

**PERMIT TO TAKE WATER**  
Surface and Ground Water  
NUMBER 3113-9UZL7Y

*Pursuant to Section 34.1 of the Ontario Water Resources Act, R.S.O. 1990 this Permit To Take Water is hereby issued to:*

Hydro One Networks Inc.  
483 Bay St 6th Floor, South Tower  
Toronto, Ontario, M5G 2P5  
Canada

*For the water taking from:* Drainage System/ Ditch

*Located at:* 2745 Townline Rd N (Lots 34 35 Concession 7) Darlington  
Clarington, Regional Municipality of Durham

*For the purposes of this Permit, and the terms and conditions specified below, the following definitions apply:*

**DEFINITIONS**

- (a) "Director" means any person appointed in writing as a Director pursuant to section 5 of the OWRA for the purposes of section 34.1, OWRA.
- (b) "Provincial Officer" means any person designated in writing by the Minister as a Provincial Officer pursuant to section 5 of the OWRA.
- (c) "Ministry" means Ontario Ministry of the Environment and Climate Change.
- (d) "District Office" means the York-Durham District Office.
- (e) "Permit" means this Permit to Take Water No. 3113-9UZL7Y including its Schedules, if any, issued in accordance with Section 34.1 of the OWRA.
- (f) "Permit Holder" means Hydro One Networks Inc..
- (g) "OWRA " means the *Ontario Water Resources Act*, R.S.O. 1990, c. O. 40, as amended.

*You are hereby notified that this Permit is issued subject to the terms and conditions outlined below:*

## **TERMS AND CONDITIONS**

### **1. Compliance with Permit**

- 1.1 Except where modified by this Permit, the water taking shall be in accordance with the application for this Permit To Take Water, dated November 14, 2014 and signed by Brian McCormick, and all Schedules included in this Permit.
- 1.2 The Permit Holder shall ensure that any person authorized by the Permit Holder to take water under this Permit is provided with a copy of this Permit and shall take all reasonable measures to ensure that any such person complies with the conditions of this Permit.
- 1.3 Any person authorized by the Permit Holder to take water under this Permit shall comply with the conditions of this Permit.
- 1.4 This Permit is not transferable to another person.
- 1.5 This Permit provides the Permit Holder with permission to take water in accordance with the conditions of this Permit, up to the date of the expiry of this Permit. This Permit does not constitute a legal right, vested or otherwise, to a water allocation, and the issuance of this Permit does not guarantee that, upon its expiry, it will be renewed.
- 1.6 The Permit Holder shall keep this Permit available at all times at or near the site of the taking, and shall produce this Permit immediately for inspection by a Provincial Officer upon his or her request.
- 1.7 The Permit Holder shall report any changes of address to the Director within thirty days of any such change. The Permit Holder shall report any change of ownership of the property for which this Permit is issued within thirty days of any such change. A change in ownership in the property shall cause this Permit to be cancelled.

### **2. General Conditions and Interpretation**

- 2.1 Inspections  
The Permit Holder must forthwith, upon presentation of credentials, permit a Provincial Officer to carry out any and all inspections authorized by the OWRA, the *Environmental Protection Act*, R.S.O. 1990, the *Pesticides Act*, R.S.O. 1990, or the *Safe Drinking Water Act*, S. O. 2002.
- 2.2 Other Approvals  
The issuance of, and compliance with this Permit, does not:
  - (a) relieve the Permit Holder or any other person from any obligation to comply with any other applicable legal requirements, including the provisions of the *Ontario Water Resources Act*, and the *Environmental Protection Act*, and any regulations made thereunder; or

(b) limit in any way any authority of the Ministry, a Director, or a Provincial Officer, including the authority to require certain steps be taken or to require the Permit Holder to furnish any further information related to this Permit.

### 2.3 Information

The receipt of any information by the Ministry, the failure of the Ministry to take any action or require any person to take any action in relation to the information, or the failure of a Provincial Officer to prosecute any person in relation to the information, shall not be construed as:

(a) an approval, waiver or justification by the Ministry of any act or omission of any person that contravenes this Permit or other legal requirement; or

(b) acceptance by the Ministry of the information's completeness or accuracy.

### 2.4 Rights of Action

The issuance of, and compliance with this Permit shall not be construed as precluding or limiting any legal claims or rights of action that any person, including the Crown in right of Ontario or any agency thereof, has or may have against the Permit Holder, its officers, employees, agents, and contractors.

### 2.5 Severability

The requirements of this Permit are severable. If any requirements of this Permit, or the application of any requirements of this Permit to any circumstance, is held invalid or unenforceable, the application of such requirements to other circumstances and the remainder of this Permit shall not be affected thereby.

### 2.6 Conflicts

Where there is a conflict between a provision of any submitted document referred to in this Permit, including its Schedules, and the conditions of this Permit, the conditions in this Permit shall take precedence.

## **3. Water Takings Authorized by This Permit**

### **3.1 Expiry**

This Permit expires on **April 30, 2016**. No water shall be taken under authority of this Permit after the expiry date.

### **3.2 Amounts of Taking Permitted**

The Permit Holder shall only take water from the source, during the periods and at the rates and amounts of taking specified in Table A. Water takings are authorized only for the purposes specified in Table A.

**Table A**

	Source Name / Description:	Source: Type:	Taking Specific Purpose:	Taking Major Category:	Max. Taken per Minute (litres):	Max. Num. of Hrs Taken per Day:	Max. Taken per Day (litres):	Max. Num. of Days Taken per Year:	Zone/ Easting/ Northing:
1	Drainage System/ Ditch	Pond Dugout	Construction	Dewatering Construction	1,400	24	800,000	334	17 673150 4872700
						<b>Total Taking:</b>	800,000		

#### **4. Monitoring**

- 4.1 The Permit Holder shall, on each day water is taken under the authorization of this Permit, record the date, the volume of water taken on that date and the rate at which it was taken. The daily volume of water taken shall be measured by a flow meter. The Permit Holder shall keep all records required by this condition current and available at or near the site of the taking and shall produce the records immediately for inspection by a Provincial Officer upon his or her request. The Permit Holder, unless otherwise required by the Director, shall submit, on or before March 31<sup>st</sup> in every year, the daily water taking data collected and recorded for the previous year to the ministry's Water Taking Reporting System.
- 4.2 The Permit Holder shall implement the monitoring and mitigation program as described in Items 2, 4 and 5, of Schedule A of this Permit. This monitoring and mitigation program was a condition of the approved Class Environmental Assessment for this construction project. This on-going groundwater and surface water monitoring and mitigation program started in 2014 and is to continue until at least two years after the completion of construction activities. It includes monitoring of both surface water and groundwater for water quality and quantity. The surface water sampling locations include SW2, SW3 and SW4, located on surface water bodies including creeks and wetlands near the site and the wells include both on-site monitoring wells and off-site private wells within 1200 m of the site.
- 4.3 The Permit Holder shall also implement the groundwater monitoring, mitigation and contingency plan identified in Item 6 of Schedule A of this Permit (a letter to Charles Wakefield, Hydrogeologist, Central Region Technical Support, MOECC, dated May 15, 2015, and attached to this permit). This monitoring program specifically targets three on-site monitoring wells near the eastern edge of the excavation. The purpose of this monitoring and mitigation program is to assess whether off-site impacts are greater than predicted and to address those impacts. The Permit Holder shall keep all monitoring records available for inspection and review upon request by the Ministry.

## **5. Impacts of the Water Taking**

### **5.1 Notification**

The Permit Holder shall immediately notify the local District Office of any complaint arising from the taking of water authorized under this Permit and shall report any action which has been taken or is proposed with regard to such complaint. The Permit Holder shall immediately notify the local District Office if the taking of water is observed to have any significant impact on the surrounding waters. After hours, calls shall be directed to the Ministry's Spills Action Centre at 1-800-268-6060.

### **5.2 For Surface-Water Takings**

The taking of water (including the taking of water into storage and the subsequent or simultaneous withdrawal from storage) shall be carried out in such a manner that streamflow is not stopped and is not reduced to a rate that will cause interference with downstream uses of water or with the natural functions of the stream.

#### **For Groundwater Takings**

If the taking of water is observed to cause any negative impact to other water supplies obtained from any adequate sources that were in use prior to initial issuance of a Permit for this water taking, the Permit Holder shall take such action necessary to make available to those affected, a supply of water equivalent in quantity and quality to their normal takings, or shall compensate such persons for their reasonable costs of so doing, or shall reduce the rate and amount of taking to prevent or alleviate the observed negative impact. Pending permanent restoration of the affected supplies, the Permit Holder shall provide, to those affected, temporary water supplies adequate to meet their normal requirements, or shall compensate such persons for their reasonable costs of doing so.

If permanent interference is caused by the water taking, the Permit Holder shall restore the water supplies of those permanently affected.

- 5.3 (a) The Permit Holder shall implement all necessary sediment control measures as described in Section 4.2 of the report listed as Item 2 of Schedule A of this Permit to ensure that the concentration of TSS in the discharge during normal streamflow conditions does not exceed 25 mg/L. To ensure compliance with this requirement, the Permit Holder shall undertake a field verification monitoring program that includes measurement of turbidity in the discharge water at least twice per day during days that there is discharge from the sediment control facilities established at the site (note that field turbidity measurement is used as a surrogate for TSS monitoring). Turbidity measurements of 15 NTU or less are deemed to be in compliance with the TSS requirement of 25 mg/L or less.

(b) During periods where turbidity in the receiving water body is at or above 80 NTU (e.g., during and immediately following storm events, during high or turbid flows), the discharge shall be managed such that the increase in turbidity in the receiving water body downstream of the discharge remains less than 10% of the upstream (background)

condition.

(c) Monitoring of the receiving water body, both upstream and downstream of discharge, shall only be required during periods when the discharge exceeds 15 NTU (equivalent to 25 mg/L TSS), during which period Condition 5.3 (b) must remain in effect.

**6. Director May Amend Permit**

The Director may amend this Permit by letter requiring the Permit Holder to suspend or reduce the taking to an amount or threshold specified by the Director in the letter. The suspension or reduction in taking shall be effective immediately and may be revoked at any time upon notification by the Director. This condition does not affect your right to appeal the suspension or reduction in taking to the Environmental Review Tribunal under the *Ontario Water Resources Act*, Section 100 (4).

*The reasons for the imposition of these terms and conditions are as follows:*

1. Condition 1 is included to ensure that the conditions in this Permit are complied with and can be enforced.
2. Condition 2 is included to clarify the legal interpretation of aspects of this Permit.
3. Conditions 3 through 6 are included to protect the quality of the natural environment so as to safeguard the ecosystem and human health and foster efficient use and conservation of waters. These conditions allow for the beneficial use of waters while ensuring the fair sharing, conservation and sustainable use of the waters of Ontario. The conditions also specify the water takings that are authorized by this Permit and the scope of this Permit.

*In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, you may by written Notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act, R.S.O. 1990, as amended, provides that the Notice requiring the hearing shall state:*

1. The portions of the Permit or each term or condition in the Permit in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

*In addition to these legal requirements, the Notice should also include:*

3. The name of the appellant;
4. The address of the appellant;
5. The Permit to Take Water number;
6. The date of the Permit to Take Water;
7. The name of the Director;
8. The municipality within which the works are located;

*This notice must be served upon:*

*The Secretary  
Environmental Review Tribunal  
655 Bay Street, 15th Floor  
Toronto ON  
M5G 1E5  
Fax: (416) 314-4506  
Email: [ERTTribunalsecretary@ontario.ca](mailto:ERTTribunalsecretary@ontario.ca)*

AND

*The Director, Section 34.1, Ministry of the  
Environment and Climate Change  
8th Floor  
5775 Yonge St  
Toronto ON M2M 4J1  
Fax: (416) 325-6347*

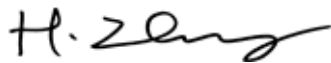
***Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the Tribunal:***

***by telephone at (416) 314-4600***

***by fax at (416) 314-4506***

***by e-mail at [www.ert.gov.on.ca](http://www.ert.gov.on.ca)***

Dated at Toronto this 26th day of May, 2015.



Helen Zhang, P.Eng.

Director, Section 34.1

*Ontario Water Resources Act*, R.S.O. 1990

## Schedule A

This Schedule “A” forms part of Permit To Take Water 3113-9UZL7Y, dated May 26, 2015.

1. Application for a Permit to Take Water - signed by Brian McCormick and dated November 14, 2014.
2. Stantec Consulting Ltd., Category 3 PTTW Hydrogeologic Assessment Report. Hydro One Networks Inc., Clarington Transformer Station, Clarington, Ontario. Final Report. Prepared for Hydro One Networks Inc. Dated November 17, 2014. File No. 1609-00764.
3. Stantec Consulting Ltd., Hydrogeologic & Hydrologic Assessment Report, Clarington Transformer Station. Prepared for Hydro One Networks Inc. Dated April 12, 2013. Stantec reference No.: 1609-60745
4. Stantec Consulting Ltd., Pre-Station Construction Groundwater and Surface Water Baseline Conditions Report, Hydro One - Clarington Transformer Station. Final Report. Prepared for: Hydro One Networks Inc. Project No.: 160900764. Dated: November 14, 2014. Attachments.
5. Stantec Consulting Ltd., Letter report to Hydro One, Environmental Engineering and Project Support, Attention: Mr. Paul Dalmazzi, Reference: Groundwater and Surface Water Monitoring Program, Clarington Transformer Station. Dated June 13, 2014. File: 160900764.
6. Hydro One Networks Inc., Letter addressed to Charles Wakefield, Hydrogeologist, Central Region - Technical Support Section, Ministry of the Environment and Climate Change, from Brian McCormick, Manager Environmental Engineering and Project Support, Dated May 15, 2015.
7. Stantec Consulting Ltd., Letter report to Hydro One, Attention: Mr. Paul Dalmazzi, Reference: Response to April 8, 2015 and April 30, 2015 MOECC Questions/ Comments. Dated May 19, 2015. File: 160900764. Attachments. Signed and stamped by Brant Gill, P.Geo. and co-signed by Roger Freymond, P.Geo.



Clarington TS MOECC PTTW Commitment to Monitor Drawdown May 15, 15.pdf



**Hydro One Networks Inc.**

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Toronto, Ontario, M5G 2P5  
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Tel: 416-345-6597  
Cell: 416-525-1051



**Brian McCormick**

Manager, Environmental Engineering and Project Support

May 15, 2015

Charles Wakefield  
Hydrogeologist, Central Region – Technical Support Section  
Ministry of the Environment and Climate Change  
Place Nouveau, 9<sup>th</sup> Floor  
5775 Yonge Street  
Toronto, ON M2M 4J1

Dear Mr. Wakefield,

Hydro One understands that during a technical review of the Category 3 Permit to Take Water (PTTW) application submitted for the construction of Clarington TS, comments have been provided to the MOECC regarding the potential effects of construction dewatering on adjacent private shallow wells, most notably a shallow private well identified as PW16. Hydro One is confident that the predicted values for groundwater seepage, drawdown and radius of influence, as submitted to the MOECC in the supporting Hydrogeologic Assessment Report (Stantec, 2014) are very conservative, and Hydro One does not believe that construction of Clarington TS will result in adverse effects on neighbouring private water wells, including PW16. However, Hydro One acknowledges these comments and we would like to reiterate our commitment to protecting local groundwater resources.

Upon receipt of the PTTW, Hydro One is hereby committing to ensure that dewatering due to construction of Clarington TS does not adversely affect nearby private water wells. Hydro One would like to propose the following Monitoring and Contingency Plan to the MOECC, to be included as a condition of approval of the PTTW:

1. Hydro One and their consultant Stantec Consulting Ltd. (Stantec) will conduct regular (monthly) manual monitoring of the water levels (drawdown) from monitoring wells located on the east side of the station property, known as MW1-13D, MW6-14 and MW7-14, for the duration of the PTTW. This water level monitoring will include downloading data from pressure transducers currently set to record data at 1-hour intervals and will be conducted in conjunction with monitoring of daily volumes of groundwater seepage collected. The monthly water level monitoring data will be submitted in graph/table form with a comparison to the predicted drawdown on a monthly basis to MOECC Central Region.
2. Upon completion of construction and before the end of the PTTW (11 month duration), Hydro One and Stantec will compare the observed groundwater levels/drawdown from the above-mentioned monitoring wells to the predicted groundwater drawdown presented in the PTTW supporting Hydrogeologic Assessment Report.

3. In the event that the agreed-upon threshold of observed groundwater drawdown is exceeded, Hydro One will meet with the MOECC Central Region – Technical Support Section to discuss the results and potential next steps. Hydro One understands that these potential next steps may include, but not be limited to, a review of existing groundwater monitoring and climate data, extension of the period of monthly groundwater level monitoring, or mitigation options to preemptively compensate for potential adverse effects on the shallow private well PW16.

In addition to the Monitoring and Contingency Plan described above, we will continue to implement our Well Interference Response Plan to address any private water well interference complaints received from nearby residents. As described in the Well Interference Response Plan, Hydro One will notify the MOECC Central Region and undertake the appropriate mitigation measures if any private water wells are found to have been adversely affected (either in quality or quantity of water available) as a result of the Clarington TS project.

I trust that the information provided in this letter is sufficient for the MOECC to complete the review of the PTIW application and technical supporting documents. If you have any further questions or concerns, please feel free to contact me at 416-345-6597 or Paul Dalmazzi at 416-345-6145.

Sincerely,



Brian J. McCormick  
Manager, Environmental Engineering and Project Support  
Hydro One Networks Inc.

cc. Ross Lashbrook, Manager, Technical Support Section, Central Region, MOECC  
Sandra Thomas, Issues Project Coordinator, York/Durham District Office, MOECC  
Jeff Cridland, Project Manager, Hydro One  
Paul Dalmazzi, Environmental Planner, Hydro One  
Brant Gill, Sr. Hydrogeologist, Stantec