

Ministry of the Environment

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MEMORANDUM

April 1, 2014

TO: Dave Fisher
Senior Environmental Officer, York Durham District Office

FROM: Christina Trotter
Hydrogeologist, Water Resources Unit, Central Region

**RE: Earthworx Industries Inc., 13471 Lakeridge Road, Port Perry, Ontario
Groundwater Monitoring Report**

As requested I have reviewed the following document:

“Groundwater Monitoring Report, 13471 Lakeridge Road, Scugog, Ontario” dated September 19, 2013, prepared by D.L. Services Inc. and signed by Steven Alls, Kevin McClintock and Scott Pitsch.

Background

The subject site (the Site) is located at 13471 Lakeridge Road in the Township of Scugog and is owned by 2241960 Ontario Inc. operating as Earthworx Industries (Earthworx). The Site is a former aggregate extraction pit. D.L. Services Inc. (DLS) was retained by Earthworx between January and March 2011 and again in January 2012 to characterize the quality of fill that was imported to the site to restore the grade for future development. The Ministry of the Environment (MOE) Terrestrial Assessment Unit also visited the Site in February 2011 and collected soil samples of the fill material. I understand the Site received imported fill from approximately June 2010 until March 2011.

Several soil samples collected by DLS and the MOE were documented as exceeding the Table 2 2011 Full Depth Generic Site Condition Standards in a Potable Groundwater Condition for Industrial/Commercial/Community property use and coarse textured soils (henceforth referred to as the Table 2 Standards) for volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), inorganics (including metals) and/or petroleum hydrocarbon fractions F2 and F3.

On July 23, 2012, I provided a memo that commented on a proposed groundwater monitoring program for the Site. The purpose of the groundwater monitoring program was to document groundwater quality at the down-gradient property boundary of the Site. In my July 23, 2012 memo I agreed with the proposed groundwater monitoring program and recommended it be implemented. The above referenced report documents the results of this groundwater monitoring program.

Comments and Recommendations

Based on my review I offer the following:

1. DLS completed the groundwater monitoring program as proposed.
2. DLS incorporated my comments and recommendations for the groundwater monitoring program as outlined in my July 23, 2012 memo.
3. I am satisfied with the borehole drilling and groundwater sampling program as completed by DLS.
4. I agree with the conclusions and recommendations presented by DLS in Section 5.0 of the above referenced report.
5. I recommend the proponent implement the quarterly groundwater monitoring program proposed by DLS in Section 5.0 of the above referenced report.

To assist in interpretation of the on-going groundwater monitoring program, I recommend the following:

1. Report quarterly monitoring results and interpretation in an annual report.
2. Include a table in the annual report showing quarterly depths to groundwater and corresponding elevations at all monitoring wells as well as elevations of the top and bottom of the screen for each monitoring well.
3. Include groundwater flow diagrams for each monitoring event in the annual report.
4. Include a figure showing the Site, Site monitoring wells, surrounding properties and the private water wells on surrounding properties.
5. The annual report should include recommendations for monitoring and/or remediation for the following year.

If you have any questions, please contact me by phone at 416-325-6970 or by email at Christina.Trotter@ontario.ca

Regards,

Original Signed By:

Christina Trotter, M.Sc., P.Geo.
Hydrogeologist