University of Connecticut Hillside Environmental Education Park UCONN Dealing with Waste

Environmental Impact of Waste

We are becoming increasingly aware of the ecological impacts of our society's consumption and waste habits. As we find ways to alter these habits by reducing, reusing and recycling materials and other strategies, we must also address environmental problems caused by waste accumulation and pollution in the landscape.

Until the mid-20th century, landfills were largely unregulated and their impacts on the land were not recognized. Most landfills were sited on land that had little value for other uses, such as the wetland in which the UConn landfill was sited. When waste is buried in the earth, compounds contained in the waste can migrate into the underlying soil and groundwater. When a landfill is in a low-lying wetland area, the surface water and sediment can also become contaminated, destroying valuable wild-life habitat. We now have better landfill siting and environmental protection standards in place, but old landfills often require extensive and complex remediation.

UConn Landfill Remediation

The UConn landfill operated from 1966 to 1989 and then sporadically until 1993. After the landfill operations ended, corrective action was necessary to protect the underground aquifers and the adjacent wetlands from contamination. Three key components comprise this remediation project:

- A Geomembrane Cap covers the compacted waste and restricts precipitation from infiltrating down through the waste into the groundwater.
- o A Leachate Intercepter Trench (LIT) around part of the landfill prevents polluted groundwater from reaching nearby wetlands, and sends the collected water to UConn's waste water treatment facility.

o A series of Methane Vents that protrude from the top of the landfill allowing decomposition gases to escape.

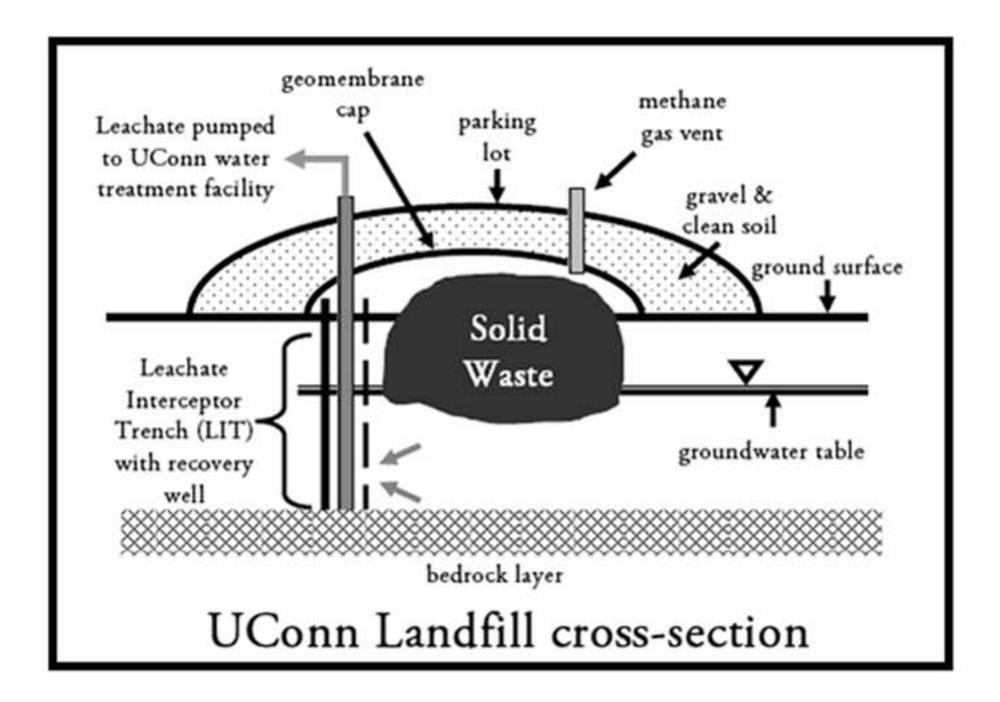
Re-Using Landfill Sites

Once a landfill is safely and properly closed, the site itself can be "recycled" for another use. These sites can be used for recreational activities or other less intensive development, such as the parking lot and park overlook that this landfill site now accommodates.

New Directions for Waste Management at the University of Connecticut

UConn is proactively involved in several initiatives aimed at responsible waste management in the campus community:

- o Recycling programs
- o Composting
- o Energy, water and solid waste reduction programs



Signage design provided by UConn Program of Landscape Architecture with support from UConn Office of Environmental Policy.

