

TERMINATION OF MUNICIPAL SOLID WASTE LANDFILL POST-CLOSURE CARE REQUIREMENTS

SWANA supports the use of a performance-based evaluation process for considering the termination of regulatory post-closure care of municipal solid waste landfills, provided it clearly identifies the criteria for demonstrating protection of human health and the environment in the absence of active control systems for leachate and landfill gas, and that the passive control systems including the final cover system will continue to perform as designed.

Three fundamental principles to consider

To determine the requisite length of a MSWLF's PCC period, state programs are encouraged to incorporate three principles in their guidance:

- 1** Establish a **regulatory PCC period** with a finite term determined on a site-specific basis
- 2** Determine the **requisite length of the PCC period** on a scientific basis using a performance-based evaluation of the closed MSWLF.
- 3** Identify **weighted, performance-based criteria** and a technical evaluation approach with stakeholder input.

Defined: Current approaches to PCC

States are increasingly using landfill stability to determine PCC requirements. Two approaches are commonly considered to represent protection of HHE.

ORGANIC STABILITY:

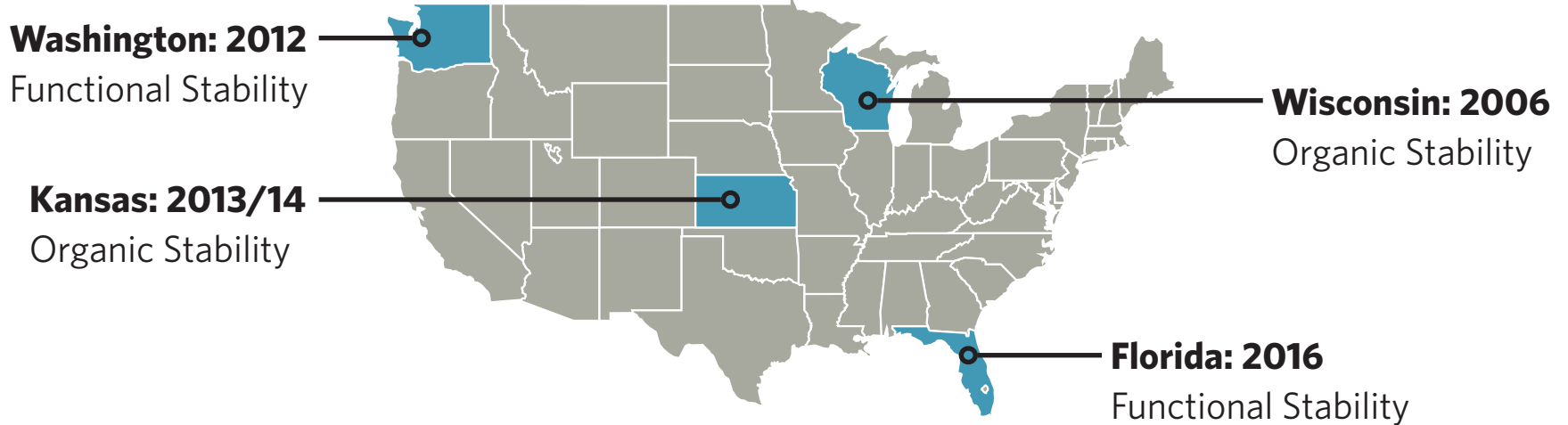
Ensures landfilled waste mass has been biodegraded to the point that human health, environmental, and financial risks associated with the potential exposure to the remaining undecomposed waste are minimal. This may require an upstream organics diversion program or leachate recirculation to effectively enhance degradation prior to closure.

FUNCTIONAL STABILITY:

Demonstrates HHE will be protected when the landfill's active control systems such as landfill gas collection or leachate collection are turned off and only the landfill's passive control systems—such as the final cover system—are functioning. This is the more common approach taken by owners and operators in the U.S.

Landfill post-closure care guidance by state





A few states across the U.S. have established guidance for termination of PCC.



Importance of data collection

To implement either functional or organic stability objectives, significant supporting data are required. The type of data and frequency of collection will depend on the site-specific evaluation criteria established.

Most states with PCC termination programs require landfills to demonstrate stability in four areas:

-  **Groundwater monitoring**
-  **Landfill gas**
-  **Temperature**
-  **Methane & carbon dioxide concentrations**

Once a state of long-term protection of HHE is demonstrated, states may approve a reduction or terminate the PCC period, including cessation of data acquisition and active controls.