## Remaining Life Expectancy

Remaining landfill capacity is calculated by comparing the most recent elevation survey of the waste mound to the final approved contours. In order to calculate the remaining life expectancy one must have an accurate figure of the annual landfilling rate. For small landfill sites the waste generation can vary significantly from year to year, and as we generally only conduct surveys every two years it does not always accurately capture the changes in site development and waste disposal operations.

At this writing we suggest:

## **Bissett Creek (Maria)**

Total approved capacity	18,443m <sup>3</sup>
Remaining capacity Dec 31/10	8,525m <sup>3</sup>
Annual landfill rate	675m <sup>3</sup>
Life expectancy	11 to 12 years

# Stonecliffe (Head)

Total approved capacity	26,680m <sup>3</sup>
Remaining capacity June/11	9,825m <sup>3</sup>
Annual landfill rate	800m <sup>3</sup>
Life expectancy	11 to 12 years

#### Site Expansion

Under the Waste Management Projects Ontario Regulation 101/07 a proposal to increase the landfill capacity to add up to 40,000m<sup>3</sup> could proceed without an environmental assessment.

When a landfill site has an established contaminant attenuation zone (CAZ) and an approved water quality monitoring program which shows no off-site impacts an application can be easily filed under Section 27 of the Environmental Protection Act to the Environmental Assessment & Approvals Branch.

The application would include:

- application form
- a revised Design & Operations Report
- a comprehensive Hydrogeological Report
- summary of Public Consultation
- MOE application fee \$6,000.00 (to be confirmed)

#### Cost for Expansion

For both sites the extent of consulting services provided would be limited to preparing the application form, supporting documentation, including assistance in the public consultation as necessary. Under the current Certificates of Approval the municipality is to prepare a Biennial (every 2 years) Report on site operations and environmental monitoring. The supporting documentation simply compiles historical results and presents how the site will be developed for the additional capacity and project any changes in environmental impact. If there are no outstanding issues it is expected the range of costs for one (1) application would be in the \$15,000 to \$20,000 range.

### Household Hazard Waste Storage

We are in the process of preparing the application form and supporting documentation to operate a HHW storage facility at the Stonecliffe Landfill Site. The proposal is to have the existing container used in part for storage of paint, batteries, fluorescent lighting. A draft will be filed with Council in the near future.

#### Summary

Jp2g will continue our efforts to conduct thorough field surveys to assist the Township in determining the remaining life expectancy of the sites. If municipal staff and its' agents maintain accurate records of waste quantities landfilled and quantities of cover material used, this information can assist in refining our calculations.

Trusting this is of assistance.

Kevin Mooder, MCIP RPP

August 10, 2011