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## SOIL FILL ACCEPTANCE PROTOCOL

Acceptance of soil fill on the property located at 410B Highway 48, Beaverton, Brock, Ontario requires the following:

- 1) Soil fill quality must meet the Ministry of the Environment, Conservation, and Parks *TABLE 2.1: Full Depth Excess Soil Quality Standards in a Potable Ground Water Condition, in Agricultural or Other Property Use, as per O.Reg 406/19*
- 2) Dry soil fill must not be liquid, as confirmed either by soil moisture or for soil with high moisture percentage by the *Test Method for the Determination of Liquid Waste* (slump test) set out in Schedule 9 of *R.R.O. Regulation 347 - General Waste Management* pursuant to the *Environmental Protection Act*. Premium rates will apply to wet soil fill.
- 3) A report, prepared by a Qualified Person, as defined in the *Environmental Protection Act*, must have been prepared in the past 18 months and must include the following:
  - a. Identification and address of the generating location.
  - b. Description of the generating location: past and present property use and potentially contaminating activities if any.
  - c. A description of the soil (e.g., type, color, etc.) to be shipped.
  - d. Description of the excavation or project that will result in the generation of soil fill.
  - e. The anticipated volume of soil fill to be shipped.
  - f. An estimated time frame in which the material will be shipped.
  - g. A record of the results of a comprehensive soil testing program for the generating location, including a description of and rationale for the sampling locations, sample collection procedures, and the parameters analyzed. Results shall be within the past 2 years, or the Qualified Person must state that results remain representative of current conditions.
  - h. Certificates of Analysis, including the Chain of Custody from a laboratory certified with CALA (Canadian Association for Laboratory Accreditation) for all samples tested as part of the comprehensive soil testing program.
  - i. A site plan which clearly shows areas of excavation and a sample location.
  - j. A statement from the Qualified Person stating that in his/her opinion the soil fill satisfies the requirements of this protocol and is suitable for placement on the property located at 410B Highway 48, Brock.
  - k. Property located at 410B Highway 48, Brock, and our third-party reviewer must be provided the reliance on the report content to the same degree as the original client.

## **REFERENCE SHEET – SOIL FILL ACCEPTANCE PROTOCOL**

### **SOIL FILL SAMPLING PROGRAM**

Sampling will be according to a Sampling and Analysis Plan (SAP) prepared in accordance with *Ontario Regulation 406/19 On-site and Excess Soil Management*, as applicable. When an SAP is not required by regulation, representative sampling distributed across the generating area and to the depth of planned excavation is required, with the following guidance:

- Soil fill analysis:
  - metals & inorganics (including EC and SAR), PHC (F1-F4), VOCs, and PAHs.
  - Soil fill described as Topsoil must also be tested for OCPs.
- Soil fill sampling with a minimum of three samples or at a frequency, as follows:
  - Excavation projects: one sample per 500 m<sup>3</sup>,
  - Trenching projects: one sample approximately every 100 meters,
  - Stockpile projects: one sample per 350 m<sup>3</sup>.
- Sampling shall include representative samples from each stratigraphic layer, to the anticipated depth of the excavation or representing the entire stockpile.
- Field screening for soil headspace vapors should be conducted as part of all sampling programs and sample submission should represent the worst case based on field screening.

A reduced analytical program will be considered with rationale provided by Qualified Person.

### **OTHER MATERIALS**

Only topsoil, silt, sand, and clay will be accepted at the Subject Site, in accordance with the Township of Brock *bylaw 2633-2015-PP*, as amended by *bylaw 2703-2016-PP*.

### **GENERAL**

The reviewer of the Site is King EPCM. Soil fill will not be accepted until their document review confirms that our acceptance criteria have been met. Review and approval may take up to 1 WEEK.

Additional information beyond the minimum requirements listed may be required.

#### **Submission:**

Email reports to: [general@kingepcm.com](mailto:general@kingepcm.com)

Please reach out to Yu Tao (Tony) Wang, P. Eng. at 647-459-5647 for information or clarification.