



Engineering Design Criteria & Standard Drawings

December 2020

APPENDIX B – POLICY AND PROCEDURE FOR DEALING WITH CONTAMINATED AND POTENTIALLY CONTAMINATED SITES





**CITY OF VAUGHAN
POLICY AND PROCEDURES FOR DEALING WITH
CONTAMINATED OR POTENTIALLY CONTAMINATED SITES
UPDATED JANUARY 2014**

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1.0 Introduction

Soil, ground water, and/or sediment quality can have a direct impact on human and ecological health. In order to minimize risk of health impacts, brownfield and contaminated sites with impacted soils, ground water, and/or sediment are severely restricted in terms of the uses that can occur on the lands.

Redevelopment and intensification will likely result in the identification of an increasing number of brownfield and contaminated sites. These sites may be found in Intensification Areas, where a significant portion of new growth in the City of Vaughan is being directed.

1.1 Purpose

This document provides an update to the City of Vaughan's *Policy and Procedures for Dealing with Contaminated or Potentially Contaminated Sites* that was originally adopted by Council on May 14, 2001. The policy's intent is to ensure contaminated or potentially contaminated sites within the City of Vaughan are addressed according to Provincial statutes and regulations, York Region standards, and best management practices to permit development or redevelopment, and to ensure that lands being conveyed to the City meet the applicable environmental standards. As significant updates have occurred to the legislation relating to contaminated sites since 2001, an update to the policy is required to ensure the City's environmental review process is consistent with current industry practices and regulations as well as remaining effective and efficient for Vaughan's development application review process.

The requirements outlined in this updated policy are consistent with those prescribed by *Ontario Regulation (O. Reg.) 153/04* (as amended) but also encompass the guiding principals and recommendations contained in Ontario Ministry of the Environment (MOE) Guidance documents in order to capture those development applications where the land use does not change or the proposed development does not result in a change to a more sensitive land use.

Although this document supersedes the 2001 *Policy and Procedures for Dealing with Contaminated or Potentially Contaminated Sites*, the protocols prescribed in this update have remained largely unchanged. Where applicable, reference should be made to the original policy document and background report if further insight on the development of the policy is required.

2.0 Governing Policies, Plans, and Legislative Background

The following provides a summary of the applicable provincial and municipal policies, plans, and legislation which has guided the development of the City's policy on dealing with brownfields and contaminated or potentially contaminated sites.

2.1 Official Plans and Policies

2.1.1 Provincial Policy Statement, 2005

The Provincial Policy Statement, 2005 (PPS) provides direction for the entire province on matters of provincial interest related to land use planning and development. The following are excerpts from the PPS which relate to brownfield and contaminated sites:

1.7 Long-Term Economic Prosperity

*1.7.1 Long-term economic prosperity should be supported by:
c) promoting the redevelopment of brownfield sites;*

3.2 Human-Made Hazards

3.2.1 Development on, abutting or adjacent to lands affected by mine hazards; oil, gas and salt hazards; or former mineral mining operations, mineral aggregate operations or petroleum resource operations may be permitted only if rehabilitation measures to address and mitigate known or suspected hazards are under-way or have been completed.

3.2.2 Contaminated sites shall be remediated as necessary prior to any activity on the site associated with the proposed use such that there will be no adverse effects.

2.1.2 Regional Municipality of York Official Plan Policies

The Regional Municipality of York (York Region) comprises nine local municipalities including the City of Vaughan. The York Region Official Plan - 2010 was approved by the Minister of Municipal Affairs and Housing on September 7, 2010 and appealed to the Ontario Municipal Board (OMB). Section 5.2 of the York Region Official Plan addresses contaminated or potentially contaminated sites as follows:

It is the policy of Council:

17. That local municipalities shall develop official plan policies and associated procedures for development on contaminated or potentially contaminated sites, including the use of community improvement plans where appropriate to promote brownfield site redevelopment.

2.1.3 City of Vaughan Official Plan Policies

On September 7, 2010, the City of Vaughan Council adopted a new Official Plan (VOP 2010) as part of the City's integrated Growth Management Strategy. The Official Plan addresses all elements of effective, sustainable and successful city-building, while managing projected growth to 2031.

Section 3.8.1 of VOP 2010 (City of Vaughan Official Plan 2010 Volume 1, as Adopted by the Council of the City of Vaughan September 7, 2010, subject to Council modifications on September 27, 2011, March 20, 2012 and April 17, 2012, as endorsed by Regional Council on June 28, 2012) outlines the City of Vaughan's policy requirements with respect to soil quality and site remediation as follows:

It is the policy of Council:

3.8.1.1. To support and encourage the cleanup, renewal and redevelopment of brownfield and other contaminated sites for a variety of uses.

3.8.1.2. That brownfields and other contaminated sites are a legacy of past or current use that must be addressed when new development or a change in land use is proposed. New development on or adjacent to brownfield sites must plan for the redevelopment and reintegration of the brownfield site. Secondary plans and other planning exercises will also be required to plan for the redevelopment of brownfield sites.

3.8.1.3. To encourage the use of municipal funding mechanisms and funding sources from other tiers of government to support the cleanup, renewal and redevelopment of brownfield and other contaminated sites.

3.8.1.4. That, where development is proposed on a site which, in the opinion of the City or other approval authority, may be contaminated due to previous use, environmental assessment reports are required to be submitted in accordance with provincial regulations and guidelines.

3.8.1.5. To require that, prior to considering to permit development on contaminated sites, the following be completed to the satisfaction of the City or other approval authority:

a. determination of the impacted area of the site, in consultation with the City or appropriate approval authority, on the basis of technical studies;

b. submission of studies by the proponent identifying the level of contamination of the site, proposed remediation measures and post clean-up conditions as deemed necessary for the proposed use; and

c. cleaning or remediation of the site in accordance with provincial criteria, the policies of this Plan, and the directions identified in studies submitted to support redevelopment.

2.2 Legislative Framework

2.2.1 Environmental Protection Act

The *Environmental Protection Act* is Ontario's key legislation for environmental protection. The act grants the MOE broad powers to deal with the discharge of contaminants which cause negative effects. The act specifically:

- prohibits the discharge of any contaminants into the environment which cause or are likely to cause negative effects - and in the case of some approved contaminants requires that they must not exceed approved and regulated limits;
- requires that any spills of pollutants be reported and cleaned up in a timely fashion.

The *Environmental Protection Act* includes, among a number of items, authorization for the MOE to issue a control order where there is an adverse effect to the environment as well as prescribes the requirements for Environmental Compliance Approvals, Waste Management, and Spills. Records of Site Condition (RSCs) setting out the requirements for the assessment and cleanup of a property and prohibiting certain changes in the use of a property are detailed in Part XV.1 of the *Environmental Protection Act*. Part XV.2 contains special provisions reducing the potential liability from orders for municipalities and others who may need to undertake certain investigative or other actions related to brownfield sites.

2.2.2 Planning Act

The *Planning Act* legislates land use planning in Ontario and describes how land uses may be controlled, and who may control them. Section 2 of the *Planning Act* states that municipalities shall have regard to:

- (h) the orderly development of safe and healthy communities;*
- (o) the protection of public health and safety;*

While Part V, Section 34 relating to Contaminated lands; sensitive or vulnerable areas states:

34. (1) Zoning by-laws may be passed by the councils of local municipalities:

- 3.1 For prohibiting any use of land and the erecting, locating or using of any class or classes of buildings or structures on land,*
 - i. that is contaminated,*

- ii. that contains a sensitive groundwater feature or a sensitive surface water feature, or
- iii. that is within an area identified as a vulnerable area in a drinking water source protection plan that has taken effect under the Clean Water Act, 2006.

2.2.3 Building Code Act, 1992

The *Environmental Protection Act* is linked to the *Building Code Act, 1992* by requiring that a RSC be filed before construction, if the building will be used in connection with certain property use changes. However, an exemption to the requirement for a RSC prior to issuance of a building permit can be made in cases where excavation and shoring are required, recognizing that site remediation often takes place in concert with building excavation and a RSC could not be filed until after an excavation has taken place.

2.2.4 MOE Guideline for Use at Contaminated Sites in Ontario (1996)

The Guideline for Use at Contaminated Sites in Ontario (GUSCO) issued by the MOE in June of 1996 and revised in February 1997 provided advice and information to property owners and consultants on assessing the environmental condition of a property, determining whether or not restoration was required and options for clean-up based on background, generic, and site specific risk assessment approaches. It included details on undertaking site assessments, sampling and analysis, remedial work plans, and RSCs. GUSCO included a section on land use planning which outlined opportunities and considerations for using planning mechanisms to address potential concerns with the reuse or redevelopment of a contaminated or potentially contaminated sites.

The majority of the details in GUSCO have largely been formalized and legalized with the implementation of *O. Reg. 153/04*. The guidance and recommendations with respect to contaminated sites and land use planning were considered during the development of this policy and have been incorporated where applicable.

2.2.5 Brownfields Statute Law Amendment Act (2001) and O. Reg. 153/04

In 2001, the Ontario government enacted the *Brownfield Statute Law Amendment Act*, which amended seven provincial statutes including the *Environmental Protection Act*, with the objective of encouraging the redevelopment of thousands of brownfield sites in Ontario. However, since compliance with the existing soil and ground water quality criteria was optional, owners and prospective owners of brownfield sites were reluctant to develop these sites because of concerns about potential liability and unknown future clean-up costs.

In 2004, the *Environmental Protection Act* was amended and *O. Reg. 153/04 – Records of Site Condition – Part XV.1 of the Act*, made under the *Environmental Protection Act*, was passed to address some of these concerns as well as to legalize and formalize the provisions originally set out in the 1996 MOE GUSCO. The regulation set out the technical requirements for conducting Environmental Site Assessments (ESAs), Site Remediation and Risk Assessments. Owners of brownfield sites or sites where a change in land use resulted in a more sensitive site (e.g., commercial or industrial to residential or parkland) were now required to provide RSCs indicating that their sites have been assessed and whether or not they met the soil, ground water and sediment quality criteria applicable to the proposed use of their sites. *O. Reg. 153/04* strengthened the quality criteria for soil, ground water and sediment from mere guidelines to standards, enforceable through RSCs.

In October 2004, the MOE issued a new guidance document entitled *Records of Site Condition – A Guide on Site Assessment, the Cleanup of Brownfield Sites and the Filing of Records of Site Condition* that provided an overview of the new requirements under the *Environmental Protection Act* and other Acts and generally replaced the 1996 MOE GUSCO.

To address ongoing concerns related to RSCs and liability, *O. Reg. 153/04* was amended again in 2007 and in December 2009, to improve the integrity of RSCs, streamline risk assessments and set quality standards for soil brought to brownfield sites. The MOE also published updated soil and ground water quality standards for approximately 120 chemicals in their technical document entitled *Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act* (April 15, 2011) (MOE Soil, Ground water, and Sediment Standards). Most of these amendments and the updated quality standards came into force on July 1, 2011.

As prescribed by the legislation, the requirements of *O. Reg. 153/04* (as amended) and the filing of a RSC is mandatory wherever a property changes to a more sensitive land use (e.g., industrial/commercial to residential). The ESA reports completed to support the filing of an RSC must be conducted or supervised by a Qualified Person (QP), as defined by *O. Reg. 153/04* (as amended).

3.0 Scope of Application

This policy applies to development proposals requiring Official Plan Amendment, Zoning By-law Amendment, Draft Plan of Subdivision, and Site Development applications, and where lands are being acquired by the City, except as otherwise stated in this policy.

This policy does not apply to applications for minor variance and severance where a change to a more sensitive land use is not contemplated. Draft Plan of Condominium applications also do not apply to this policy as they are addressed at the Official Plan, Zoning By-Law, or Site Development application stages.

4.0 Administration

The Development Planning Department is responsible for ensuring all required information is received to facilitate the approval of development applications.

The Development/Transportation Engineering (DTE) Department is responsible for coordinating the review of environmental information relating to contamination or potential contamination at a site for a development application. The DTE Department will identify specific requirements to address contamination or potential contamination and will provide acceptance of ESA reports and related documentation.

5.0 Review Process

As part of the Pre-Application Consultation (PAC) meeting request, the Proponent will be required to complete and submit a Site Screening Questionnaire. The value of the Site Screening Questionnaire assists in ensuring that the potential for adverse environmental effects are kept to a minimum to the extent practicable, without unduly restricting or slowing down the development review process.

The Development Planning Department will circulate the Site Screening Questionnaire to the DTE Department for review prior to the PAC meeting. The Proponent will be notified in the PAC meeting whether the development application will require the submission of ESA reports.

If ESA reports are required, the Proponent shall submit the reports to Development Planning Department who will then circulate to the DTE Department for review and comment. Comments from the DTE Department will be provided to the Development Planning Department who will then circulate to the Proponent.

If contamination or potential contamination on the subject lands is identified, the Proponent must then determine the course of action required to address and resolve the issues to the satisfaction of the City.

5.1 External Peer Review Option

At the discretion of the DTE Department, submitted ESA reports may be subject to an external peer review. The option to undertake an external peer review will be on a case-by-case basis but will generally depend on factors such as the previous or current use of the site, the degree or potential degree of contamination at the site, and/or the complexity of remediation/risk assessment undertaken or required. If an external peer review is deemed necessary, the Proponent will be notified and will be required to submit a deposit and pay for all costs associated with the peer review.

In those instances where a peer review is required, the City will rely on the review and recommendations of the City's environmental peer review consultant. However, the responsibility for ensuring that ESA reports and remedial/risk assessment work (if required) meet the applicable MOE requirements and the site is suitable for the intended use or reuse remains solely the responsibility of the Proponent and their environmental consultant's QP.

6.0 Scheduling and Timing

Where ESA(s) are required, the following shall apply with respect to the scheduling of the development application for consideration by the Committee of the Whole:

1. The requirement for ESA report(s) **will not** affect the scheduling of the Public Hearing on an application.
2. **Applications for Official Plan and Zoning By-law Amendment, Plan of Subdivision and Site Development shall not proceed to a Technical Report to the Committee of the Whole until such time as the DTE Department has informed the Development Planning Department that one of the following has occurred:**
 - i) The Proponent has submitted a Site Screening Questionnaire which has been completed to the satisfaction of the DTE Department and the information in the Site Screening Questionnaire along with a review of the City's files/records indicates no potential for environmental concern to the proposed development or adjacent properties; OR
 - ii) The Proponent has submitted ESA report(s) which have been completed to the satisfaction of the DTE Department, the ESA report(s) indicate that the subject lands are free of contamination, and/or the Proponent's QP indicates no further investigation is necessary and the lands are suitable for the proposed land use; OR
 - iii) The Proponent's ESA report(s) have identified areas of contamination and a Remedial Action Plan (RAP) has been prepared by the Proponent's QP, submitted, and reviewed to the satisfaction of the DTE Department. For Zoning By-law Amendments, the use of the 'H' Symbol shall be applied to



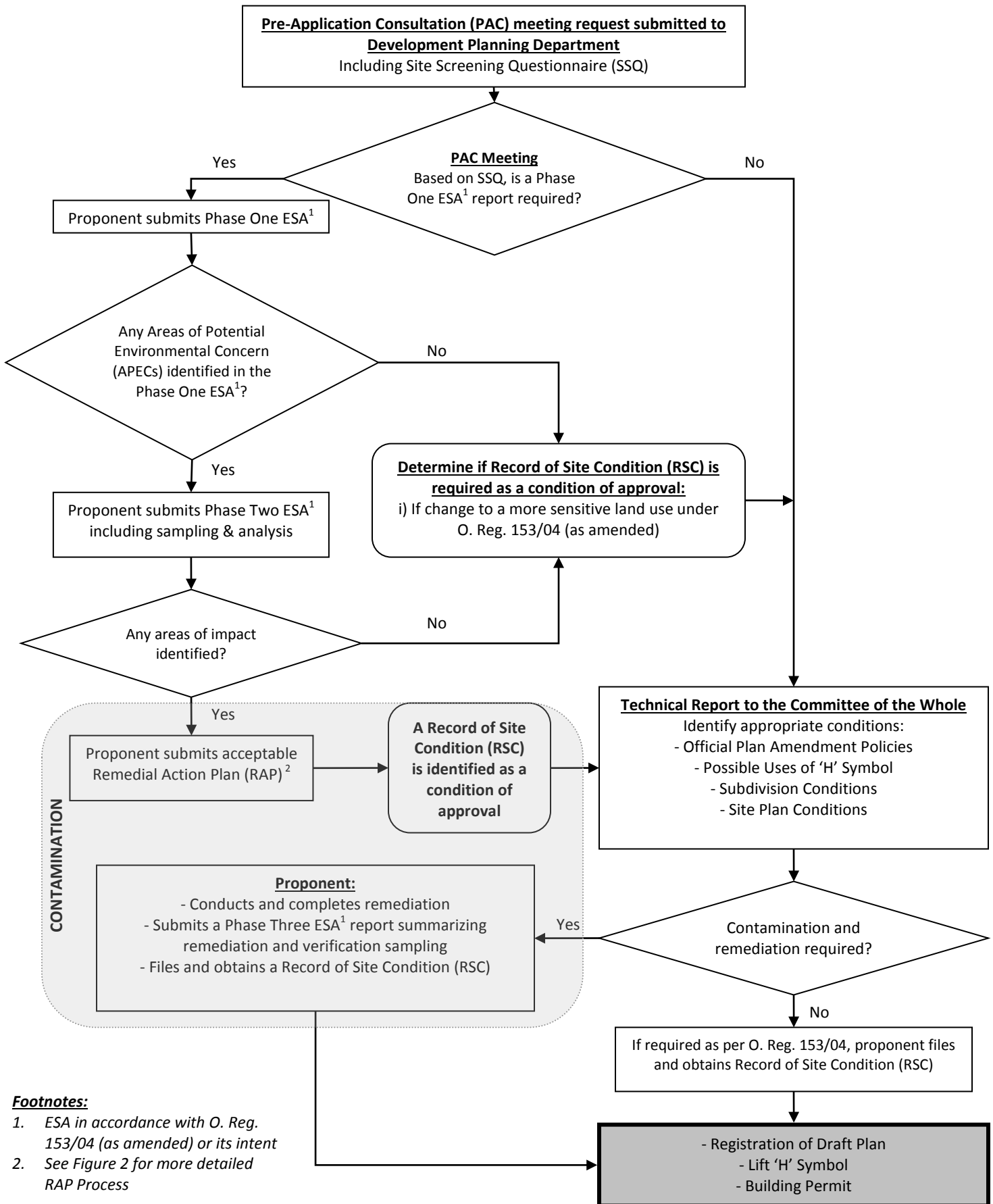
the application under these circumstances (refer to Section 8.1 for further details).

7.0 Submission Requirements

This section provides a detailed description of the City of Vaughan's environmental site contamination document submission and review requirements for development applications.

A flow chart outlining the City's review process is provided on the following page (Figure 1) for ease of reference in understanding this policy's requirements.

Figure 1: City of Vaughan Environmental Site Contamination Review Flow Chart



Footnotes:

1. ESA in accordance with O. Reg. 153/04 (as amended) or its intent
2. See Figure 2 for more detailed RAP Process

7.1 Site Screening Questionnaire

A Site Screening Questionnaire (completed and signed by the Owner and, if applicable, purchaser and/or lessee of the subject lands) must be submitted to the Development Planning Department with every Pre-Application Consultation (PAC) meeting request. As part of the application, the Environmental Certification affidavit which the applicant swears to, will also apply to the Site Screening Questionnaire.

The Development Planning Department will forward the completed Site Screening Questionnaire and Environmental Certification to the DTE Department for review.

A copy of the Site Screening Questionnaire and Environmental Certification is included in Appendix A of this Policy.

7.2 Environmental Site Assessment (ESA) Reports

7.2.1 Phase One ESA Requirements

A Phase One ESA, in accordance with *O. Reg. 153/04* (as amended) or generally meeting the intent of *O. Reg. 153/04* (as amended) to the satisfaction of the City where a RSC is not mandatory, will be required as part of a development application submission prior to the Technical Report being considered by the Committee of the Whole, if **any** of the following circumstances apply:

- i) The proposal includes a change to a more sensitive land use as defined under *O. Reg. 153/04* (as amended).
- ii) The Site Screening Questionnaire indicates the potential or uncertainty for contamination on the subject lands that currently or historically have been use for non-residential purposes (e.g., landfill, industrial manufacturing, automotive related, gas station, dry cleaning, raw material storage) and presents an environmental concern to the proposed development or to the surrounding land uses.
- iii) Lands are to be deeded/conveyed to or acquired by the municipality including but not limited to roads, parks, woodlots, valley lands, storm water management facilities or where lands are being acquired by the City through real estate transactions outside of the development review process.
- iv) The City has any other information by which it has reason to suspect that the subject lands may have the potential for being contaminated presenting an environmental concern to the proposed development or to the surrounding land uses.

The submitted Phase One ESA must be completed by or under the supervision of a QP and reflect the **current conditions** of the subject lands. As such, the submitted Phase One ESA report should contain information and site data **no more than 18 months** from the time of the development application submission date. If the information in the report is beyond 18 months, then an update to the Phase One ESA will be required with the extent of the Phase One ESA update (e.g., update letter or full report) determined by the Proponent's QP in order to satisfy themselves that the information relied upon in the update provides an accurate environmental assessment of the current site conditions.

Exceptions to the requirement for a Phase One ESA report may be granted as determined on a case-by-case basis by the DTE Department (e.g., in the case of road widening, easements and acquisitions of a minor nature).

Reliance on submitted Phase One ESA report(s) must be provided to the City and its peer reviewer as part of the development application, either within the body of the report or in a separate reliance letter. A sample reliance letter template is provided in Appendix A.

7.2.2 Phase Two ESA Requirements

A Phase Two ESA, in accordance with *O. Reg. 153/04* (as amended) or generally meeting the intent of *O. Reg. 153/04* (as amended) to the satisfaction of the City where a RSC is not mandatory, will be required as part of a development application submission that resolves the environmental concerns of the City prior to the Technical Report being considered by the Committee of the Whole, if **any** of the following circumstances apply:

- i) The Phase One ESA recommends a Phase Two ESA and/or identifies areas of potential environmental concern on the subject lands presenting an environmental concern to the proposed development or to the surrounding land uses.
- ii) Lands designated as park land and/or open spaces are being deeded/conveyed to the City. If areas of potential environmental concern are identified in the Phase One ESA, the Phase Two ESA on the park land and/or open spaces shall occur **prior** to the Technical Report to the Committee of the Whole AND, in all cases, a Phase Two ESA on the park land and/or open spaces shall be conducted **after** the City has certified the rough grading for the park land and/or open spaces but prior to placement of topsoil and landscaping.

The submitted Phase Two ESA must be completed by or under the supervision of a QP and reflect the **current conditions** of the subject lands. If the City has reason to believe the information in the Phase Two ESA report does not reflect or satisfy all of the environmental concerns on

the subject lands, then additional updates or supplemental ESA work may be required to the satisfaction of the City.

Reliance on submitted Phase Two ESA report(s) must be provided to the City and its peer reviewer as part of the development application, either within the body of the report or in a separate reliance letter. A sample reliance letter template is provided in Appendix A.

7.2.3 Phase Three ESA / Remedial Action Plan (RAP) requirements

A Phase Three ESA / Remedial Action Plan (RAP) in accordance with *O. Reg. 153/04* (as amended) will be required as part of the development application submission if the Phase Two ESA identifies soil, ground water, and/or sediment concentrations of contaminants on the subject land which exceed the applicable MOE Soil, Ground Water and Sediment Standards and remediation is necessary in order to make the site suitable for the intended use.

A RAP meeting the requirements outlined in the **City's Environmental Remedial Action Plan (RAP) checklist** (attached in Appendix A) shall be submitted by the Proponent for review and to the satisfaction of the DTE Department prior to the Technical Report to the Committee of the Whole. In some instances, the Proponent may be required to undertake a public communication program, to the satisfaction of the City.

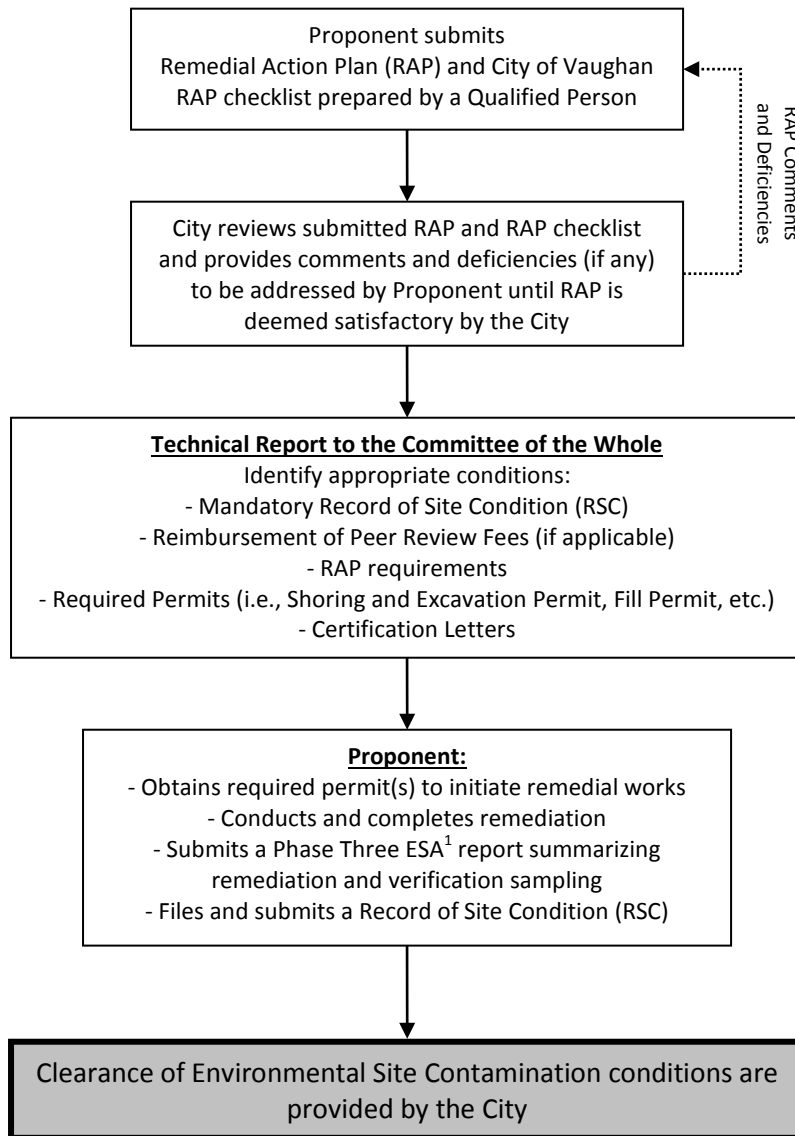
Upon ratification of the development application by Council, the Proponent may then proceed with remedial works in accordance with all applicable permits and agreements. The responsibility for ensuring that the information in the reports is correct, the site remediation and restoration work is completed in a manner consistent with MOE requirements, and the site is suitable for the intended property use, remains with the Proponent and their environmental consultant's QP.

Following the completion of all remedial works whereby the subject land is deemed suitable by the Proponent's QP for the intended land use and meets the applicable MOE Soil, Ground Water and Sediment Standards, a Phase Three ESA which includes details on the execution of the RAP and a summary of the results of remediation along with details on the completed site restoration must be prepared and submitted by the Proponent for review and to the satisfaction of the DTE Department.

The Phase Three ESA and RAP must be prepared by or under the supervision of a QP. Reliance on submitted Phase Three ESA report(s) and RAP must be provided to the City and its peer reviewer as part of the development application, either within the body of the report or in a separate reliance letter. A sample reliance letter template is provided in Appendix A.

An overview outlining the City of Vaughan's RAP review process is provided in Figure 2 on the following page for ease of reference.

Figure 2: City of Vaughan RAP Review Flow Chart



Footnotes:

1. *ESA in accordance with O. Reg. 153/04 (as amended)*

7.3 Record of Site Condition (RSC)

A Record of Site Condition (RSC) will be required as a condition of development approval, if any of the following circumstances apply:

- i) The proposal includes a change in use to a more sensitive land use as defined under *O. Reg. 153/04* (as amended).
- ii) The subject land requires remediation.

A copy of the RSC along with an MOE acknowledgement letter confirming that the RSC was filed on the Environmental Site Registry must be provided to the City as a condition of approval of the development application.

7.4 Use of Risk Assessment and Stratified Clean-up Approach

The City acknowledges the use of risk assessment and/or stratified clean-up in accordance with *O. Reg. 153/04* as an alternative approach for addressing contaminated sites where remediation may not be feasible. As such, the utilization of risk assessment or stratified clean-up approach would be permitted for development sites where no lands are to be conveyed or acquired by the City. The proponent will be required to provide applicable documentation to the satisfaction of the City indicating that the approach is a viable alternative and recommended over remediation.

For development sites where the proposed remediation includes land to be conveyed or acquired by the City, the use of a risk assessment or stratified cleanup approach will be assessed on a case-by-case basis, having regard for the individual constraints and merits of the development proposal, and will be brought to the attention of Council.

Should a risk assessment or stratified clean-up approach be utilized, all applicable documentation must be forwarded to the City for review (e.g., MOE Pre-Submission Form, MOE correspondence, Risk Evaluation/Assessment Report, Risk Management Plan, Certificate of Property Use, RSC acknowledged by MOE etc.). The applicant may also be requested to undertake a public communication program, to the satisfaction of the City. Documentation must be prepared by or under the supervision of a QP (ESA or RA, as applicable). Reliance on submitted reports must be provided to the City and its peer reviewer as part of the development application, either within the body of the report or in a separate reliance letter. A sample reliance letter template is provided in Appendix A.

8.0 Conditions on Development Approvals

If the development application or ESA reports have indicated that **remediation of the subject land and/or a RSC is required**, appropriate environmental site contamination policies/conditions will be applied to the Amendment or Agreement (i.e., Official Plan Amendment, Zoning By-Law Amendment, Draft Plan of Subdivision, Site Plan Agreement, Letter of Undertaking) which may include the following, as applicable.

8.1 Official Plan Amendments and Zoning By-Law Amendments

- The Official Plan Amendment should include policies respecting any additional reports or approvals required to address the remediation of the site, prior to development occurring, and the use of a “H” Holding Symbol in the amending zoning by-law.
- For Zoning By-Law Amendments, “H” Holding Symbol will be used to grant approval conditional upon the proponent’s RAP and verification of clean-up (RSC).
- The “H” Holding Symbol would have the effect of requiring the owner to carry out or cause to be carried out the recommendations and measures contained in the environmental consultants report(s) including the RAP and to obtain the necessary permits to perform the works referred to prior to construction on the site and to provide the City with a completed RSC acknowledged by the MOE prior to lifting of the “H” Holding Symbol.

8.2 Plan of Subdivision

- The Proponent shall carry out or cause to be carried out the recommendations and measures contained within the ESA report(s) and RAP and to obtain any necessary permits to perform the work(s) referred to, prior to the commencement of any grading or construction on the site.
- The Proponent shall provide the City with appropriate environmental documentation (e.g., Updated ESA reports, Phase Three ESA report, certificate letters) which documents that the site remediation and restoration has been conducted and completed in accordance with the requirements of the *Environmental Protection Act* and its regulations and indicates that the site is suitable for the intended property use.
- Prior to final approval, the Proponent shall provide the City with a copy of the RSC which has been acknowledged by the MOE.

8.3 Site Plan Agreement/Letter of Undertaking

- The Proponent shall carry out or cause to be carried out the recommendations and measures contained within the ESA report(s) and RAP and to obtain any necessary permits to perform the work(s) referred to, prior to the commencement of any grading or construction on the site.
- The Proponent shall provide the City with appropriate environmental documentation (e.g., Updated ESA reports, Phase Three ESA report, certificate letters) which documents that the site remediation and restoration has been conducted and completed in accordance with the requirements of the *Environmental Protection Act* and its regulations and indicates that the site is suitable for the intended property use.
- Prior to the issuance of building or foundation permits, the Proponent shall provide the City with a RSC which has been acknowledged by the MOE. Should the Proponent require excavation as part of the works to remediate the subject lands, a shoring and excavation permit may be issued by the Buildings Standards Department to facilitate remedial works prior to issuing of a building or foundation permit provided City interests are protected through financial assurances or other means.

8.4 Other Conditions (as applicable)

- The Proponent shall reimburse the City for the cost of an external peer review.
- For developments where no remediation was required but a change in use to a more sensitive land use as defined under *O. Reg. 153/04* (as amended) is proposed, prior to final approval, the Proponent shall provide the City with a copy of the RSC which has been acknowledged by the MOE.
- For development on or adjacent to closed or active waste disposal sites or landfill facilities, the proponent may be required to provide written approval from the MOE that the development satisfies the provisions of the *Environmental Protection Act* and that the site has been decommissioned and rehabilitated in accordance with applicable legislation and to the satisfaction of the MOE.

8.5 Land Conveyances/Acquisitions to the City

Where **lands are being conveyed to or acquired by the City**, the following clauses will be included as a condition in the Site Plan/Letter of Undertaking or Subdivision Agreement (as applicable) which has the effect of:

- Where **only a Phase One ESA** was completed, the Proponent's QP covenants and agrees that:
 - The assessment of the subject land has been conducted in accordance with the current requirements of the *Environmental Protection Act* and its regulations by or under the supervision of a QP.
 - They are not aware of any soil, ground water or sediment contamination on or within lands to be conveyed to the municipality that would exceed the MOE Soil, Ground water, and Sediment Standards (as amended) applicable for the subject lands and its intended use.
 - They are not aware of soil, ground water or sediment contamination on or within adjacent lands that could potentially migrate on to lands conveyed to the municipality resulting in exceedences of the MOE Soil, Ground water, and Sediment Standards (as amended) applicable for the intended use.
- Where a **Phase One and Phase Two ESA** were completed, the Proponent's QP covenants and agrees that:
 - The assessment of the subject land has been conducted in accordance with the current requirements of the *Environmental Protection Act* and its regulations by or under the supervision of a QP.
 - Lands to be conveyed to the municipality meet the MOE Soil, Ground water, and Sediment Standards (as amended) applicable for the subject lands and its intended use.
 - They are not aware of soil, ground water or sediment contamination on or within adjacent lands that could potentially migrate on to lands conveyed to the municipality resulting in exceedences of the MOE Soil, Ground water, and Sediment Standards (as amended) applicable for the intended use.
- Where **park land/open space is being conveyed to or acquired by the City**, prior to conveyance/acquisition and/or the issuance of building permits, the Proponent shall submit Phase Two ESA report(s) addressing all park blocks/open spaces in the plan to the satisfaction of the City. Note that if areas of potential environmental concern are identified in the



Phase One ESA, the Phase Two ESA on the park land and/or open spaces shall occur **prior** to the Committee of the Whole AND, in all cases, a Phase Two ESA on the park land and/or open spaces shall be conducted **after** the City has certified the rough grading for the park land and/or open spaces but prior to placement of topsoil and landscaping.

9.0 Definitions and Acronyms

Brownfield Site - abandoned or underutilized properties where development or activities have led to the presence or potential for environmental contamination. Brownfields are usually former industrial or industrial/commercial lands (e.g., closed factories, processing plants, gas stations).

Contaminated Site - an area of land in which the soil or underlying ground water or sediment contains a hazardous waste or substance in an amount or concentration that exceeds provincial environmental quality standards. A site is contaminated if it is unsuitable for specific uses of land, water and sediment.

DTE – Development/Transportation Engineering

ESA – Environmental Site Assessment

GUSCO – *Ontario Ministry of the Environment Guideline for Use at Contaminated Sites in Ontario* (June 1996 and revised February 1997)

MOE – Ontario Ministry of the Environment

MOE Soil, Ground water, and Sediment Standards – *Ontario Ministry of the Environment Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act* (April 15, 2011)

Phase One ESA – is the systematic process by which a Qualified Person seeks to determine whether a particular property is or may be subject to actual or potential contamination, and the likely nature and location of the contamination. The process involves gathering and examining documents, maps and verbal information pertaining to a site. A Phase One ESA does not involve the investigative procedures of sampling, analyzing, and measuring. The Phase One ESA shall be completed in accordance with *O. Reg. 153/04* (as amended) or generally meeting the intent of *O. Reg. 153/04* (as amended) where a RSC is not mandatory.

Phase Two ESA – is the systematic process by which a Qualified Person seeks to characterize and delineate the extent of a property's contamination, by means of intrusive investigations, including surveys, excavating, sampling and analyses, to provide information to enable a decision on whether site remediation is required. A Phase Two ESA does not involve implementing any remedial activities. The Phase Two ESA shall be completed in accordance with *O. Reg. 153/04* (as amended) or generally meeting the intent of *O. Reg. 153/04* (as amended) where a RSC is not mandatory.

Phase Three ESA and Remedial Action Plan (RAP) - Depending on the results of the Phase Two ESA, a Phase Three ESA/RAP may be required in order to remediate the site. A Phase Three ESA/RAP involves determining the course of action required to remove contamination from the property and implementation and documentation of that strategy. Documentation must be sufficient to demonstrate that the remedial objectives were achieved. Examples of remediation strategies include: Excavation and soil removal; Physical treatment; Hydraulic containment; Ground water treatment; Offsite

treatment; In-situ treatment system; Institutional control. Depending on the nature of the contamination, on-going monitoring may be required for a determined period of time. The Phase Three ESA shall be completed in accordance with *O. Reg. 153/04* (as amended).

Pre-Application Consultation (PAC) – Prior to submitting a Development Application, the Owner and/or Agent must arrange a Pre-Application Consultation meeting with the Development Planning Department. The purpose of this meeting is for the Owner and/or Agent to present a proposal and for City Staff to identify, on a preliminary basis only, the required information for a complete submission of the Development Application.

Proponent – refers to the Owner and/or Owner’s Agent for the subject lands.

Qualified Person (QP) – is defined under **O. Reg. 153/04** (as amended) as someone:

- Who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, or,
- Who holds a certificate of registration under the *Professional Geoscientists Act*, 2000, and is a practising member, temporary member or limited member of the Association of Professional Geoscientists of Ontario.

Record of Site Condition (RSC) – is a document prepared by a Qualified Person based on ESAs and filed electronically with the MOE in the Environmental Site Registry (ESR) to certify that a property has been assessed and meets the soil, ground water, and sediment standards applicable to the proposed use of the property. The ESA(s) will either confirm that there is no evidence of contaminants at the property that would interfere with any future use of the property or that contaminants at the property do not exceed applicable concentration standards. **O. Reg. 153/04** (as amended), made under the *Environmental Protection Act*, outlines the provisions related to RSCs.

Remediation – refers to the cleanup and management of contaminated soil, ground water and sediment so that the site will be suitable for its future intended use.

Risk Assessment – is the scientific process used to describe and estimate the likelihood of adverse effects to human health and the environment resulting from exposure to contaminants. The purpose of a risk assessment is to develop standards that will protect the people and organisms expected at a property, that is being used for a given purpose.

10.0 References

City of Vaughan, *Background Report on Policy and Procedures for Dealing with Contaminated or Potentially Contaminated Sites*, May 2001

City of Vaughan, *Policy and Procedures for Dealing with Contaminated or Potentially Contaminated Sites*, May 2001

Ontario Ministry of the Environment, *Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Environmental Protection Act*, April 2011

Ontario Ministry of the Environment, *Records of Site Condition – A Guide on Site Assessment, the Cleanup of Brownfield Sites and the Filing of Records of Site Condition*, October 2004

Ontario Ministry of the Environment, *Guideline for Use at Contaminated Sites in Ontario*, June 1996, Revised February 1997

Ontario Regulation (O. Reg.) 153/04 (as amended)

ATTACHMENTS

City of Vaughan Site Screening Questionnaire
Letter of Reliance Template
City of Vaughan Environmental Remedial Action Plan (RAP) Requirements

SITE SCREENING QUESTIONNAIRE AND ENVIRONMENTAL CERTIFICATION

(To be completed by Owner and, if applicable, Purchaser and/or Lessee of the Subject Property)

SUBJECT PROPERTY ADDRESS (Legal/Municipal): _____

1. What is the historical, current, and proposed use of the Subject Property? Historical: _____ Current: _____ Proposed: _____	
2. Is there reason to believe the Subject Property may be contaminated either from <u>historical</u> or <u>current land use</u> or from <u>adjacent properties</u> ? (If yes, please circle applicable underlined item(s))	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Uncertain
3. Has <u>land filling</u> or <u>waste dumping</u> ever occurred on the <u>Subject Property</u> or on <u>adjacent properties</u> ? (If yes, please circle applicable underlined item(s))	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Uncertain
4. Has a <u>gas station</u> or <u>dry cleaning operation</u> ever been located on the <u>Subject Property</u> or on <u>adjacent properties</u> ? (If yes, please circle applicable underlined item(s))	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Uncertain
5. Was the <u>Subject Property</u> or <u>adjacent properties</u> ever used for industrial/commercial purposes (e.g., <u>product manufacturing</u> , <u>chemical/petroleum bulk storage</u> , <u>rail yards/tracks</u> , <u>automotive repair</u> , <u>metal fabrication</u> , other: _____)? (If yes, please circle/fill-in the applicable underlined item(s))	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Uncertain
6. Was the Subject Property ever used for agricultural purposes with the application of <u>cyanide-based pesticides</u> (e.g., for orchards) or <u>sewage sludge</u> ? (If yes, please circle applicable underlined item(s))	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Uncertain
7. Are there or have there been any <u>underground</u> or <u>aboveground</u> storage tanks located on the Subject Property? (If yes, please circle applicable underlined item(s))	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Uncertain
8. Are you aware of any hazardous materials that may be present or that were generated on the Subject Property (i.e., asbestos, PCBs, lead, mercury, etc.)?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Uncertain
9. Is the Subject Property within 500 m (1,640 ft) of an <u>operational</u> or <u>non-operational</u> landfill or dump? (If yes, please circle applicable underlined item(s))	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Uncertain
10. Have any previous environmental reports been prepared for the Subject Property within the last 5 years, including but not limited to a Phase I, II, III Environmental Site Assessment(s), Remedial Action Plan, Risk Assessment, Record of Site Condition, or Certificate of Property Use? If Yes, please submit the documents in digital and hard copy format with your application along with a letter granting third party reliance on the documents to the City of Vaughan and its peer reviewer. If the reports were in connection to a previous City of Vaughan Development Application, please provide the City reference file number(s) (e.g., OP-, Z-, 19T-, DA-): _____	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Uncertain

NOTE: ALL QUESTIONS MUST BE ANSWERED.

<u>TO BE COMPLETED BY CITY OF VAUGHAN</u>	
A. DEVELOPMENT PLANNING DEPARTMENT	
1. Are all the Site Screening Questions answered and the Environmental Certification on page 2 completed, dated and signed?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Does the completed Site Screening Question include any "Yes" or "Uncertain" responses?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Does the proposal include any lands to be conveyed to the City?	<input type="checkbox"/> Yes <input type="checkbox"/> No
B. DEVELOPMENT/TRANSPORTATION ENGINEERING DEPARTMENT	
1. Does the proposal require any lands to be conveyed to the City or for the City to acquire an interest in any lands for such purposes as, but not limited to, road widening, storm water management, services, etc.?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Is there a change proposed for the Subject Property to a more sensitive land use as defined by the MOE? If Yes, then ESA reports and RSC is required as per O. Reg. 153/04.	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Is a Phase One, Two, Three ESA, and/or RAP required to be submitted with the application? If Yes, provide correspondence to Development Planner to notify proponent in PAC meeting.	<input type="checkbox"/> Yes <input type="checkbox"/> No



City File Number: _____
 City File Name: _____
 City Planner and extension: _____

ENVIRONMENTAL CERTIFICATION

(To be signed by Owner and, if applicable, purchaser and/or lessee)

I/We _____ the owner and/or purchaser _____ and/or lessee _____ (delete terms not applicable) of the above-noted lands Hereby acknowledge that the information provided in the site screening questionnaire is true to the best of my/our knowledge as of the date below and it is my/our responsibility to ensure that I/We are in compliance with all applicable legislative enactments, guidelines and other government directives pertaining to contaminated or potentially contaminated sites including, but not limited to, the *Environmental Protection Act (as amended)*. I/We further acknowledge that the City of Vaughan and/or the Regional Municipality of York are not responsible for the identification and/or remediation of contaminated sites and in any action or proceeding for losses or damages related to environmental contamination or clean-up of contamination will not sue or claim over against the City of Vaughan and/or the Regional Municipality of York.

Affix Corporate Seal of registered owner of property. Processing will not commence until this is provided.

Dated at _____ this _____ day of _____ 2_____.
Location Day Month Year

Signature of OWNER _____
Please Print Name
(AFFIX Corporate Seal, if applicable)

Dated at _____ this _____ day of _____ 2_____.
Location Day Month Year

Signature of PURCHASER _____
Please Print Name
(AFFIX Corporate Seal, if applicable)

Dated at _____ this _____ day of _____ 2_____.
Location Day Month Year

Signature of LESSEE _____
Please Print Name
(AFFIX Corporate Seal, if applicable)

(INSERT COMPANY LETTERHEAD/LOGO)

(INSERT DATE)

Andy Lee, P. Eng
Environmental Engineer
Development/Transportation Engineering Department, City of Vaughan
2141 Major Mackenzie Drive
Vaughan, ON L6A 1T1

Dear Mr. Lee,

Re: Reliance Letter for (INSERT FULL SITE ADDRESS OR LEGAL DESCRIPTION AND PROJECT REFERENCE NUMBER)

(INSERT NAME OF YOUR COMPANY) (the “Consultant”) understands that **(INSERT NAME OF THE OWNER/PROPONENT)** (the “Client”) is seeking approval of their development application from the City of Vaughan regarding the above-referenced property (the “Site”). The Client has requested that the City accept the following report(s), which was prepared by the Consultant for the exclusive benefit and use of the Client:

- **(INSERT THE TITLES OF ALL APPLICABLE ENVIRONMENTAL REPORTS, REFERENCE NUMBERS, AND DATES)**

The Consultant therefore agrees that the City and its peer reviewer may use and rely on the Report as if the report had been prepared for the use and benefit of the City. The Consultant recognizes that the City will utilize the Report for the purposes of assessing the environmental risk inherent in the contemplated development of the Site. The Consultant certifies that the Report was prepared in accordance with the due diligence practices and environmental laws and regulations applicable at the time of the investigation.

Yours very truly,

(INSERT SIGNATURE OF QUALIFIED PERSON, AS DEFINED UNDER O. REG. 153/04(AS AMENDED))

(INSERT YOUR NAME, FOLLOWED BY QUALIFIED PERSON DESIGNATION) (I.E., P. ENG OR P. GEO)

(INSERT YOUR TITLE)

(INSERT YOUR CONTACT INFORMATION)



ENVIRONMENTAL REMEDIAL ACTION PLAN (RAP) REQUIREMENTS

The following checklist ensures proponents submit an environmental Remedial Action Plan (RAP), where required, containing complete and comprehensive information. The checklist shall be completed and submitted along with the RAP to the City for review and acceptance.

The checklist is based on recommended Ministry of the Environment (MOE) guidelines as well as requirements outlined under *O. Reg. 153/04* (as amended). It is not meant to be an exhaustive list and additional requirements may be identified by the City in the course of the environmental documents review.

REMEDIAL ACTION PLAN CHECKLIST	
1. Description of the proposed remediation objective and strategy to reduce/eliminate concentrations of contaminants exceeding the applicable MOE site condition standards for soil, ground water, and/or sediment (e.g., excavation and soil removal; offsite treatment; in-situ treatment, containment/isolation etc.).	<input type="checkbox"/>
2. Site Plan Figure(s) showing locations and concentrations of contaminants exceeding the applicable MOE site condition standards for soil, ground water, and/or sediment.	<input type="checkbox"/>
3. Site Plan Figure(s) showing the estimated vertical and horizontal extent of contamination on the site.	<input type="checkbox"/>
4. The estimated quantity of contaminated soil/ground water/sediment required to be remediated (in m ³ or tonnes and/or litres).	<input type="checkbox"/>
5. The estimated quantity of imported clean fill material required following remediation (if applicable) (in m ³ or tonnes).	<input type="checkbox"/>
6. A management plan outlining how the remediation of contaminated soil / ground water/sediment will be undertaken along with associated onsite activities (e.g., provide details on segregation of soils, stockpiling, offsite removal, onsite screening of contaminants, long-term monitoring requirements, onsite supervision schedule, management of impacted groundwater, dust, noise and traffic issues, etc.).	<input type="checkbox"/>
7. The confirmatory sampling strategy detailing the media, the specific analyses to be undertaken on the media, and the number and location of confirmatory samples to be submitted for chemical analysis following implementation of the remediation strategy. If excavation is proposed, confirmatory sampling should follow the minimum floor and wall sampling requirements for excavations as presented in <i>O. Reg. 153/04, Schedule E- Part V, Table 3</i> (as amended). If stockpiles are present on site, confirmatory sampling follow the minimum stockpile sampling frequency as presented in <i>O. Reg. 153/04, Schedule E- Part V, Table 2</i> (as amended).	<input type="checkbox"/>
8. If import of clean fill material is required for site restoration, the proposed confirmatory sampling strategy for imported clean fill material to confirm it meets the applicable MOE site condition standards.	<input type="checkbox"/>
9. The Contingency Remediation Plan in the event confirmatory sampling results indicate concentrations exceeding the applicable MOE site condition standards.	<input type="checkbox"/>
10. The Quality Assurance/ Quality Control Plan and Health and Safety Plan to be implemented during remedial activities.	<input type="checkbox"/>
11. The Communications and Reporting Plan to the City and other regulatory agencies.	<input type="checkbox"/>
12. The approximate timelines and/or stages of the implemented remediation strategy.	<input type="checkbox"/>
13. Description of regulatory agency approval requirements and/or other responsible authorities , if applicable (e.g., MOE Environmental Compliance Approval (ECA) for discharges such as air/noise, water, waste treatment, TRCA approval, etc.).	<input type="checkbox"/>
14. Proponent's Qualified Person (QP) Sign-off and Owner's Certification of Implementation of the RAP (include title, designations and stamps, signatures, and printed names).	<input type="checkbox"/>

Checklist Completed by (print name): _____

Signature: _____

Company: _____

Date: _____