The anatomy of a modern managed landfill includes numerous engineered systems and components that function together with natural conditions and buffers. Combined, these engineered and natural components provide overlapping environmental safeguards throughout the operating and post closure life of the landfill.

Engineered Component Systems

- Stormwater Management System
- Final Cover System
- Liner System
- Gas Management System
- Leachate Management System
- Environmental Monitoring System

The waste containment, treatment, and monitoring systems are designed, constructed, operated, and maintained to provide long-term environmental protection.

Modern managed landfills are designed and operated to prevent human or vector (e.g., insects, rodents, birds, etc.) contact with disposed waste. Additionally, engineered liners of low permeability are used to protect groundwater quality.