

Report To: Dan Best, Chief Administrative Officer

From: Don Giberson, Environmental Services Director

Date: March 5 2018

Report: ESD.18.05

Subject: 2017 Annual Kirkton Landfill (Closed) Status Report

Recommendations:

That South Huron Council receive the report from Don Giberson, Environmental Services Director Re: 2017 Annual Kirkton Landfill (Closed) Status Report.

Purpose:

The purpose of this report is to notify Council of regulatory compliance with respect to the Kirkton Landfill Site.

Background and Analysis:

It is a condition of the Kirkton Landfill MOE Certificate of Approval that the Municipality prepare an annual status report and submit a copy to the Ministry of the Environment by March 31st of each year. A report was prepared by Wilson Associates Consulting Hydrogeologists and submitted to the Ministry of the Environment and Climate Change, Owen Sound District Office on February 7, 2018.

The Annual Kirkton Landfill Site report is a comprehensive document that includes a Description of the site; Site History; Post Closure Maintenance & Operations; Water Resource Monitoring; Control and Contingency Implementation; Conclusions; and Recommendations. A complete copy of the Report is available in the Environmental Services Department for viewing by any Member of Council.

The landfill site was closed in September 2006 and the final clay cover, topsoil/seed was placed in the fall of 2006. Post closure maintenance & operations is carried out in accordance with the MOECC approved Closure Plan. There is currently no activity taking place at this site other than ground water monitoring and perpetual care maintenance.

Wilson Associates Consulting Hydrogeologists summarized their findings in a Water Quality Monitoring Program Status Report and the following are their report conclusions/recommendations:

- 1) For 2017 the overall quality of groundwater at downgradient monitoring wells at the Kirkton Landfill remained relatively stable in comparison to historical trends.
- 2) Reasonable Use Criteria continued to be exceeded for a number of chemical parameters in the groundwater from most downgradient monitoring wells. There are no users of ground water within the leachate plume. No off-site users of ground water could be conceivably impacted by the landfill.
- 3) The overall water quality in Fish Creek in 2017 remained generally stable between the three monitoring stations, with only very slight impacts indicated under low-flow conditions. The aluminium and phosphorus contents of the Creek were elevated above the Provincial Water Quality Objectives, however these exceedances are not attributable to the landfill.
- 4) Based on the continuing relatively stable level of impact to the end of 2017, the once per year monitoring program should continue for 2018. Given the historical stability of landfill impacts to ground water and Fish Creek, it is recommended that sampling of the Creek for 2018 continue at once per year as has been undertaken since 1999 (except 2016).

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.

<u>Increased Communications and Municipal Leadership</u>

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

Transparent, Accountable and Collaborative Governance

Public reporting of the Annual Kirkton Landfill (Closed) 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. Kirkton Landfill Site MOE Certificate of Approval A162401
- 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:

Ian Wilson, P.Geo. – Wilson Associates Consulting Hydrogeologists, was consulted regarding the content of this Report. Ken Bettles, Director of Public Works for the Township of Perth South was consulted regarding report recommendations and filing with the Ministry, as there is a cost sharing Agreement with the Township of Perth South for the Kirkton Landfill.

Related Documents:

None

Respectfully submitted,

Don Giberson, Environmental Services Director