

CMC Chair's November Update: Timberlea's Recent Bouts with a Bad Smell

An Unpleasant Odour

The Otter Lake Community Monitoring Committee was alerted in September and again in October to complaints, particularly in the Timberlea area, of a strong unpleasant odour coming from the Otter Lake Landfill.

In response, CMC's Environmental Consultant **Scott Morash** visited the site twice and spoke with senior management at the landfill.

On his September visit, staff had already resolved the problem by adding temporary gas flaring capacity – the means to burn off excess landfill or other biogas generated by buried solid waste – along with more clay for cell capping. This is the material used to seal the solid waste-filled burial pits.

Mr. Morash was advised that post tropical storm Lee and the associated air pressure variations created when it passed through Nova Scotia Sept. 16-17, likely triggered the release of methane with hydrogen sulphide gas, causing the odour. The gas probably escaped through cracks in the clay-capped cells no longer accepting waste.

Then in October, Mr. Morash learned the presumed source of the latest complaints was another gas leak. The cause was believed to have been the disturbance of municipal waste during the installation of six vertical gas collection wells and one horizontal well in Cell 7A, the active cell now being used for waste burial.



One of the six-member Gas Control System Team takes readings from a hand-held gas detector. Monitoring is round-the-clock at the Otter Lake landfill. At least one member of the team is always on duty. The device, a *GEM5000TM*, samples and analyzes the methane, carbon dioxide and oxygen content of landfill gas. Readings guide adjustments to the suction rates of the gas vacuums attached to each of the 75 active wellheads. Odour-causing gases formed with sulphur compounds are siphoned off and burned using the odourless and highly flammable methane gas also generated in the landfill. *Photo: Jason Timms*

Call 311

Odour complaints from residents and businesses near the landfill operation are rare but they have been more frequent lately. The CMC, HRM (the landfill owner) and Mirror Nova Scotia (the landfill operator) are eager to eliminate the problem. You can help by promptly calling 311 to report any incidents of odours linked to the landfill, so they can be promptly monitored, scoped and mitigated.

Province Approves Revised Compliance Plan

HRM and Mirror Nova Scotia are now set to track developments as they implement a new revised three-year compliance plan.

It will now take until March 31, 2026 for the landfill to reach the 10 per cent compostable waste target set by the province July 2, 2022. The new scenario, submitted by HRM without CMC's prior consultation or approval, received the Department of Environment and Climate Change's green light, September 22.

The target – "Compostable waste shall not exceed ten percent (10%) of total amount of municipal solid waste landfilled, by mass"– stated in the approval was the department's main condition for authorizing last December's shutdown of the landfill's front-end processor and waste stabilization facility. They were used to help pre-sort and process organic material, recyclables and hazardous waste found in residential garbage before it was buried in the landfill. Decomposing organic waste triggers the production of odours and greenhouse gases.

The new plan sets three incremental targets for compostable waste as a percentage of the solid waste landfilled by mass at the Otter Lake facility:

It was explained that excessive rain this summer and fall had percolated to the lower levels of Cell 7A, hastening decomposition and gas production. Increased gas capture and clay cover were being used to mitigate the problem. Six staff members have now been assigned to monitor and maintain the gas collection system.

Let the CMC know too by emailing cmc.hwrs@gmail.com or by posting to our OtterLake CMC Facebook page.

- March 31, 2024 11.61 per cent
- March 31, 2025 10.81 per cent
- March 31, 2026 10 per cent

CMC will be monitoring the progress to reach all three milestones.

The revised plan and the provincial approval letter are posted on our OtterLakeCMC website and our Facebook page.

Linda Linda MacKay

CMC Chair