

**Report To:** Dan Best, Chief Administrative Officer

From: Don Giberson, Environmental Services Director

**Date:** July 17 2017

**Report:** ESD.17.21

**Subject:** 2016 Annual Closed Stephen Landfill Status Report

#### **Recommendations:**

**That** South Huron Council receive the report from Don Giberson, Environmental Services Director Re: 2016 Annual Closed Stephen Landfill Status Report

## **Purpose:**

The purpose of this report is to notify Council of regulatory compliance with respect to the closed Stephen Landfill Site, to ensure Members of Council are fully informed.

# **Background and Analysis:**

A requirement of the Certificate of Approval for the closed Stephen Landfill Site is to prepare and submit a report to the Ministry of the Environment and Climate Change by May  $31^{\rm st}$  of each year. This report to Council is to confirm that BM Ross Engineers prepared and submitted the 2016 report to the Ministry by the prescribed deadline.

The report is extensive and covers Approvals; Site History; Post Closure Maintenance & Operations; Water Resource Monitoring; Conclusions; and Recommendations. A complete copy of the Report is available from the Environmental Services Department.

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 will be mixed with topsoil to cover filled areas.

In 2016 there was an issue of elevated hydrocarbons in the sludge material from the LHPWSS WTP. The Municipality stopped accepting this sludge material until the issue was resolved. The Water Treatment Plant operator located the source of the hydrocarbon and changed the polymer used in the water treatment process. Subsequent sampling confirmed the issue was resolved and the Municipality resumed accepting this material.

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) If approved by the Ministry, the Municipality should discontinue sampling the Dietrich pond and well in 2018.

- 4) SP2-93 could not be located during the 2016 fall sampling event. The Municipality should continue investigating what happened to it and consider replacing/repairing the casing, if possible.
- 5) The photo inventory of the existing wells should be updated in 2017.
- 6) No uses of the Landfill Site should occur except as outlined in the approved Closure Plan.
- 7) Monitoring should continue in accordance with the recommendations of this Report and as directed by the Regional Director.
- 8) 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.
- 9) 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 and Climate Change's 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

Informing Council of regulatory compliance, reduces liability and results in efficient use of time/resources.

### Increased Communications and Municipal Leadership

Communicating information to Council related the closed Stephen Landfill Site and associated monitoring, keeps Council and the public informed.

#### Transparent, Accountable and Collaborative Governance

Public reporting of the 2016 Annual Closed Stephen Landfill Status Report, demonstrates commitment to transparent, accountable and collaborative governance.

#### **Dedicated Economic Development Effort**

Informing Council of regulatory compliance, results in increased public confidence; retention/attraction of businesses and economic development opportunities.

### **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.

## **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 MOE Certificate of Approval A162102
- 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:**

Ryan DeVries, P.Eng. – B.M. Ross and Associates Limited, was consulted regarding the content of the Engineers Report. Jason Parr, Transportation Services Manager provided information for the annual report.

### **Related Documents:**

None

Respectfully submitted,

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**Don Giberson, Environmental Services Director**