



FACT SHEET — Summary of Landfill Final Cover Requirements

Old Final Cover Standard

Final cover is designed to minimize infiltration of moisture through the landfill. The cover is sloped to provide drainage, and vegetated to control erosion. Nevada State landfill regulations adopted in 1977 included the following standards:

- ...2. Final cover. A layer of suitable cover material compacted to a minimum uniform thickness of 24 inches must be placed on any surface that represents the final grade of the landfill. This cover should be placed within 30 days of lift completion.*
- 3. Final cover must be graded to drain surface runoff water. The top slope should be from 2 to 4 percent.*
- 4. The integrity of all cover must be maintained. All cracks, depressions and erosion of the cover for surface and side slopes of fills must be promptly repaired. (NAC 444.716, eff. 9/21/77)*
- 5. Landfills that are not subject to the new cover standards should be covered and closed as described above.*

New Cover Standard – Applicability

Federal landfill regulations published on October 9, 1991, which were incorporated into the Nevada Administrative Code (NAC) on November 8, 1993, include criteria for final cover construction. These regulations were phased in over time, and different standards apply depending on the landfill's rate of waste disposal and the dates that disposal ceased:

1. Municipal waste landfills that stopped receiving waste prior to October 9, 1991, are not subject to the new federal regulations, although the old State regulations do apply.
2. Municipal waste landfills that disposed of less than 100 tons per day and stopped receiving waste after October 9, 1991, but before April 9, 1994 must only comply with the federal standard for final cover of the landfill.
3. Class II municipal waste landfills, i.e., small, rural landfills as defined in NAC 444.571, that stopped receiving waste before October 9, 1997 must only comply with the federal standard for final cover of the landfill.
4. Municipal landfills that do not satisfy the conditions of #2 or #3, above, and that received waste after October 9, 1993 must comply with all of the federal landfill requirements, including closure and post-closure care requirements.

New Cover Standard - Prescriptive and Alternative Designs

Federal landfill regulations established in 1991 were more stringent than the old State standard. The State and federal regulations now require a final cover composed of an

infiltration layer 18 inches thick having a permeability of no more than 10^{-5} cm/sec, topped by an erosion layer 6 inches thick and capable of supporting native plant growth. The permeability requirement means that, in general, soil with a high clay content is required for the final cover material.

The regulations also contain provisions for approval of alternative cover designs that can be demonstrated to perform as well as the prescriptive standard in reducing infiltration and preventing erosion. During the last decade a growing field of research has investigated the performance characteristics of a variety of landfill cover designs. Nevada's arid climate makes the region particularly well-suited to the use of certain alternative cover designs. Such designs may be able to cost-effectively meet or exceed performance requirements without utilizing low-permeability soils.

Contact

For additional information, contact the NDEP Solid Waste Branch at (775) 687-9462. Facilities located in Clark or Washoe Counties should contact:

- [Southern Nevada Health District](#) at (702) 759-0600
- [Washoe County District Health Department](#) at (775) 328-2434