

Memorandum

WMPSC-C 11-2024

Subject: Change to Soil Acceptance at Niagara Region's Open Landfills

Date: August 27, 2024

To: Waste Management Planning Steering Committee

From: Jamie Kristjanson, Hydrogeologist and Environmental Engineer

Purpose

This memorandum is to inform members of the Waste Management Planning and Steering Committee (WMPSC) about changes to excess soil acceptance at Niagara Region's open landfills due to Ontario Regulation 406/19 "On-Site and Excess Soil Management".

Current Soil Handling at the Open Landfills

Humberstone Landfill in the City of Welland and the Niagara Road 12 Landfill in the Township of West Lincoln currently accept clean and impacted (waste) soils from municipal and private development projects.

The landfills receive approximately 22,000 tonnes of clean and impacted soil per year, with about 2,000 tonnes per year used for landfill operations such as interim and final cover. Remaining soil is stockpiled and when stockpile volumes surpass operational needs, they are moved to other locations on site.

Ontario Regulation 406/19 - On-Site and Excess Soil Management

On January 1, 2025, Section 22 of Ontario Regulation 406/19 will come into effect which results in two significant changes to soil handling at Regional landfill sites.

1. The first change is that clean soil may only be accepted at a landfill if there is a beneficial use for the soil such as for landfill cover, roads, or berms on site. Clean soil can no longer be landfilled. This is a measure to conserve valuable landfill space and help extend the life of the landfill.
2. The second change is how impacted (that is not considered clean) soil is defined. Impacted soil will be defined as waste that has to be landfilled.

Impact of the Regulation on Soil Acceptance at Landfill

After January 1, 2025, those wishing to bring soil to the landfill will need to have their soil tested. Tests results will be reviewed by Niagara Region staff to confirm if the soil is clean or waste before it is accepted.

Clean soil may only be accepted when the Region has a need for the soil for beneficial use such as for interim / final cover or internal roads. If there is sufficient clean soil already at the landfill for these purposes, additional clean soil may not be accepted. If waste soil is accepted, it will use airspace normally destined for solid waste disposal.

Impact of Soil Acceptance Changes to the Local Area Municipalities

Local Area Municipalities (LAMs) account for about 75% of all soils accepted at the Region's open landfills which amounts to about 17,000 tonnes of soil annually. This annual soil volume is more than operationally required at the open landfills. In order to comply with the new regulation, the Region may no longer be able to continue accepting this volume of soil from the LAMs. This, in turn, will affect how LAMs plan for and manage excess soils from their projects. To help with this transition, Niagara Region will be starting a process that will let LAMs know in advance if we can accept their soil. LAMs will provide soil sample results and an approximate volume of excess soil to the Region prior to their work being carried out. Based on this information the Region will advise whether the landfill can accept the material as clean or waste soil with enough lead time that the LAMs can seek alternative soil disposal sites, if needed.

At the Public Works Officials meeting on June 13, 2024, Staff presented an overview of the new excess soils regulation (Reg. 406/19) and the impacts of this regulation to processes at Regional landfill sites.

In addition to establishing a LAM / Region excess soils working group, ongoing communication between LAMs and Niagara Region will continue with a goal of finding alternatives for excess soil.

Respectfully submitted and signed by

Jamie Kristjanson
Hydrogeologist and Environmental Engineer, Waste Management Services