



Staff Report PW2023-015

Title of Report: PW2023-015 Egremont Landfill Site Status Report 2021/2022
Department: Public Works
Branch: Waste Resources and Diversion Management
Council Date: April 5, 2023

Recommendation:

Be it resolved that Council receive Staff Report PW2023-015 for information.

Background:

The Egremont Landfill Monitoring Report (2021/2022) has been compiled by GM BluePlan Engineering as per Environmental Compliance Approval (ECA) Number A261602. The report was also submitted to Mr. Scott Gass, the District Manager at the Ministry of the Environment, Conservation and Parks (MECP), Owen Sound District Office.

The Township landfill monitoring programs includes where samples are collected in the spring and fall from monitoring wells and surface water locations for numerous water quality parameters. Testing is also completed for landfill gas production specifically methane.

Staff Comments:

The Egremont Landfill Site Monitoring Report 2021/ 2022, Sections 11 and 12, Conclusions and Recommendations respectively, (Attachment #1).

Conclusions:

- Based on the landfill capacity of approximately 28,590 m³ in Cell 1 for waste and cover as designed in the Amended Development Plan (November 2002), Cell 1 has been filled to capacity.
- The original waste fill area is approximately 0.6 hectares and contains an estimated 24,500m³ of waste and cover materials.
- At the 5- year average fill rate of approximately 3,280 m³/year, it is estimated that the 3.3 hectares fill area, which has approved capacity of 350,000 m³ for waste and interim cover, will provide for greater than 80 years of additional site life.
- There are no impacts to surface water quality above the Provincial Water Quality Objectives (PWQO) and/or are attributed to landfill activities. Contingency measures outlined for the surface water trigger mechanisms do

not need to be implemented at this time.

- Groundwater quality and the suggested groundwater flow direction at the site do not indicate impacts from landfilling above the Reasonable Use Criteria (RUC) are noted beyond the established compliance boundaries to the south, west and north.

Recommendations:

- The closed and capped old fill area should continue to be inspected on a semi-annual basis to ensure the integrity of the cover material. A 300 mm thick interim cover should be applied in areas where landfilling has been suspended for 6 months or more (i.e., the Cell 1 area). Waste and cover material operations should continue within the Cell 2 area.

- When the Township submits the next application to amend the ECA, a request to increase the maximum daily waste received for disposal of 28.5 tonnes / day with consideration of the Township population growth should be suggested.

- The original waste fill area was approved by the Ministry to be relocated into the Cell 2 area to take advantage of the space that could be obtained of another approximately 7 metres deeper, which previously added about 25 years of additional landfill capacity. This can be phased with consultant oversight for the project with allocated budget to achieve the works.

- A minimum of 2 compost samples per year be taken for lab analysis.

- The annual monitoring program in the spring and fall continue as per Schedule B of the ECA, the new monitoring wells that were installed in 2022, in the recently acquired property to the east, being OW21, OW22 and OW23.

Financial Implications:

The operating budget includes sampling and monitoring for landfill sites.

Communications & Community Action Plan Impact:

Goal 5 - Upgrading our "Hard Services"

Action 5:

The residents and businesses of Southgate recognize our linear services - roads, bridges, water and sewer works, for example - to be a fundamental purpose of municipal government. This infrastructure needs to be serviceable and sustainable so that our businesses and communities can thrive and grow.

Strategic Initiatives:

5-B - The Township will have adopted a long-term asset management plan for the timely repair, replacement, and expansion of the Township's infrastructure, facilities, and other assets

Concluding Comments:

Staff recommends that Council receive Staff Report PW2023-015 for information.

Respectfully Submitted,

Dept. Head: *Original Signed By*
Jim Ellis, Public Works Manager

CAO Approval: *Original Signed By*
Dina Lundy, CAO

Attachments:

Attachment # 1 Egremont Landfill Site Monitoring Report 2021/2022, Section 11 & 12, Conclusions & Recommendations and Egremont Landfill Site Plan