Post-Closure Care of Landfills

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. The post-closure period of the landfill shall be the period of time required to demonstrate the facility has achieved the performance standards specified in Env-Sw 807.04.

Major Elements of Post-Closure Care
Once a landfill is closed, the owner/operator is responsible for monitoring and maintenance of the landfill cap, decomposition gas control system, stormwater management system, water quality system, and leachate management system; providing financial assurance for the cost of post-closure care; filing annual post-closure reports. Major elements of the post-closure care program include the following.

*Landfill Capping System:* The owner/operator must maintain the integrity of the cap. Monitor the cap’s ability to properly manage water in accordance with the approved post-closure plan and the solid waste rules and report to the New Hampshire Department of Environmental Services (NHDES) any settlement and/or slope movement that exceeds the capping system's design standards, any loss of positive drainage, or damage to the cap. Any investigation and repair work must first be approved by NHDES. Also, the owner/operator must control public access and prevent unauthorized entry by using natural and artificial barriers, and signs.

*Decomposition Gas Control System and Methane Generation:* The owner/operator must inspect and maintain landfill gas vents, soil gas probes, and the active gas extraction system, if applicable, in accordance with the approved post-closure plan and solid waste rules. If methane gas levels detected in the ambient air and/or soil gas probes exceed limits in the solid waste rules, the owner/operator must contact NHDES immediately and implement contingency procedures to ensure protection of public health and safety.

*Stormwater Management System:* The owner/operator must inspect and maintain the stormwater system including swales, culverts and detention basins.

*Water Quality Systems and Monitor Water Quality:* The owner/operator must sample ground and surface water in accordance with the terms of the Groundwater Management Permit and inspect all elements of the water quality system (e.g., monitoring wells, etc.).
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 NHDES annually.

Financial Assurance: The owner/operator must maintain financial assurance in accordance with Env-Sw 1400. Cost estimate to be based upon the estimated cost of post-closure care performed by a third party.

Annual Post-Closure Report: The owner/operator must file an annual report with NHDES for the prior calendar year for each year of the facility’s post-closure monitoring and maintenance period. Notify NHDES as soon as practicable if a condition/situation is discovered that meets the requirements of Env-Sw 1005.09(a), Incident Reporting. The owner/operator may request to reduce the level of post-closure monitoring and maintenance subject to the limitation in Env-Sw 807.05(g).

Owner/operators should use the post-closure report form on the NHDES website at the following link: https://www.des.nh.gov/organization/divisions/waste/swmb/css/categories/forms.htm#annual.

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