Ministry of the Environment, Conservation and Parks Ministère de l'Environnement, de la Protection de la nature et des Parcs



## **Certificate of Property Use**

Environmental Protection Act, R.S.O. 1990, c.E.19, s.168.6 and 197

Certificate of Property use number 5671-A6BRE7-1 Risk Assessment number 5671-A6BRE7

Owner: Suncor Energy Inc.

3275 Rebecca Street

Oakville, Ontario, L6L 6N5

Site: 7115 Yonge Street

City of Markham, Regional Municipality of York

#### with a legal description of:

Part of Lots 17, 18, 19, & 321 And 12 foot lane, Registered Plan 2446; City of Markham

Being All of PINs 03020-0534 (LT) and 03020-0535 (LT)

The conditions of this Certificate of Property Use (CPU) address the Risk Management Measures in the Risk Assessment noted above and described in detail in Part 1 below (Risk Assessment). In the event of a conflict between the CPU and the Risk Assessment, the conditions of the CPU take precedence.

#### **Summary:**

Refer to Part 1 of the CPU, Interpretation, for the meaning of all the defined capitalized terms that apply to the CPU.

i) CPU requirements addressed in Part 4 of the CPU, Director Requirements, are summarized as follows:

a. Installing/maintaining any equipment	Yes
b. Monitoring any contaminant	Yes
c. Refraining from constructing any building specified	Yes
d. Refraining from using the Property for any use specified	Yes
e. Other: Prohibiting the construction or use of any potable	Yes
groundwater supply wells; maintaining a barrier to site soils	
with a hard cap or fill cap; and preparing and implementing	
a soil and groundwater management plan and health and safe	ty plan for the
Property	

- ii) Duration of Risk Management Measures identified in Part 4 of the CPU is summarized as follows:
  - a. The requirement for vapour intrusion mitigation measures is required for as long as the Contaminants of Concern are present on the Property.
  - b. The prohibition against potable groundwater use and construction of potable supply wells applies for as long as the Contaminants of Concern are present on the Property.
  - c. The barrier to site soils over the entirety of the Property shall be maintained for as long as the Contaminants of Concern are present on the Property.
  - d. The soil and groundwater management plan shall be required for the Property during any Intrusive Activities for as long as the Contaminants of Concern are present on the Property.
  - e. The health and safety plan shall be required for the Property during any Intrusive Activities for as long as the Contaminants of Concern are present on the Property.
  - f. All other Risk Management Measures shall continue indefinitely until the Director alters or revokes the CPU.

## **Part 1: Interpretation**

In the CPU the following terms shall have the meanings described below:

"Act" means the Environmental Protection Act, R.S.O. 1990, c. E.19, as amended.

"Adverse Effect" has the same meaning as in the Act; namely,

- (a) impairment of the quality of the natural environment for any use that can be made of it
- (b) injury or damage to property or to plant or animal life;
- (c) harm or material discomfort to any person;
- (d) an adverse effect on the health of any person;
- (e) impairment of the safety of any person;
- (f) rendering any property or plant or animal life unfit for human use:
- (g) loss of enjoyment of normal use of property; and,
- (h) interference with the normal conduct of business.

"Approved Model" has the same meaning as in subsection 1 (1) of Schedule C of O. Reg. 153/04, namely, the data file entitled "Modified Generic Risk Assessment Model" and dated October 19, 2009 as amended from time to time, that is maintained by the Ministry as part of its Brownfield initiative and is available on the Internet and may be available in such other manner as the Minister considers appropriate.

"Capping Soil" means,

- (a) soil that meets the applicable site condition standards for the Property, or
- (b) soil that meets any higher standards for the contaminant or contaminants as generated by the Risk Assessment without incorporation of risk management measures, and as specified in section 3 of the Risk Assessment and in Schedule 'A' of the CPU.

"Competent Person" has the same meaning as in the Occupational Health and Safety Act, R.S.O. 1990, c. O.1.

"Contaminant" has the same meaning as in the Act; namely any solid, liquid, gas, odour, heat, sound, vibration, radiation or combination of any of them, resulting directly or indirectly from human activities that causes or may cause an Adverse Effect.

"Contaminants of Concern" has the meaning as set out in Item 3.2 of the CPU.

"CPU" means this Certificate of Property Use as may be altered from time to time and bearing the document number **5671-A6BRE7-1**.

"Director" means the undersigned Director or any other person appointed as a Director for the purpose of issuing a certificate of property use.

"EBR" means the Environmental Bill of Rights, 1993, S.O. 1993, c. 28, as amended.

"Intrusive Activities" means any intrusive activity undertaken at the Property, such as excavating or drilling into soil or ground water, which may disturb or expose Property Specific Contaminants of Concern at the Property.

"Ministry" means Ontario Ministry of the Environment, Conservation and Parks.

"O. Reg. 153/04" means Ontario Regulation 153/04, "Record of Site Condition – Part XV.1 of the Act" as amended, made under the Act.

"Owner" means the owner(s) of the Property, beginning with the person(s) to whom the CPU is issued, described in the "Owner" section on Page 1 above, and any subsequent owner(s) of the Property.

"OWRA" means the Ontario Water Resources Act, R.S.O. 1990, c. O.40, as amended.

"Professional Engineer" means a person who holds a licence, limited licence or temporary licence under the *Professional Engineers Act*, R.S.O. 1990, c. P. 28.

"Property" means the property that is the subject of the CPU and described in the "Site" section on page 1 above.

"Property Specific Contaminants of Concern" means one or more contaminants found on, in or under the Property at a concentration that exceeds the applicable site condition standards for the Property and any higher standards for the contaminant or

contaminants as generated by the Approved Model without incorporation of risk management measures, and as specified in section 3 of the Risk Assessment.

"Property Specific Standards" means the property specific standards established for the Contaminants of Concern in the Risk Assessment number and in Item 3.2 of the CPU.

"Provincial Officer" means a person who is designated as a provincial officer for the purposes of the Act.

"Qualified Person" means a person who meets the qualifications prescribed in subsection 5 (2) of O. Reg. 153/04, namely a person who:

- a. Holds a licence, limited licence or temporary licence under the Professional Engineers Act, or
- b. 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.

"Risk Assessment" means the Risk Assessment number 5671-A6BRE7 accepted by the Director on February 28, 2020 and set out in the following documents:

- "Site-Specific Risk Assessment, 7115 Yonge Street, Markham, Ontario", report prepared by Terrapex Environmental Ltd., dated December 27, 2018
- "Revised Site-Specific Risk Assessment, 7115 Yonge Street, Markham, Ontario", report prepared by Terrapex Environmental Ltd., dated June 28, 2019; and
- "Addendum to the Revised Site-Specific Risk Assessment, 7115 Yonge Street, Markham, Ontario", report prepared by Terrapex Environmental Ltd., dated November 4, 2019

"Risk Management Measures" means the risk management measures specific to the Property described in the Risk Assessment and/or Part 4 of the CPU.

"Tribunal" has the same meaning as in the Act; namely, the Environmental Review Tribunal.

## Part 2: Legal Authority

- 2.1 Section 19 of the Act states that a certificate of property use is binding on the executor, administrator, administrator with the will annexed, quardian of property or attorney for property of the person to whom it was directed, and on any other successor or assignee of the person to whom it was directed.
- 2.2 Subsection 132(1.1) of the Act states that the Director may include in a certificate of property use a requirement that the person to whom the certificate is issued provide financial assurance to the Crown in right of Ontario for any one or more of,

- a. the performance of any action specified in the certificate of property use;
- the provision of alternate water supplies to replace those that the
  Director has reasonable and probable grounds to believe are or are
  likely to be contaminated or otherwise interfered with by a contaminant
  on, in or under the property to which the certificate of property use
  relates; and
- c. measures appropriate to prevent adverse effects in respect of the property to which the certificate of property use relates.
- 2.3 Section 168.6 (1) of the Act states that if a risk assessment related to the property has been accepted under clause 168.5 (1) (a), the Director may issue a certificate of property use to the owner of the property, requiring the owner to do any of the following things:
  - a. Take any action that is specified in the certificate and that, in the Director's opinion, is necessary to prevent, eliminate or ameliorate any adverse effect that has been identified in the Risk Assessment, including installing any equipment, monitoring any contaminant or recording or reporting information for that purpose.
  - b. Refrain from using the property for any use specified in the certificate or from constructing any building specified in the certificate on the property
- 2.4 Subsection 168.6(2) of the Act states that a certificate of property use shall not require an owner of property to take any action that would have the effect of reducing the concentration of a contaminant on, in or under the property to a level below the level that is required to meet the standards specified for the contaminant in the risk assessment.
- 2.5 Subsection 168.6(3) of the Act states that the Director may, on his or her own initiative or on application by the owner of the property in respect of which a certificate has been issued under subsection 168.6(1),
  - a. alter any terms and conditions in the certificate or impose new terms and conditions; or
  - revoke the certificate.
- 2.6 Subsection 168.6(4) of the Act states that if a certificate of property use contains a provision requiring the owner of property to refrain from using the property for a specified use or from constructing a specified building on the property.
  - a. the owner of the property shall ensure that a copy of the provision is given to every occupant of the property;
  - b. the provision applies, with necessary modifications, to every occupant of the property who receives a copy of the provision; and
  - c. the owner of the property shall ensure that every occupant of the property complies with the provision.
- 2.7 Subsection 197(1) of the Act states that a person who has authority under the Act to make an order or decision affecting real property also has authority to make an order requiring any person with an interest in the property, before dealing with the

- property in any way, to give a copy of the order or decision affecting the property to every person who will acquire an interest in the property as a result of the dealing.
- 2.8 Subsection 197(2) of the Act states that a certificate setting out a requirement imposed under subsection 197(1) may be registered in the proper land registry office on the title of the real property to which the requirement relates, if the certificate is in a form approved by the Minister, is signed or authorized by a person who has authority to make orders imposing requirements under subsection 197(1) and is accompanied by a registrable description of the property.
- 2.9 Subsection 197(3) of the Act states that a requirement, imposed under subsection 197(1) that is set out in a certificate registered under subsection 197(2) is, from the time of registration, deemed to be directed to each person who subsequently acquires an interest in the real property.
- 2.10 Subsection 197(4) of the Act states that a dealing with real property by a person who is subject to a requirement imposed under subsection 197(1) or 197(3) is voidable at the instance of a person who was not given the copy of the order or decision in accordance with the requirement.

### Part 3: Background

- 3.1 The Risk Assessment was undertaken for the Property on behalf of the Owner to assess the human health risks and ecological risks associated with the presence or discharge of Contaminants on, in or under the Property and to identify appropriate Risk Management Measures to be implemented to ensure that the Property is suitable for the intended use: "commercial use", as defined in O. Reg. 153/04.
- 3.2 The Contaminants on, in or under the Property that are present above the Residential/Parkland/Institutional Property Use Standards within **Table 2** of the *Soil, Groundwater and Sediment Standards for Use under Part XV.1 of the Act published by the Ministry and dated April 15, 2011*, or for which there are no such standards are defined as the Contaminants of Concern. The Property Specific Standards for the Contaminants of Concern are set out in Schedule "A" attached to and forming part of the CPU. Also attached to and forming part of the CPU is the following figures:
  - Figure 1: Site Map
  - Figure 2: Risk Management Measures Typical Cap Cross-Sections
  - Figure 3: Risk Management Measures Conceptual Drawing Sub-Slab Ventilation System (Slab On Grade)
  - Figure 4: Risk Management Measures Conceptual Drawing Sub-Slab Ventilation System (Building with Basement).
- I am of the opinion, for the reasons set out in the Risk Assessment that the Risk Management Measures described therein and outlined in Part 4 of the CPU are

- necessary to prevent, eliminate or ameliorate an Adverse Effect on the Property.
- The Risk Assessment indicates the presence of Contaminants of Concern 3.4 including: metals, petroleum hydrocarbons, volatile organic compounds, polycyclic aromatic hydrocarbons and electrical conductivity and sodium adsorption ratio in soil, and petroleum hydrocarbons and polycyclic aromatic hydrocarbons in groundwater which require on-going pathway elimination. As such, it is necessary to impose Risk Management Measures including: vapour mitigation measures for new buildings; a restriction on any potable groundwater use at the Property; a requirement for barriers to prevent contact with soils; a soil and groundwater management plan for any Intrusive Activities; and a health and safety plan for any Intrusive Activities as set out in the Risk Assessment and in Parts 4 and 5 of the CPU.
- I am of the opinion, that the requirements set out in Part 6 of the CPU are 3.5 necessary to supplement the Risk Management Measures described in the Risk Assessment in Part 4 of the CPU.
- 3.6 I believe for the reasons set out in the Risk Assessment that it is also advisable to require the disclosure of the CPU and registration of notice of the CPU on title to the Property as set out in the section 197 order requirements in Part 7 of the CPU.

#### Part 4: CPU Risk Management Measures Relating to the Risk Assessment and the **Property**

I hereby require the Owner to do or cause to be done the following under the authority of section 168.6(1) of the Act:

- 4.1 Implement, and thereafter maintain or cause to be maintained, the following Risk Management Measures and requirements identified in the Risk Assessment and set out in Items 4.1 to 4.8 as applicable.
- 4.2 Without restricting the generality of the foregoing in Item 4.1, carry out or cause to be carried out the following key elements of the Risk Management Measures:

#### 4.3 Prohibition on groundwater use

- a. Refrain from using groundwater in or under the Property as a source of potable
- b. Properly abandon any wells on the Property, as defined in section 35 of O. Reg. 153/04, according to R.R.O. 1990, Regulation 903 (Wells), as amended, made under the OWRA; and
- c. Refrain from constructing on the Property any wells as defined in section 35 of O. Reg. 153/04.

#### 4.4 Barriers to Site Soils:

- a. The Property shall be covered by a barrier to site soils designed, installed and maintained in accordance with the Risk Assessment, so as to prevent exposure to the Contaminants of Concern identified on the Property for as long as the Contaminants of Concern are present on the Property.
- b. Any new hard cap and or fill cap barriers that are to be installed on the Property, or portion (s) of the Property under development or redevelopment, shall be installed in accordance with Section 7 and Figure H-2 of the Risk Assessment. The new hard cap and fill cap barriers shall consist of the following, at a minimum
  - i. The hard cap barrier(s) shall consist of an asphalt, concrete or impervious paving, above the Property Specific Contaminants of Concern, that is at least 75 millimetres thick, underlain by Granular "A" aggregate or equivalent material and includes a building slab or building foundation and floor slab meeting these specifications.
  - ii. The fill cap barrier(s) shall consist of a minimum of 1 m depth consisting of soil meeting the Property Use Standards within Table 2 of the Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Act, published by the Ministry and dated April 15, 2011.
  - iii. The fill cap barrier shall consist of a minimum depth of 1.5m depth consisting of soil meeting the Property Use Standards within Table 2 of the Soil, Ground Water and Sediment Standards for Use under Part XV.1 of the Act for trees or other deep rooting vegetation.
  - iv. The fill cap barrier within a minimum 1.2m and maximum 2.4m radius of an existing, mature tree at the Property shall consist of a minimum depth of 0.15m of mulch, wood bark or similar matter.
  - v. Gardens including plants intended for human consumption are prohibited unless completed in raised planter boxes.
- c. Within 90 days of completion of the installation of hard cap and fill cap barriers on the Property, or any portion (s) of the Property under development or redevelopment, and upon issuance of this CPU, the Owner shall submit to the Director written confirmation signed by a Professional Engineer that the barriers have been installed in accordance with the requirements of Section 7 of the Risk Assessment and Section 4.4(a) and 4.4(b) of this CPU along with final design specifications/drawings and or as built drawings.
- d. Prior to first use and within 90 days of completion of the installation of the hard cap and fill cap barriers on the Property, or any portion (s) of the Property under development or redevelopment, the Owner shall submit to the Director a site plan that clearly identifies the location of each of the different barriers.
- e. In relation to Item 4.4(a) and 4.4(b) of this CPU, areas of the Property that are **not** in use or **not under development or redevelopment**, hard cap and fill cap barriers are not required as long as exposure to the Contaminants of Concern is

prevented by a fence that restricts access to those areas of the Property and a dust control plan is implemented.

Inspection, maintenance and reporting requirements for barriers

- 4.4.1. Prepare and implement a written inspection and maintenance program, prepared by a Qualified Person and to be retained by the Owner, and to be available for inspection upon request by a Provincial Officer, so as to ensure the continuing integrity of each Barrier at the Property so long as the Property Specific Contaminants of Concern are present at the Property, including, at a minimum:
  - a. procedures and timing for implementing the program;
  - b. semi-annual inspections, in spring and fall, of the Barrier;
  - c. noting any deficiencies in the Barrier observed during the inspections, or at any other time:
  - d. repairing promptly any such deficiencies, to the original design specifications, with written confirmation that the Barrier has been properly repaired;
  - e. contingency measures, such as fencing, to be implemented if cracks, breaches or any loss of integrity of the Barrier cannot be repaired or addressed in a timely manner, to prevent exposure to the Property Specific Contaminants of Concern in that area of the Property; and
  - recording, in writing, all inspections, deficiencies, repairs and implementation of contingency measures, to be retained by the Owner and be available for inspection upon request by a Provincial Officer;

and which are:

- prepared within 90 days of issuance of the CPU; and i.
- ii. updated within 30 days following making any alteration to the program.
- Prepare a site plan of the entire Property, prepared by a Professional iii. Engineer and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, showing the Property, any fencing, and the location, type and design of each Barrier at the Property, including cross-sectional drawings of the Barrier showing its design and vertical and lateral extent:

#### Intrusive Activities

- 4.4.2 Prepare and implement written procedures, prepared by a Qualified Person and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, for written and oral communication to all persons who may be involved in Intrusive Activities at the Property that may disturb a Barrier at the Property, so as to ensure the persons are made aware of the presence and significance of the Barrier and the Property Specific Contaminants of Concern at the Property and the precautions to be taken to ensure the continued integrity of the Barrier when undertaking the Intrusive Activities, and if damaged, to ensure that the Barrier is repaired promptly to the original design specifications, or, if it cannot be repaired promptly, to ensure that the contingency measures are implemented, and records kept, as specified in the inspection and maintenance program; and which are,
  - prepared before any Intrusive Activities are undertaken at the Property; a. and

b. updated within 30 days of any alteration to the procedures.

#### 4.5 Soil and groundwater management plan:

Prepare and implement a written soil and groundwater management plan for the Property, prepared by a Qualified Person and to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, for managing excavated soil or soil brought to the Property, and, if any, groundwater from dewatering during Intrusive Activities at the Property, so as to prevent exposure to or uncontrolled movement or discharge of the Property Specific Contaminants of Concern in soil or groundwater at the Property, including, at a minimum:

- a. procedures and timing for implementing the plan, including the supervision of persons implementing the plan;
- b. measures to control dust and prevent tracking of soil by vehicles and persons from the Property, including the cleaning of equipment and vehicles;
- c. measures, in addition to any applicable measures specified in O. Reg. 153/04, to manage soil excavated at the Property and any soil brought to or removed from the Property, including:
  - i. characterizing for contaminant quality all excavated soil and any soil brought to the Property, including determining whether the soil:
    - 1. is Capping Soil;
    - 2. meets the Property Specific Standards; or
    - 3. exceeds the Property Specific Standards.
  - ii. managing excavated soil separately from any soil brought to the Property, including any excavated soil that is to be:
    - 1. used as Capping Soil at the Property;
    - 2. otherwise used as fill at the Property:
    - 3. removed from the Property.
  - iii. stockpiling of excavated soil and any soil brought to the Property in separate designated areas that:
    - 1. reflect the distinctions described in parts iii. (a) and (b);
    - 2. have been lined and covered, as appropriate, to prevent uncontrolled movement
    - have been bermed, as appropriate, to restrict access by persons;
    - have storm water runoff controls in place to minimize storm water runoff contacting stockpiled soil, with provision for discharge of storm water runoff to a sanitary sewer or to other approved treatment if needed.
- d. measures to manage storm water and any ground water from dewatering at the Property to prevent the movement of entrained soil within and away from the Property, including, in addition to any applicable measures specified pursuant to other applicable law or other instruments, measures such as silt fences, filter socks for catch-basins and utility covers, and provision for discharge to a sanitary sewer or to other approved treatment if needed; and
- e. recording, in writing, the soil, storm water and any ground water management measures undertaken, in addition to any applicable record keeping requirements specified in O. Reg. 153/04 or pursuant to other applicable law or

other instruments, to be retained by the Owner, and be available for inspection upon request by a Provincial Officer, including:

- i. dates and duration of the Intrusive Activities being undertaken;
- ii. weather and site conditions during the Intrusive Activities;
- iii. the location and depth of excavation activities, and dewatering activities, if any:
- iv. dust control and soil tracking control measures:
- v. characterization results for excavated soil and any soil brought to or removed from the Property, and for any ground water from dewatering;
- vi. soil management activities including soil quantities excavated and brought to and removed from the Property, and stockpile management and storm water runoff control;
- vii. management activities for any ground water from dewatering;
- viii. names and contact information for the Qualified Persons and on-site contractors involved in the Intrusive Activities;
- ix. names and contact information for any haulers and receiving sites for soil and any ground water removed from the Property, and for haulers and source sites of any soil brought to the Property; and
- x. any complaints received relating to the Intrusive Activities, including the soil, storm water and any ground water management activities;

and which is,

- i. prepared before any Intrusive Activities are undertaken at the Property; and
- ii. updated within 30 days following making any alteration to the plan.

#### 4.6 Health and Safety Plan

A site-specific health and safety plan shall be developed for the Property and implemented during all Intrusive Activities and a copy shall be maintained on the Property for the duration of these intrusive activities. The Owner shall ensure that the health and safety plan accounts for the presence of the Contaminants of Concern, is designed to reduce or eliminate exposures to vapours in trench air and is implemented prior to any intrusive work being done on the Property in order to protect workers from exposure to the Contaminants of Concern. The health and safety plan shall be prepared in accordance with applicable Ministry of Labour health and safety regulations, shall address any potential risks identified in the Risk Assessment, and shall include, but not be limited to, occupational hygiene requirements, requirements for personal protective equipment, and contingency plan requirements including site contact information. Prior to initiation of any project (as defined in the Occupational Health and Safety Act, as amended) on the Property, the local Ministry of Labour office shall be notified of the proposed activities and that the Property contains contaminated soil and ground water. Implementation of the health and safety plan shall be overseen by persons qualified to review the provisions of the plan with respect to the proposed site work and conduct inspections as required. The Owner shall retain a copy of the plan, which shall be made available for review by a Provincial Officer upon request.

#### 4.7 Vapour Intrusion Barriers

The construction of any new enclosed building(s) on, in or under the Property is prohibited unless the newly constructed building(s) includes a *Sub-Slab Ventilation System with Passive/Active Ventilation System* as per Section 3.1.1 of Appendix H of the RA or a

Ventilated Storage Garage as Section 3.1.2 of Appendix H of the RA. The Owner shall obtain an Environmental Compliance Approval, as necessary, and any other permits or approvals as may be required;

#### 4.7.1 Sub-Slab Ventilation System

The construction of any new building(s) on, in or under the Property is prohibited unless the newly constructed building(s) includes a sub-slab ventilation system to intercept and prevent vapour intrusion into enclosed building(s) and conforms to the requirements of the Ontario Building Code, including Supplementary Standard SB-9, "Requirements for Soil Gas Control" and meets the following requirements:

- a. The installation of the vapour mitigation system shall be completed under the supervision of a qualified Licensed Professional Engineer and a Qualified Person;
- b. The design includes a vapour venting layer beneath the entire building floor slab includina:
  - A network of perforated collection pipes or geocomposite vapour collection i. drains, embedded in a granular material of sufficient permeability and depth: and
  - Vent boxes and/or junctions or other suitable venting infrastructure that ii. convey collected vapours to vent risers
- c. The design includes a geosynthetic vapour barrier layer or equivalent that meets the appropriate gas permeability and chemical resistance specifications and is established above the venting layer and below the floor slab:
- d. Any perforations through the vapour barrier are appropriately sealed;
- e. Vent risers of sufficient size or diameter, frequency and locations to promote efficient venting and that terminate above the roof of the building. Vent risers shall be designed to convey soil vapour from the soil vapour venting layer to discharge to outdoor air above the roof, considering potential entrainment effects and building characteristics such as air intakes and openable windows, doors and other openings.
- f. Vent risers are topped with wind-driven turbines and can be adapted to active ventilation.
- g. A minimum of three monitoring ports constructed to permit sampling of the vapour venting layer. Each port shall correspond to a unique collection point, providing adequate areal coverage of the venting layer.
- h. The installation of the sub-slab ventilation system shall include a quality assurance/quality control (QA/QC) program, undertaken during the installation of the vapour mitigation system and shall be completed by, and clearly documented in a report prepared by, a qualified contractor and overseen by a qualified Licensed Professional Engineer and Qualified Person.

#### 4.7.2 Storage Garage

The construction of any new building(s) on, in or under the Property is prohibited unless the newly constructed Building (s) includes a storage garage as defined in the Building Code, and meets the following requirements:

- a. The storage garage area is constructed at or below the Grade of the Building;
- The storage garage area covers the entire Building Area at Grade; b.

- c. The storage garage complies with all applicable requirements of the Building Code, such as the provisions governing:
  - i. design of a mechanical ventilation system as set out in Division B, Article
     6.2.2.3 (Ventilation of Storage and Repair Garages) of the Building Code;
  - ii. interconnection of air duct systems as set out in Division B, Sentence (2) of Article 6.2.3.9 (Interconnection of Systems) of the Building Code; and,
  - iii. air leakage as set out in Division B, Section 5.4 (Air Leakage) of the Building Code:
- d. The mechanical ventilation system for the storage garage is designed to provide, during operating hours, a continuous supply of outdoor air at a rate of not less than 3.9 liters per second for each metre of floor area or be activated on as as-needed basis by carbon monoxide or nitrogen dioxide monitoring devices as required by the Building Code and as detailed in Section 3.1.2 of Appendix H of the RA.

#### Vapour Monitoring

- 4.7.4 A soil vapour monitoring program shall be implemented for any enclosed building that is constructed on the Property with a sub-slab ventilation system in accordance with Item 4.7.1 of this CPU. The vapour monitoring requirements on the Property shall commence prior to occupancy. All indoor air quality monitoring shall consider USEPA Method TO-15 for the Contaminants of Concerns listed Table 7-1 of Appendix H of the RA. The monitoring program shall be carried out as follows:
  - a. The soil vapour quality monitoring shall be carried out quarterly for the first year, and semi-annually, until such time as the Director, upon application by the Owner, has reviewed the data available and either alters or revokes the monitoring requirement.
  - b. Sampling locations will include monitoring ports in the venting layer and a minimum of one outdoor sampling location for background comparison.
  - c. If the soil vapour sampling concentration for any Contaminants of Concern exceeds the Alert Criteria in Schedule 'B', the Owner shall collect a confirmatory sample within 15 days of receipt of this result.
  - d. If the soil vapour concentration of the confirmatory sample exceeds Schedule 'B' for any target level, then indoor air quality monitoring shall be completed within 30 days of the receipt of the confirmatory result, and indoor air monitoring shall be carried out as follows:
    - the location and number of indoor air samples will be determined considering building layout, potential vapour intrusion points and venting layer area represented by the vapour monitoring;
    - ii. a minimum of one outdoor air sample will be collected during the indoor air monitoring event;
    - iii. Indoor air monitoring will continue concurrently with vapour sampling events;
    - iv. If any indoor air result exceeds target levels in Schedule 'B', submit written notice to the Director within 15 days of the receipt of the results. This notice shall include soil vapour and indoor air confirmatory sampling results, a description of the significance of the results, any measures taken as a result, and recommended contingency measures consistent with Section 5.1.1 of Appendix M of the RA.

e. The Owner shall keep a copy of all sampling data available for inspection by a Provincial Officer upon request.

#### 4.8 Annual Reports

The Owner shall prepare by March 31st of each year, an annual report documenting activities relating to the Risk Management Measures undertaken during the previous calendar year. A copy of this report shall be maintained on file by the Owner and shall be made available for review by a Provincial Officer upon request. The report shall include, but not be limited to, the following minimum information requirements:

- a. A copy of all records relating to the inspection and maintenance program for the barrier to the site soils.
- b. A copy of all records relating to the soil and groundwater management plan.
- c. A copy of all records relating to the health and safety plan.
- d. A copy of all soil vapour and if applicable, indoor monitoring data.

## Part 5: CPU Restrictions on Property Use, Building Construction and Notice Requirements

I hereby require the Owner to do or cause to be done the following under the authority of paragraph 168.6(1)2 of the Act:

#### Property Use Restrictions

- 5.1.1 Refrain from using the Property for any of the following use(s): "agricultural or other" as defined in O. Reg 153/04.
- 5.1.2 Refrain from using the groundwater beneath the Property as a potable water supply. The installation of potable wells on the Property is also prohibited and any monitoring wells or test holes at the Property must be secured to ensure no potable use of these wells.

#### **Building Construction Restrictions**

5.2 Refrain from constructing the following building(s): No enclosed building construction unless constructed in accordance with Items 4.7.1 or 4.7.2 of the CPU

#### Notice of Restrictions

Pursuant to subsection 168.6(4) of the Act, the Owner shall ensure that every occupant of the Property is given notice that the Ministry has issued this CPU and that it contains the provisions noted above in Items 5.1 and 5.2. For the

purposes of this requirement, an occupant means any person with whom the Owner has a contractual relationship regarding the occupancy of all or part of the Property.

### **Part 6: Additional Requirements**

I hereby require the Owner to do or cause to be done the following things under the authority of subsection 168.6(1) of the Act:

#### Site Changes Affecting Risk Management Measures

6.1 In the event of a change in the physical site conditions or receptor characteristics at the Property that may affect the Risk Management Measures and/or any underlying basis for the Risk Management Measures, the Owner shall forthwith notify the Director of such changes and the steps taken or proposed, to implement, maintain and operate any further Risk Management Measures as are necessary to prevent, eliminate or ameliorate any Adverse Effect that will result from the presence on, in or under the Property of any Contaminant of Concern or the discharge of any Contaminant of Concern into the natural environment from the Property. In support of this work, the Director may require a new risk assessment be completed in accordance with O. Reg. 153/04 and submitted to the Ministry for acceptance if the change in the physical site conditions or receptor characteristics is such that it is not contemplated by the existing Risk Assessment or cannot be adequately managed by the Risk Management Measures. An amendment to the CPU will be issued to address the changes set out in the notice received and any further changes that the Director considers necessary in the circumstances.

#### Report Retention Requirements

The Owner shall retain a copy of any reports required under the CPU for a 6.2 period of seven (7) years from the date the report is created and within ten (10) days of the Director or a Provincial Officer making a request for a report, provide a copy to the requesting Director or Provincial Officer.

#### Owner Change Notification

6.3 While the CPU is in effect, the Owner shall, forthwith report in writing to the Director any changes of ownership of the Property.

#### Financial Assurance

6.4 The Director has not included in the CPU a requirement that the Owner provide financial assurance to the Crown in right of Ontario.

# Part 7: Section 197 Order – Property Notice and Certificate of Requirement Registration

I hereby order the Owner to do or cause to be done the following under the authority of subsections 197(1) and (2) of the Act:

#### Property Notice Requirement

7.1 I hereby order the Owner and any other person with an interest in the Property, before dealing with the Property in any way, to give a copy of the CPU, including any amendments thereto, to every person who will acquire an interest in the Property as a result of the dealing with the Property.

#### Certificate of Requirement Registration

7.2 Within fifteen (15) days of receipt of a certificate of requirement, issued under subsection 197 (2) of the Act completed as outlined in Schedule "C", register the certificate of requirement on the title to the Property in the appropriate land registry office.

#### **Verification**

7.3 Immediately after registration of the certificate of requirement, provide to the Director written verification that the certificate of requirement has been registered on title to the Property.

## **Part 8: General Requirements**

- 8.1 The requirements of the CPU are severable. If any requirement of the CPU or the application of any requirement to any circumstance is held invalid, the application of such requirement to other circumstances and the remainder of the CPU shall not be affected thereby.
- 8.2 An application under sub section 168.6(3) of the Act to,
  - a) alter any terms and conditions in the CPU or impose new terms and conditions; or
  - b) revoke the CPU; shall be made in writing to the Director, with reasons for the request.
- 8.3 The Director may alter the CPU under subsections 132(2) or (3) of the Act to change a requirement as to financial assurance, including that the financial assurance may be increased or reduced or released in stages. The total financial assurance required may be reduced from time to time or released by an order issued by the Director under section 134 of the Act upon request and submission of such supporting documentation as required by the Director.
- 8.4 Subsection 186(3) of the Act provides that non-compliance with the requirements of the CPU constitutes an offence.

- 8.5 The requirements of the CPU are minimum requirements only and do not relieve the Owner from,
  - a. complying with any other applicable order, statute, regulation, municipal, provincial or federal law; or
  - b. obtaining any approvals or consents not specified in the CPU.
- 8.6 Notwithstanding the issuance of the CPU, further requirements may be imposed in accordance with legislation as circumstances require. The Director shall also alter the CPU where the approval or acceptance of the Director is required in respect of a matter under the CPU and the Director either does not grant the approval or acceptance or does not grant it in a manner agreed to by the Owner.
- 8.7 In the event that, any person is, in the opinion of the Director, rendered unable to comply with any requirements in the CPU because of,
  - a. natural phenomena of an inevitable or irresistible nature, or insurrections,
  - b. strikes, lockouts or other labour disturbances,
  - c. inability to obtain materials or equipment for reasons beyond your control, or
  - d. any other cause whether similar to or different from the foregoing beyond your control,

the requirements shall be adjusted in a manner defined by the Director. To obtain such an adjustment, the Director must be notified immediately of any of the above occurrences, providing details that demonstrate that no practical alternatives are feasible in order to meet the requirements in question.

- 8.8 Failure to comply with a requirement of the CPU by the date specified does not absolve the Owner from compliance with the requirement. The obligation to complete the requirement shall continue each day thereafter.
- 8.9 The Risk Management Measures identified in the Risk Assessment and also in Part 4 of the CPU and other requirements of the CPU shall commence upon the issuance of the CPU and continue in full force and effect until such time as the Director alters or revokes the CPU.
- 8.10 The provisions of the CPU shall take precedence in the event of a conflict between the provisions of the CPU and the Risk Assessment.

## Part 9: Hearing before the Environmental Review Tribunal

- 9.1 Pursuant to section 139 of the Act, you may require a hearing before the Environmental Review Tribunal (the "Tribunal"), if within fifteen (15) days after service on you of a copy of the CPU, you serve written notice upon the Director and the Tribunal.
- 9.2 Pursuant to section 142 of the Act, the notice requiring the hearing must include a statement of the portions of the CPU and the grounds on which you intend to rely

at the hearing. Except by leave of the Tribunal, you are not entitled to appeal a portion of the CPU, or to rely on a ground, that is not stated in the notice requiring the hearing.

9.3 Service of a notice requiring a hearing must be carried out in a manner set out in section 182 of the Act and Ontario Regulation 227/07: Service of Documents, made under the Act as they may be amended from time to time. The address, email address and fax numbers of the Director and the Tribunal are:

The Secretary Environmental Review Tribunal 655 Bay Street, Suite 1500 Toronto, ON, M5G 1E5

Fax: (416) 326-5370

Email: <u>ERTTribunalSecretary@ontario.ca</u>

and

Celeste Dugas, Director Ministry of the Environment, Conservation and Parks 230 Westney Road South, 5<sup>th</sup> Floor Ajax, Ontario, L1S 7J5 Fax: (905) 427-5602

Email: Celeste.Dugas@ontario.ca

- 9.4 Unless stayed by application to the Tribunal under section 143 of the Act, the CPU is effective from the date of issue.
- 9.5 If you commence an appeal before the Tribunal, under section 47 of the Environmental Bill of Rights, 1993 (the "EBR"), you must give notice to the public in the Environmental Registry of Ontario. The notice must include a brief description of the CPU (sufficient to identify it) and a brief description of the grounds of appeal.

The notice must be delivered to the Minister of the Environment, Conservation and Parks who will place it on the Environmental Registry of Ontario. The notice must be delivered to the Minister of the Ministry of the Environment, Conservation and Parks, College Park 5th FIr, 777 Bay St, Toronto, ON M7A 2J3 by the earlier of:

- (a) two (2) days after the day on which the appeal before the Tribunal was commenced; and
- (b) fifteen (15) days after service on you of a copy of the CPU.
- 9.6 Pursuant to subsection 47(7) of the EBR, the Tribunal may permit any person to participate in the appeal, as a party or otherwise, in order to provide fair and adequate representation of the private and public interests, including governmental interests, involved in the appeal.

- 9.7 For your information, under section 38 of the EBR, any person resident in Ontario with an interest in the CPU may seek leave to appeal the CPU. Under section 40 of the EBR, the application for leave to appeal must be made to the Tribunal by the earlier of:
  - (a) fifteen (15) days after the day on which notice of the issuance of the CPU is given in the Environmental Registry of Ontario; and
  - (b) if you appeal, fifteen (15) days after the day on which your notice of appeal is given in the Environmental Registry of Ontario.

Further information on the Environmental Review Tribunal requirements for an appeal can be obtained directly from the Tribunal at:

Tel: (416) 212- 6349 Fax: (416) 326-5370 www.elto.gov.on.ca

Issued at Ajax this [ day of ], 2020.

Celeste Dugas
Director, section 168.6 of the Act

Schedule "A" Property Specific Standards - Groundwater

Contaminant of Concern	Medium	Property Specific Standard
Benzo(a)pyrene	Groundwater	0.35 μg/L
Benzo(b)fluoranthene	Groundwater	0.55 μg/L
Benzo(g,h,i)perylene	Groundwater	0.3 µg/L
Benzo(k)fluoranthene	Groundwater	0.17 μg/L
Chloride	Groundwater	1,104,000 μg/L
Chrysene	Groundwater	0.31 μg/L
Fluoranthene	Groundwater	0.94 μg/L
Indeno(1,2,3-cd)pyrene	Groundwater	0.29 μg/L
2-(1-)Methylnaphthalene	Groundwater	7.2 µg/L
Petroleum Hydrocarbons, F2	Groundwater	456 μg/L
Petroleum Hydrocarbons, F3	Groundwater	2,760 μg/L
Petroleum Hydrocarbons, F4	Groundwater	3,120 µg/L

## **Property Specific Standards - Soil**

Contaminant of Concern	Medium	Property Specific Standard	
Acenaphthylene	Soil	0.34 μg/g	
Benzene	Soil	92 μg/g	
Bromodichloromethane	Soil	12 μg/g	
Bromoform	Soil	0.6 µg/g	
Dibromochloromethane	Soil	12 μg/g	
1,1-Dichlorethane	Soil 12 μg/g		
Cis-1,2-Dichloroethylene	Soil	12 μg/g	
Trans-1,2-Dichloroethylene	Soil	0.6 μg/g	
Electrical Conductivity	Soil	1.3 mS/cm	
Ethylbenzene	Soil	276 μg/g	
Hexane	Soil	144 µg/g	
Lead	Soil	156 μg/g	
Methyl isobutyl ketone	Soil	6 µg/g	
Methylene Chloride	Soil	0.6 μg/g	
2-(1-) Methylnaphthalene	Soil	28 μg/g	
Naphthalene	Soil	16 µg/g	
Petroleum Hydrocarbons, F1	Soil	9,120 µg/g	
Petroleum Hydrocarbons, F2	Soil	6,120 μg/g	
Petroleum Hydrocarbons, F3	Soil	3,000 µg/g	
Sodium Adsorption Ratio	Soil	25	
Styrene	Soil	12 µg/g	
Tetrachloroethylene	Soil	0.6 μg/g	
Toluene	Soil	1440 μg/g	
1,1,1,-Trichloroethane	Soil	0.6 µg/g	
Trichloroethylene	Soil	0.6 µg/g	
Xylenes (total)	Soil	2400 μg/g	

Schedule "B" **Soil Vapour and Indoor Air Trigger Levels** 

Parameter	Units	Alert Criteria	
		Soil Vapour	Indoor Air
Benzene	μg/m³	25.3	0.506
1,1-Dichlroethane	μg/m³	1,720	34.4
Cis-1,2-Dichlorethylene	μg/m³	1,560	31.3
Trans-1,2-Dichloroethylene	μ <b>g</b> /m³	626	12.5
Ethylbenzene	μg/m³	10,500	209
Hexane	μg/m³	26,100	521
Methylene Chloride	μg/m³	2,420	48.4
Naphthalene	μg/m³	38.6	0.772
PHC F1 Aliphatic C <sub>6</sub> -C <sub>8</sub>	μ <b>g</b> /m³	480,000	9,590
PHC F1 Aliphatic C> <sub>8</sub> -C <sub>10</sub>	μg/m³	26,100	521
PHC F1 Aromatic C> <sub>8</sub> -C <sub>10</sub>	μg/m³	5,210	104
PHC F2 Aliphatic C>10-C12	μg/m³	26,100	521
PHC F2 Aliphatic C> <sub>12</sub> -C <sub>16</sub>	μg/m³	26,100	521
PHC F2 Aromatic C> <sub>10</sub> -C <sub>12</sub>	μg/m³	5,210	104
PHC F2 Aromatic C>12-C16	μ <b>g</b> /m³	5,210	104
Tetrachloroethylene	μ <b>g</b> /m³	214	4.28
Toluene	μg/m³	52,100	1,040
1,1,1-Trichlorethane	μg/m³	10,400	209
Trichlorethylene	μ <b>g</b> /m³	13.6	0.271
Xylenes (total)	μ <b>g</b> /m³	7,300	146

#### SCHEDULE 'C'

#### **CERTIFICATE OF REQUIREMENT**

#### s.197 (2) Environmental Protection Act

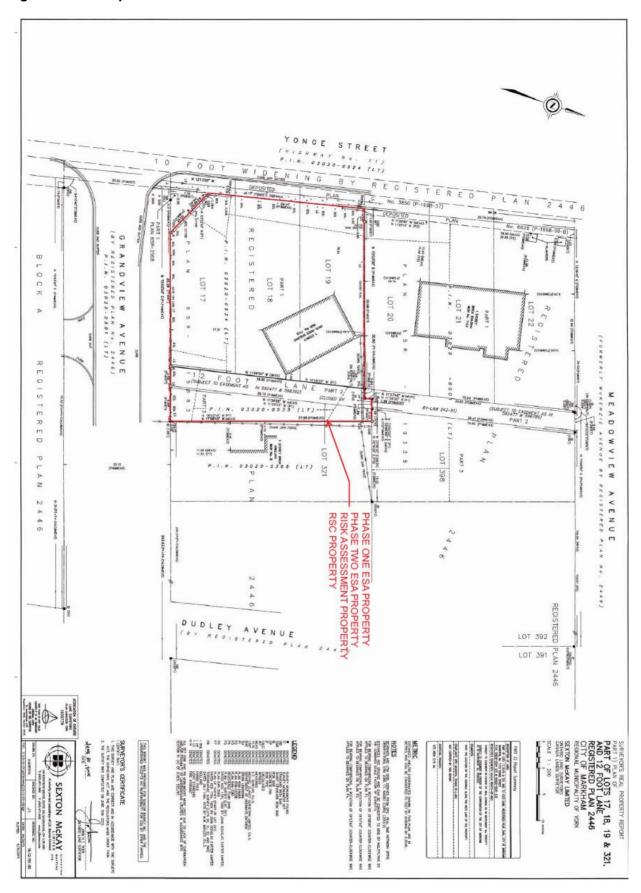
This is to certify that pursuant to item 7.1 Certificate of Property Use Number 5671-A6BRE7-1 issued by Celeste Dugas, Director of the Ministry of the Environment, Conservation and Parks, dated [date issued], under sections 168.6 and 197 of the Environmental Protection Act, being a Certificate of Property Use and order under subsection 197(1) relating to the property municipally known as 7115 Yonge Street, City of Markham, being all of Property Identifier Numbers (PIN) 03020-0534 (LT) and 03020-0535 (LT) (the "property") with respect to a Risk Assessment and certain Risk Management Measures and other preventive measure requirements on the property

#### **Suncor Energy Inc.**

and any other persons having an interest in the property are required before dealing with the property in any way, to give a copy of the Certificate of Property Use, including any amendments thereto, to every person who will acquire an interest in the property as a result of the dealing.

Under subsection 197(3) of the Environmental Protection Act, the requirement applies to each person who, subsequent to the registration of the certificate, acquires an interest in the real property.

Figure 1: Site Map



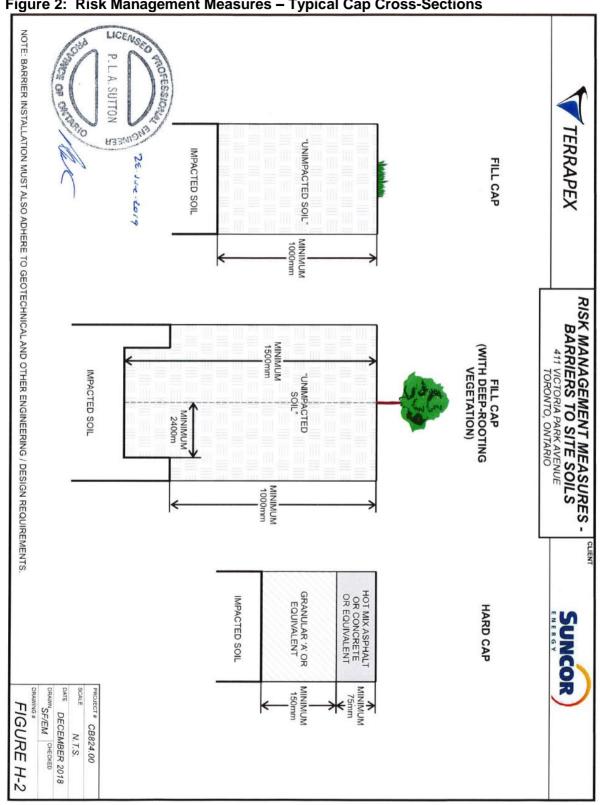
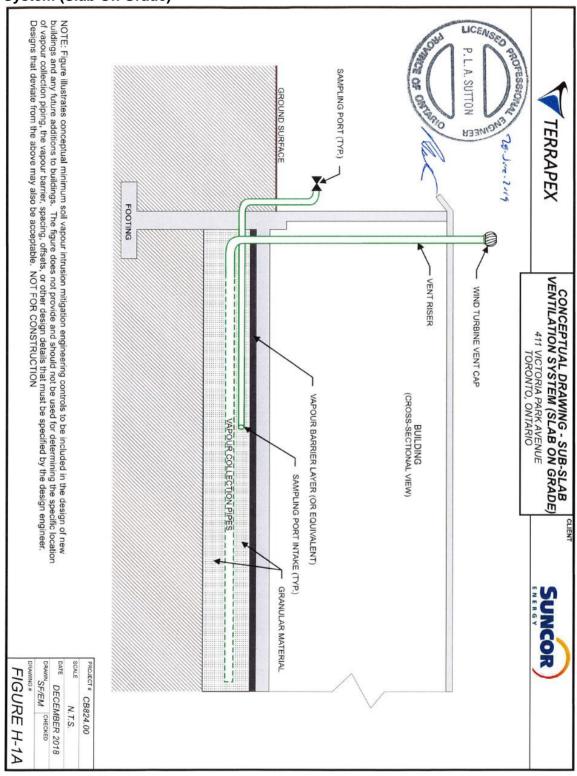


Figure 2: Risk Management Measures - Typical Cap Cross-Sections

#### Figure 3: Risk Management Measures – Conceptual Drawing – Sub-Slab Ventilation System (Slab On Grade)



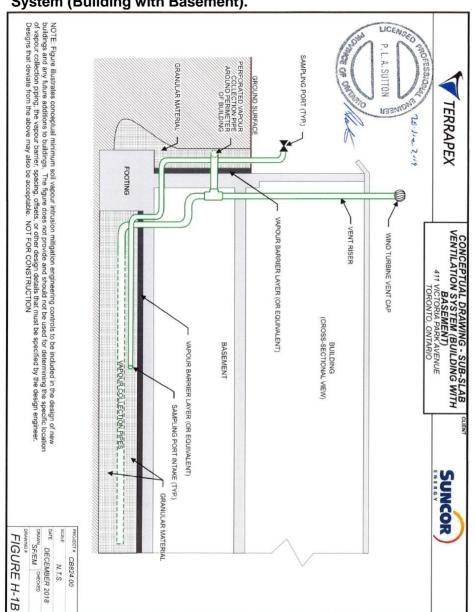


Figure 4: Risk Management Measures – Conceptual Drawing – Sub-Slab Ventilation System (Building with Basement).