

# Phase Two Environmental Site Assessment



---

## What is it?

A Phase Two Environmental Site Assessment (ESA), prepared in accordance with Ontario Regulation (O. Reg.) 153/04, is a type of study that involves physical testing of soil, groundwater, surface water and/or sediment (where applicable) to determine if one or more contaminants are present on the subject property that exceed the applicable standards for the intended use.

## Who prepares it?

A Qualified Person, as defined under O. Reg. 153/04, who holds a valid licence as a Professional Engineer (P. Eng.) or who holds a valid certificate of registration as a Professional Geoscientist (P. Geo.).

## Why is it required?

The Phase Two ESA is required to confirm whether one or more contaminants may be present on the subject property that exceed any of the applicable standards for the intended use.

## When is it required?

A Phase Two ESA is required when it is recommended in a Phase One ESA report. A Phase Two ESA may be required in support of the following development application types:

- Official Plan Amendment
- Zoning By-law Amendment
- Draft Plan of Subdivision / Condominium
- Site Plan Control
- Consent to Sever
- Minor Variance

## How to prepare it

- **Introduction and Background:** Describe the location of the subject property, ownership (and contact information), current and future uses, and the applicable Generic Standards. Describe the physical setting of the subject property and surrounding area. Provide a summary of the Phase One ESA findings and any previous environmental investigations.
- **Criteria and Method:** Follow site investigation and reporting requirements for Phase Two Environmental Site Assessments as prescribed under O. Reg. 153/04 under Part VIII and Schedule E.
- **Assessment/Analysis:** Compare laboratory data of each Contaminant of Concern (COC) from all collected soil and groundwater samples (and other media, where applicable) from each Area of Potential Environmental Concern on the subject property against the applicable Generic Standards for the intended use and assess whether all COCs have been effectively delineated both horizontally and vertically. Include a Phase Two

# Phase Two Environmental Site Assessment



Conceptual Site Model, as prescribed under O. Reg. 153/04. If remedial activities were undertaken, then summarize the remedial actions and confirmation sampling performed.

- **Conclusions:** Summary of the location and concentration of COCs in comparison to the applicable Generic Standard(s) for the intended use(s). The Qualified Person makes a determination whether or not the subject property meets the applicable Generic Standards as of the certification date of the report. Where it does not meet the applicable Generic Standards, further delineation of one or more COCs may be recommended on the subject property and/or off-site, and/or proceeding with the development of a remedial action plan to properly address contaminated material.

**Appendices:**

- Sampling and Analysis Plan
- Field Logs (boreholes, monitoring wells, test pits, sediment sampling, soil vapour, etc.)
- Laboratory Analytical Results and Chain of Custody
- Residue Management
- Survey Plan of Phase Two Property
- Remediation Report and Records (where remedial activities undertaken)

## Additional Information

- A “Phase II ESA” that is prepared following the Canadian Standards Association (“CSA”) standard Z769-01 (R2013), is not regulated under provincial legislation, cannot be used to file a Record of Site Condition, and will not be accepted by the City for a land dedication.
- All Phase Two ESA reports submitted to the City must be accompanied by either a Letter of Reliance to the satisfaction of the City or the report must be directly addressed to the Corporation of the City of Mississauga.
- Any Phase Two ESA reports submitted to the City for land dedications that exceed 18 months will not be accepted a Record of Site Condition based on the report(s) has been filed on the Environmental Site Registry.
- A Building permit may indicate that a Record of Site Condition is required due to a change in land use to a more sensitive use. In such cases, a Phase One ESA will be required as a first step, which may recommend that a Phase Two ESA be completed in order to file a Record of Site Condition.
- If a Phase Two ESA report indicates that contaminants are present on the property that exceed the applicable site condition standards, then a Qualified Person will need to prepare a Remedial Action Plan to properly address the contamination to meet the applicable standards. A Remedial Action Plan may include the use of a Risk Assessment either as an alternative to, or in combination with, physical remediation methods to remove and/or treat contamination in soil and/or groundwater. (Please see Risk Assessment terms of reference for more details.)