
ENVIRONMENTAL Fact Sheet



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Post-Closure Care of Landfills

Effective October 28, 2005, New Hampshire adopted revised Solid Waste Rules (Rules) regulating solid waste. The pertinent Rules for the post-closure monitoring and maintenance of closed landfills include Env-Sw 807.03 "Landfill Closure and Post-Closure Requirements" and Env-Sw 807.05 "Post-Closure Inspections, Monitoring, Maintenance and Reporting Requirements." Under Env-Sw 807.03(a), landfills must be closed in accordance with an approved plan that meets the additional standards set forth in Env-Sw 1106 Additional Closure Requirements. Env-Sw 807.05 (a) requires a closure monitoring period from the time the capping system is installed to demonstrate the facility has achieved the performance standards specified in Env-Sw 807.04.

Post-Closure Care

Once a landfill is closed, the owner/operator is responsible for maintaining the integrity of the landfill cap; making repairs as needed to the cap; monitor water quality, settlement, and methane generation; maintain the gas control, leachate collection, and storm water systems; provide financial assurance for the cost of post-closure care; and file post-closure reports with the Waste Management Division summarizing the condition of the cap and all other elements of the landfill closure. The following information generally describes what is required for the major elements of the post-closure care program.

Repair of Landfill Cap: The owner/operator shall maintain the integrity of the cap and any damage, malfunction, or sub-standard performance must be reported to DES. NOTE: If during an inspection a situation is found meeting the requirements of Env-Sw 1005.09(a) then the owner/operator must contact the DES as soon as practicable. Once the grass is established, it should be mowed at least once each year. In addition, the owner/operator must control public access and prevent unauthorized entry to the site by using natural and artificial barriers, and signs.

Maintain Water Quality Systems and Monitor Water Quality: Ground and surface water sampling must be done in accordance with the terms of the Groundwater Management Permit. All elements of the water quality system (e.g., monitoring wells, etc.) must be inspected. If damage is detected then the owner/operator must first obtain DES approval prior to any repair work. The owner/operator must also obtain DES approval prior to any changes to the terms and conditions of the permit. The requirements for monitoring may be periodically reduced by the DES during the post-closure period if conditions at the site merit such action.

Monitor Settlement, Slope Stability, and Erosion: Owner/operators must monitor the cap's ability to shed water, slope stability, and damage due to erosion in accordance with the approved post-

closure plan and the rules. Any settlement and/or slope movement that exceeds the capping system's design standards, any loss of positive drainage, or damage to the cap must be reported to the DES. Any investigation and repair work must first be approved by the DES.

Maintain /Monitor Gas Control System and Methane Generation: The landfill gas vents, soil gas probes, and, if required, the active gas extraction system must be inspected and maintained in accordance with the approved post-closure plan and rules.

If methane levels detected in the ambient air and/or soil gas probes exceed the limits stated in the rules including the agency's *Landfill Gas Policy*, the owner/operator must contact the DES as soon as possible to discuss what course of action will be required. While most exceedences can be managed through DES, in certain instances, resolution of the issue may require the involvement of the DES Air Resources Division.

Manage the Leachate Collection System: The owner/operator must maintain the leachate collection system and properly manage the liquids until the landfill no longer produces leachate. Leachate quality test results must be submitted to the DES annually.

Financial Assurance: The owner/operator shall maintain financial assurance in the proper amount based upon the estimated cost of post-closure care performed by a third party.

File Post-Closure Performance Report: The owner/operator must file a report with the DES summarizing the capped landfill's performance for the prior reporting period. Any repairs made to the closed landfill must be recorded in the performance report. As noted above, the DES is to be notified as soon as practicable if a condition/situation is discovered, during an inspection, that meets the requirements of Env-Sw 1005.09(a). NOTE: Initially, each post-closure report is submitted annually. However, if over time monitoring data indicates the landfill is meeting the performance standards under Env-Sw 807.04 of the Rules, then the DES may approve a request to reduce the level of post-closure monitoring and maintenance.

Owner/operators should use the post-closure inspection checklist prepared by the DES and provided on the agency's website. The checklist can be obtained by clicking the "forms/applications" link found under the "quick links" window and scrolling down to the Solid Waste section or at <http://des.nh.gov/organization/commissioner/pip/categories/forms.htm>.

For additional information contact the DES Solid Waste Management Bureau at (603) 271-2925.