

Update

March 2016

on the Comox Valley Waste Management Centre Landfill Closure Project

Overview:

According to the solid waste management plan, the Comox Strathcona waste management (CSWM) service is responsible for construction of a new engineered landfill at the Comox Valley waste management centre (CVWMC) to serve the region for the next 20 years. To reduce greenhouse gas emissions and prevent environmental impacts, the plan also requires the service to close the existing landfill. The landfill closure supports environmental compliance regulations addressing landfill leachate and landfill gas management.

Latest News:

Approximately 70 per cent of the existing landfill surface has been fully lined with a geomembrane cover to stop clean water from infiltrating the landfill and generating leachate. Clean stormwater diverted from the lined areas is directed off the landfill into two infiltration ponds; a soil layer protects the membrane from damage. The majority of the geomembrane liner has now been covered with the soil protection layer. A final layer of topsoil, as well as hydroseeding, will be placed later this spring. **(Photos 1 & 2)**

Currently, alternative uses for the landfill gas are being investigated. However, before these options can be considered, the CSWM service must also validate flowrates and composition of the landfill gas. These can vary significantly from the modelled rates due to the differences in waste composition, waste age and other environmental conditions. If an alternative use is chosen, an onsite flare system will still be required in the event of a mechanical breakdown and as part of the regular maintenance program – this is directed by Ministry of Environment (MoE) regulations.

According to the MoE's landfill design documents, "methane is considered to be approximately 25 times more heat absorptive than carbon dioxide." By flaring landfill gas, the methane is converted to less potent carbon dioxide. Flaring the landfill gas is a temporary measure that reduces the impact of greenhouse gases until an alternative use is considered.

(Photos 3, 4, 5)

The road at the east side of the active landfill has now been reduced to single-lane traffic for its remaining life to maximize accessible landfill space. At the top and bottom, traffic control lights have been installed to manage vehicles accessing the active face of the landfill.

(Photo 6)

Upcoming project work includes:

- Topsoil placement and hydroseeding on landfill and stripped area

