

Closure and Post-Closure Care Plan

The written closure/post-closure care plan is to include the following information in a **formal report**:

A) SITE DESCRIPTION:

- 1) A report describing the general and local geology and hydrogeology of the landfill site area.
- 2) Groundwater information indicating depth(s) and, if possible, water quality.
- 3) A landfill description, including:
 - a) How long the landfill was in operation; date the landfill opened; date the landfill closed
 - b) The types of waste accepted at the landfill (i.e. - household, commercial, construction and demolition waste, etc.)
 - c) The volume of waste on-site at the time of closure
 - d) The size of the actual fill area (indicate dimensions and show on a topographic map)
 - e) Indicate existing structures (buildings, residences, sheds, etc), existing drainages, and water wells in the area (show on topographic map).
 - f) The size of the landfill property (indicate acreage and show on topographic map)

B) COVER PLAN:

- 1) Description of the cover material and source.
- 2) Indicate the source (borrow area) of the cover material.
- 3) A construction quality assurance / construction quality control (CQA/CQC) plan for placement of the final cover.
- 4) What equipment will be utilized to apply the cover to the landfill and how it will be compacted to obtain the appropriate Proctor Density.
- 5) Thickness of the cover material.*
- 6) Indicate final contours** and grade (show on site topographic map)

Note: *Part 20.9.6.9.A.1.a, b and c NMAC of the Rules. Under the 2007 Solid Waste Rules, an infiltration layer of a minimum of 18 inches of earthen material having a saturated hydraulic conductivity less than or equal to the saturated hydraulic conductivity of any bottom liner system or natural subsoil present, or a saturated hydraulic conductivity no greater than 1×10^{-5} cm/sec whichever is less for landfills that receive greater than 7300 tons (~ 20 tons/day average) or 1×10^{-5} cm/sec for landfills that receive less than 7300 tons. An erosion layer consisting of at least 6 inches of earthen material that is capable of sustaining native plant growth. * 20.9.6.10 NMAC for construction and demolition landfills a final cover of not less than 24 inches of approved material consisting of 18 inches of approved material and a layer for minimizing erosion of not less than 6 inches that is capable of sustaining native plant growth. Alternative covers may be submitted but they must meet the criteria in the Rules and receive approval from the Department.

**Part 20.9.6.9.A.1.e NMAC of the Rules. The final contours must exhibit gradients in which the side slopes shall not exceed 25% (or 33% under 20.9.6.9.A.2.d) grade and the top portion of the landfill shall have a gradient of 2% to 5% (depending on when the facility was permitted or expanded) in order to prevent ponding of water and erosion of the cover material.

C) FINAL USE:

- 1) Define the vegetation plan, including:
 - a) the spreading method
 - b) species of vegetation to be planted
- 2) Final usage plan for the landfill site area.
- 3) Describe the methane monitoring plan. Methane monitoring is required in any buildings adjacent to the fill areas and along property boundaries.
- 4) Plan to prevent unauthorized access
- 5) Plan to remove unused structures
- 4) Upon completion of closure, file a detailed use description of the site, with a plat, with the county land recording authority. Provide a copy of the filed recording to the Department.

D) POST-CLOSURE CARE PLAN:

- 1) Describe the monitoring and repair plan to protect cover integrity from settlement, ponding, water and wind erosion, drainage, and vegetation maintenance over the 30 year post-closure period.
- 2) Description of the methane monitoring plan during post-closure.
- 3) Description of the groundwater monitoring system* plan during post-closure.
- 4) A schedule for completion of closure activities.

Note: *Groundwater monitoring system plans in accordance with Part 20.9.9 of the Rules are required for landfills closed after May 13, 1989, unless the landfill qualifies for an exemption under Part 20.9.2.14 or 20.9.9.8 NMAC. However, those landfills with exemptions (which have Department approval) must address groundwater monitoring.

E) MAPS AND DRAWINGS:

Maps that are required for closure/post-closure care plans are as follows:

- 1) U.S.G.S. 7.5 Minute Topographic Map: indicating the *landfill property boundary, cells (fill areas), wells, and structures* within and surrounding the landfill site
- 2) Plan Drawings (including Final Contour Grade Map) indicating:
 - (a) the *final contours and vegetation* in relationship to the surrounding land and any run-on and run-off control structures;
 - (b) *well location(s), depth to groundwater and flow direction (local and/or regional) and gradient;*
 - (c) the locations at which methane monitoring values are established.
- 3) Geological Map and Cross-sections: indicating the *surface geology* of the landfill site and surrounding site including *cross-sections* illustrating subsurface geologic structures (e.g. - faults, dipping strata, etc.).

F) FINANCIAL ASSURANCE:

Municipal landfills and landfills granted a waiver under 20.9.14 NMAC operating on or after April 9, 1997 or solid waste facilities permitted after January 30, 1992 are required to have Financial Assurance under 20.9.10 NMAC. Contact the SWB Financial Assurance Officer at 505-827-2860 to ensure that Financial Assurance mechanism(s) (in accordance with the Rules) has been executed. Financial Assurance costs should include but not be limited to hiring a third party contractor to close the largest area of the facility ever requiring closure and should include proof of financial assurance.