



Staff Report

Report To: Dan Best, Chief Administrative Officer

From: **Shawn Young, Manager of Environmental Services**

Date: May 16 2022

Report: ESD.22.11

Subject: 2020-21 Annual Closed Stephen Landfill Status Report

Recommendations:

That South Huron Council receive the report from Shawn Young, Manager of Environmental Services Re: 2020-21 Annual Closed Stephen Landfill Status Report.

Purpose:

The purpose of this report is to notify Council of regulatory compliance regarding the closed Stephen Landfill Site annual reporting and to provide information on the status of the landfill site.

Background and Analysis:

The Amended Environmental Compliance Approval (ECA) for the closed Stephen Landfill Site requires the Municipality to prepare a report bi-annually and submit to the Ministry of the Environment, Conservation and Parks (MECP) by May 31st of the reporting year. BM Ross Engineers prepared the 2020-21 Annual South Huron Landfill Status Report and submitted it electronically to the Ministry on April 13, 2022.

The report is extensive and covers approvals; site history; post closure maintenance & operations; ground water monitoring; conclusions; and recommendations. A complete copy of the Report is available from the Environmental Services Department for viewing by any Member of Council.

The landfill site is located at 69364 Black Bush Line, north of Mount Carmel Drive, and previously provided service to the residents of the former Stephen Township. The landfill site was closed in 2001 and the final clay cover, topsoil and seed was placed in 2002. Post closure maintenance and operations is being carried out in accordance with the Ministry approved Closure Plan. The only activities currently taking place at this site is the disposal of inert fill and silt material from the centrifugal filters at the LHPWSS Water Treatment Plant. Bagged leaves collected in Stephen Ward are being stockpiled on site; allowed to naturally compost and are mixed with topsoil to cover filled areas.

In 2016 there was an issue with elevated hydrocarbons in the sludge material from the LHPWSS Water Treatment Plant. This was subsequently resolved by a change in the additive used in the water treatment process. Increased sampling of the sludge confirmed that the change in the additive resolved the issue.

Ground water and surface water monitoring confirmed that the closed landfill site was not negatively impacting the surrounding surface or groundwater resources. There has been a historical impact in surface water along the west boundary of the site, with elevated levels of chloride. This is a possible indicator of migration of leachate in the westerly direction, but sampling results could also be influenced by road salt.

There is no increasing groundwater impact trends and the Ministry has no concerns; however continued monitoring is required. Sampling confirms relatively low strength landfill leachate.

Engineers Report Recommendations:

The following is a complete listing of all report recommendations related to the post-closure care of the Stephen Landfill Site:

- 1) Municipal staff should complete routine inspections of the landfill site to check for any illegal dumping of wastes or trespassing. All affected areas should be cleared of litter and that litter brought to the South Huron Landfill, for disposal.
- 2) The Municipality can continue filling on-site ponds with clean or inert fill material only, as suitable material becomes available. The Municipality may wish to commence filling the pond northeast of the Landfill Site with inert or clean fill, beginning at the point closest to the landfill mound, as soil becomes available.
- 3) The photo inventory of the existing wells should be updated in 2023.

- 4) No uses of the Landfill Site should occur except as outlined in the approved Closure Plan.
- 5) If approved, the Municipality should abandon OW17-3 and OW18-3 and discontinue sampling from these wells, as well as from the former SP2-93 location.
- 6) Monitoring should continue in accordance with the recommendations of this Report and as approved by the Regional Director.
- 7) Municipal staff responsible for post-closure care of this site should become familiar with the conclusions and recommendations of this report, as well as, the requirements of the approved Closure Plan and the current Certificate of Approval.
- 8) Two copies of this Status Report (Volume I) and the Report's Figures & Appendices (Volume II) should be forwarded to the attention of the District Manager of the Ministry of the Environment, Conservation and Parks' office in Owen Sound.

Operational Considerations:

As this report is being presented for information purposes only, no alternatives are presented.

South Huron's Strategic Plan:

Section 6.2.2 of the Municipality of South Huron 2015-2019 Strategic Plan identifies key objectives that are reflective of the collective perspectives of the strategic planning process. The recommendations and actions outlined in this report are reflective of the following strategic objectives:

- ✓ Administrative Efficiency and Fiscal Responsibility
- ✓ Increased Communications and Municipal Leadership
- ✓ Transparent, Accountable and Collaborative Governance
- ✓ Dedicated Economic Development Effort

Financial Impact:

There are no financial implications for the Corporation resulting from the proposed recommendation.

Legal Impact:

There are no legal implications for the Corporation resulting from the proposed recommendation.

Staffing Impact:

There are no staffing implications for the Corporation resulting from the proposed recommendation.

Communication Actions:

Public is notified through the publication of the Council Agenda and Minutes.

Policies/Legislation:

1. Environmental Protection Act, R.S.O. 1990, c. E.19
2. Ontario Regulation 347 – General Waste Management
3. Ontario Regulation 232/98 – Landfilling Sites
4. Stephen Landfill Site MECP Certificate of Approval A162102 (as amended).
5. MOECC Technical Support for Ontario Drinking Water Standards, Objectives and Guidelines
6. MOECC Reasonable Use Concept into MOE Groundwater Management Activities
7. MOECC Water Management Policies, Guidelines, Provincial Water Quality Objectives

Consultation:

Don Giberson, General Manager of Infrastructure and Development was consulted regarding the content of this report.

Ryan DeVries, P.Eng. and Ann Gibson, M.E.S., P. Eng. – B.M. Ross and Associates Limited, prepared the Annual Landfill Report submitted to the Ministry.

Related Documents:

1. BM Ross correspondence to MECP dated April 13, 2022

Respectfully submitted,

Shawn Young, Manager of Environmental Services