc.** **EBR**

Guelph ON N1E 5N7

Year: 2008
EBR Registry No.: 010-4652
Ministry Ref. No.: 2536-7HAGYQ
Type: Instrument Proposal
Instrument Type: (EPA s. 9) - Approval for discharge into the natural environment other than water (i.e. Air)
Proposal Date: September 16, 2008
Location: Mobile Facility Guelph County of Wellington N1E 5N7
Proponent Address: 150 Stevenson Street South Guelph Ontario Canada N1E 5N7

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9 **4 of 9** **178.5** **315.0** **Insitu Contractors Inc.** **GEN**
150 Stevenson St S
Guelph ON N1E 5N7

SIC Code: 532410
SIC Description: Construction Transportation Mining and Forestry Machinery and Equipment Rental and Leasing
Generator #: ON6338475
Approval Yrs: 2009

--- Details ---
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS

---

9 **5 of 9** **178.5** **315.0** **Insitu Contractors Inc.** **GEN**
150 Stevenson St S
Guelph ON N1E 5N7

SIC Code: 532410
SIC Description: Construction Transportation Mining and Forestry Machinery and Equipment Rental and Leasing
Generator #: ON6338475
Approval Yrs: 2010

--- Details ---

Map Key	Number of Records	Distance m	Elevation m	Site	DB
Waste Code:		252			
Waste Description:		WASTE OILS & LUBRICANTS			
+					
Waste Code:		251			
Waste Description:		OIL SKIMMINGS & SLUDGES			
9	**6 of 9**	**178.5**	**315.0**	**Insitu Contractors Inc.** **150 Stevenson St S** **Guelph ON N1E 5N7**	**GEN**
SIC Code:					
SIC Description:					
Generator #:		ON6338475			
Approval Yrs:		02,03,04,05,06,07,08			
--- Details ---					
Waste Code:		251			
Waste Description:		OIL SKIMMINGS & SLUDGES			
+					
Waste Code:		252			
Waste Description:		WASTE OILS & LUBRICANTS			
9	**7 of 9**	**178.5**	**315.0**	**Insitu Contractors Inc.** **150 Stevenson St S** **Guelph ON N1E 5N7**	**GEN**
SIC Code:					
SIC Description:					
Generator #:		ON6338475			
Approval Yrs:		As of Apr 2012			
--- Details ---					
Waste Code:		251			
Waste Description:		Waste oils/sludges (petroleum based)			
+					
Waste Code:		252			
Waste Description:		Waste crankcase oils and lubricants			
9	**8 of 9**	**178.5**	**315.0**	**Insitu Contractors Inc.** **150 Stevenson St S** **Guelph ON N1E 5N7**	**GEN**
SIC Code:		532410			
SIC Description:		Construction Transportation Mining and Forestry Machinery and Equipment Rental and Leasing			
Generator #:		ON6338475			
Approval Yrs:		2011			
--- Details ---					
Waste Code:		252			
Waste Description:		WASTE OILS & LUBRICANTS			
+					
Waste Code:		251			
Waste Description:		OIL SKIMMINGS & SLUDGES			
9	**9 of 9**	**178.5**	**315.0**	**Insitu Contractors Inc.** **150 Stevenson St S** **Guelph ON N1E 5N7**	**SCT**

Map Key	Number of Records	Distance m	Elevation m	Site	DB
Established:		01-JUN-94			
Plant Size (ft²):					
Employment:					
--- Details ---					
SIC/NAICS Code:		562910			
Description:		Remediation Services			
+					
SIC/NAICS Code:		333990			
Description:		All Other General-Purpose Machinery Manufacturing			
+					
SIC/NAICS Code:		417230			
Description:		Industrial Machinery, Equipment and Supplies Wholesaler-Distributors			
10	***1 of 7***	***178.9***	***315.0***	***Choice Enterprises & Transportation Services Inc. 143 Stevenson St S Guelph ON N1E 5N6***	***CA***
Certificate #:		8373-8AKJDU			
Application Year:		2010			
Issue Date:		10/29/2010			
Approval Type:		Waste Management Systems			
Status:		Approved			
Application Type:					
Client Name:					
Client Address:					
Client City:					
Client Postal Code:					
Project Description:					
Contaminants:					
Emission Control:					
10	***2 of 7***	***178.9***	***315.0***	***Choice Enterprises + Transportation Services Inc. 143 Stevenson St. South Guelph ON N1E 5N6***	***GEN***
SIC Code:		238990			
SIC Description:		All Other Specialty Trade Contractors			
Generator #:		ON2188243			
Approval Yrs:		2011			
--- Details ---					
Waste Code:		253			
Waste Description:		EMULSIFIED OILS			
10	***3 of 7***	***178.9***	***315.0***	***Choice Enterprises + Transportation Services Inc. 143 Stevenson St. South Guelph ON N1E 5N6***	***GEN***
SIC Code:					
SIC Description:					
Generator #:		ON2188243			
Approval Yrs:		As of Apr 2012			
--- Details ---					

Map Key	Number of Records	Distance m	Elevation m	Site	DB
Waste Code:		253			
Waste Description:		Emulsified oils			

10	**4 of 7**	**178.9**	**315.0**	**Choice Enterprises + Transportation Services Inc.** **143 Stevenson St. South** **Guelph ON**	**GEN**

SIC Code:
SIC Description:
Generator #: ON2188243
Approval Yrs: 03,04,05,06,07,08

--- Details ---
Waste Code: 253
Waste Description: EMULSIFIED OILS

10	**5 of 7**	**178.9**	**315.0**	**Choice Enterprises + Transportation Services Inc.** **143 Stevenson St. South** **Guelph ON N1E 5N6**	**GEN**

SIC Code: 123456
SIC Description:
Generator #: ON2188243
Approval Yrs: 2009

--- Details ---
Waste Code: 253
Waste Description: EMULSIFIED OILS

10	**6 of 7**	**178.9**	**315.0**	**Choice Enterprises + Transportation Services Inc.** **143 Stevenson St. South** **Guelph ON N1E 5N6**	**GEN**

SIC Code: 238990
SIC Description: All Other Specialty Trade Contractors
Generator #: ON2188243
Approval Yrs: 2010

--- Details ---
Waste Code: 253
Waste Description: EMULSIFIED OILS

10	**7 of 7**	**178.9**	**315.0**	**Choice Enterprises Inc.** **143 Stevenson St S** **Guelph ON N1E 5N6**	**SCT**

Established: 01-JAN-98
Plant Size (ft²):
Employment:

--- Details ---
SIC/NAICS Code: 332810
Description: Coating, Engraving, Heat Treating and Allied Activities
+
SIC/NAICS Code: 332810
Description: Coating, Engraving, Heat Treating and Allied Activities

Map Key	Number of Records	Distance m	Elevation m	Site	DB
11	1 of 5	179.6	315.0	TALLON METAL TECHNOLOGIES INC. - LOT 1 STEVENSON ST./BEVERLY ST. GUELPH CITY ON	CA

Certificate #: 8-2046-92-
Application Year: 92
Issue Date: 7/29/1992
Approval Type: Industrial air
Status: Cancelled
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description: OPERATE SOILS TREATMENT DEMO PLANT
Contaminants:
Emission Control:

Map Key	Number of Records	Distance m	Elevation m	Site	DB
11	2 of 5	179.6	315.0	GUELPH HYDRO 18-344 BEVERLEY ST. AT STEVENSON ST. SOUTH C/O 104 DAWSON ROAD GUELPH ON N1H 1A7	GEN

SIC Code: 4911
SIC Description: ELECT. POWER SYS.
Generator #: ON0558303
Approval Yrs: 94,95,96

--- Details ---
Waste Code: 122
Waste Description: ALKALINE WASTES - OTHER METALS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
11	3 of 5	179.6	315.0	GUELPH HYDRO BEVERLEY ST. AT STEVENSON ST. SOUTH GUELPH ON N1H 1A7	GEN

SIC Code: 4911
SIC Description: ELECT. POWER SYS.
Generator #: ON0558303
Approval Yrs: 92,93,97,98

--- Details ---
Waste Code: 122
Waste Description: ALKALINE WASTES - OTHER METALS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
11	4 of 5	179.6	315.0	GUELPH HYDRO BEVERLEY STREET AT STEVENSON STREET SOUTH	GEN

Map Key	Number of Records	Distance m	Elevation m	Site	DB
				GUELPH ON	

SIC Code: 4911
SIC Description: ELECT. POWER SYS.
Generator #: ON0558303
Approval Yrs: 99,00,01,03,04

--- Details ---
Waste Code: 122
Waste Description: ALKALINE WASTES - OTHER METALS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
11	5 of 5	179.6	315.0	GUELPH HYDRO BEVERLEY ST. AT STEVENSON ST. SOUTH C/O 104 DAWSON ROAD GUELPH ON N1H 1A7	GEN

SIC Code: 4911
SIC Description: ELECT. POWER SYS.
Generator #: ON0558303
Approval Yrs: 89,90

--- Details ---
Waste Code: 122
Waste Description: ALKALINE WASTES - OTHER METALS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
12	1 of 1	180.1	315.0	ON	WWIS

Well Id:	6715462	**Lot:**	
Concession:		**Concession Name:**	
County:	WELLINGTON	**Municipality:**	GUELPH
Easting Nad83:	562075	**Northing Nad83:**	4822260
Zone:	17	**Utm Reliability:**	
Primary Water Use:		**Construction Date:**	28-JUN-05
Sec. Water Use:		**Well Depth:**	4.62 m
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Observation Wells
Construction Method:	Diamond	**Flowing (y/n):**	
Elevation (m):	314.88	**Elevation Reliability:**	
Depth to Bedrock:	5	**Overburden/Bedrock:**	Bedrock
Water Type:		**Casing Material:**	PLASTIC

--- Details ---

Thickness:	.15 m	**Original Depth:**	.15 m
Material Colour:		**Material:**	
+			
Thickness:	1.37 m	**Original Depth:**	1.52 m
Material Colour:	BROWN	**Material:**	SAND, GRAVEL

Map Key	Number of Records	Distance m	Elevation m	Site	DB
+					
Thickness:	3.1 m		**Original Depth:**	4.62 m	
Material Colour:	GREY		**Material:**	ROCK	

13	**1 of 1**	**189.2**	**315.0**	**ON**	**WWIS**

Well Id:	6715463	**Lot:**	
Concession:		**Concession Name:**	
County:	WELLINGTON	**Municipality:**	GUELPH
Easting Nad83:	562075	**Northing Nad83:**	4822239
Zone:	17	**Utm Reliability:**	
Primary Water Use:		**Construction Date:**	28-JUN-05
Sec. Water Use:		**Well Depth:**	4.75 m
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Observation Wells
Construction Method:	Diamond	**Flowing (y/n):**	
Elevation (m):	314.92	**Elevation Reliability:**	
Depth to Bedrock:	5	**Overburden/Bedrock:**	Bedrock
Water Type:		**Casing Material:**	PLASTIC

--- Details ---

Thickness:	.42 m	**Original Depth:**	.5 m
Material Colour:	BLACK	**Material:**	FILL, SAND, GRAVEL
+			
Thickness:	1.02 m	**Original Depth:**	1.52 m
Material Colour:	BROWN	**Material:**	SAND, GRAVEL
+			
Thickness:	3.23 m	**Original Depth:**	4.75 m
Material Colour:	GREY	**Material:**	ROCK
+			
Thickness:	.08 m	**Original Depth:**	.08 m
Material Colour:		**Material:**	

14	**1 of 34**	**192.3**	**315.0**	**ABS Friction Corp. 10 Kingsmill Avenue Guelph ON**	**CA**

Certificate #:	2759-666KLE
Application Year:	2004
Issue Date:	11/9/2004
Approval Type:	Air
Status:	Revoked and/or Replaced
Application Type:	
Client Name:	
Client Address:	
Client City:	
Client Postal Code:	
Project Description:	
Contaminants:	
Emission Control:	

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	2 of 34	192.3	315.0	ABS Friction Inc. 10 Kingsmill Ave Guelph ON	CA

Certificate #: 9794-8B2QVF
Application Year: 2010
Issue Date: 11/30/2010
Approval Type: Air
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	3 of 34	192.3	315.0	10 Kingsmill Avenue Guelph ON N1E 5V9	CA

Certificate #: 7631-4N7QAQ
Application Year: 00
Issue Date: 10/4/00
Approval Type: Industrial air
Status: Approved
Application Type: Amended CofA
Client Name: ABS Friction Inc.
Client Address: 10 Kingsmill Avenue
Client City: Guelph
Client Postal Code: N1E 5V9
Project Description: This application is for an Air Certificate of Approval for the installation of one more dust collector to service the new in plant process equipment for a manufacturer of friction brake pads for automobiles.
Contaminants:
Emission Control:

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	4 of 34	192.3	315.0	ABS FRICTION INC. 10 KINGSMILL AVENUE GUELPH CITY ON N1E 5V9	CA

Certificate #: 8-2110-97-
Application Year: 97
Issue Date: 11/12/1997
Approval Type: Industrial air
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description: INFRARED CURING OVEN, MOLD/CURE PRESS
Contaminants: Suspended Particulate Matter, Nitrogen Oxides, Ammonia, Phenol
Emission Control: Baghouse (Incl Vent Fil.)

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	5 of 34	192.3	315.0	ABS Friction Corp. 10 Kingsmill Ave Guelph ON	CA

Certificate #: 4905-7DZPZX
Application Year: 2008
Issue Date: 4/28/2008
Approval Type: Air
Status: Revoked and/or Replaced
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description:
Contaminants:
Emission Control:

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	6 of 34	192.3	315.0	ABS Friction Inc. 10 Kingsmill Avenue Guelph ON N1E 5V9	EBR

Year: 2003
EBR Registry No.: IA03E1466
Ministry Ref. No.: 1496-5SJLXY
Type: Instrument Decision
Instrument Type: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9
Proposal Date:
Location: 10 Kingsmill Avenue Guelph Ontario N1E 5V9
Proponent Address: 10 Kingsmill Avenue Guelph Ontario N1E 5V9

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	7 of 34	192.3	315.0	ABS Friction Corp. 10 Kingsmill Avenue Guelph ON N1E 5V9	EBR

Year: 2009
EBR Registry No.: 010-7495
Ministry Ref. No.: 3720-7UFPP6
Type: Instrument Proposal
Instrument Type: (EPA s. 9) - Approval for discharge into the natural environment other than water (i.e. Air)
Proposal Date: August 07, 2009
Location: 10 Kingsmill Avenue Guelph, County of Wellington N1E 5V9
Proponent Address: 10 Kingsmill avenue Guelph Ontario Canada N1E 5V9

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	8 of 34	192.3	315.0	ABS Friction Inc. City of Guelph ON	EBR

Year: 1997
EBR Registry No.: IA7E0800
Ministry Ref. No.:
Type: Instrument
Instrument Type: EPA s. 9 - Approval for discharge into the natural environment other than water (i.e. Air)
Proposal Date: 6/3/97
Location: City of Guelph
Proponent Address: ABS Friction Inc.,10 Kingsmill Avenue,Guelph, Ontario,N1E 5V9

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	9 of 34	192.3	315.0	ABS Friction Inc 10 Kingsmill Avenue Guelph ON N1E 5V9	EBR

Year: 2000
EBR Registry No.: IA00E0905
Ministry Ref. No.:
Type: Instrument
Instrument Type: EPA s. 9 - Approval for discharge into the natural environment other than water (i.e. Air)
Proposal Date:
Location: 10 Kingsmill Avenue,Guelph, Ontario, N1E 5V9Guelph
Proponent Address: ABS Friction Inc.10 Kingsmill Avenue,Guelph, Ontario, N1E 5V9

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	10 of 34	192.3	315.0	10 Kingsmill Avenue Guelph ON N1E 5V9	EHS

Order No.: 20030602006
Report Date: 6/6/03
Report Type: Complete Report
Search Radius (km): 0.30
Addit. Info Ordered:

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	11 of 34	192.3	315.0	10 Kingsmill Ave Guelph ON N1E 5V9	EHS

Order No.: 20000711001
Report Date: 7/17/00
Report Type: Complete Report
Search Radius (km): 0.25
Addit. Info Ordered:

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	12 of 34	192.3	315.0	2049936 Ontario Ltd 10 Kingsmill Ave Guelph ON N1E 5V9	GEN

SIC Code:
SIC Description:
Generator #: ON9004317
Approval Yrs: As of Apr 2012

--- Details ---
Waste Code: 145
Waste Description: Wastes from the use of pigments, coatings and paints
+
Waste Code: 251
Waste Description: Waste oils/sludges (petroleum based)
+
Waste Code: 252
Waste Description: Waste crankcase oils and lubricants
+
Waste Code: 253
Waste Description: Emulsified oils

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	13 of 34	192.3	315.0	ABS FRICTION INC. 10 Kingsmill Avenue Guelph ON	GEN

SIC Code: 336340
SIC Description: Motor Vehicle Brake System Manufacturing
Generator #: ON2390500
Approval Yrs: 2011

--- Details ---
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 331
Waste Description: WASTE COMPRESSED GASES
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	14 of 34	192.3	315.0	GUELPH (OUT OF BUSINESS)D 10 KINGSMILL AVENUE GUELPH ON N1E 5V9	GEN

SIC Code: 3059
SIC Description: OTHER WIRE PROD.
Generator #: ON0389204
Approval Yrs: 00,01

--- Details ---
Waste Code: 213
Waste Description: PETROLEUM DISTILLATES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	15 of 34	192.3	315.0	ABS FRICTION INC. 10 Kingsmill Avenue Guelph ON	GEN

SIC Code: 336340
SIC Description: Motor Vehicle Brake System Manufacturing
Generator #: ON2390500
Approval Yrs: 2009

--- Details ---
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 331
Waste Description: WASTE COMPRESSED GASES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	16 of 34	192.3	315.0	ABS FRICTION INC. 10 Kingsmill Avenue	GEN

Map Key	Number of Records	Distance m	Elevation m	Site	DB
				Guelph ON	

SIC Code: 336340
SIC Description: Motor Vehicle Brake System Manufacturing
Generator #: ON2390500
Approval Yrs: 2010

--- Details ---
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 331
Waste Description: WASTE COMPRESSED GASES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	**17 of 34**	**192.3**	**315.0**	**GUELPH TOOL & DIE LIMITED** **10 KINGSMILL AVE.** **GUELPH ON N1E 5V9**	**GEN**

SIC Code: 3059
SIC Description: OTHER WIRE PROD.
Generator #: ON0389204
Approval Yrs: 94,95,96,97,98

--- Details ---
Waste Code: 213
Waste Description: PETROLEUM DISTILLATES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	**18 of 34**	**192.3**	**315.0**	**ABS FRICTION CORP.** **10 Kingsmill Avenue** **Guelph ON N1E 5V9**	**GEN**

SIC Code:
SIC Description:
Generator #: ON2390500
Approval Yrs: 02,03,04,05,06,07,08

--- Details ---
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 252
Waste Description: WASTE OILS & LUBRICANTS
+
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 331
Waste Description: WASTE COMPRESSED GASES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	**19 of 34**	**192.3**	**315.0**	**GUELPH TOOL & DIE LIMITED** **10 KINGSMILL AVENUE** **GUELPH ON N1E 5V9**	**GEN**

Map Key	Number of Records	Distance m	Elevation m	Site		DB
SIC Code:		3059				
SIC Description:		OTHER WIRE PROD.				
Generator #:		ON0389204				
Approval Yrs:		99				
--- Details ---						
Waste Code:		213				
Waste Description:		PETROLEUM DISTILLATES				
14	**20 of 34**	**192.3**	**315.0**	**CAMPBELL-COX FABRICATIONS** **10 KINGS MILL ROAD C/O 367** **WOODLAWN ROAD WEST** **GUELPH ON N1E 5V9**		**GEN**
SIC Code:		3029				
SIC Description:		OTHER FAB. STRUCTURES				
Generator #:		ON0879701				
Approval Yrs:		86,87,88,89,90				
--- Details ---						
Waste Code:		211				
Waste Description:		AROMATIC SOLVENTS				
+						
Waste Code:		213				
Waste Description:		PETROLEUM DISTILLATES				
14	**21 of 34**	**192.3**	**315.0**	**CAMPBELL-COX(OUT OF BUS)** **111** **10 KINGS MILL ROAD C/O 367** **WOODLAWN ROAD WEST** **GUELPH ON N1E 5V9**	**07-**	**GEN**
SIC Code:		3029				
SIC Description:		OTHER FAB. STRUCTURE				
Generator #:		ON0879701				
Approval Yrs:		92,93,94,95,96,97,98				
--- Details ---						
Waste Code:		211				
Waste Description:		AROMATIC SOLVENTS				
+						
Waste Code:		213				
Waste Description:		PETROLEUM DISTILLATES				
14	**22 of 34**	**192.3**	**315.0**	**ABS FRICTION INC.** **10 KINGSMILL AVENUE** **GUELPH ON N1E 5V9**		**GEN**
SIC Code:		3255				
SIC Description:		VEH. WHEEL & BRAKE				
Generator #:		ON2390500				
Approval Yrs:		98,99,00,01				
--- Details ---						
Waste Code:		251				
Waste Description:		OIL SKIMMINGS & SLUDGES				
+						
Waste Code:		252				
Waste Description:		WASTE OILS & LUBRICANTS				

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	23 of 34	192.3	315.0	ABS Friction Inc. 10 Kingsmill Avenue Guelph ON N1E 5V9	NPRI

NPRI #: 0000007671
Year: 2011
Longitude: -80.228
Latitude: 43.5513

--- Details ---
Air: .08
Water:
Land:
Units: tonnes
Substances Released: Copper (and its compounds)
+
Air: 2.093
Water:
Land:
Units: tonnes
Substances Released: PM10 - Particulate Matter <= 10 Microns
+
Air: 1.046
Water:
Land:
Units: tonnes
Substances Released: PM2.5 - Particulate Matter <= 2.5 Microns

---

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	24 of 34	192.3	315.0	KROSHERRA CORPORATION (17528 - 04/2014) 10 KINGSMILL AVE GUELPH ON N1E 5V9	PES

Licence No.: 22-01-13728-0
Licence Type: GENERAL

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	25 of 34	192.3	315.0	KROSHERRA CORPORATION (17528 - 04/2014) 10 KINGSMILL AVE GUELPH ON N1E5V9	PES

Licence No.:
Licence Type: Vendor

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	26 of 34	192.3	315.0	ABS Friction Inc. 10 Kingsmill Ave Guelph ON N1E 5V9	SCT

Established: 01-AUG-96
Plant Size (ft²): 50000
Employment:

--- Details ---
SIC/NAICS Code: 336340
Description: Motor Vehicle Brake System Manufacturing

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	27 of 34	192.3	315.0	Superior Steel Fabricators 10 Kingsmill Ave Guelph ON N1E 5V9	SCT

Established: 01-AUG-85
Plant Size (ft²): 20000
Employment:

--- Details ---
SIC/NAICS Code: 331110
Description: Iron and Steel Mills and Ferro-Alloy Manufacturing

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	28 of 34	192.3	315.0	ABS Friction Corp. 10 Kingsmill Ave Guelph ON N1E 5V9	SCT

Established: 1996
Plant Size (ft²): 50000
Employment:

--- Details ---
SIC/NAICS Code: 336340
Description: Motor Vehicle Brake System Manufacturing

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	29 of 34	192.3	315.0	EASTWING WOOD SPECIALTIES 10 KINGSMILL AVE REAR BLDG GUELPH ON N1E 5V9	SCT

Established: 1993
Plant Size (ft²):
Employment: 3

--- Details ---
SIC/NAICS Code: 2431
Description: MILLWORK

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	30 of 34	192.3	315.0	THOMPSON DIV OF VALCOM LTD H I 10 KINGSMILL AVE GUELPH ON N1E 5V9	SCT

Established: 1952
Plant Size (ft²):
Employment: 35

--- Details ---
SIC/NAICS Code: 3769
Description: GUIDED MISSILE & SPACE VEHICLE PARTS

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	31 of 34	192.3	315.0	WENA MFG. CO. LTD. 10-A KINGSMILL AVE GUELPH ON N1E 5V9	SCT

Established: 1985
Plant Size (ft²): 2700
Employment: 7

--- Details ---
SIC/NAICS Code: 3499

Map Key	Number of Records	Distance m	Elevation m	Site	DB
Description:		FABRICATED METAL PRODUCTS, NOT ELSEWHERE CLASSIFIED			
14	**32 of 34**	**192.3**	**315.0**	**Wena Manufacturing Co. Ltd.** **10 Kingsmill Rd** **Guelph ON N1E 5V9**	**SCT**

Established: 1985
Plant Size (ft²): 2700
Employment: 7

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	**33 of 34**	**192.3**	**315.0**	**Wena Manufacturing Co. Ltd.** **10 Kingsmill Ave** **Guelph ON N1E 5V9**	**SCT**

Established: 1985
Plant Size (ft²): 20000
Employment: 12

--- Details ---
SIC/NAICS Code: 331110
Description: Iron and Steel Mills and Ferro-Alloy Manufacturing

Map Key	Number of Records	Distance m	Elevation m	Site	DB
14	**34 of 34**	**192.3**	**315.0**	**Superior Steel Fabricators** **10 Kingsmill Ave** **Guelph ON N1E 5V9**	**SPL**

Ref No.: 2364-7DJMEU
Incident Dt:
MOE Reported Dt: 4/9/2008
Contaminant Name: FIRE WATER (PARTICULATE CONTAMINANT)
Contaminant Quantity: 1200 L
Incident Summary: Superior Steel Fab, 1200L fire water, Land
Incident Cause: Other Discharges
Incident Reason: Fire/Explosion - Resulting from fires/explosions (Not occurrences which cause a fire or explosion)
Nature of Impact: Surface Water Pollution
Receiving Medium:
Environmental Impact: Confirmed

Map Key	Number of Records	Distance m	Elevation m	Site	DB
15	**1 of 1**	**193.7**	**315.0**	**ON**	**WWIS**

Well Id: 7174595
Concession:
County: WELLINGTON
Easting Nad83: 562065
Zone: 17
Primary Water Use: Test Hole
Sec. Water Use: Monitoring
Pump Rate:
Flow Rate:
Specific Capacity:
Construction Method: Diamond
Elevation (m):
Depth to Bedrock:
Lot:
Concession Name:
Municipality: GUELPH
Northing Nad83: 4822249
Utm Reliability: margin of error : 30 m - 100 m
Construction Date: 26-OCT-11
Well Depth: 4.57 m
Static Water Level:
Clear/Cloudy:
Final Well Status: Observation Wells
Flowing (y/n):
Elevation Reliability:
Overburden/Bedroc

Map Key	Number of Records	Distance m	Elevation m	Site	DB

		k:	
Water Type:		**Casing Material:**	PLASTIC
--- Details ---			
Thickness:	.31 m	**Original Depth:**	.31 m
Material Colour:	BROWN	**Material:**	TOPSOIL, STONES, SOFT
+			
Thickness:	1.51 m	**Original Depth:**	1.82 m
Material Colour:	BROWN	**Material:**	STONES, SAND, LOOSE
+			
Thickness:	2.75 m	**Original Depth:**	4.57 m
Material Colour:	BROWN	**Material:**	SANDSTONE, , HARD

16 **1 of 1** **193.7** **314.0** **ON** **WWIS**

Well Id:	7108608	**Lot:**	
Concession:		**Concession Name:**	
County:	WELLINGTON	**Municipality:**	GUELPH
Easting Nad83:	562104	**Northing Nad83:**	4822466
Zone:	17	**Utm Reliability:**	margin of error : 10 - 30 m
Primary Water Use:	Monitoring	**Construction Date:**	07-JUL-08
Sec. Water Use:		**Well Depth:**	3.05 m
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Test Hole
Construction Method:	Boring	**Flowing (y/n):**	
Elevation (m):	314.66	**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:		**Casing Material:**	PLASTIC
--- Details ---			
Thickness:	1.82 m	**Original Depth:**	1.82 m
Material Colour:	BLACK	**Material:**	PEAT, TOPSOIL, SOFT
+			
Thickness:	1.23 m	**Original Depth:**	3.05 m
Material Colour:	BLACK	**Material:**	STONES, PEAT, SOFT

17 **1 of 1** **200.9** **315.0** **ON** **WWIS**

Well Id:	7178856	**Lot:**	
Concession:		**Concession Name:**	
County:	WELLINGTON	**Municipality:**	GUELPH
Easting Nad83:	562048	**Northing Nad83:**	4822274
Zone:	17	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Monitoring	**Construction Date:**	02-MAR-12
Sec. Water Use:		**Well Depth:**	3 ft
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Observation Wells
Construction Method:	Diamond	**Flowing (y/n):**	

Map Key	Number of Records	Distance m	Elevation m	Site	DB

Elevation (m): ***Elevation Reliability:***

Depth to Bedrock: ***Overburden/Bedrock:***

Water Type: ***Casing Material:*** PLASTIC

--- Details ---

Thickness:	3 ft	***Original Depth:***	3 ft
Material Colour:	BROWN	***Material:***	SAND, GRAVEL
+			
Thickness:	12 ft	***Original Depth:***	15 ft
Material Colour:	GREY	***Material:***	ROCK

18	***1 of 5***	***203.0***	***314.8***	***212 Alice Street Guelph ON N1E 3A8***	***EHS***

Order No.: 20050422034
Report Date: 5/3/2005
Report Type:
Search Radius (km): 0.25
Addit. Info Ordered:

18	***2 of 5***	***203.0***	***314.8***	***Aim Waste Management 212 Alice Street Guelph ON N1E 3A8***	***GEN***

SIC Code: 238990
SIC Description: All Other Specialty Trade Contractors
Generator #: ON8672271
Approval Yrs: 2009

--- Details ---
Waste Code: 221
Waste Description: LIGHT FUELS

18	***3 of 5***	***203.0***	***314.8***	***EARL SMITH 212 ALICE STREET GUELPH ON N1E 3A8***	***GEN***

SIC Code: 814110
SIC Description: Private Households
Generator #: ON9139444
Approval Yrs: 2010

--- Details ---
Waste Code: 221
Waste Description: LIGHT FUELS

18	***4 of 5***	***203.0***	***314.8***	***EARL SMITH 212 ALICE STREET GUELPH ON N1E 3A8***	***GEN***

SIC Code: 814110
SIC Description: Private Households
Generator #: ON9139444
Approval Yrs: 2011

Map Key	Number of Records	Distance m	Elevation m	Site	DB

--- Details ---
Waste Code: 221
Waste Description: LIGHT FUELS

---

18 **5 of 5** **203.0** **314.8** **STANTEC CONSULTING INC.** **GEN**
212 ALICE STREET
GUELPH ON N1E 3A8

SIC Code:
SIC Description:
Generator #: ON8394759
Approval Yrs: As of Apr 2012

--- Details ---
Waste Code: 150
Waste Description: Inert organic wastes

---

19 **1 of 1** **203.9** **315.0** **WWIS**
ON

Well Id: 6709855
Concession:
County: WELLINGTON
Easting Nad83: 562054.3
Zone: 17
Primary Water Use: Industrial
Sec. Water Use:
Pump Rate: 1 GPM
Flow Rate:
Specific Capacity:
Construction Method: Rotary (Convent.)
Elevation (m): 314.83
Depth to Bedrock: 6
Water Type: Not stated

Lot:
Concession Name:
Municipality: GUELPH
Northing Nad83: 4822248
Utm Reliability: margin of error : 10 - 30 m
Construction Date: 11-JUL-89
Well Depth: 6 ft
Static Water Level: 4 ft
Clear/Cloudy:
Final Well Status: Test Hole
Flowing (y/n): N
Elevation Reliability:
Overburden/Bedrock: Bedrock
Casing Material: OPEN HOLE,STEEL

--- Details ---
Thickness: 6 ft
Material Colour: BROWN
Original Depth: 6 ft
Material: CLAY, SAND, GRAVEL
+
Thickness: 15 ft
Material Colour: GREY
Original Depth: 21 ft
Material: LIMESTONE, HARD

---

20 **1 of 1** **206.5** **315.0** **WWIS**
ON

Well Id: 6715346
Concession:
County: WELLINGTON
Easting Nad83: 562403
Zone: 17
Primary Water Use:
Sec. Water Use:
Pump Rate:
Flow Rate:

Lot:
Concession Name:
Municipality: GUELPH
Northing Nad83: 4822458
Utm Reliability:
Construction Date: 09-FEB-04
Well Depth: 2.2 m
Static Water Level:
Clear/Cloudy:

Map Key	Number of Records	Distance m	Elevation m	Site	DB

Specific Capacity:		**Final Well Status:**	Observation Wells
Construction Method:	Diamond	**Flowing (y/n):**	
Elevation (m):	315.79	**Elevation Reliability:**	
Depth to Bedrock:	7	**Overburden/Bedrock:**	Bedrock
Water Type:		**Casing Material:**	PLASTIC

--- Details ---

Thickness:	.4 m	**Original Depth:**	.4 m
Material Colour:	BROWN	**Material:**	SAND, SILT, GRAVEL
+			
Thickness:	1.8 m	**Original Depth:**	2.2 m
Material Colour:	BROWN	**Material:**	SILT, SAND, GRAVEL
+			
Thickness:	9.6 m	**Original Depth:**	11.8 m
Material Colour:	GREY	**Material:**	DOLOMITE, GRAVEL, FRACTURED

---

21 ***1 of 1*** ***209.7*** ***314.7*** ***ON*** ***WWIS***

Well Id:	7178857	**Lot:**	
Concession:		**Concession Name:**	
County:	WELLINGTON	**Municipality:**	GUELPH
Easting Nad83:	562038	**Northing Nad83:**	4822277
Zone:	17	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Monitoring	**Construction Date:**	06-MAR-12
Sec. Water Use:		**Well Depth:**	3 ft
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Observation Wells
Construction Method:	Diamond	**Flowing (y/n):**	
Elevation (m):		**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:		**Casing Material:**	PLASTIC,STEEL

--- Details ---

Thickness:	3 ft	**Original Depth:**	3 ft
Material Colour:	BLACK	**Material:**	FILL, , LOOSE
+			
Thickness:	12 ft	**Original Depth:**	15 ft
Material Colour:	GREY	**Material:**	ROCK, , HARD

---

22 ***1 of 1*** ***212.4*** ***315.0*** ***ON*** ***WWIS***

Well Id:	7178858	**Lot:**	
Concession:		**Concession Name:**	
County:	WELLINGTON	**Municipality:**	GUELPH
Easting Nad83:	562039	**Northing Nad83:**	4822264
Zone:	17	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:	Monitoring	**Construction Date:**	03-MAR-12

Sec. Water Use:		**Well Depth:**	3 ft
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	Observation Wells
Construction Method:	Diamond	**Flowing (y/n):**	
Elevation (m):		**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:		**Casing Material:**	PLASTIC

--- Details ---

Thickness:	3 ft	**Original Depth:**	3 ft
Material Colour:	BROWN	**Material:**	SAND, GRAVEL
+			
Thickness:	12 ft	**Original Depth:**	15 ft
Material Colour:	GREY	**Material:**	ROCK

---

23 ***1 of 1*** ***217.2*** ***315.0*** ***Bentley Mobile Veterinary Service*** ***GEN***
1 Simcoe Street
Guelph ON N1E 3B7

SIC Code:	541940
SIC Description:	Veterinary Services
Generator #:	ON3054891
Approval Yrs:	07,08

--- Details ---

Waste Code:	261
Waste Description:	PHARMACEUTICALS
+	
Waste Code:	312
Waste Description:	PATHOLOGICAL WASTES

---

24 ***1 of 1*** ***221.1*** ***314.5*** ***WWIS***
ON

Well Id:	7189743	**Lot:**	
Concession:		**Concession Name:**	
County:	WELLINGTON	**Municipality:**	GUELPH
Easting Nad83:	562029	**Northing Nad83:**	4822267
Zone:	17	**Utm Reliability:**	margin of error : 30 m - 100 m
Primary Water Use:		**Construction Date:**	12-SEP-12
Sec. Water Use:		**Well Depth:**	
Pump Rate:		**Static Water Level:**	
Flow Rate:		**Clear/Cloudy:**	
Specific Capacity:		**Final Well Status:**	
Construction Method:		**Flowing (y/n):**	
Elevation (m):		**Elevation Reliability:**	
Depth to Bedrock:		**Overburden/Bedrock:**	
Water Type:		**Casing Material:**	

Map Key	Number of Records	Distance m	Elevation m	Site		DB
25	1 of 11	223.9	315.0	FOSECO CANADA INC. ALICE STREET GUELPH CITY ON		CA

Certificate #: 4-0104-89-006
Application Year: 89
Issue Date: 9/26/89
Approval Type: Industrial wastewater
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description: CONTAMINATED GROUNDWATER CLEAN UP
Contaminants:
Emission Control:

Map Key	Number of Records	Distance m	Elevation m	Site		DB
25	2 of 11	223.9	315.0	FOSECO CANADA INC. ALICE STREET GUELPH CITY ON		CA

Certificate #: 8-2153-89-
Application Year: 89
Issue Date: 8/11/1989
Approval Type: Industrial air
Status: Approved
Application Type:
Client Name:
Client Address:
Client City:
Client Postal Code:
Project Description: TOLUENE STRIPPER FOR GROUNDWATER
Contaminants: Toluene(Pentyl Methane)(Methyl Benzene), Benzene (Carcinogen Requires Bact)
Emission Control: Other - Air

Map Key	Number of Records	Distance m	Elevation m	Site		DB
25	3 of 11	223.9	315.0	BP CANADA ENERGY COMPANY 201 ALICE STREET GUELPH ON N1E 3A7		GEN

SIC Code:
SIC Description:
Generator #: ON3960034
Approval Yrs: As of Apr 2012

--- Details ---
Waste Code: 211
Waste Description: Aromatic solvents and residues

Map Key	Number of Records	Distance m	Elevation m	Site		DB
25	4 of 11	223.9	315.0	FOSECO CANADA INC. 201 ALICE STREET GUELPH ON N1E 3A7	15-151	GEN

SIC Code: 3591
SIC Description: REFRACTORIES IND.
Generator #: ON0081801
Approval Yrs: 92,93,94,95,96,97

Map Key	Number of Records	Distance m	Elevation m	Site	DB

--- Details ---

Waste Code:	114
Waste Description:	OTHER INORGANIC ACID WASTES
+	
Waste Code:	122
Waste Description:	ALKALINE WASTES - OTHER METALS
+	
Waste Code:	132
Waste Description:	NEUTRALIZED WASTES - OTHER METALS
+	
Waste Code:	145
Waste Description:	PAINT/PIGMENT/COATING RESIDUES
+	
Waste Code:	146
Waste Description:	OTHER SPECIFIED INORGANICS
+	
Waste Code:	148
Waste Description:	INORGANIC LABORATORY CHEMICALS
+	
Waste Code:	211
Waste Description:	AROMATIC SOLVENTS
+	
Waste Code:	212
Waste Description:	ALIPHATIC SOLVENTS
+	
Waste Code:	213
Waste Description:	PETROLEUM DISTILLATES
+	
Waste Code:	232
Waste Description:	POLYMERIC RESINS
+	
Waste Code:	233
Waste Description:	OTHER POLYMERIC WASTES
+	
Waste Code:	241
Waste Description:	HALOGENATED SOLVENTS
+	
Waste Code:	251
Waste Description:	OIL SKIMMINGS & SLUDGES
+	
Waste Code:	263
Waste Description:	ORGANIC LABORATORY CHEMICALS
+	
Waste Code:	268
Waste Description:	AMINES

Map Key	Number of Records	Distance m	Elevation m	Site	DB
25	***5 of 11***	***223.9***	***315.0***	***FOSECO CANADA INC.(OUT OF BUSINESS)*** ***201 ALICE STREET*** ***GUELPH ON N1E 3A7***	***GEN***

SIC Code:	3591
SIC Description:	REFRACTORIES IND.
Generator #:	ON0081801
Approval Yrs:	98

--- Details ---

Waste Code:	114
Waste Description:	OTHER INORGANIC ACID WASTES

Map Key	Number of Records	Distance m	Elevation m	Site	DB

+
Waste Code: 122
Waste Description: ALKALINE WASTES - OTHER METALS
+
Waste Code: 132
Waste Description: NEUTRALIZED WASTES - OTHER METALS
+
Waste Code: 145
Waste Description: PAINT/PIGMENT/COATING RESIDUES
+
Waste Code: 146
Waste Description: OTHER SPECIFIED INORGANICS
+
Waste Code: 148
Waste Description: INORGANIC LABORATORY CHEMICALS
+
Waste Code: 211
Waste Description: AROMATIC SOLVENTS
+
Waste Code: 212
Waste Description: ALIPHATIC SOLVENTS
+
Waste Code: 213
Waste Description: PETROLEUM DISTILLATES
+
Waste Code: 232
Waste Description: POLYMERIC RESINS
+
Waste Code: 233
Waste Description: OTHER POLYMERIC WASTES
+
Waste Code: 241
Waste Description: HALOGENATED SOLVENTS
+
Waste Code: 251
Waste Description: OIL SKIMMINGS & SLUDGES
+
Waste Code: 263
Waste Description: ORGANIC LABORATORY CHEMICALS
+
Waste Code: 268
Waste Description: AMINES

25	***6 of 11***	***223.9***	***315.0***	***FOSECO CANADA INC.*** ***201 ALICE STREET C/O 361 SPEEDVALE AVENUE WEST*** ***GUELPH ON N1E 3A7***	***GEN***

SIC Code: 3591
SIC Description: REFRACTORIES IND.
Generator #: ON0081801
Approval Yrs: 86,87,88,89,90

--- Details ---
Waste Code: 146
Waste Description: OTHER SPECIFIED INORGANICS
+
Waste Code: 211
Waste Description: AROMATIC SOLVENTS

Map Key	Number of Records	Distance m	Elevation m	Site	DB
25	7 of 11	223.9	315.0	BP CANADA ENERGY COMPANY 201 ALICE STREET GUELPH ON N1E 3A7	GEN

SIC Code: 336390
SIC Description: Other Motor Vehicle Parts Manufacturing
Generator #: ON3960034
Approval Yrs: 2011

--- Details ---
Waste Code: 211
Waste Description: AROMATIC SOLVENTS

Map Key	Number of Records	Distance m	Elevation m	Site	DB
25	8 of 11	223.9	315.0	BP CANADA 201 ALICE STREET GUELPH ON N1E 3A7	GEN

SIC Code: 336390
SIC Description: Other Motor Vehicle Parts Manufacturing
Generator #: ON3960034
Approval Yrs: 04,05,06,07,08

--- Details ---
Waste Code: 211
Waste Description: AROMATIC SOLVENTS

Map Key	Number of Records	Distance m	Elevation m	Site	DB
25	9 of 11	223.9	315.0	Bryco Construction Management 201 Alice St Guelph ON N1E 3A7	GEN

SIC Code:
SIC Description:
Generator #: ON5084757
Approval Yrs: 03,04

Map Key	Number of Records	Distance m	Elevation m	Site	DB
25	10 of 11	223.9	315.0	BP CANADA ENERGY COMPANY 201 ALICE STREET GUELPH ON N1E 3A7	GEN

SIC Code: 336390
SIC Description: Other Motor Vehicle Parts Manufacturing
Generator #: ON3960034
Approval Yrs: 2009

--- Details ---
Waste Code: 211
Waste Description: AROMATIC SOLVENTS

Map Key	Number of Records	Distance m	Elevation m	Site	DB
25	11 of 11	223.9	315.0	BP CANADA ENERGY COMPANY 201 ALICE STREET GUELPH ON N1E 3A7	GEN

SIC Code: 336390
SIC Description: Other Motor Vehicle Parts Manufacturing
Generator #: ON3960034
Approval Yrs: 2010

Map Key	Number of Records	Distance m	Elevation m	Site	DB
--- Details ---					
Waste Code:	211				
Waste Description:	AROMATIC SOLVENTS				
26	1 of 3	243.0	315.0	STEELE BROS (GUELPH-1986) LTD 60 JOHNSTON ST GUELPH ON N1E 5T6	SCT
Established:	1986				
Plant Size (ft²):	6500				
Employment:	10				
--- Details ---					
SIC/NAICS Code:	3495				
Description:	WIRE SPRINGS				
+					
SIC/NAICS Code:	3496				
Description:	MISCELLANEOUS FABRICATED WIRE PRODUCTS				
26	2 of 3	243.0	315.0	Steele Bros. (Guelph, 1986) Ltd. 60 Johnston St Guelph ON N1E 5T6	SCT
Established:	1986				
Plant Size (ft²):	6500				
Employment:	13				
26	3 of 3	243.0	315.0	Steele Bros. 60 Johnston St Guelph ON N1E 5T6	SCT
Established:	01-AUG-86				
Plant Size (ft²):	15000				
Employment:					
--- Details ---					
SIC/NAICS Code:	332619				
Description:	Other Fabricated Wire Product Manufacturing				
+					
SIC/NAICS Code:	332210				
Description:	Cutlery and Hand Tool Manufacturing				
27	1 of 7	246.5	315.0	MAPLE LEAF GAS 390 YORK RD GUELPH ON N1E 3H4	FST
License Issue Date:	9/27/2002			Tank Status:	Pending Renewal
Tank Status As Of:	August 2007			Operation Type:	Retail Fuel Outlet
Facility Type:	Gasoline Station - Full Serve				
--- Details ---					
Status:	Active				
Capacity (L):	25000				
Year of Installation:	1987				
Corrosion Protection:					
Tank Fuel Type:	Liquid Fuel Single Wall UST - Gasoline				
+					
Status:	Active				

Map Key	Number of Records	Distance m	Elevation m	Site	DB

Capacity (L): 35000
Year of Installation: 1987
Corrosion Protection:
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline
+
Status: Active
Capacity (L): 25000
Year of Installation: 1987
Corrosion Protection:
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline
+
Status: Active
Capacity (L): 15000
Year of Installation: 1987
Corrosion Protection:
Tank Fuel Type: Liquid Fuel Single Wall UST - Diesel

---

27 ***2 of 7*** ***246.5*** ***315.0*** ***MAPLE LEAF GAS***
390 YORK RD
GUELPH ON N1E 3H4 ***FST***

License Issue Date: 9/27/2002 ***Tank Status:*** Licensed
Tank Status As Of: December 2008 ***Operation Type:*** Retail Fuel Outlet
Facility Type: Gasoline Station - Full Serve

--- Details ---
Status: Active
Capacity (L): 25000
Year of Installation: 1987
Corrosion Protection:
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline
+
Status: Active
Capacity (L): 35000
Year of Installation: 1987
Corrosion Protection:
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline
+
Status: Active
Capacity (L): 25000
Year of Installation: 1987
Corrosion Protection:
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline
+
Status: Active
Capacity (L): 15000
Year of Installation: 1987
Corrosion Protection:
Tank Fuel Type: Liquid Fuel Single Wall UST - Diesel

---

27 ***3 of 7*** ***246.5*** ***315.0*** ***MAPLE LEAF GAS***
390 YORK RD
GUELPH ON N1E 3H4 ***FST***

License Issue Date: ***Tank Status:***
Tank Status As Of: June 2011 ***Operation Type:*** Retail Fuel Outlet
Facility Type: FS GASOLINE STATION - FULL SERVE

--- Details ---

Map Key	Number of Records	Distance m	Elevation m	Site	DB

Status: Active
Capacity (L): 25000
Year of Installation: 1985
Corrosion Protection: Sacrificial anode
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline
+
Status: Active
Capacity (L): 15000
Year of Installation: 1988
Corrosion Protection: Sacrificial anode
Tank Fuel Type: Liquid Fuel Single Wall UST - Diesel
+
Status: Active
Capacity (L): 35000
Year of Installation: 1988
Corrosion Protection: Sacrificial anode
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline
+
Status: Active
Capacity (L): 25000
Year of Installation: 1985
Corrosion Protection: Sacrificial anode
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline

27	***4 of 7***	***246.5***	***315.0***	***MAPLE LEAF GAS*** ***390 YORK RD*** ***GUELPH ON N1E 3H4***	***FST***

License Issue Date:
Tank Status:
Tank Status As Of: June 2010
Operation Type: Retail Fuel Outlet
Facility Type: FS GASOLINE STATION - FULL SERVE

--- Details ---
Status: Active
Capacity (L): 25000
Year of Installation: 1985
Corrosion Protection: Sacrificial anode
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline
+
Status: Active
Capacity (L): 15000
Year of Installation: 1988
Corrosion Protection: Sacrificial anode
Tank Fuel Type: Liquid Fuel Single Wall UST - Diesel
+
Status: Active
Capacity (L): 35000
Year of Installation: 1988
Corrosion Protection: Sacrificial anode
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline

27	***5 of 7***	***246.5***	***315.0***	***MAPLE LEAF GAS*** ***390 YORK RD*** ***GUELPH ON N1E 3H4***	***FST***

License Issue Date:
Tank Status:
Tank Status As Of: January 2010
Operation Type: Retail Fuel Outlet
Facility Type: FS GASOLINE STATION - FULL SERVE

Map Key	Number of Records	Distance m	Elevation m	Site	DB
--- Details ---					
Status:		Active			
Capacity (L):		25000			
Year of Installation:		1985			
Corrosion Protection:		Sacrificial anode			
Tank Fuel Type:		Liquid Fuel Single Wall UST - Gasoline			
+					
Status:		Active			
Capacity (L):		15000			
Year of Installation:		1988			
Corrosion Protection:		Sacrificial anode			
Tank Fuel Type:		Liquid Fuel Single Wall UST - Diesel			
+					
Status:		Active			
Capacity (L):		35000			
Year of Installation:		1988			
Corrosion Protection:		Sacrificial anode			
Tank Fuel Type:		Liquid Fuel Single Wall UST - Gasoline			
27	**6 of 7**	**246.5**	**315.0**	**MAPLE LEAF GAS & FUELS LTD AND QUALITY AUTO GLASS 390 YORK RD GUELPH ON N1E3H4**	**PRT**
Location ID:		5684			
Type:		retail			
Expiry Date:		1995-07-31			
Capacity (L):		100000			
Licence #:		0054464001			
27	**7 of 7**	**246.5**	**315.0**	**MAPLE LEAF GAS & FUELS LTD 390 YORK RD GUELPH ON N1E 3H4**	**RST**
Facility:		SERVICE STATIONS-GASOLINE, OIL & NATURAL GAS			
Description:					
28	**1 of 9**	**248.1**	**315.0**	**1028119 ONTARIO LIMITED 408 YORK RD GUELPH ON N1E 3H5**	**EXP**
TSSA Program Area:					
Maximum Hazard Rank:					
Federal Device:					
Type:					
Capacity:					
Corrosion Protection:					
Tank Material:					
Tank Type:					
Expire Date:					
Instance ID:		394083			
Instance Number:		9737014			
Instance Type:		FS Facility			
Status:		EXPIRED			
Description:		FS Gasoline Station - Full Serve			

Map Key	Number of Records	Distance m	Elevation m	Site	DB
28	2 of 9	248.1	315.0	1028119 ONTARIO LIMITED 408 YORK RD GUELPH ON N1E 3H5	EXP

TSSA Program Area:
Maximum Hazard Rank:
Federal Device:
Type:
Capacity:
Corrosion Protection:
Tank Material:
Tank Type:
Expire Date:
Instance ID: 72063
Instance Number: 11181073
Instance Type: FS Liquid Fuel Tank
Status: EXPIRED
Description: FS Liquid Fuel Tank

Map Key	Number of Records	Distance m	Elevation m	Site	DB
28	3 of 9	248.1	315.0	1028119 ONTARIO LIMITED 408 YORK RD GUELPH ON N1E 3H5	EXP

TSSA Program Area:
Maximum Hazard Rank:
Federal Device:
Type:
Capacity:
Corrosion Protection:
Tank Material:
Tank Type:
Expire Date:
Instance ID: 39458
Instance Number: 10771980
Instance Type: FS Liquid Fuel Tank
Status: EXPIRED
Description: FS Liquid Fuel Tank

Map Key	Number of Records	Distance m	Elevation m	Site	DB
28	4 of 9	248.1	315.0	SHAMLOW SERVICE O/A GAS STN 408 YORK RD GUELPH ON N1E 3H5	FST

License Issue Date:
Tank Status:
Tank Status As Of: June 2010
Operation Type: Retail Fuel Outlet
Facility Type: FS GASOLINE STATION - FULL SERVE

--- Details ---
Status: Active
Capacity (L): 22730
Year of Installation: 1990
Corrosion Protection: Fiberglass
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline
+
Status: Active
Capacity (L): 31822
Year of Installation: 1990
Corrosion Protection: Fiberglass

Map Key	Number of Records	Distance m	Elevation m	Site	DB
Tank Fuel Type:		Liquid Fuel Single Wall UST - Gasoline			

28	**5 of 9**	**248.1**	**315.0**	**SHAMLOW SERVICE O/A GAS STN** **408 YORK RD** **GUELPH ON N1E 3H5**	**FST**

License Issue Date:
Tank Status As Of: January 2010
Facility Type: FS GASOLINE STATION - FULL SERVE
Tank Status:
Operation Type: Retail Fuel Outlet

--- Details ---

Status: Active
Capacity (L): 22730
Year of Installation: 1990
Corrosion Protection: Fiberglass
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline
+
Status: Active
Capacity (L): 31822
Year of Installation: 1990
Corrosion Protection: Fiberglass
Tank Fuel Type: Liquid Fuel Single Wall UST - Gasoline

28	**6 of 9**	**248.1**	**315.0**	**1028119 ONTARIO LIMITED** **408 YORK RD** **GUELPH ON N1E 3H5**	**PRT**

Location ID: 5683
Type: retail
Expiry Date: 1995-01-31
Capacity (L): 2640
Licence #: 0076410422

28	**7 of 9**	**248.1**	**315.0**	**SAMS AUTO SERVICE LTD** **408 YORK RD** **GUELPH ON N1E 3H5**	**PRT**

Location ID: 5683
Type: retail
Expiry Date: 1995-06-30
Capacity (L): 54552
Licence #: 0076421957

28	**8 of 9**	**248.1**	**315.0**	**HILTON GROUP GAS** **408 YORK RD** **GUELPH ON N1E 3H5**	**RST**

Facility: Service Stations-Gasoline, Oil & Natural Gas
Description:

28	**9 of 9**	**248.1**	**315.0**	**CANGO PETROLEUMS LTD.** **408 YORK RD. SERVICE STATION** **GUELPH CITY ON N1E 3H5**	**SPL**

Ref No.: 19540

Map Key	Number of Records	Distance m	Elevation m	Site	DB

Incident Dt:	6/1/1989
MOE Reported Dt:	6/2/1989
Contaminant Name:	
Contaminant Quantity:	
Incident Summary:	CANGO SERV. STN. -UNKNOWNQTY. GASOLINE TO GROUND DUE TO TANK OVERFLOW.
Incident Cause:	CONTAINER OVERFLOW
Incident Reason:	UNKNOWN
Nature of Impact:	
Receiving Medium:	LAND
Environmental Impact:	

Map Key	Number of Records	Distance m	Elevation m	Site	DB
29	**1 of 1**	**248.5**	**315.0**	**LEWIS UPHOLSTERY** **404 YORK RD** **GUELPH ON N1E 3H4**	**SCT**

Established:	1972
Plant Size (ft²):	0
Employment:	3
--- Details ---	
SIC/NAICS Code:	2512
Description:	WOOD HOUSEHOLD FURNITURE, UPHOLSTERED

Unplottable Report

Site: ***Guelph, City of***
Guelph ON

Database:
EBR

Year:	2010
EBR Registry No.:	011-1110
Ministry Ref. No.:	23-3888-042A
Type:	Instrument Proposal
Instrument Type:	(Planning Act s17(34)&s21) - Approval of an Official Plan Amendment
Proposal Date:	September 16, 2010
Location:	This amendment applies to the entire City of Guelph.
Proponent Address:	1 Carden Street Guelph Ontario Canada N1H 3A1

Site: ***Guelph, City of***
Guelph ON

Database:
EBR

Year:	2009
EBR Registry No.:	010-7185
Ministry Ref. No.:	23-OP-3888-09001
Type:	Instrument Proposal
Instrument Type:	(Planning Act s17(34)&s21) - Approval of an Official Plan Amendment
Proposal Date:	July 08, 2009
Location:	The amendment applies to the entire City of Guelph
Proponent Address:	1 Carden Street Guelph Ontario Canada N1H 3A1

Site: ***The Corporation of the City of Guelph***
Alice St Guelph ON

Database:
ECA

CofA Number:	7480-8WAKYQ
Date:	7/19/2012
Status:	Approved
Project Type:	Municipal and Private Sewage

Site: ***Double R. Developments***
DIVISION B PART LOT 2, CONCESSION 3E GUELPH ON

Database:
GEN

SIC Code:	231410
SIC Description:	
Generator #:	ON1560500
Approval Yrs:	2011

--- Details ---

Waste Code:	252
Waste Description:	WASTE OILS & LUBRICANTS
+	
Waste Code:	251
Waste Description:	OIL SKIMMINGS & SLUDGES

Appendix: Database Descriptions

Ecolog Environmental Risk Information Services Ltd can search the following databases. The extent of Historical information varies with each database and current information is determined by what is publicity available to Ecolog ERIS at the time of update. ***Note:*** *Databases denoted with " * " indicates that the database will no longer be updated. See the individual database description for more information.*

Abandoned Aggregate Inventory: Up to Sept 2002 Provincial AAGR
The MAAP Program maintains a database of all abandoned pits and quarries. Please note that the database is only referenced by lot and concession and city/town location. The database provides information regarding the location, type, size, land use, status and general comments.

Aggregate Inventory: Up to Aug 2012 Provincial AGR
The Ontario Ministry of Natural Resources maintains a database of all active pits and quarries. Please note that the database is only referenced by lot\concession and city/town location. The database provides information regarding the registered owner/operator, location, status, licence type, and maximum tonnage.

Abandoned Mine Information System: 1800-Feb 2013 Provincial AMIS
The Abandoned Mines Information System contains data on known abandoned and inactive mines located on both Crown and privately held lands. The information was provided by the Ministry of Northern Development and Mines (MNDM), with the following disclaimer: "the database provided has been compiled from various sources, and the Ministry of Northern Development and Mines makes no representation and takes no responsibility that such information is accurate, current or complete". Reported information includes official mine name, status, background information, mine start/end date, primary commodity, mine features, hazards and remediation.

Anderson's Waste Disposal Sites: 1860s-Present Private ANDR
The information provided in this database was collected by examining various historical documents which aimed to characterize the likely position of former waste disposal sites from 1860 to present. The research initiative behind the creation of this database was to identify those sites that are missing from the Ontario MOE Waste Disposal Site Inventory, as well as to provide revisions and corrections to the positions and descriptions of sites currently listed in the MOE inventory. In addition to historic waste disposal facilities, the database also identifies certain auto wreckers and scrap yards that have been extrapolated from documentary sources. Please note that the data is not warranted to be complete, exhaustive or authoritive. The information was collected for research purposes only.

Automobile Wrecking & Supplies: 2001-Jun 2010 Private AUWR
This database provides an inventory of all known locations that are involved in the scrap metal, automobile wrecking/recycling, and automobile parts & supplies industry. Information is provided on the company name, location and business type.

Borehole: 1875-Aug 2011 Provincial BORE
A borehole is the generalized term for any narrow shaft drilled in the ground, either vertically or horizontally. The information here includes geotechnical investigations or environmental site assessments, mineral exploration, or as a pilot hole for installing piers or underground utilities. Information is from many sources such as the Ministry of Transportation (MTO) boreholes from engineering reports and projects from the 1950 to 1990's in Southern Ontario. Boreholes from the Ontario Geological Survey (OGS) including The Urban Geology Analysis Information System (UGAIS) and the York Peel Durham Toronto (YPDT) database of the Conservation Authority Moraine Coalition. This database will include fields such as location, stratigraphy, depth, elevation, year drilled, etc. For all water well data or oil and gas well data for Ontario please refer to WWIS and OOGW.

Certificates of Approval: 1985-Oct 30, 2011* Provincial CA

This database contains the following types of approvals: Air & Noise, Industrial Sewage, Municipal & Private Sewage, Waste Management Systems and Renewable Energy Approvals. The MOE in Ontario states that any facility that releases emissions to the atmosphere, discharges contaminants to ground or surface water, provides potable water supplies, or stores, transports or disposes of waste, must have a Certificate of Approval before it can operate lawfully. Fields include approval number, business name, address, approval date, approval type and status. This database will no longer be updated, as CofA's have been replaced by either Environmental Activity and Sector Registry (EASR) or Environmental Compliance Approval (ECA). Please refer to those individual databases for any information after Oct.31, 2011.

Commercial Fuel Oil Tanks: 1948-Apr 2013 Provincial CFOT

Since May 2002, Ontario developed a new act where it became mandatory for fuel oil tanks to be registered with Technical Standards & Safety Authority (TSSA). This data would include all commercial underground fuel oil tanks in Ontario with fields such as location, registration number, tank material, age of tank and tank size.

Chemical Register: 1992, 1999-Jun 2010 Private CHEM

This database includes information from both a one time study conducted in 1992 and private source and is a listing of facilities that manufacture or distribute chemicals. The production of these chemical substances may involve one or more chemical reactions and/or chemical separation processes (i.e. fractionation, solvent extraction, crystallization, etc.).

Inventory of Coal Gasification Plants and Coal Tar Sites: Apr 1987 and Nov 1988* Provincial COAL

This inventory includes both the "Inventory of Coal Gasification Plant Waste Sites in Ontario-April 1987" and the Inventory of Industrial Sites Producing or Using Coal Tar and Related Tars in Ontario-November 1988) collected by the MOE. It identifies industrial sites that produced and continue to produce or use coal tar and other related tars. Detailed information is available and includes: facility type, size, land use, information on adjoining properties, soil condition, site operators/occupants, site description, potential environmental impacts and historic maps available. This was a one-time inventory.*

Compliance and Convictions: 1989-Jun 2013 Provincial CONV

This database summarizes the fines and convictions handed down by the Ontario courts beginning in 1989. Companies and individuals named here have been found guilty of environmental offenses in Ontario courts of law.

Certificates of Property Use: 1994-Jul 2013 Provincial CPU

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all CPU's on the registry such as (EPA s. 168.6) - Certificate of Property Use.

Drill Hole Database: 1886-Jun 2013 Provincial DRL

The Ontario Drill Hole Database contains information on more than 113,000 percussion, overburden, sonic and diamond drill holes from assessment files on record with the department of Mines and Minerals. Please note that limited data is available for southern Ontario, as it was the last area to be completed. The database was created when surveys submitted to the Ministry were converted in the Assessment File Research Image Database (AFRI) project. However, the degree of accuracy (coordinates) as to the exact location of drill holes is dependent upon the source document submitted to the MNDM. Levels of accuracy used to locate holes are: centering on the mining claim; a sketch of the mining claim; a 1:50,000 map; a detailed company map; or from submitted a "Report of Work".

Environmental Activity and Sector Registry: Oct 31, 2011-Jul 2013 Provincial EASR

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. The EASR allows businesses to register certain activities with the ministry, rather than apply for an approval. The registry is available for common systems and processes, to which preset rules of operation can be applied. The EASR is currently available for: heating systems, standby power systems and automotive refinishing. Businesses whose activities aren't subject to the EASR may apply for an ECA (Environmental Compliance Approval), Please see our ECA database.

Environmental Registry: 1994-Jul 2013 Provincial EBR

The Environmental Registry lists proposals, decisions and exceptions regarding policies, Acts, instruments, or regulations that could significantly affect the environment. Through the Registry, thirteen provincial ministries notify the public of upcoming proposals and invite their comments. For example, if a local business is requesting a permit, license, or certificate of approval to release substances into the air or water; these are notified on the registry. Data includes: Approval for discharge into the natural environment other than water (i.e. Air) - EPA s. 9, Approval for sewage works - OWRA s. 53(1), and EPA s. 27 - Approval for a waste disposal site. For information regarding Permit to Take Water (PTTW), Certificate of Property Use (CPU) and (ORD) Orders please refer to those individual databases.

Environmental Compliance Approval: Oct 31, 2011-Jul 2013 Provincial ECA

On October 31, 2011, a smarter, faster environmental approvals system came into effect in Ontario. In the past, a business had to apply for multiple approvals (known as certificates of approval) for individual processes and pieces of equipment. Today, a business either registers itself, or applies for a single approval, depending on the types of activities it conducts. Businesses whose activities aren't subject to the EASR may apply for an ECA. A single ECA addresses all of a business's emissions, discharges and wastes. Separate approvals for air, noise and waste are no longer required. This database will also include Renewable Energy Approvals. For CofA's prior to Nov 1st, 2011, please refer to the CA database. For all Waste Disposal Sites please refer to the WDS database.

Environmental Effects Monitoring: 1992-2007* Federal EEM

The Environmental Effects Monitoring program assesses the effects of effluent from industrial or other sources on fish, fish habitat and human usage of fisheries resources. Since 1992, pulp and paper mills have been required to conduct EEM studies under the Pulp and Paper Effluent Regulations. This database provides information on the mill name, geographical location and sub-lethal toxicity data.

ERIS Historical Searches: 1999-Mar 2013 Private EHS

EcoLog ERIS has compiled a database of all environmental risk reports completed since March 1999. Available fields for this database include: site location, date of report, type of report, and search radius. As per all other databases, the ERIS database can be referenced on both the map and "Statistical Profile" page.

Environmental Issues Inventory System: 1992-2001* Federal EIIS

The Environmental Issues Inventory System was developed through the implementation of the Environmental Issues and Remediation Plan. This plan was established to determine the location and severity of contaminated sites on inhabited First Nation reserves, and where necessary, to remediate those that posed a risk to health and safety; and to prevent future environmental problems. The EIIS provides information on the reserve under investigation, inventory number, name of site, environmental issue, site action (Remediation, Site Assessment), and date investigation completed.

List of TSSA Expired Facilities: Current to Feb 2012 Provincial EXP

This is a list of all expired facilities that fall under the TSSA (TSSA Act & Safety Regulations), including the six regulations that exist under the Fuels Safety Division. It will include facilities such as private fuel outlets, bulk plants, fuel oil tanks, gasoline stations, marinas, propane filling stations, liquid fuel tanks, piping systems, etc. These tanks have been removed and automatically fall under the expired facilities inventory held by TSSA.

Federal Convictions: 1988-Jun 2007* Federal FCON

Environment Canada maintains a database referred to as the "Environmental Registry" that details prosecutions under the Canadian Environmental Protection Act (CEPA) and the Fisheries Act (FA). Information is provided on the company name, location, charge date, offence and penalty.

Contaminated Sites on Federal Land: June 2000-Jan 2013 Federal FCS

The Federal Contaminated Sites Inventory includes information on all known federal contaminated sites under the custodianship of departments, agencies and consolidated Crown corporations as well as those that are being or have been investigated to determine whether they have contamination arising from past use that could pose a risk to human health or the environment. The inventory also includes non-federal contaminated sites for which the Government of Canada has accepted some or all financial responsibility. It does not include sites where contamination has been caused by, and which are under the control of, enterprise Crown corporations, private individuals, firms or other levels of government.

Fisheries & Oceans Fuel Tanks: 1964-Sept 2003 Federal FOFT

Fisheries & Oceans Canada maintains an inventory of all aboveground & underground fuel storage tanks located on Fisheries & Oceans property or controlled by DFO. Our inventory provides information on the site name, location, tank owner, tank operator, facility type, storage tank location, tank contents & capacity, and date of tank installation.

Fuel Storage Tank: Current to Jun 2011 Provincial FST

The Technical Standards & Safety Authority (TSSA), under the Technical Standards & Safety Act of 2000 maintains a database of registered private and retail fuel storage tanks in Ontario with fields such as location, tank status, license date, tank type, tank capacity, fuel type, installation year and facility type.

Ontario Regulation 347 Waste Generators Summary: 1986-Apr 2012 Provincial GEN

Regulation 347 of the Ontario EPA defines a waste generation site as any site, equipment and/or operation involved in the production, collection, handling and/or storage of regulated wastes. A generator of regulated waste is required to register the waste generation site and each waste produced, collected, handled, or stored at the site. This database contains the registration number, company name and address of registered generators including the types of hazardous wastes generated. It includes data on waste generating facilities such as: drycleaners, waste treatment and disposal facilities, machine shops, electric power distribution etc. This information is a summary of all years from 1986 including the most currently available data. Some records may contain, within the company name, the phrase "See & Use..." followed by a series of letters and numbers. This occurs when one company is amalgamated with or taken over by another registered company. The number listed as "See & Use", refers to the new ownership and the other identification number refers to the original ownership. This phrase serves as a link between the 2 companies until operations have been fully transferred.

TSSA Historic Incidents: 2006-June 2009 Provincial HINC

This database will cover all incidences recorded by TSSA with their older system, before they moved to their new management system. TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. The TSSA works to protect the public, the environment and property from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from pipelines, diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

Indian & Northern Affairs Fuel Tanks: 1950-Aug 2003* Federal IAFT

The Department of Indian & Northern Affairs Canada (INAC) maintains an inventory of all aboveground & underground fuel storage tanks located on both federal and crown land. Our inventory provides information on the reserve name, location, facility type, site/facility name, tank type, material & ID number, tank contents & capacity, and date of tank installation.

TSSA Incidents: June 2009-Apr 2013 Provincial INC

TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. Includes incidents from fuel-related hazards such as spills, fires and explosions. This database will include spills and leaks from diesel, fuel oil, gasoline, natural gas, propane and hydrogen recorded by the TSSA.

Landfill Inventory Management Ontario: 2012 Provincial LIMO

The Landfill Inventory Management Ontario (LIMO) database is updated every year, as the ministry compiles new and updated information. The inventory will include small and large landfills. Additionally, each year the ministry will request operators of the larger landfills complete a landfill data collection form that will be used to update LIMO and will include the following information from the previous operating year. This will include additional information such as estimated amount of total waste received, landfill capacity, estimated total remaining landfill capacity, fill rates, engineering designs, reporting and monitoring details, size of location, service area, approved waste types, leachate of site treatment, contaminant attenuation zone and more. The small landfills will include information such as site owner, site location and certificate of approval # and status.

Canadian Mine Locations: 1998-2009 Private MINE

This information is collected from the Canadian & American Mines Handbook. The Mines database is a national database that provides over 290 listings on mines (listed as public companies) dealing primarily with precious metals and hard rocks. Listed are mines that are currently in operation, closed, suspended, or are still being developed (advanced projects). Their locations are provided as geographic coordinates (x, y and/or longitude, latitude). As of 2002, data pertaining to Canadian smelters and refineries has been appended to this database.

Mineral Occurrences: 1846-Apr 2013 Provincial MNR

In the early 70's, the Ministry of Northern Development and Mines created an inventory of approximately 19,000 mineral occurrences in Ontario, in regard to metallic and industrial minerals, as well as some information on building stones and aggregate deposits. Please note that the "Horizontal Positional Accuracy" is approximately +/- 200 m. Many reference elements for each record were derived from field sketches using pace or chain/tape measurements against claim posts or topographic features in the area. The primary limiting factor for the level of positional accuracy is the scale of the source material. The testing of horizontal accuracy of the source materials was accomplished by comparing the planimetric (X and Y) coordinates of that point with the coordinates of the same point as defined from a source of higher accuracy.

National Analysis of Trends in Emergencies System (NATES): 1974-1994* Federal NATE

In 1974 Environment Canada established the National Analysis of Trends in Emergencies System (NATES) database, for the voluntary reporting of significant spill incidents. The data was to be used to assist in directing the work of the emergencies program. NATES ran from 1974 to 1994. Extensive information is available within this database including company names, place where the spill occurred, date of spill, cause, reason and source of spill, damage incurred, and amount, concentration, and volume of materials released.

Non-Compliance Reports: 1992(water only), 1994-2010 Provincial NCPL

The Ministry of the Environment provides information about non-compliant discharges of contaminants to air and water that exceed legal allowable limits, from regulated industrial and municipal facilities. A reported non-compliance failure may be in regard to a Control Order, Certificate of Approval, Sectoral Regulation or specific regulation/act.

National Defence & Canadian Forces Fuel Tanks: Up to May 2001* Federal NDFT

The Department of National Defence and the Canadian Forces maintains an inventory of all aboveground & underground fuel storage tanks located on DND lands. Our inventory provides information on the base name, location, tank type & capacity, tank contents, tank class, date of tank installation, date tank last used, and status of tank as of May 2001. This database will no longer be updated due to the new National Security protocols which have prohibited any release of this database.

National Defence & Canadian Forces Spills: Mar 1999-Aug 2010 Federal NDSP

The Department of National Defence and the Canadian Forces maintains an inventory of spills to land and water. All spill sites have been classified under the "Transportation of Dangerous Goods Act - 1992". Our inventory provides information on the facility name, location, spill ID #, spill date, type of spill, as well as the quantity of substance spilled & recovered.

National Defence & Canadian Forces Waste Disposal Sites: 2001-Apr 2007* Federal NDWD

The Department of National Defence and the Canadian Forces maintains an inventory of waste disposal sites located on DND lands. Where available, our inventory provides information on the base name, location, type of waste received, area of site, depth of site, year site opened/closed and status.

National Environmental Emergencies System (NEES): 1974-2003* Federal NEES

In 2000, the Emergencies program implemented NEES, a reporting system for spills of hazardous substances. For the most part, this system only captured data from the Atlantic Provinces, some from Quebec and Ontario and a portion from British Columbia. Data for Alberta, Saskatchewan, Manitoba and the Territories was not captured. However, NEES is also a repository for all previous Environment Canada spill datasets. NEES is composed of the historic datasets ' or Trends ' which dates from approximately 1974 to present. NEES Trends is a compilation of historic databases, which were merged and includes data from NATES (National Analysis of Trends in Emergencies System), ARTS (Atlantic Regional Trends System), and NEES. In 2001, the Emergencies Program determined that variations in reporting regimes and requirements between federal and provincial agencies made national spill reporting and trend analysis difficult to achieve. As a consequence, the department has focused efforts on capturing data on spills of substances which fall under its legislative authority only (CEPA and FA). As such, the NEES database will be decommissioned in December 2004.

National PCB Inventory: 1988-2008* Federal NPCB

Environment Canada's National PCB inventory includes information on in-use PCB containing equipment in Canada including federal, provincial and private facilities. All federal out-of-service PCB containing equipment and all PCB waste owned by the federal government or by federally regulated industries such as airlines, railway companies, broadcasting companies, telephone and telecommunications companies, pipeline companies, etc. are also listed. Although it is not Environment Canada's mandate to collect data on non-federal PCB waste, the National PCB inventory includes some information on provincial and private PCB waste and storage sites.

National Pollutant Release Inventory: 1993-2011 Federal NPRI

Environment Canada has defined the National Pollutant Release Inventory ("NPRI") as a federal government initiative designed to collect comprehensive national data regarding releases to air, water, or land, and waste transfers for recycling for more than 300 listed substances.

Oil and Gas Wells: 1988-Jun 2013 Private OGW

The Nickle's Energy Group (publisher of the Daily Oil Bulletin) collects information on drilling activity including operator and well statistics. The well information database includes name, location, class, status and depth. The main Nickle's database is updated on a daily basis, however, this database is updated on a monthly basis. More information is available at www.nickles.com.

Ontario Oil and Gas Wells: 1800-Jul 2013 Provincial OOGW

In 1998, the MNR handed over to the Ontario Oil, Gas and Salt Resources Corporation, the responsibility of maintaining a database of oil and gas wells drilled in Ontario. The OGSR Library has over 20,000+ wells in their database. Information available for all wells in the ERIS database include well owner/operator, location, permit issue date, well cap date, licence no., status, depth and the primary target (rock unit) of the well being drilled. All geology/stratigraphy table information, plus all water table information is also provide for each well record.

Inventory of PCB Storage Sites: 1987-Oct 2004 Provincial OPCB

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of PCB storage sites within the province. Ontario Regulation 11/82 (Waste Management - PCB) and Regulation 347 (Generator Waste Management) under the Ontario EPA requires the registration of inactive PCB storage equipment and/or disposal sites of PCB waste with the Ontario Ministry of Environment. This database contains information on: 1) waste quantities; 2) major and minor sites storing liquid or solid waste; and 3) a waste storage inventory.

Orders: 1994-Jul 2013 Provincial ORD

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all Orders on the registry such as (EPA s. 17) - Order for remedial work, (EPA s. 18) - Order for preventative measures, (EPA s. 43) - Order for removal of waste and restoration of site, (EPA s. 44) - Order for conformity with Act for waste disposal sites, (EPA s. 136) - Order for performance of environmental measures.

Canadian Pulp and Paper: 1999, 2002, 2004, 2005, 2009 Private PAP

This information is part of the Pulp and Paper Canada Directory. The Directory provides a comprehensive listing of the locations of pulp and paper mills and the products that they produce.

Parks Canada Fuel Storage Tanks: 1920-Jan 2005* Federal PCFT

Canadian Heritage maintains an inventory of all known fuel storage tanks operated by Parks Canada, in both National Parks and at National Historic Sites. The database details information on site name, location, tank install/removal date, capacity, fuel type, facility type, tank design and owner/operator.

Pesticide Register: 1988-Jun 2013 Provincial PES

The Ontario Ministry of Environment maintains a database of all manufacturers and vendors of registered pesticides.

TSSA Pipeline Incidents: June 2009-Mar 2012 Provincial PINC

TSSA's Fuels Safety Program administers the Technical Standards & Safety Act 2000, providing fuel-related safety services associated with the safe transportation, storage, handling and use of fuels such as gasoline, diesel, propane, natural gas and hydrogen. Under this Act, TSSA regulates fuel suppliers, storage facilities, transport trucks, pipelines, contractors and equipment or appliances that use fuels. This database will include spills, strike and leaks from recorded by the TSSA.

Private and Retail Fuel Storage Tanks: 1989-1996* Provincial PRT

The Fuels Safety Branch of the Ontario Ministry of Consumer and Commercial Relations maintained a database of all registered private fuel storage tanks and licensed retail fuel outlets. This database includes an inventory of locations that have gasoline, oil, waste oil, natural gas and/or propane storage tanks on their property. The MCCR no longer collects this information. This information is now collected by the Technical Standards and Safety Authority (TSSA).

Permit to Take Water: 1994-Jul 2013 Provincial PTTW

This is a subset taken from Ontario's Environmental Registry (EBR) database. It will include all PTTW's on the registry such as OWRA s. 34 - Permit to take water.

Ontario Regulation 347 Waste Receivers Summary: 1986-2011 Provincial REC

Part V of the Ontario Environmental Protection Act ("EPA") regulates the disposal of regulated waste through an operating waste management system or a waste disposal site operated or used pursuant to the terms and conditions of a Certificate of Approval or a Provisional Certificate of Approval. Regulation 347 of the Ontario EPA defines a waste receiving site as any site or facility to which waste is transferred by a waste carrier. A receiver of regulated waste is required to register the waste receiving facility. This database represents registered receivers of regulated wastes, identified by registration number, company name and address, and includes receivers of waste such as: landfills, incinerators, transfer stations, PCB storage sites, sludge farms and water pollution control plants. This information is a summary of all years from 1986 including the most currently available data.

Record of Site Condition: 1997-Sept 2001, Oct 2004-Jun 2013 Provincial RSC

The Record of Site Condition (RSC) is part of the Ministry of the Environment's Brownfields Environmental Site Registry. Protection from environmental cleanup orders for property owners is contingent upon documentation known as a record of site condition (RSC) being filed in the Environmental Site Registry. In order to file an RSC, the property must have been properly assessed and shown to meet the soil, sediment and groundwater standards appropriate for the use (such as residential) proposed to take place on the property. The Record of Site Condition Regulation (O. Reg. 153/04) details requirements related to site assessment and clean up.
RSCs filed after July 1, 2011 will also be included as part of the new (O.Reg. 511/09).

Retail Fuel Storage Tanks: 1999-Jun 2010 Private RST

This database includes an inventory of retail fuel outlet locations (including marinas) that have on their property gasoline, oil, waste oil, natural gas and / or propane storage tanks.

Scott's Manufacturing Directory: 1992-Mar 2011 Private SCT

Scott's Directories is a data bank containing information on over 200,000 manufacturers across Canada. Even though Scott's listings are voluntary, it is the most comprehensive database of Canadian manufacturers available. Information concerning a company's address, plant size, and main products are included in this database.

Ontario Spills: 1988-Aug 2012 Provincial SPL

This database identifies information such as location (approximate), type and quantity of contaminant, date of spill, environmental impact, cause, nature of impact, etc. Information from 1988-2002 was part of the ORIS (Occurrence Reporting Information System). The SAC (Spills Action Centre) handles all spills reported in Ontario. Regulations for spills in Ontario are part of the MOE's Environmental Protection Act, Part X.

Wastewater Discharger Registration Database: 1990-2011 Provincial SRDS

Information under this heading is combination of the following 2 programs. The Municipal/Industrial Strategy for Abatement (MISA) division of the Ontario Ministry of Environment maintained a database of all direct dischargers of toxic pollutants within nine sectors including: Electric Power Generation; Mining; Petroleum Refining; Organic Chemicals; Inorganic Chemicals; Pulp & Paper; Metal Casting; Iron & Steel; and Quarries. All sampling information is now collected and stored within the Sample Result Data Store (SRDS).

Anderson's Storage Tanks: 1915-1953* Private TANK

The information provided in this database was collected by examining various historical documents, which identified the location of former storage tanks, containing substances such as fuel, water, gas, oil, and other various types of miscellaneous products. Information is available in regard to business operating at tank site, tank location, permit year, permit & installation type, no. of tanks installed & configuration and tank capacity. Data contained within this database pertains only to the city of Toronto and is not warranted to be complete, exhaustive or authoritative. The information was collected for research purposes only.

Transport Canada Fuel Storage Tanks: 1970-Mar 2007 Federal TCFT

With the provinces of BC, MB, NB, NF, ON, PE, and QC; Transport Canada currently owns and operates 90 fuel storage tanks. Our inventory provides information on the site name, location, tank age, capacity and fuel type.

TSSA Variances for Abandonment of Underground Storage Tanks: Current to Jun 2013 Provincial VAR

The TSSA, Under the Liquid Fuels Handling Code and the Fuel Oil Code, all underground storage tanks must be removed within two years of disuse. If removal of a tank is not feasible, you may apply to seek a variance from this code requirement. This is a list of all variances granted for abandoned tanks.

Waste Disposal Sites - MOE CA Inventory: 1970-Jul 2013 Provincial WDS

The Ontario Ministry of Environment, Waste Management Branch, maintains an inventory of known open (active or inactive) and closed disposal sites in the Province of Ontario. Active sites maintain a Certificate of Approval, are approved to receive and are receiving waste. Inactive sites maintain Certificate(s) of Approval but are not receiving waste. Closed sites are not receiving waste. The data contained within this database was compiled from the MOE's Certificate of Approval database. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number. All new Environmental Compliance Approvals handed out after Oct 31, 2011 for Waste Disposal Sites will still be found in this database.

Waste Disposal Sites - MOE 1991 Historical Approval Inventory: Up to Oct 1990* Provincial WDSH

In June 1991, the Ontario Ministry of Environment, Waste Management Branch, published the "June 1991 Waste Disposal Site Inventory", of all known active and closed waste disposal sites as of October 30st, 1990. For each "active" site as of October 31st 1990, information is provided on site location, site/CA number, waste type, site status and site classification. For each "closed" site as of October 31st 1990, information is provided on site location, site/CA number, closure date and site classification. Locations of these sites may be cross-referenced to the Anderson database described under ERIS's Private Source Database section, by the CA number.

Water Well Information System: 1955-May 2013 Provincial WWIS

This database describes locations and characteristics of water wells found within Ontario in accordance with Regulation 903. It includes such information as coordinates, construction date, well depth, primary and secondary use, pump rate, static water level, well status, etc. Also included are detailed stratigraphy information, approximate depth to bedrock and the approximate depth to the water table.

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries". All values are an approximation.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property, within the report search radius, and the surrounding area outside the search radius.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red upside down triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and were included as reference.

APPENDIX F

CHRONOLOGICAL EVENTS

DCS

DOC. NO.	DATE	DESCRIPTION
1.	11/1990	IMICO Site Plan
2.	06/10/1991	Proctor & Redfern Limited Environmental Investigation – International Malleable Iron Company
3	04/10/1992	Transfer from International Malleable Iron Limited to John H. Long, Instrument Number 663427.
n/a	4/15/1992	Notice of Violation served (Various Infractions)
4	05/22/1992	Order of Property Standards Officer issued and registered on title
4a	11/1/1993	Order of Property Standards Officer,.
5	12/31/1993	Transfer from John H. Long to The Assembly of the Church of the Universe, Instrument Number 706184.
6.	07/14/1994	MOE Order issued. Issued to 6 recipients. Requires a Remedial Work Plan.
7.	02/14/1995	Environmental Appeal Board (The Assembly of the Church of the Universe v. Director, West Central Region)
8.	03/20/1995	MOEE letter: Proposed Plan for Demolition of Buildings IMICO.
9.	02/05/1992	MOEE letter: Requesting status of demolition plan and whether Council has agreed to proceed.
10.	Jun/06,07,08, 12,13,14,15, & 28/1995	Environmental Appeal Board – Church of the Universe v. Director, Ministry of Environment and Energy
11.	03/01/1996	MOE letter to the City to answer the City's question concerning the level of site investigation and clean-up that would be required if the City became the owner of the site.
12.	03/04/1996	MOE letter to the City: Phytotoxicology Survey in the Vicinity of the Former MIICO
13.	05/14/1996	MOE letter: regarding final copy of environmental clean-up requirements.
14.	05/28/1997	Notice of Vesting/Statutory Declaration under Municipal Sales Tax Act, Instrument Number 774461.
n/a	12/1997	City gains ownership of property following unsuccessfully attempt to sell it for unpaid taxes.
n/a	01/20/1998	City has vacant possession of property. Site security and patrols begin.
15.	02/09/1998	Status report to Planning, Works and Environment Committee - "Staff be authorized to proceed with a site management plan" - Staff developed Strategy for Site Management Plan: to manage the site in a responsible but cost effective manner to prevent adverse environmental effects and to minimize unsafe conditions on site; these goals will be achieved through a phased approach consistent with reducing uncertainties and impediments to reuse or redevelopment of the site; if, at any time a suitable purchase or partner comes forward, the City may seek to achieve these same site management goals through appropriate agreements.
16.	03/5/1998	MOE letter RE: City responsibilities to Director's Order

DOC. NO.	DATE	DESCRIPTION
17.	03/23/1998	City submits to MOE: 1. Preliminary Site Management Plan – City requests approval
18.	04/1998	Public Notices: That the City will begin site investigations and evaluations on the IMICO site starting the week of April 27, 1998.
19.	04/21/1998	City letter to MOE: Advising that Gartner Lee appointed for preliminary site investigations and Proctor and Redfern appointed for site inspection and engineering evaluations.
20.	04/22/1998	Moe letter from John Cooke requesting further information following City submission of Preliminary Site Management Plan
21.	04/23/1998	Council Resolution: Staff were directed to prepare a report with respect to the process relating to the future usage of the IMICO site.
22.	04/29/1998	City letter from LEP requesting that the City's holding of reserves is sufficient to satisfy section 2.1.16 of the Order.
23.	05/1/1998	MOE letter to City to approve Preliminary Site Management Plan as submitted.
24.	05/22/1998	City submits to MOE a Plan to demolish Unsafe Buildings as recommended by Proctor and Redfern Limited during their engineering evaluations
25.	05/28/1998	Letter MOE to LEP regarding request to provide financial assurance - financial assurance not required at this time.
26.	06/12/1998	Gartner Lee: Geotechnical Investigation letter.
27.	08/4/1998	Status report to Planning, Works and Environment Committee - "Staff be authorized to proceed with site management plan". This stage estimated at $800,000.00
28.	08/12/1998	Final Draft Gartner Lee Limited Report – Hydrogeologic Site Investigations – northeast corner has most highly concentrated contaminants – some off-site contaminants detected along north-east perimeter – low concentrations of Total Petroleum Hydrocarbons (TPH) occur over most of the site – levels of contaminants along northeast and southeast perimeters should be investigated.
29	07/1998	Final Procter & Redfern Limited Report - Site Inspections and Engineering Evaluations – systematic inventory of water materials – safety issues of fire damaged structures – recommends demolition of remaining structures including waste separation, management, and disposal.
n/a.	09/3/1998	Certificate of Prohibition – prohibiting The Assembly of the Church of the Universe from dealing with the property – Instrument Number 799157.
30.	09/3/1998	City submits to MOE an Interim Site Management Plan.
31.	09/14/1998	The IMICO Site Study –Final Planning Report.
32.	09/28/1998	Status report to Planning, Works and Environment Committee on demo and further investigation.
33.	11/4/1998	MOE letter to City RE: Review and further clarification of Intermediate Site Man. Plan submitted September 3, 1998.
34.	11/25/1998	Proctor & Redfern: Response to MOE letter of November 4/98 to address issues raised.

DOC. NO.	DATE	DESCRIPTION
35.	12/7/1998	City submits to MOE our Progress Report #1 ending October 1998.
36.	12/08/1998	Gartner Lee Limited letter to The City: Additional Investigation Activities – Former IMICO Foundry Site.
37.	12/31/1998	Gartner Lee: Oil Recovery, Vicinity of OW1
38.	01/6/1999	Letter from John Cooke re: our submitted Interim Site Management Plan requesting clarification on PCB clean-up, storm water management.
n/a	01/11/1999	Gartner Lee Limited Study – Site Hydrogeologic Study (to investigate potential of off-site contamination and remedial measures) – Exceedances of Total Petroleum Hydrocarbons (TPH) and Poly Aromatic Hydrocarbons (PAH) at easterly boundary and have potential of migrate through ground water – low concentrations of TPH over most of site with localized exceedences in northeast quadrant – exceedances in metals (zinc & Lead) in ground water in northeast quadrant and southeast and west boundaries – localized exceedance of chlorinated organic compound (Trichlorethane and Trichloroethylene) on the west boundary requires soil gas testing – one well in northeast corner has layer of fuel oil in upper bedrock and should be extracted.
39.	01/11/1999	Status report to Planning, Works and Environment Committee on Demo Contract 98-19 and further geotech work to be completed.
40.	01/13/1999	Joseph Young of Proctor & Redfern Limited letter to the City addressing outstanding issues raised in the MOE's letter dated January 6, 1999.
41.	01/26/1999	City submits letter to MOE responding to request for clarification of information from MOE letter dated January 6, 1999.
42.	03/01/1999	MOE letter to the City acknowledges receipt of the City's Generator Registration report dated February 1, 1999 (ON0349018).
43.	03/8/1999	Report - Supplementary Hydrogeological Investigation by Gartner Lee Ltd. Copied to MOE.
44.	03/22/1999	Status report to Planning, Works and Environment Committee – "staff be authorized to proceed with the next stage of the Site Management Plan" – excavation and disposal off-site of contaminated soil and fill materials from northeast corner (5,400 cubic metres, $710,000) – install one or more recovery wells into the bedrock in northeast to skim and pump free phase oil below the water table (est. $55,000) – Three year monitoring program for recovery wells ($90,000). – contaminants (TPH heavy oils, benzene, arsenic, metals) exceed guidelines in groundwater monitoring wells (maintenance garage, storage fuel tanks, annealing oven, mechanical shop, electrical shop) and must be monitored on quarterly basis ($90,000/year) – investigate TCE (trichloroethylene) detected in wells on eastern boundary by installing additional wells and monitor ($17,000).
45.	03/29/1999	City letter to MOE forwarding the Supplemental Hydrogeologic Investigation Report on the IMICO site.
46.	03/31/1999	John Cooke (MOE) letter to the City; with comments concerning the supplemental investigation and request for the City to proceed to implement the proposed remedial measures as quickly as possible.

DOC. NO.	DATE	DESCRIPTION
47.	04/14/1999	Gartner Lee Limited letter to the City re: Soil Excavation and Off-Site Disposal –Summary of Proposed Remedial Action Northeast Portion of Former IMICO Foundry Site
48.	04/16/1999	Gartner Lee Limited letter to the City re: Groundwater Monitoring Program – Former IMICO Foundry Site. (Summary)
49.	04/26/1999	City response letter to MOE letter of March 31, 1999. Requesting further info regarding submitted Hydrogeologic Report by Gartner Lee Limited dated March 1999.
50.	05/03/1999	Gartner Lee letter to City: Soil Excavation and Off-Site Disposal – Summary of Proposed Remedial Action.
51.	05/17/1999	Gartner Lee Letter: re: Well Decommissioning of OW1, OW1-II, OW20 and OW21.
52.	05/20/1999	City submits to MOE: 1. Site Remedial Plan 2. Progress Report #2
53.	07/12/1999	Presentation Notes – Option One, Restore Site for Industrial Use 1. remove or manage contaminated soils; 2) Long term site monitoring. Option Two, Restore Site for Residential Use 1. Remove contaminated soils; 2) remove or manage foundry sands; 3) remove concrete floor and foundations; 4) Long term site monitoring.
54.	07/12/1999	Committee Report: "staff be authorized to proceed to a Public Meeting with the staff recommended preferred land use on the former IMICO property being industrial/commercial".
55.	09/01/1999	Gartner Lee: supplemental Well Installation Program, July 1999.
56.	10/7/1999	Earth-Tech Inc. submits final report of Demolition and Waste Removal Report following completion of Contract 98-19.
57.	10/07/1999	Gartner Lee: Routine Groundwater Monitoring – April and July 1999.
58.	11/4/1999	City submits to MOE, Progress Report #3 including a copy of the report Demolition and Waste Removal Report by Earth Tech Inc.
59.	01/05/2000	Progress Report-Site Remedial Plan, Former IMICO Site, 200 Beverley St.
60.	03/22/2000	Routine Groundwater Monitoring –Former IMICO Site (November/December 1999 Ground Monitoring Event
61.	04/10/2000	Gartner Lee: Review Comments – Site Remedial Plan Progress Report.
n/a	04/17/2000	City submits to MOE, Progress Report #4.
n/a	05/29/2000	Report from Gartner-Lee Ltd.to City RE: Geophysical Survey Report for area where suspected buried tanks and structures were.
62.	07/07/2000	Council Resolution: Staff were directed to report back to Council in two weeks with additional information.
63.	07/18/2000	Gartner Lee: Intrusive (Test Pit) Investigation.
64	07/21/2000	Council Resolution: "That staff be directed to proceed to hold a public meeting on the IMICO site and report back to Council on input received from the public."

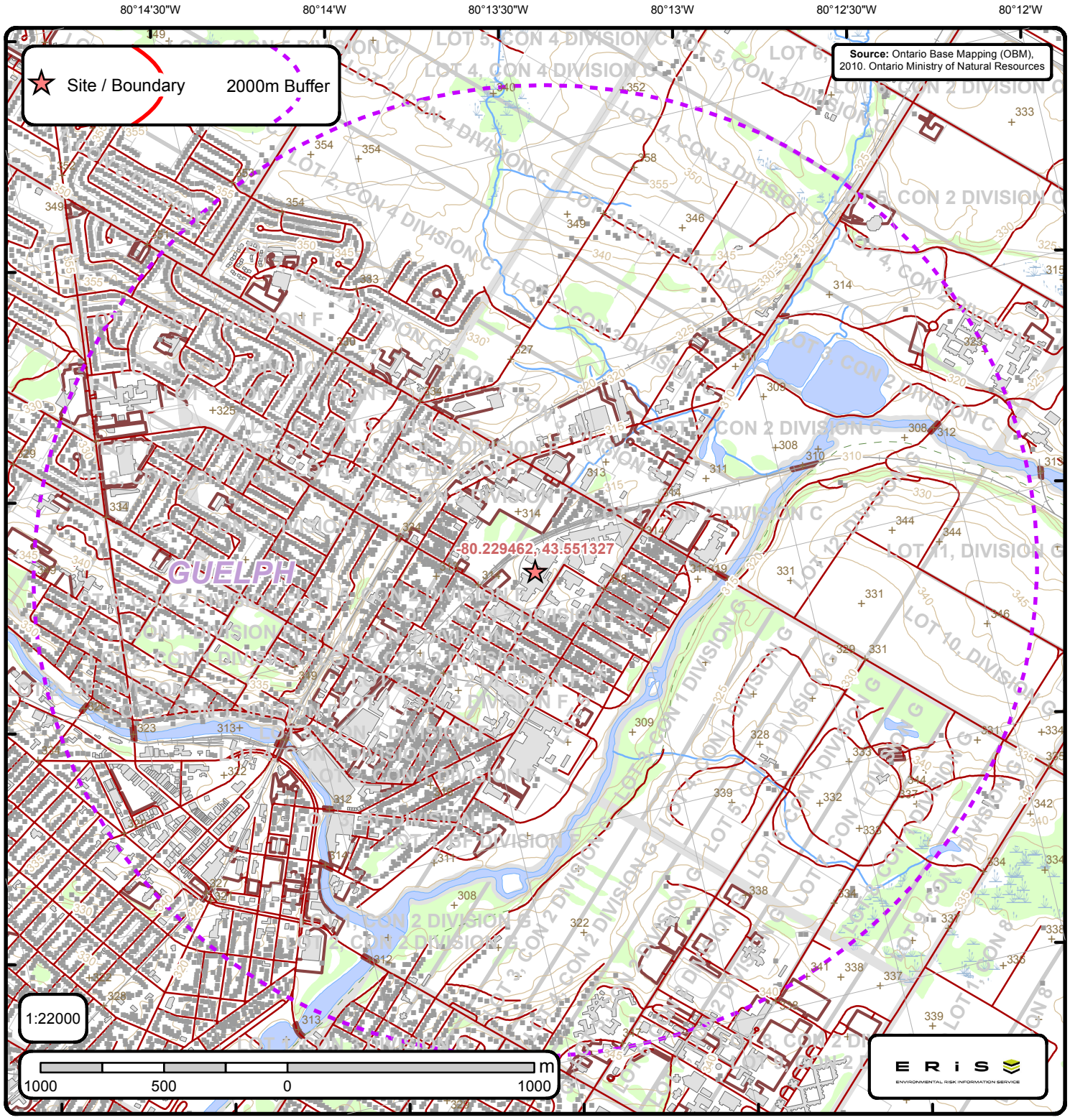
DOC. NO.	DATE	DESCRIPTION
65.	07/31/2000	City submits letter to MOE RE: Completion of MOE Director's Order requesting MOE to remove order from the site.
66.	10/19/2000	Gartner Lee: Routine Groundwater Monitoring – May 2000.
67.	12/21/2000	Gartner Lee: Quarterly Groundwater Monitoring Program – September 2000 event
68.	01/19/2001	City submits to MOE, Progress Report #5.
69.	06/15/2001	City submits letter to MOE RE: request response to Progress Reports and letter of July 15, 2000 requesting MOE release Order.
70.	06/25/2001	MOE responds to City request of July 15, 2000 - requests Remedial Plan and indicates premature to release Order.
71.	07/20/2001	Gartner Lee: Semi-Annual Groundwater Monitoring Report – December 2000 and March 2001 events.
72.	07/24/2001	Groundwater Monitoring Report, Gartner Lee
73.	07/27/2001	Oil Recovery Efforts, Gartner Lee
74.	08/2001	Final Site Remedial Plan - IMICO
75.	08/23/2001	City responds to Moe letter dated June 25, 2001, with further clarifications and includes Progress Report #6.
76.	10/29/2001	Letter from MOE acknowledge letter from City of Oct 10, 2001, MOE review in progress.
n/a	12/4/2001	Letter from MOE completing review of Progress Report #6.
77.	12/27/2001	Email from Jamie Connelly from MOE to City responding to Progress report #6.
78.	01/14/2002	City's response to meeting with MOE January 4, 2002 with a summary of items resulting from those discussions.
79.	01/24/2002	Gartner Lee: Groundwater Monitoring Report – September and December, 2001.
80.	03/6/2002	Progress Report #7.
81.	04/08/2002	PWE Report: "That the report of the Commissioner of the Environment & Transportation Group dated April 1, 2002 be received as information.
82.	04/8/2002	Public Meeting held at Italian-Canadian Club, Rick Tolkunow, Mike Crechiolo, Thom Kewen, GBF.
83.	06/3/2002	Council Report summarizing Public Meeting and propose: "a process for assessing an appropriate range of Alternative end land uses… be developed…"
84.	06/06/2002	Council Resolution: That a process for assessing an appropriate range of alternative end land uses, including a mixed use option for the former IMICO be developed by staff, having regard to land use compatibility, transportation and infrastructure criteria.
85.	08.12/2002	Council Report: "That the report of the Commissioner of Environment & Transportation Group entitled Former International Malleable Iron Site (IMICO) dated August 12, 2002 be received."

DOC. NO.	DATE	DESCRIPTION
86.	08/23/2002	MOE letter: Review of Response to Comments and Sept/Dec 2001 Monitoring Reports.
87.	10/28/2002	Report to Planning, Environment & Transportation Committee. – endorse the proposed process to define a range of land uses for the IMICO site.
88.	11/13/2003	CH2M HILL Technical Memorandum: Summary of Environmental Conditions and Resultant Development Constraints at 200 Beverley Street, Guelph
89.	02/04/2004	CH2M HILL Memorandum: Guelph Property Use Study Summary of Short List Options Screening and Proposed Evaluation Criteria
90.	8/2004	CH2M HILL Scenario Profile Summary: Scenario Profiles 1-4
91.	8/2004	CH2M HILL Summary of Remedial Options for Redevelopment
92.	10/29/2004	Groundwater Monitoring Report, July and September 2004, Gartner Lee Limited
93.	9/2005	Letter from John Cooke at MOE with regard to possible partial removal of Order
94.	6/5/2006	Council Report of June 5, 2006 regarding outcome of Request for Expressions of Interest and proposed work plan

APPENDIX G

TOPOGRAPHIC MAP

DCS



Ontario Base Mapping (OBM) Data

Order No. 20131028018

- Spot Height
- Building Point
- Towers
- Utility Site Point
- Misc. Line
- Railroads
- Roads
- Trail
- Transportation Structure
- Utility Line
- Water Structure
- Drainage Line Feature
- River or Stream
- Airports
- Tanks
- Building to Scale
- Contour Line
- Pit or Quarry
- Waterbody
- Wetlands
- Concession
- Lots
- Municipalitiy
- Land Ownership
- Wooded Area
- Conservation Authority
- Conservation Area
- Municipal Park
- Provincial Park
- National Park
- Nature Reserve

APPENDIX H

MOE FOI REQUEST

DCS

A response has not been received from the MOE at the time of reporting. Any response received after reporting will be forwarded to the City of Guelph.

DCS

APPENDIX I

INTERVIEW AND SITE RECONNAISSANCE FORMS

DECOMMISSIONING CONSULTING SERVICES

PHASE I ENVIRONMENTAL SITE ASSESSMENT INTERVIEW FORM

DCS Project N^{o}: 701696-001

Client: City of Guelph

Interview Date & Time: 2 December 2013

Name(s) of Interviewee(s) & Title: Grant Ferguson, CET
(Current owner/occupant/other)

Contact Information:

Interview Method & Location: Telephone

General Site Information

Property Address: 200 Beverley Street, Guelph, ON

Site Description: former IMICO property
bound by Guelph Rail to the N, Stevenson Street South to the W, Beverley Street to the S

Interview Questions:

1. How long have you worked/lived at the site?

Since 1991

2. What is the site currently used for? What was it used for in the past?

Vacant - previously iron jobbing facility, chemical storage

3. Was a dry cleaning facility ever present at the site or at adjacent properties?

no

4. Was the site ever used as a gasoline service station or for fuel storage or oil and gas refining?

no - did previously have USTs / AST

5. Potentially Contaminating Activities

Item	Column A	
1.	Acid and Alkali Manufacturing, Processing and Bulk Storage	Yes ☐ No ✓
2.	Adhesives and Resins Manufacturing, Processing and Bulk Storage	Yes ☐ No ✓
3.	Airstrips and Hangars Operation	Yes ☐ No ✓
4.	Antifreeze and De-icing Manufacturing and Bulk Storage	Yes ☐ No ✓
5.	Asphalt and Bitumen Manufacturing	Yes ☐ No ✓
6.	Battery Manufacturing, Recycling and Bulk Storage	Yes ☐ No ✓
7.	Boat Manufacturing	Yes ☐ No ✓
8.	Chemical Manufacturing, Processing and Bulk Storage	Yes ✓ No ☐
9.	Coal Gasification	Yes ☐ No ✓
10.	Commercial Autobody Shops	Yes ☐ No ✓
11.	Commercial Trucking and Container Terminals	Yes ☐ No ✓
12.	Concrete, Cement and Lime Manufacturing	Yes ☐ No ✓

13.	Cosmetics Manufacturing, Processing and Bulk Storage	Yes ☐ No ✓
14.	Crude Oil Refining, Processing and Bulk Storage	Yes ☐ No ✓
15.	Discharge of Brine related to oil and gas production	Yes ☐ No ✓
16.	Drum and Barrel and Tank Reconditioning and Recycling	Yes ☐ No ☐
17.	Dye Manufacturing, Processing and Bulk Storage	Yes ☐ No ✓
18.	Electricity Generation, Transformation and Power Stations	Yes ☐ No ✓
19.	Electronic and Computer Equipment Manufacturing	Yes ☐ No ✓
20.	Explosives and Ammunition Manufacturing, Production and Bulk Storage	Yes ☐ No ✓
21.	Explosives and Firing Range	Yes ☐ No ✓
22.	Fertilizer Manufacturing, Processing and Bulk Storage	Yes ☐ No ✓
23.	Fire Retardant Manufacturing, Processing and Bulk Storage	Yes ☐ No ✓
24.	Fire Training	Yes ☐ No ✓
25.	Flocculants Manufacturing, Processing and Bulk Storage	Yes ☐ No ✓
26.	Foam and Expanded Foam Manufacturing and Processing	Yes ☐ No ✓
27.	Garages and Maintenance and Repair of Railcars, Marine Vehicles and Aviation Vehicles	Yes ☐ No ✓

28.	Gasoline and Associated Products Storage in Fixed Tanks	Yes ☑ No ☐
29.	Glass Manufacturing	Yes ☐ No ☑
30.	Importation of Fill Material of Unknown Quality	Yes ☑ No ☐
31.	Ink Manufacturing, Processing and Bulk Storage	Yes ☐ No ☑
32.	Iron and Steel Manufacturing and Processing	Yes ☑ No ☐
33.	Metal Treatment, Coating, Plating and Finishing	Yes ☑ No ☐
34.	Metal Fabrication	Yes ☐ No ☑
35.	Mining, Smelting and Refining; Ore Processing; Tailings Storage	Yes ☐ No ☑
36.	Oil Production	Yes ☐ No ☑
37.	Operation of Dry Cleaning Equipment (where chemicals are used)	Yes ☐ No ☑
38.	Ordnance Use	Yes ☐ No ☑
39.	Paints Manufacturing, Processing and Bulk Storage	Yes ☐ No ☑
40.	Pesticides (including Herbicides, Fungicides and Anti-Fouling Agents) Manufacturing, Processing, Bulk Storage and Large-Scale Applications	Yes ☐ No ☑
41.	Petroleum-derived Gas Refining, Manufacturing, Processing and Bulk Storage	Yes ☐ No ☑
42.	Pharmaceutical Manufacturing and Processing	Yes ☐ No ☑

43.	Plastics (including Fibreglass) Manufacturing and Processing	Yes ☐ No ✓
44.	Port Activities, including Operation and Maintenance of Wharves and Docks	Yes ☐ No ✓
45.	Pulp, Paper and Paperboard Manufacturing and Processing	Yes ☐ No ✓
46.	Rail Yards, Tracks and Spurs	Yes ☐ No ✓
47.	Rubber Manufacturing and Processing	Yes ☐ No ✓
48.	Salt Manufacturing, Processing and Bulk Storage	Yes ☐ No ✓
49.	Salvage Yard, including automobile wrecking	Yes ☐ No ✓
50.	Soap and Detergent Manufacturing, Processing and Bulk Storage	Yes ☐ No ✓
51.	Solvent Manufacturing, Processing and Bulk Storage	Yes ✓ No ☐
52.	Storage, maintenance, fuelling and repair of equipment, vehicles, and material used to maintain transportation systems	Yes ☐ No ✓
53.	Tannery	Yes ☐ No ✓
54.	Textile Manufacturing and Processing	Yes ☐ No ✓
55.	Transformer Manufacturing, Processing and Use	Yes ✓ No ☐
56.	Treatment of Sewage equal to or greater than 10,000 litres per day	Yes ☐ No ✓
57.	Vehicles and Associated Parts Manufacturing	Yes ☐ No ✓

58.	Waste Disposal and Waste Management, including thermal treatment, landfilling and transfer of waste, other than use of biosoils as soil conditioners	Yes ☐ No ☑
59.	Wood Treating and Preservative Facility and Bulk Storage of Treated and Preserved Wood Products	Yes ☐ No ☑

6. When was the site first developed?

Approximately 1912

7. How old is/are the building(s) or other structures on the site?

no buildings on site, demolished 1999

- Have there been any additions or major renovations?

N/A

8. How are the buildings heated and cooled? How were they heated/cooled previously?

N/A

9. Are any ASTs or USTs situated on the site?

historic, none at present time

- Quantity:
- Location:
- Contents:

10. Have any ASTs or USTs been removed from the site? If so, was any soil verification testing carried out?

Yes, yes

11. Are you aware of any leaks or spills associated with the ASTs/USTs or on the overall site?

Yes

12. Has imported fill ever been placed on the site?

Yes

13. Were pesticides, herbicides, fungicides or anti-fouling agents ever used at the site?

most likely - no evidence

14. Have radioactive materials ever been used or stored at the site?

no

15. Has salt ever been stored, used, handled or disposed of on-site?

yes, for parking + de icing activities

16. Have motor vehicle maintenance, operation or repair activities ever been carried out on-site?

yes

17. Is garbage or other waste materials, such as old cars, scrap metal or car batteries on the site?

yes, empty spray paint, tires, garbage thrown over fence

18. Are there any easements on the property?

no

19. Are any chemicals stored on the property? Where? Is secondary containment used? Have any leaks or spills occurred?

no

20. What is the source of potable water at the site? (i.e. municipal or water wells)

no

- If water wells, how are they constructed? (i.e. bored, dug, drilled)

N/A

21. Are there any drinking or monitoring wells present on the property, either operational or non-operational? If so, where are they located?

no

22. If potable water wells are present, what type of treatment system is used?

N/A

23. Are any underground utilities present at the site?

no

24. Are any sumps or oil/water separators present on the site?

previously remediated

25. Are you aware of any previous environmental investigations on the site?

yes

26. Are or were any hazardous materials used or stored on the site?

yes

27. Is any waste generated at the site?

yes, previously

If 'Yes', how is waste removed from the site?

PCB-containing equipment was trucked to licenced facility

28. Are you aware of the presence of asbestos, lead, mould or other designated substances on the property?

N/A

- Has a designated substances survey been carried out previously for the site?
- Has any abatement work been conducted. If so what was the outcome?

29. Is any hydraulic equipment (hoists, lifts, etc.) present on the property?

no

30. Are any septic tanks situated on the site?

no

31. Were PCBs ever stored on the site?

yes

32. Are any cisterns on the site to store water?

no

33. Are any ponds or watercourses situated on or adjacent to the property?

no

Additional Information:

Interviewer: Tu-Anh Nguyen Sign:

Qualified Person: _____ Sign: _____

Date: _____

This form is prepared in accordance with O. Reg. 153/04 for a Phase I Environmental Site Assessment.

DECOMMISSIONING CONSULTING SERVICES

PHASE I ENVIRONMENTAL SITE ASSESSMENT CHECKLIST

DCS PROJECT N°: 901996-001

CLIENT: City of Guelph

SITE INSPECTION DATE: 7 November 2013

DCS INSPECTION STAFF: Tu-Anh Nguyen

INTERVIEW/CONTACT NAME, TITLE: Grant Ferguson

Items needed :

- flashlight
- screwdriver/crowbar
- camera + film
- site plan
- tape measure
- sample bags/jars
- historical plans showing areas of concern

1.0 GENERAL SITE INFORMATION

Property Address: 200 Beverley Street, Guelph, ON

Site Description: vacant property, formerly IMICO

NOTE: Note presence of light standards, navigation lights, concrete pads, ramps, etc.

Topography: flat

Area of Property: ~ 52,000 m^2

Site Plans / Building Plans: no building

2.0 BUILDINGS

2.1 BUILDING DESCRIPTION

No. of Buildings on Site:

Date(s) of Construction:

Size of Buildings:

No. of Floors:

Total Square Footage:

Building Construction:

Type of Materials:

Heating System(s):
(gas/electric/fuel oil)

Boiler Room? Y N

Details of any Additions or Major Renovations:
(dates)

2.2 TENANTS

(1) Company Name: ? (John H. Long)

Date of Occupancy: 1992 - 1993

Type of business activity: chemical storage

Descriptions of processes/operations: chemical storage

(2) Company Name:

Date of Occupancy:

Type of business activity:

Descriptions of processes/operations:

2.3 ADJACENT PROPERTIES

Uses of Adjacent Properties: (List occupants, type of business activity and location in relation to the subject site.)

NORTH

Guelph Rail Line +

chemical bulk storage

SOUTH

Beverley Street, mixed use:

residential, commercial, light industrial

EAST

chemical bulk storage + Guelph Rail Line.

WEST

Stevenson Street South, light industrial

History of adjacent land uses?

Environmental Concerns on Adjacent Properties: (e.g., industrial operations, gas stations, USTs, waste storage, etc.)
(If concerns exist, identify direction and distance from the subject site.)

gas station on York Road

2.4 FILL DEPOSITS

(Y) N

Any evidence of fill materials on or adjacent to the site? (based on elevation of the site in relation to surrounding areas) Describe location, thickness, material type.

piles of soil - dirt bike tracks

3.0 FACILITY AUDIT

3.1 ASBESTOS

Note presence of and general condition of the following applications.

Friable Materials:

- Pipe Insulation:
- Tank Insulation:
- Duct and Air Handling Unit Insulation:
- Sprayed-on Fireproofing: (Check perimeter beams and immediately under Penthouse)
- Acoustic/Texture Spray: (interior/exterior)

If friable ACM is present:

- Is there an existing asbestos survey report? **Y** **N**

Non-friable Materials:

- Cement Board (Transite):
- Vinyl Floor Tile or Sheet Flooring:
- Ceiling Tile:
- Cement Pipe (Roof Drains):
- Other:

3.2 PCBs

Descriptions of interior lighting: (include approximate number, location)

Ballast nameplate information: (manufacturer, serial Nº, etc.)

Descriptions of outdoor lighting: (include approximate number, location)

Capacitors:

Transformers:
(Note - wet or dry type.)
- location

(Also note Pole Nº and describe location for pole-mounted transformers.)

Is there any visible evidence of leakage from transformers or capacitors? Y N

Describe locations of leaks.

Does anyone have knowledge of former transformer locations? Y N

Describe locations of leaks.

Note: Document all nameplate information for wet transformers and capacitors.

PCB Waste Storage On Site: Y N
(If yes, complete "PCB Storage Site Compliance Checklist")

Is storage site registered with MOEE? Y N

Registration Nº:

3.3 HAZARDOUS MATERIALS HANDLING/CHEMICAL STORAGE

Prepare inventory of chemicals stored on site. Include location, container type and size, label description, amount of chemical in place, any hazards noted on label, manufacturer, if known.

Note also any evidence of leakage, corrosion of containers and presence of drains in vicinity of chemical storage.

Note if chemical product is identified as a "flammable liquid".

Does the building contain a room which may have been used formerly for the storage of chemical products (and may, therefore, have had a dump tank?) Y N

If yes, provide details:
(Note: any evidence of floor staining, containment, room construction.)

3.3.1 Flammable Liquids

Are flammable liquids present?

Note: Flammability classification may be referenced on MSDS or on container labels; record flash point, if available.

If yes:

- Does the volume exceed 235 ℓ? Y N
- Are they in sealed containers? Y N
- Are they located:
  - □ outdoors? (If so, where?) Y N
  - □ in a building not used for any other purpose? Y N
  - □ in a room: Y N
    - ○ separated from the rest of the building with partitions having,
      - at least a 1-hr fire rating? Y N
      - self-closing doors, hinged to swing outwardly? Y N
    - ○ equipped with,
      - a drain connected to a dry sump or holding tank? Y N
      - liquid-tight seals between interior walls and floor and a liquid-tight ramped sill at any door opening which is not an exterior wall? Y N
    - ○ having natural ventilation to the outdoors by upper and lower exterior wall gravity louvres? Y N
      ○with explosion venting to outdoors? Y N
    - ○ with spark-resistant floor? Y N
  - □ in facilities having no potential source of ignition? Y N
- If volume is less than 235 ℓ:
  - □ are containers sealed and less than 23 ℓ capacity each? Y N
  - □ are containers stored in metal storage cabinet? Y N
- Does area where flammable liquids are dispensed have:
  - □ mechanical ventilation to outdoors? Y N
  - □ containers and dispensing equipment bonded and grounded (when liquid is dispensed)? Y N
- Do portable containers used for dispensing flammable liquids have:
  - □ spring-loaded caps? Y N
  - □ flame arrestors? Y N

3.4 WASTE MANAGEMENT

Registered Waste Streams:

Site Registration Nº and Company Registered:

If yes, list MOEE waste classifications: (Review copy of waste manifest, if possible.)

Waste Disposal Contractor/ Firms:

Waste Inventory:
(Note how long wastes are stored on site, if possible.)

3.5 CFCs:

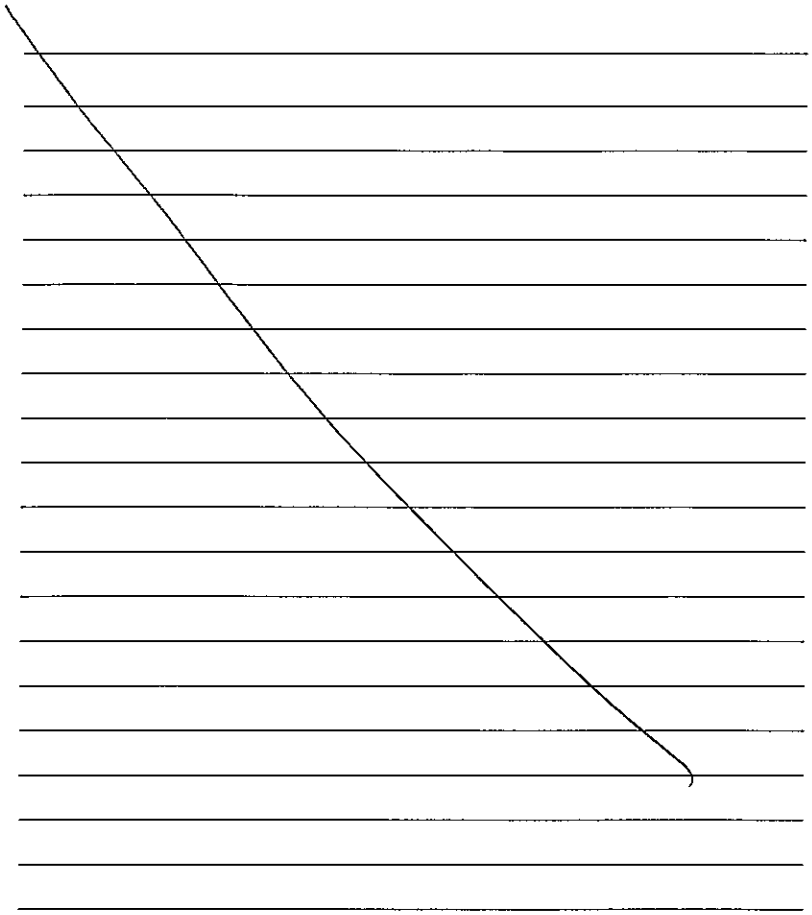
Coolant used in A/C systems:
(or in refrigeration/cooler equipment).
Inspect rooftop units where possible.

CFC handling practices (if applicable):

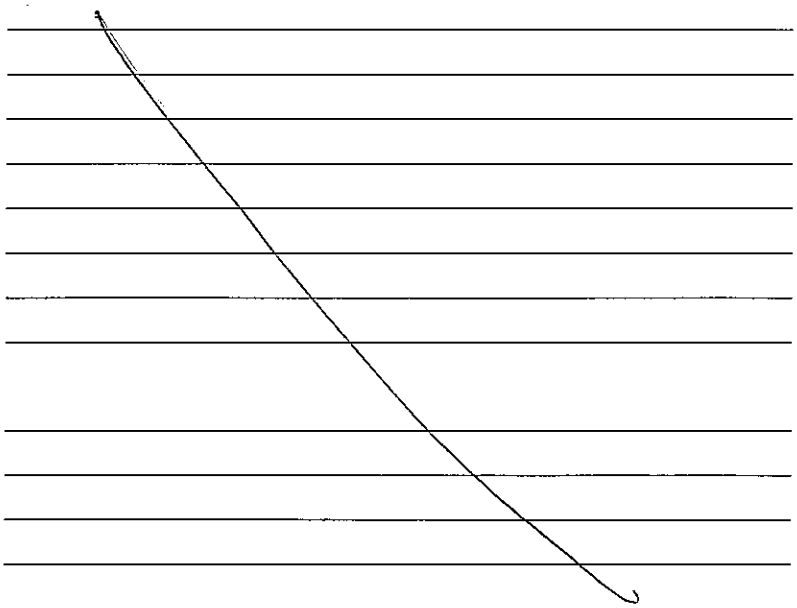
Name of A/C maintenance contractor:

3.6 AIR EMISSIONS

Note locations and details of any air emission sources:
(Note - check roof.)
(Include date of installation and whether installed by the owner or by the previous or current tenant.)



Total capacity of boilers (BTU/hr input) or other heaters (e.g., gas-fired unit heaters, roof-mounted HVAC units if supplied by oil or gas):



Emergency Generators:
(diesel/gas)

Have Certificates of Approval been obtained for the above sources? **Y** **N**

Was Owner requested to provide copies of CofA's. **Y** **N**

3.7 DISCHARGES TO SEWERS

Provide details of waste water and other discharges, if any:
(where are sewers located?)

assumed to be disconnected

Septic System? Y (N)

If yes, please describe type, location, etc. and if reported to be functioning properly. Are chemicals or solvents discharged to septic?

Note the presence of and describe any accumulations of residues, odours, oil sheen, etc., in drains, trenches, pits or sumps:

Are any oil interceptors present? Y N

If yes, provide details on location, maintenance and condition:

assumed disconnected

Note: **Inspect, if possible, and mark locations of floor drains, septic fields, sumps, etc., on building plan. Inspect catchbasins for presence of liquid and note if there is any evidence of floating product or discoloration.**

3.8 OTHER

Evidence of spills or staining? (Y) N

Previous fires occurring on the property? (Y) N ← could be historic

If yes, please describe type, size, location, etc.: evidence of "bush fire" - fire pit + debris

Mercury in equipment gauges: Y (N)
(Check boiler room and fan/mechanical room.)

UREA Formaldehyde Foam Insulation
(wall cavities):
(Note - banned in 1980)

- Any evidence of patched nozzle insertion holes (typically ~1" diameter) outside building? Y (N)
- Any evidence of UFFI behind electrical outlet cover plates? Y (N)

Evidence of significant particulate deposition? (Check roof in vicinity of air emission sources.) Y (N)

If yes, please describe:

Lead (paint): Y N

Mercury (thermostats, paint): Y N

Presence of soil fill materials: Y N

Other Designated Substances present including: acrylonitrile, arsenic, benzene, coke oven emissions, ethylene oxide isocyanates, silica and vinyl chloride. Y N

- Describe:

Mould (readily evident): Y N

- Describe:

4.0 PROPERTY EVALUATION

- Snow cover at time of site visit? Y _____% (N)
- List any inaccessible or restricted areas. _____

4.1 UNDERGROUND STORAGE TANKS

Any USTs on the property? Y (N)

Total Number of USTs. _____

Note: Review available drawings prior to site inspection.

	Tank 1	Tank 2	Tank 3	Tank 4
• tank name:				
• capacity ▯ or g:				
• types of liquid stored (gas, diesel fuel oil, process chemicals, waste oil):				
• identify if active or abandoned:				
• construction type: (material)				
• single or double wall:				
• installation date (and who installed,				
• i.e., the owner, previous tenant or current tenant):				
• vacuum monitored:				
• corrosion protection:				
• results of leak tests (if available):				

4.1 UNDERGROUND STORAGE TANKS (CONTINUED)

Any fill or breather pipes on site? Y N

If yes, describe and mark location on site plan: (Any evidence of former breather pipes -i.e. wall stains or evidence of wall clips.)

Any floor drains in chemical storage rooms? Y N

If yes, where do they drain to?

Any evidence of staining around drain.

Any evidence of fuel pump pads (concrete)? Y N

Any evidence of repairs to pavements, fill soil, stressed or inconsistent vegetation which could indicate UST removal? Y N

If yes, describe:

Have any tanks been removed? Y N

If yes, provide details for each, including date, type of tank, cleanup work done, available reports or test results:

Note: **All areas must be carefully inspected for the presence of breather and/or fill pipes which may be associated with USTs (pipes may be cut off at ground surface).**

4.2 ABOVE-GROUND STORAGE TANKS

Are any ASTs present on site? Y (N)

If yes, provide details regarding size, type, containment devices (walls, curbs, dykes), locations and identification tags or signs:

	Tank 1	Tank 2	Tank 3
• tank name:			
• capacity - ℓ or g:			
• contents:			
• location:			
• active/abandoned:			
• construction type:			
• single or double wall vacuum monitored:			
• condition:			
• age:			
• secondary containment (walls, curbs, dykes):			

Any staining or evidence of spills? Y N

If yes, describe: _____

If the tank is subject to requirements of the *Gasoline Handling Act*:

- confirm registration with TSSA: _____
- confirm whether owner conducts regular tank dipping to check for leakage (and maintaining records thereof): _____

If the tank is used for building emergency generator:

- is there a gauge for determining liquid level? Y N
- is there a device to indicate, visually or audibly, when tank is full? Y N
- record whether tank is located on lowest floor of the building: _____

4.3 WASTE STORAGE

4.3.1 Hazardous Wastes

Any hazardous waste materials (subject to requirements of O.Reg. 347) stored on site? Y (N)

If yes, provide a detailed description: (i.e. acid solutions, alkaline solutions, sludges, solvents, resins and plastics, pesticides/ herbicides, oily wastes, lab wastes.) _____

Are the materials stored in designated areas? Y N

If yes, provide details of storage areas: _____

4.3.2 Non-hazardous Waste

Any non-hazardous debris present? Y (N)

Specify whether type (standard municipal/office wastes or loose debris).

If yes, provide a detailed listing.

Waste Storage Containers:

- Record type, size, number and locations:

Waste Storage Areas:

- Enclosed? Y N

  If yes, describe enclosure:

- Presence of uncontained debris and waste? Y N

Waste Disposal Contractor:

Frequency of waste pickup:

4.4 WATER

Are there any surface water bodies or courses in the vicinity on the property? Y (N)

Describe surface drainage pattern or swale location:

_____

_____

_____

Are there any septic systems on the property? Y (N)

Describe location, type, etc.:

_____

_____

_____

_____

Is there a potable water supply on site (well, municipal supply) Y (N)

Describe location and type of wells.

_____

_____

_____

_____

Are there any wells on adjacent sites? Y N

4.5 SENSITIVE SITE CONDITIONS

Do site conditions suggest this property or adjacent lands would be classified as a potentially sensitive site as per the MOEE GUSCO?

- adjacent wetlands, ANSI, endangered species habitat, Provincial Park, conservation area, etc. Y (N)
- less than 2 m of overburden over bedrock. Y N

Describe:

_____

_____

_____

4.6 SITE UTILITY SUMMARY

Utilities	Location/Description		
Hydro		U/G	A/G
Bell		U/G	A/G
Cable		U/G	A/G
Municipal Water		U/G	A/G
Sanitary Sewer		U/G	A/G
Storm Sewer		U/G	A/G

4.7 PREVIOUS INVESTIGATIONS

Any evidence of previous boreholes, test pits or monitoring wells. (Y) N

Describe:

monitoring wells

4.8 SITE PLAN

Mark-up site plan showing location of:

- USTs; included dump tanks
- fill and breather pipes;
- concrete cover pads;
- above-ground storage tanks;
- heavy staining;
- hazardous materials storage;
- drains and sumps;
- catchbasins;
- drum storage
- wells
- septic field
- utilities lines/pipes
- surface drainage
- transformers
- fill areas

4.9 PHOTOGRAPHS

Take photos of:

- items of environmental concern such as:
  - hazardous waste storage;
  - storage tanks and breather/fill pipes;
  - asbestos fireproofing;
  - significantly-damaged ACM;
  - gas bars or fuel pumping areas;
  - transformers;
  - outdoor lighting;
  - fill materials;
  - adjacent properties;
  - etc.

4.10 SAMPLING

Obtain samples of:

- surface water on site (creeks, ponds, etc.);
- surficial soil from any mounds of soil present on site.

Samples may or not be submitted for laboratory analysis at the discretion of the Project Manager. (Sampling and analysis is normally beyond the scope of a Phase I Environmental Site Assessment.)

5.0 ADDITIONAL OBSERVATIONS

5.1 SEDIMENT

Location of extent (note if bedrock)

5.2 SURFACE WATER

Is there any surface water on the property? Y (N)

If yes, please describe:

Are there any marsh or wetland areas on the site? Y (N)

If yes, please describe:

5.3 VEGETATION

Describe vegetation in aquatic /littoral zone (if present):

Describe vegetation in wetland/marsh areas (if present):

Describe vegetation in terrestrial areas (note vegetation types, and species): over grown brush

5.4 FISH

Is there any recreational fishing in the area? Y (N)

If yes, please provide details:

Is there any commercial fishing activity in the area? Y (N)

If yes, please provide details:

5.5 WILDLIFE

Note any wildlife observed or signs of wildlife: none

6.0 PHOTOGRAPHS

PHOTOGRAPH LOG	
PHOTOGRAPH №.	PHOTOGRAPH DESCRIPTION

APPENDIX J

QUALIFICATIONS OF THE ASSESSORS
RESUMES FOR S. PRIOR AND T. NGUYEN

DCS

Richard W. Browne, M.A.Sc., P.Eng.

SENIOR VICE PRESIDENT

EDUCATION

M.A.Sc., Geo-Environmental Engineering, University of Waterloo, 1988
B.Sc., Geological Engineering, Queen's University, Kingston, 1978

PROFESSIONAL AFFILIATIONS

Professional Engineers of Ontario
Canadian Geotechnical Society
Canadian Dam Association

EXPERIENCE

1993-Present - ARCADIS SENES Canada Inc. (Decommissioning Consulting Services)

1993 – 2002 General Manager, Engineering Services
2002 – Present Senior Vice President

Mr. Browne is the Senior Vice President at DCS and has a background in environmental and geotechnical engineering. He is a Qualified Person under Ontario's O.Reg. 153/04 for both Phase I and II Environmental Site Assessments. He has been involved in a wide range of projects including subsurface contamination investigations; environmental liability assessments; development, design and supervision of site remediation programs as well as the geotechnical and foundation engineering components of site remediation and property redevelopment projects. He has been the project manager for numerous environmental programs including the following:

Mr. Browne is currently the project director for a 3 to 5 year Vendor of Record agreement with Infrastructure Ontario to provide environmental and geotechnical engineering services to the real estate and public infrastructure development arm of the Province of Ontario. In this capacity he has been involved with numerous Phase I and II ESA programs as well as Category B EAs throughout northeastern Ontario. The largest program completed to date has been the Phase I ESA of 77 Ontera telecommunication facilities located between North Bay and James Bay. Phase I ESA assessments of 7 railway yard properties owned by Ontario Northland Railway has also been carried out. Mr. Browne has played a key role in the setup of the required programs, co-ordination of the work, review of reports and discussion of remediation options etc. with senior IO staff.

Recently Mr. Browne has carried out reviews of hydro electric dam improvement and replacement projects located in the Northwest Territories. For both projects Mr. Browne participated in the public hearings and reviewed technical specifications and submissions prepared by Power Corporation and their consultants

Project director for two three-year contracts with the Toronto Transit Commission (TTC) to provide geotechnical and geoenvironmental engineering services for modifications and upgrades of the Toronto subway and bus system. Developed investigation work plans, completed environmental and geotechnical report and recommendations reviews and carried out project management, as required. The more than 100 projects included new bus and light rail transit routes, investigations for new entrances to existing subway stations, assessment and remediation of hydrocarbon impact plumes and many other assignments.

Completed environmental investigation of the former Morningside Landfill open lands in preparation for development of the Pan Am Aquatics Centre site. Carried out a detailed Phase I ESA followed by completion of more than 100 borehole and tests on City of Toronto and University of Toronto Scarborough lands. Determined buried municipal waste volumes, earthworks quantities and the estimated cost to fully remediate the site by excavation and off site disposal. Assessed soil and groundwater conditions for the purposes of determining founding elevation of barrier wall to stop methane gas migration from the adjacent landfill mound to remain on site.

Project director for the environmental investigation and risk assessment for the parkland and residential redevelopment of the West Don Lands former industrial area in downtown Toronto. The program carried out for the Ontario Realty Corporation involves completion of more than 150 boreholes and development of detailed risk management strategies for this brownfield site meeting City of Toronto and MOE requirements.

Project Director for geotechnical investigation for Toronto Hydro at the Ashbridges Bay Treatment plant for foundation system to support a seven unit methane gas electrical cogeneration plant. Site was underlain by compressible peat and fill layers with subsurface methane gas under pressure. Provided foundation design recommendations and obtained Ministry of Labour approval for health and safety plan to be followed during pile foundation installation through methane bearing strata.

Retained by the City of Toronto to carry out environmental peer reviews of site investigation and remediation reports prepared by other consultants to support applications to redevelop industrial properties. Completed peer reviews of over 70 properties over more than 10 years.

Completed geotechnical investigation at the Hydro One Richview Transformer Station in Toronto, Ontario. Prepared geotechnical recommendations to resolve differential

settlement of switchgear equipment supported by shallow foundations at locations throughout the station.

Completed detailed environmental investigations of University of Toronto lands surrounding a former municipal landfill site in the Scarborough area of Toronto, Ontario. Completed assessment of soil and groundwater impacts, as well as, potential concerns associated with landfill gas migration and generation. Presented geotechnical and environmental concerns and solutions at public meetings and to City officials. Work was completed to obtain approvals for redevelopment of land within potential zone of influence of the landfill.

Provided senior engineering review and co-ordination to the investigation of 17 Phase II ESA's of Hydro One distribution station sites throughout southern Ontario. This included review of work plans, final site investigation reports and proposed site remediation plans, specifications and risk analyses.

Project Director for the Phase II ESA of a property located in the Municipality of Port Hope. The property which is bound to the north by the Oak Ridges Moraine and to the south by a provincially significant wetland is considered a sensitive site. The assessment involved the completion of over 30 boreholes and test pits to investigate potential contamination to soil and groundwater from former activities undertaken on the property. Potential areas of concern included UST and AST locations, the septic beds, the maintenance garage and a dump site on the embankments of a watercourse crossing the property. Oversaw the completion of the work program, prepared a detailed report outlining the findings of the investigation program and provided recommendations for remedial work activities.

Project director for the investigation and remediation of a former gravel pit infilled with miscellaneous fill in Scarborough, Ontario for Centennial College. The program involved assessment of potential impacts of methane gas and leachate from two nearby landfills. Completed technical specifications and supervised remediation of site. Completed detailed geotechnical investigation for proposed 5 storey community college campus. Prepared slope stability analyses for construction of building within Highland Creek Valley. Oversaw geotechnical inspection work for construction of building foundations, retaining walls and required sub-slab drainage system.

Completed Phase I and Phase II ESA’s of a series of properties to be acquired by Rogers AT & T throughout Southern Ontario. Co-ordinated cleanup of a designated sensitive site to background contaminant levels.

Co-ordinated the environmental investigation and preparation of ecological and human health risk assessments for two former bulk oil storage industrial sites in the Toronto waterfront area for TEDCO. One site was proposed for commercial usage, while the second was proposed to be a wildlife corridor green space.

Project Manager for completion of an environmental assessment of the proposed Technodome site at former CFB Toronto, Downsview, property. The program involved subsurface investigation of a large number of former aboveground and underground storage tank locations as well as former ammunition storage areas.

Completed an environmental investigation into the possible upgradient sources of volatile organic compound (VOC) contamination within the groundwater underlying a Toronto industrial plant. Presented case to MOE for classification as an area wide concern.

Prepared environmental engineering requirements for the capping of arsenic-impacted soil at three electrical distribution sites. The program included preparation of environmental work plans, construction drawings for capping and drainage systems, and preparation of technical specifications.

Co-ordinated the subsurface investigation of a hydrocarbon-contaminated MNR works yard adjacent to a river in Northern Ontario. Prepared a remediation work plan and tender documentation for cleanup of the site. Oversaw remediation of the site and ongoing groundwater monitoring to assess any impact on water quality.

Co-ordinated the geotechnical investigation of a proposed residential development site along the crest of the Humber River Valley in Bolton, Ontario. Completed stability analyses of the 20 to 30 m high valley slope and prepared an engineering report to support the proposed development at an Ontario Municipal Board hearing.

Project Manager for the investigation and partial remediation of a major heating fuel oil tank loss, of in excess of 100,000 ℓ, at a Toronto apartment complex immediately adjacent to the Don River Valley. Co-ordinated emergency installation of product recovery well and interceptor trenches to recover loss product migrating through the sandy overburden. Supervised the monitoring of the product recovery system and the installation of a groundwater treatment system. Represented firm in arbitration hearings which resolved dispute with major oil firm and property owner.

Co-ordinated the environmental investigation of a 14 ha property in the historic industrial area of Kingston, Ontario. Investigated the extent of primarily heavy metal contamination associated with past operations of a tannery and lead smelter on the site. Assessed environmental liabilities and remediation costs associated with redevelopment of the

property. Prepared to give environmental testimony in court; however, issue was resolved.

1978-1993 - Geocon Inc. (SNC Lavalin), Toronto, Ontario

General Manager - 1991-1993
Senior Project Engineer - 1978-1991
Carried out geotechnical investigations, analyses and report preparation for industrial properties, dam sites, mine tailings areas, marine installations, highway route alignments and pulp and paper mills at locations across Canada as well as in Honduras.

Geotechnical/environmental investigation for major expansion of the Humber Sewage Treatment Plant. Provided recommendations for off-site disposal of contaminated soil and groundwater.

Project Manager for the geotechnical investigation of a proposed oil storage tank farm to be constructed on soft marine sediments in Hamilton Harbour. The program included detailed settlement analyses and slope indicator and pneumatic piezometer monitoring of the stability of the structure during water testing and filling of the tanks.

Geotechnical investigations and construction supervision for the Sky Dome facilities, including caisson installation and spread footings on shale.

Supervised pile load test program and installation of 944 steel tube piles for settlement-sensitive paper machine at Abitibi Price mill in northern Ontario.

Stephen R. Prior, P. Eng., QP_{ESA}

SENIOR PROJECT MANAGER

EDUCATION

B.Sc. Earth Sciences, University of Waterloo, 1980

TRAINING

1993 40 hour OSHA training Course
1995 8 hour OSHA refresher training
2000 Hydro One Grounding and Bonding Course
2006 Confined Space Entry

EXPERIENCE

2006-Present - ARCADIS SENES Canada Inc. (Decommissioning Consulting Services)

Mr. Prior is a senior project manager for DCS and has over 30 years' experience is site assessments and environmental investigations.

- Completed a large number of Peer Reviews of Phase One, Phase Two and Records of Site Conditions for the City of Toronto and the City of Vaughan. These reviews were completed to ensure that lands being transferred to the City were not impacted and would therefore present no environmental liability.
- Provided peer review services for the MOE for Risk Assessments that had been completed by other consultants. The peer review process examined the Property Information, Site Plan and Geological Interpretation portion (Section 3) of the Risk Assessment to ensure correct interpretation of the site conditions was used and to ensure that all items addressed met the criteria provided under O. Reg. 153/04.
- Oversaw the completion of the field program for a Phase One and Phase Two ESA for the proposed Pan Am Stadium and Velodrome in the West Harbour area of the City of Hamilton. The field program was designed to establish site conditions in preparation for the completion of a Risk Assessment using the standards established in O. Reg. 153/04.
- Completed a number of Phase I and Phase II ESAs for the potential development of power generating stations. The potential site and potential transmission lines routes were examined. Potential sites included former industrial areas that had been impacted by VOCs. A review of the effectiveness of a former air sparging system was completed.
- Completed numerous Phase I and Phase II ESAs throughout southern Ontario for Public Works and Government Services Canada. These included overseeing the field programs and preparation of reports. The projects were generally completed using the applicable federal guidelines to establish liabilities and also to the Site Conditions Standards under O. Reg. 153/04
- Project manager for a Phase II Environmental Site Assessment on a property owned by the City of Guelph. It was necessary to develop a program based on historic chemical data and site uses to develop a field program that would maximize the information acquired. The end goal was to assess the potential future land uses and determine estimated costs for clean-up.
- Developed specifications and remedial procedures for lands that had been formerly used as a skeet range. The impacted soil contained lead from the shot and benzo(a)pyrene from the tar used as a binder in the clay pigeons.
- Developed and implemented a Phase One and Phase Two Environmental Site Assessment for a surplus property located in Northern Ontario. Previous land uses had included boat manufacturing, pesticide blending and storage and fuel oil/gasoline storage. In addition, an assessment of gasoline in a monitoring well sealed in the bedrock was required. Based on the geology and construction of the monitoring well it was postulated that the gasoline had been introduced into the well as opposed to gasoline contamination site wide.
- Project manager for the assessment of harbour lands to be transferred to the local government. The development of a Phase I and Phase II ESA was required to develop a database that would allow for the completion of a Risk Assessment. This work program was completed using the applicable federal guidelines to establish liabilities. The results were also compared to the MOE Site Conditions Standards as provided under O. Reg. 153/04.
- Developed and implemented a program to examine a number of sites within a Canadian Forces Base. Environmental concerns included Mustard Gas storage areas and potential petroleum hydrocarbon impacts.
- Oversaw the development and implantation of a Phase II Environmental Site Assessment for a former industrial property in Toronto. The program was designed based on previously completed studies to maximize the information obtained.
- Completed a hydrogeologic investigation into a property located with the Oak Ridges Moraine in preparation for obtaining a Permit To Take Water (PTTW) that would be required for excavation of a two level basement. A major concern was the possibility for upward pressure from the underlying aquifer to overcome the soil remaining in place. This could have resulted in major flooding of the

excavation resulting in increased costs for construction.
- Project Manager for the completion of a number of Scaled Down Phase I/II ESAs at a number of properties operated by the Department of Fisheries and Oceans across southern Ontario.
- Completed a large number of Phase I and Phase II Environmental Site Assessments across the Province of Ontario.
- Supervised the completion of a number of remedial programs including the removal of impacted soils so that an RSC could be obtained for the property.

2005 – 2006 Self Employed

- Provided on site laboratory analysis during the investigation and clean up of TPH impacted sites. On site analysis used Ultra Violet Fluorescence (UVF) techniques to provide real time, near laboratory quality analysis for petroleum hydrocarbons.
- Developed a relational data base for a small local manufacturer to track supplies and equipment.

2000 – 2005 AEON Management, Brampton, Project Manager/Engineer

- Project Engineer on a number of electrical distribution stations that had been impacted by the use of arsenic trioxide which had been used as a defoliant until 1972. Field screening techniques included the use of X-Ray Fluorescence (XRF) were used to assess the extent of impacts and also to guide the excavation during the remediation program.
- Project engineer on the remediation of a number of sites that were impacted by NAPLs, petroleum hydrocarbons and metals.
- Provided on site laboratory analysis using X Ray Fluorescence (XRF) for metals and Ultra Violet Fluorescence (UVF) for some organics including petroleum hydrocarbons, BTEX parameters, some NAPLs, PCBs and PAHs. These techniques allow for near instantaneous analysis of field samples resulting in reduced downtime during a clean up process.
- Completed studies at a number of provincial parks to assess the potential for non-GUDI wells. Water supply wells were drilled at most sites and pumping tests were completed.
- Completed numerous data projects using VIEWLOG and SiteFX. These programs allow for the input of data into a relational database and the creations of isopoch, chemical concentration and groundwater flow maps. Cross sections were generated directly from the database and volumes of contaminated material were estimated. VIEWLOG may also be used as a pre- and post-processor for MODFLOW.
- Designed a number of surface and ground water observation stations that monitored the interaction between the ground and surface water flow into and out of a test area. These stations were designed to monitor surface flows and ground water levels through the use of pressure transducers. The data could be collected at regular intervals and downloaded for a more detailed analysis.

1997 – 2000 Trow Consulting Engineers, Stoney Creek, Project Engineer

- Site engineer responsible for overseeing the geotechnical and environmental aspects of a large-scale expansion of an industrial facility along the Hamilton Harbour front.
- Provided an assessment of an existing pump and treat system and determined its long-term effectiveness. Alternative methodologies were proposed.

1990 – 1997 Jagger Hims Limited, St. Catharines, Project Manager/Engineer

- Completed a multi year aquifer evaluation for a city in south central Ontario. The project involved the design of a phased pumping test program to ensure an adequate supply of drinking water was available over the duration of the test and to maximize the collected data. In addition, all information available for each water supply was compiled from various sources. It is understood this information is used to this day as a useful reference for City employees.
- Developed a relational database for a hazardous waste disposal facility located in southwestern Ontario. This database included all known information on the site including chemical analysis, geology and historical land use. This database was used in the preparation of an Environmental Assessment of a proposed expansion of the hazardous waste landfill.
- Completed a model of the fractured bedrock aquifer system for a city in south central Ontario. This included proposed wellhead protection zones.
- Completed a number of models to monitor the impact of landfills on the groundwater flow system
- Completed a number of 1½ D diffusion models to predict the long-term rate of impact of a hazardous waste facility on an aquifer supplying area residences.

1988 – 1990 MacLaren Engineers, Toronto, Project Engineer

- Field project manager for the removal of approximately 450,000 m3 of potentially contaminated soil from a former rail yard in downtown Toronto. Laboratory analysis was performed on a just-in-time basis with these results determining the disposal site of the soil.
- Created a large database to track the chemical analysis for soil samples at a large dig and dump project. The database also tracked the movement of the soil leaving the site.

1985 – 1988 Bruce A. Brown Associates Limited, Project Engineer

- Completed a number of Phase II investigations at various sites across Toronto.
- Completed a number of investigations to determine the feasibility of sites for septic systems.

1980 – 1985 Geocon Inc., Toronto, Project Engineer

- Completed a large number of geotechnical investigations in the harbour front area of Toronto. This work included drilling supervision with boreholes that extend into the Georgian Bay bedrock, caisson inspection and monitoring of the construction of a tunnel leading from the cross town water line into the new John St. Water pumping station.
- Completed monitoring of fractures in the bedrock underlying the footings of the Skydome to determine if wide clay filled fractures were present that may have had a detrimental impact on the settlement of the footings.
- Provided on site supervision during the construction of a large number of tailings ponds across Canada. This work includes monitoring the construction of the starter dams and supervising grouting of the bedrock beneath the dams to create a low permeability barrier.

PUBLICATIONS

Prior, S., G. Funk and J. Sanvido, *Aquifer Evaluation and Delineation of Wellhead Protection Areas for the City of Guelph.* Presented at the International Association of Hydrogeologists Conference, Edmonton, June 1995.

COMMUNITY INVOLVEMENT

Chair of Land Care Niagara, a land stewardship group that is committed to creating a healthy and sustainable rural and urban environment. This is a volunteer group consisting of citizens who are knowledgeable and active in land resource management.

Tu-Anh Nguyen, M.Eng.

ENVIRONMENTAL SPECIALIST

EDUCATION

M.Eng. Environmental Engineering, University of Ottawa, Ottawa, Ontario, 2011

B.A.Sc. Chemical Engineering, University of Ottawa, Ottawa, Ontario, 2008

The focus of graduate studies was to gain a wide breadth of knowledge pertaining to various topics in environmental engineering. Relevant courses included Environmental Impact Assessment, Construction Management, Advanced Water Treatment, Wastewater Treatment, Sludge Treatment and Disposal, Infrastructure Management and Mine Waste Management.

PROFESSIONAL AFFILIATIONS

Professional Engineers of Ontario – Engineer in Training

EXPERIENCE

2013-Present - ARCADIS SENES Canada Inc. (Decommissioning Consulting Services)

Environmental Specialist

Responsibilities as an Environmental Specialist include performing Phase I and II environmental site assessments, analysis and interpretation of chemical data, preparation and review of reports.

Typical projects are described below:

- Involved in a Phase I environmental site assessment for a residential property in Northern Ontario. Examined aerial photographs and conducted a review of Ministry of Environment databases.
- Performing QA/QC on analytical results, as well as organization of laboratory data and certificates.

2011-2013 OHE Consultants, Mississauga, Ontario

Project Consultant

Responsibilities included project planning, preparation of proposals, liaising with clients and scopes of work, in addition to cost estimation, budget preparation, planning and execution of projects. Technical writing included Phase One and Phase Two environmental site assessments as well as storage tank removal and remediation reports. Carried out Phase One site reconnaissance, soil sampling and groundwater monitoring and collection for Phase Two environmental site assessments, supervision of storage tank removal and remediation.

Typical clients included banks and financial institutions, real estate holdings firms, commercial retailers and cosmetics firms.

2008-2009 DST Consulting Engineers Inc., Ottawa, Ontario

Junior Environmental Engineer

Responsibilities included writing various technical reports such as environmental site assessments, property transfer assessments and remediation reports, as well a background research, data analysis and interpretation of trends and results. Fieldwork includes soil, sediment and groundwater sampling, in addition to site inspections and surveying.

SHORT COURSES

Nuclear Radiation Safety Course, 2013
Workplace Hazardous Materials Information System, St. John Ambulance, 2013
Subway Rule Book and Track Safety Training, Toronto Transit Commission, 2013
Emergency First Aid and CPR Level B, Lifesaver 101 First Aid & CPR Training, 2012