

April 5, 2022
File: 160900933 Task 248

Attention: Iain Mudd, Planner

County of Peterborough
470 Water Street
Peterborough, ON K9H 3M3
VIA EMAIL: IMudd@ptbocounty.ca

Dear Iain Mudd,

**Reference: Peer Review of a Land Use Compatibility Study (D-4) Assessment
Lot 14, Concession 3, Township of Douro-Dummer
County File No. B-15-22 (Smith)**

Peterborough County (the County) retained Stantec Consulting Ltd. (Stantec) to peer review a D-4 Assessment for Lot 14, Concession 3, Township of Douro-Dummer, ON (the Site). The D-4 Assessment was prepared by D.M. Wills. This letter has been prepared to provide comments to the County on the D-4 Assessment. The requirement for a D-4 Assessment was triggered by the presence of a closed Landfill located within 500 m of the Site. The property is about 81.6 ha in size and the proposed severance includes one residential parcel about 0.6 ha in size.

The purpose of a D-4 Assessment is to determine if there will be any negative impacts on the property from the closed Landfill. The Ministry of Environment, Conservation and Parks (MECP) indicates in the D-4 Guideline that they consider the most significant contaminant discharges from a closed landfill to be normally within 500 m of the perimeter of the fill area. As per the D-4 Guideline, the following factors are to be considered when there is a new land use proposed near a non-operating (closed) landfill:

- groundwater and surface water contamination by leachate
- surface water runoff
- ground settlement
- visual impact
- soil contamination and hazardous waste, and
- landfill generated gases

D.M. Wills was not able to find any information about the closed landfill in the publicly available records. D.M. Wills completed the following activities in support of the assessment:

- MECP Water Well Record survey
- An assessment of groundwater conditions

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- Site reconnaissance including a partial site reconnaissance for the closed landfill area
- Groundwater quality monitoring from an onsite residential well
- Landfill gas monitoring from an onsite residential well

Stantec's review comments are as follows:

- D.M. Wills determined that the groundwater flow direction was likely to the southwest towards Quarry Lake, suggesting the closed landfill is downgradient of the Site. Stantec concurs with this assessment.
- D.M. Wills found no evidence of waste disposal on the Site. Waste disposal appeared to be limited to a small area adjacent to Quarry Lake.
- Groundwater quality results had elevated iron, turbidity, and hardness; however, these parameters are not health-related and can be easily managed with standard household treatment systems.
- The landfill gas monitoring data was weak but based on the shallow depth to bedrock and limited evidence of waste disposal, Stantec agrees with D.M. Wills that it is unlikely landfill gas impacts the Site.

In summary, Stantec concurs with D.M. Wills assessment and there are no outstanding items to address.

We trust these comments are sufficient for your purposes; however, if you have any questions or require clarification, please do not hesitate to contact the undersigned.

Regards,

Stantec Consulting Ltd

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