

Clarington Transformer Station FAQ Sheet

Published on August 15, 2014

Thank you for taking the time to submit your questions and comments for Clarington Transformer Station (TS).

Question #1: What will happen to Cherrywood TS when Pickering Nuclear Generating Station is retired?

Hydro One's response: Cherrywood TS is a critical station for the Hydro One network and no changes are planned for this station.

Question #2: Isn't this site on the Oak Ridges Moraine?

Hydro One's response: The Oak Ridges Moraine Conservation Plan (ORMCP) southern boundary (through the Municipality of Clarington) was delineated on 245 m elevation contours and consequently differs from the actual physiographic units (Ontario Ministry of Municipal Affairs and Housing, 2008). While the Clarington TS property is partially within the area designated under the ORMCP, it is located on the South Slope physiographic region, whereas the core Oak Ridges Moraine physiographic region is located approximately 6 km to the north of the TS site (Chapman and Putnam, 1984). Figure 3 – 7 in the Clarington TS Final Environmental Study Report (ESR) shows the boundaries for the ORM and South Slope physiographic regions and the boundary of the ORMCP area. This figure clearly illustrates the difference between the ORM physical and ORMCP boundaries.

Utilities are a permitted land use within the areas governed by the ORMCP. Hydro One has demonstrated compliance with Section 41 of the ORMCP during the Class EA process as documented in the Clarington TS Final ESR.

Question #3: Will the transformers be under water given the depth of the water table? Who is responsible for approving the drainage system? Please supply us with a scientific drawing (cross section of the site).

Hydro One's response: The station will have an extensive drainage system approved by the Ministry of the Environment (MOE) through the Environmental Compliance Approval process. The transformer containment system will not be submerged or immersed in water. A copy of this drawing will be presented at meeting #2 of the Community Liaison committee (CLC).

Question #4: Where in Ontario's *Environmental Assessment Act* does it state that any land in discussion or being contemplated to be purchased can be added to the existing Environmental Assessment (EA)?

Hydro One's response: There is no requirement in Ontario's *Environmental Assessment Act* that states that property must be purchased prior to EA approval and property purchase in and of itself does not trigger an additional assessment. EA approval is granted for the undertaking as described in **Section 1.4** of the ESR. The 1.1 ha piece of property purchased to accommodate the TS access road falls within the study area for the Class EA as defined in **Section 2.1** of the ESR, and is described in **Section 4.7.5**. In this section, the preferred access from Townline Road is discussed and it is mentioned that a small piece of property would need to be purchased. The following excerpt is from Section 4.7.5 of the ESR:

Hydro One investigated the use of Townline Road and concluded that an access road was technically feasible; however property acquisition would be required from one private property owner, southwest of the Hydro One property. Through discussions with the Municipality of Clarington and the City of Oshawa, a Road User Agreement to utilize the unopened Townline Road North would need to be obtained from the municipalities.

Hydro One selected the Townline access road option as it would be shorter in length than the proposed access road off of Langmaid Road and would minimize community disturbances. The Townline access road will be approximately 650 metres in length and will not cross any watercourses.

Upon filing of the final ESR, Hydro One will conclude negotiations for the purchase of the private property for the station access and obtain a Road User Agreement from the Municipality of Clarington for Townline Road North.

Although the sale closed in early 2014, the option to purchase the property was finalized between the landowner and Hydro One in late 2012, and was conditional upon successful completion of the Class EA. It is standard practice for Hydro One to enter into purchase option agreements conditional upon EA approval.

Question #5: Why is Hydro One proposing to build a road on a site that was deemed unacceptable for Enfield TS in the past?

Hydro One's response: The site 2 was rejected in the Enfield TS Environmental Study Report due to the amount of grading that would have been required for the construction and operation of the station which is significantly more than what is required to construct

an access road. The draft design of the access road was completed by a road engineer. It will be stamped and finalized with approval.

Question #6: In the ESR it states that Hydro One will be applying for a permit to pump in excess of 50,000 litres of water per day. Will this permit be required?

Hydro One's response: Hydro One does not expect that the Clarington TS project will require the dewatering or removal of large volumes of groundwater. If it becomes apparent that groundwater dewatering will occur at a rate of 50,000 L/day or greater, Hydro One will obtain a Permit to Take Water from the Ministry of the Environment. This is one of a number of standard permits that may potentially be applicable in any construction project of this scope.

Question #7: Will Clarington TS generate regulated waste, such as lead, PCB, cadmium, mercury, etc.?

Hydro One's response: None of these materials will be used in the construction and operation of the proposed Clarington TS.

Hydro One has a voluntary land assessment and remediation (LAR) program in place to identify and remediate historical contamination that resulted from Ontario Hydro's past operational practices and use of certain chemicals. The program addresses legacy issues and is not applicable to newly developed sites such as Clarington TS.

Dependent on the age of the station, there have been cases where contaminants were found. PCBs were used in electrical equipment and transformers until the late 1970's. Consequently, PCBs have been found in soils at some older sites. Cadmium, lead and mercury contamination is rare.

Question #8: What will Hydro One commit to if my well is impacted during the construction or operation of the station?

Hydro One's response: Hydro One has built stations and transmission lines throughout the province and has not encountered a case where our facilities have negatively affected well water quality or quantity. Having said that, Hydro One has committed that, in the unlikely event that water becomes contaminated, a safe supply of drinking water would be provided to affected well owners in the community.

Hydro One's environmental consultant (Stantec) has prepared a "Well Interference Response Plan" (WIRP) which describes the response that will be taken to address any

well interference complaints, as well as the criteria for assessing and mitigating well-related complaints associated with the construction and operation of the Clarington TS. Hydro One will provide more information in a presentation of the WIRP at CLC meeting #2 on August 19, 2014. Following this meeting, Hydro One will post the WIRP on www.HydroOne.com/Projects/Clarington.

Question #9: Can Hydro One guarantee that it will accept responsibility if our wells are impacted during the construction or operation of the station?

Hydro One's response: Further to question #2, Hydro One has committed that, in the extremely unlikely event that water should become contaminated, a safe supply of drinking water would be provided to affected well owners in the community. Hydro One has provided this assurance but emphasizes that contamination of private wells is considered extremely unlikely and is unexpected in these circumstances.

Hydro One's environmental consultant has prepared a Well Interference Response Plan which describes the response that will be taken to address well interference complaints, as well as the criteria for assessing and mitigating well-related complaints associated with the construction and operation of the Clarington TS. This plan will be reviewed at CLC meeting #2.

Question #10: Would you inform us as to the depth of the footings that will support the 410 ton transformers, and also the depth that the reservoir or water separator will be placed.

Hydro One's response: Each transformer will weigh 535 tonnes and the footings will be to a depth of 5.8 m. The deepest concrete chambers of the Oil Water Separator will be installed approximately 5.5 m below finished grade, or approximately 4.9 m below existing land surface.

Question #11: When did on-site sampling begin at the on-site wells? Will four seasons of data be included in the baseline conditions report?

Hydro One's response: Hydro One commenced its on-site monitoring activities in the fall of 2013 and conducted quarterly sampling thereafter in winter and spring of 2014. To date, there have been three quarterly sampling events, with a fourth one planned for this summer and a fifth one planned for fall of 2014. This means that there will have been a total of five sampling events prior to the commencement of station construction in December, 2014.

Question #12: How can station construction begin when Hydro One does not have four seasons of private well monitoring?

Hydro One's response: With respect to the private well monitoring program, the Groundwater and Surface Water Monitoring Plan does not commit Hydro One to conduct sampling at private wells on a quarterly basis or other basis prior to station construction, nor is it necessary to do so. The Groundwater Monitoring Plan references sampling at private wells commencing in spring of 2014.

In this regard, consent forms for accessing private wells were distributed door-to-door to all residents within 1200 metres of the site in June of 2014. Following the MOE Central Region approval of the Groundwater Monitoring Plan on June 24, 2014, Hydro One's consultant began sampling in July and early August at those properties where consent has been provided. Hydro One's consultant will also monitor these wells in the fall of 2014 such that two private well sampling events will be completed prior to the commencement of station construction. Hydro One cannot and will not be conducting sampling activities on private properties where access has been refused by property owners.

Question # 13: Will the third party consultant be able to review residential private wells?

Hydro One's response: Once the third party is selected, they will be available to review data from the on-site and private well monitoring programs should residents choose to discuss questions and concerns about private well monitoring results with the third party consultant.

Question #14: Who should the community contact if there is an issue about water quality?

Hydro One's response: All queries related to on-site groundwater and surface water monitoring activities (i.e., those taking place on the Clarington TS property) should be directed to Paul Dalmazzi, Planner – Environmental Engineering and Project Support, Hydro One Networks. Mr. Dalmazzi can be reached at (416) 345-6145 or by email at Paul.Dalmazzi@HydroOne.com.

For queries relating to the sampling and/or monitoring of private water wells, please contact Brant Gill, Sr. Hydrogeologist, Stantec Consulting at (905) 415-6330 or Brant.Gill@Stantec.com.

Should a resident conduct any of their own testing, please contact the community resource selected. Their contact information will be provided once selected.

Question #15: Can we use the third-party to conduct private well monitoring?

Hydro One's response: Hydro One's consultant will be conducting all monitoring both off-site and on. However, once the third party expert is selected, it will be available to review the data on behalf of the community.

Question #16: How will we know if the construction or operation of this station has impacted our well?

Hydro One's response: Hydro One's station construction and operation are not anticipated to have any potential to impact private wells. At the first CLC meeting, residents expressed an interest in having the private well monitoring program expanded from property owners adjacent to the site to a larger study area. Hydro One has agreed to this and will be offering the program to interested residents within an approximate 1,200 metre radius of the station perimeter boundary. Specific program information and details for participation were hand delivered to all community members within the designated area.

Hydro One's environmental consultant has also prepared a Well Interference Response Plan which describes the response that will be taken to address well interference complaints, as well as the criteria for assessing and mitigating well-related complaints associated with the construction and operation of the Clarington TS.

Question #17: Is the additional property purchased for the access road considered part of the wetlands?

Hydro One's response: The 1.1 ha parcel of property that was purchased to accommodate the access road does not contain any areas identified as wetlands; it consists mostly of row crop (corn) and contains some trees and shrubs that form part of an adjacent hedgerow.

Question # 18: What happens if there is an emergency situation at the site?

Hydro One's response: Hydro One will conduct regular maintenance at the station to ensure the safe operation of all equipment and will also monitor the station remotely from our provincial grid control centre on a 24-7 basis. If an alarm goes off, a crew is dispatched immediately to investigate. The spill containment units that will be used at

Clarington TS are designed to contain 1.3 times the amount of oil that is actually contained in the transformer. In the rare event of an oil discharge, meaning a loss of oil outside of these systems, Hydro One has a Ministry of the Environment approved emergency spill containment system.

Hydro One is currently producing an Emergency Response Plan (ERP) for Clarington TS which will specify the procedures to be followed in the highly unlikely event of a release of mineral insulating oil from the station. Upon completion, Hydro One will post the ERP for Clarington TS on its web page in accordance with Condition 4 of the Minister of the Environment's decision.

Question #19: Will Hydro One assess the cumulative impacts of all projects in the area (including the Highway 407 extension and East Link) on the headwaters and downstream Harmony and Farewell creeks?

Hydro One's response: A Cumulative Effects Assessment is not a requirement of the Ontario *Environmental Assessment Act*. Hydro One is of the opinion that there is no basis for interaction with other known projects and therefore, a meaningful assessment of cumulative effects is not possible.

During the Class EA process, Hydro One committed to implementing a Groundwater and Surface Water Monitoring Program which includes seasonal sampling of three intermittent surface water features located within the Clarington TS property, as well as the installation of drive-point piezometers to monitor seasonal surface water and shallow groundwater levels. The results from the surface water component of the Groundwater and Surface Water Monitoring Program will be presented in the annual progress reports produced by Stantec.

Question #20: How can you proceed with construction when you have not yet met all of the Minister's conditions?

Hydro One's Response: Hydro One is only required to fulfill one of the six conditions in advance of station construction as follows:

"Prior to construction the proponent shall submit a Groundwater Monitoring Plan to the Regional Director in the Central Region for review and approval. The plan shall be in accordance with the Hydrogeological & Hydrologic Assessment Report prepared for the Project by Stantec (2013) and shall include water level and quality sampling from on-site wells and adjacent private wells in order to document pre and post construction

conditions to confirm no impacts. Once approved, the final report shall be posted on the Proponent's website. "

Hydro One received approval from the Ministry of Environment on its Groundwater and Surface Water Monitoring Program on June 24, 2014. Station construction will not begin until December 2014. Hydro One has proceeded with the relocation of 230 kilovolt lines on the site. Hydro One will provide an update on the Minister's conditions at CLC meeting #2 on August 19, 2014.