

**Recommendation:**

That the Public Works-2022-11 report, dated May 31, 2022 regarding the Warsaw and Stoney Lake Road Landfill Annual Monitoring be received for information.

**Overview:**

The Township of Douro-Dummer retained Cambium Inc. in 2021 to complete the annual monitoring program at the three closed landfill sites: Warsaw Road, Stoney Lake and Hall's Glen. In 2021 and 2022 Cambium established a reduced monitoring program at the Warsaw Road landfill upon consultation with the Ministry, which was implemented at in the spring of 2022.

Cambium has included proposed reductions to the established monitoring programs at both Stoney Lake Road and Hall's Glen Transfer Station in the 2021 AMRs.

Current and historical data at the Stoney Road Landfill Site indicates that reductions to the existing monitoring program are appropriate. Cambium included proposed reductions to the existing monitoring program in the 2021 Annual Monitoring Report (AMR). In addition, it was determined that the concentrations of boron are increasing in the shallow groundwater. Groundwater is interpreted to discharge to surface, as such surface water features located east of the Site may be sensitive to increasing concentrations of boron. Local groundwater resources are not interpreted to be influenced from the Site. Cambium proposed a contingency plan in the 2021 AMR to address the increasing trend of boron concentrations. The proposed contingency plan includes installing a new piezometer east of the site in the road allowance and includes a temporary, accelerated, monitoring program to be completed for a three-year period to assess off-site concentrations of boron. The Ministry of Environment, Conservation and Parks will review the proposed contingency plan and provide comment of whether its implementation is appropriate.

**Conclusion:**

The piezometer can be installed by hand in the road allowance, north of County Road 6. Cambium recommends that samples from the new shallow drive point piezometer be collected three times annually for three years. In addition, samples should be collected from SW1 and SW8 three times a year to confirm background and down-stream conditions. The need to continue the accelerated monitoring program or proceed with other contingency plans and/or mitigation measures should be reviewed during and at the end of the three-year monitoring period. A future report to Council will follow the review from the Ministry of Environment, Conservation and Parks.

**Financial Impact:**

If the Ministry of Environment, Conservation and Parks (MECP) supports the proposed contingency plan, the estimated costs of the piezometer installation and temporary, accelerated monitoring program are as follows; Piezometer installation: \$2,000 - \$2,500

(one time expense). Annual Sampling Program (samples collected three times a year, and an annual summary report): \$6,000 - \$6,500 (per year)

**Strategic Plan Applicability:** To effectively respond to the challenges of addressing the Township's municipal infrastructure needs as well as effectively managing the assets of the corporation.

**Sustainability Plan Applicability:** N/A