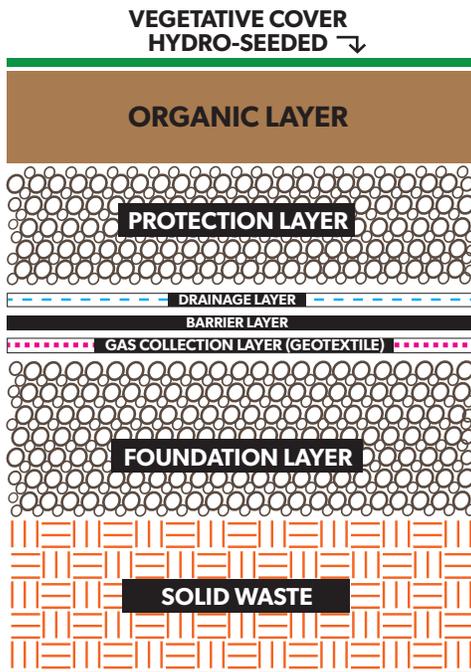# Update

June 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 the 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:

Phase 1 of the Comox Valley waste management centre landfill closure project is nearing completion. **Photos 1 & 2** represent the finished landfill slopes with topsoil. Approximately 70 per cent of the existing landfill surface has been fully closed with a series of layers to stop clean water infiltrating the landfill and generating leachate. The clean stormwater is diverted from the landfill and directed into two infiltration ponds. The illustration below represents the various protection layers installed.

**VEGETATIVE COVER
HYDRO-SEEDED**

ORGANIC LAYER

PROTECTION LAYER

DRAINAGE LAYER

BARRIER LAYER

GAS COLLECTION LAYER (GEOTEXTILE)

FOUNDATION LAYER

SOLID WASTE

The mid-slope ditch intercepts surface water from running along the entire slope of the landfill and causing erosion. Stormwater from the mid-slope ditches is diverted to two drop structures and conveyed to the infiltration ponds. **(See Photos 3 & 4)**

The final layer of hydroseeded topsoil is now completed and is starting to show growth. **(See Photos 5 & 6)**

A gas trench was recently constructed to ensure that gas generated in the closed landfill area does not migrate beyond the footprint of the landfill. **(See Photo 7)**

The landfill gas system has been in operation since February this year. On a weekly basis, landfill gas operators monitor the individual well flow rates and composition and adjust the system accordingly. **(See Photo 8)**

The next step following the phase 1 closure is the construction of the new engineered landfill scheduled to begin this summer.

1 North slope of landfill before hydroseeding

2 Top of the closed landfill area

3 Construction of the mid-slope ditch

4 Drop structure installed to convey storm water from the mid-slope ditch to the stormwater ponds

5 Hydroseeding of final closed landfill slopes

6 Final hydro-seeded slopes starting to show growth

7 Installation of a perimeter landfill gas trench

8 The fully operational landfill gas system