

Closure and Post-Closure Care Plan per 20.9.6.9 NMAC

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

- A. Schedule for completion of all activities necessary to meet closure criteria.
- B. SITE DESCRIPTION:
 - 1) A report describing the local geology and hydrogeology of the landfill site area, including maps and cross-sections illustrating subsurface features.
 - 2) Groundwater information: well locations, depth(s) to ground water, and, if possible, water quality, flow direction and gradient shown on a topographic map.
 - 3) A landfill description, including:
 - a) How long the landfill was in operation; date the landfill opened and date of final receipt of waste;
 - b) types of waste accepted at the landfill (i.e. - household, commercial, construction and demolition waste, etc.);
 - c) total volume of waste on-site at the time of closure;
 - d) 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) size of the landfill property (indicate acreage and show on topographic map), and
 - g) methane monitoring points and methane concentrations along the landfill property boundary and within structures located on landfill property (on a topographic map).
- C. COVER PLAN:
 - 1) Description of the cover material and its placement;
 - 2) indicate the source (borrow area) of the cover material;
 - 3) construction quality assurance / construction quality control (CQA/CQC) plan for placement of the final cover;
 - 4) equipment that will be utilized to apply the cover to the landfill and ensure it is adequately compacted to obtain the appropriate Proctor Density;
 - 5) thickness of the cover material and hydraulic conductivity* ; and

* 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.

- 6) indicate final contours^{**} and grade (show on site topographic map).

D. VEGETATION PLAN:

- 1) Seeding method to obtain proper growth density; and
- 2) Species of vegetation to be planted, including grasses of local seed mix as recommended for the area by the natural resources conservation service for permanent soil stabilization and to minimize wind and water erosion

E. OTHER PLANS:

- 1) Final usage plan for the landfill site area;
 - a. upon completion of closure, a detailed description of the location of areas of waste disposed at the facility, including a plat (signed by a registered surveyor), shall be filed with the appropriate county land recording authority. Provide a copy of the filed recording to the Department. The description and the plat so that it will be found during a title search and proof of the filing shall be submitted to the secretary; the description shall perpetually notify any potential purchaser of the property that;
 - i. the land has been used as a landfill facility;
 - ii. its use is restricted as described in the post-closure care plan
- 2) Plan to prevent unauthorized access by public and entry by large animals to the landfill through the use of fences, gates, locks, or other means.
- 3) Plan to remove unused structures, unless otherwise approved by the Secretary.
- 4) Description of signs, indicating that the site is a closed landfill and no dumping is permitted (signs shall include the name and telephone number of the landfill owner).

F. 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) methane monitoring plan;
- 3) groundwater monitoring plan^{***}; and
- 4) leachate collection system plan, if applicable.

G. MAPS AND DRAWINGS:

- 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.

^{**} 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.

^{***} 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.

- 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; and
 - (c) 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.).

H. 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 at any time during the active life and should include proof of financial assurance.