



WASTE MANAGEMENT
& RADIATION CONTROL

Utah Division of Waste Management and Radiation Control Solid Waste Management Program

Mailing Address
P.O. Box 144880
Salt Lake City, Utah 84114-4880

Office Location
195 North 1950 West
Salt Lake City, Utah 84116

Phone (801) 536-0200
Fax (801) 536-0222
www.deq.utah.gov

ACTIVITIES ON CLOSED LANDFILLS GUIDANCE

This guidance is not a rule. It has been prepared to give the reader information, in plain language, about how the Division of Waste Management and Radiation Control expects to interpret Rule R315-302-3 and other sections of the solid waste rules covering post-closure care activities on landfills. In the event questions arise regarding the matters discussed in this guidance, the text of the rule will govern.

Utah administrative Code (UAC) R315-302-3 (Landfill closure requirements) is not applicable to units or facilities that received municipal or construction/demolition waste and that were properly closed prior to July 15, 1993 or industrial landfills that were properly closed prior to July 15, 1999. However, landfills that closed prior to these dates and that have caused contamination of surface or ground water may be subject to corrective actions under UAC R315-301-6 or other state, local, or federal regulations.

Solid waste that is removed from a landfill site (i.e., excavated from a cell) or otherwise actively managed at the site is subject to the *Solid Waste Permitting and Management Rules* and must be properly managed (i.e., disposed, reused, recycled, etc.) in accordance with the rules.

Note: Activities on closed landfills are always subject to all other applicable local, state, or federal ordinances, statutes, etc.

Note: Open burning is prohibited at landfills. Open burning of green waste can be allowed on closed landfills or other controlled areas when done in accordance with Utah Division of Air Quality rules.

The *Utah Solid Waste Permitting and Management Rules* (Rules) do not specifically prohibit any activity, including construction or development, from occurring on a closed landfill. However, the rules do require that any activity conducted on a closed landfill be conducted in a way that will maintain the integrity of the cover system. The following guidance is provided to assist anyone wishing to develop the area on and around a landfill that has been closed. Activities on closed landfills should be reviewed in light of the following:

- The activity is not specifically prohibited under local or other regulations;
- The facility has an adequate post-closure plan, in accordance with the Rules, which specifically includes a description of the activities planned and occurring on the landfill during the post-closure period (Note: Activities cannot occur on a landfill in post-closure care unless appropriately addressed in the post-closure plan for the facility). Post-closure care plans are approved by the Director of the Division of Waste Management and Radiation Control and may be amended to include the activity;
- The activity may not permanently compromise the integrity (i.e., performance, effectiveness, or soundness) of the final cover, liner(s), or any other components of the containment system;
- The activity can not disturb the function of the monitoring systems; and
- Any activity, not part of the post-closure care plan, that will disturb the final cover will require approval of the Director. An activity that will penetrate the infiltration layer, whether listed in the post-closure care plan or not, must be reviewed and approved by the Director prior to commencement of the activity. To receive this approval, the owner or operator must demonstrate that any disturbance of the final cover, liner(s), or any other components of the containment system will not decrease the effectiveness of the final cover system and will not increase the potential threat to human health or the

environment and that the disturbance of any component of the containment system or monitoring system will be repaired.

The integrity of the final cover, liner(s), or any other component of the containment system, or the function of all the monitoring system's components must be maintained at all times. Construction and other disturbances that occur on the landfill during the post-closure period should be done in a manner that minimizes disturbance of all of the components of the containment and monitoring systems and maintains a positive drainage of storm water away from the fill area (i.e., prevents the infiltration of surface water or other liquids into the waste). Practices that would minimize the disturbance of the final cover and not disturb the integrity of the containment systems include, placing any structures on concrete pads or placing additional soil fill. If the final cover is to be disturbed, the components disturbed must be repaired immediately. Any disturbance and subsequent repair must be done in a way that results in a final cover with a hydraulic conductivity less than or equal to the original final cover. (For example, a trench can be dug in the erosion layer to lay cable that would lie above the infiltration layer. This disturbance must be repaired by covering the trench with soil or other suitable cover of equal thickness and contoured to prevent ponding.

Activities that penetrate into the waste (e.g., placing footings for a building, etc.) will, at least temporarily, disturb the integrity of the final cover system, and have a high potential of permanently disturbing the integrity of the system. Activities that disturb the final cover and require penetration of the cover and liners must be reviewed by the Director and may be rejected. If activities that disturb the final cover are allowed they should be conducted so that:

- (1) Gas and leachate collection systems or ground water monitoring systems will not be adversely impacted;
- (2) The integrity of the final cover system is fully restored to at least its original condition immediately upon completion of the activity that caused the disturbance.

The time allowed for the disturbance should be kept as short as practical. During the construction activities, the area of waste that is exposed to the atmosphere should be kept as small as practical. Disturbed waste and areas immediately surrounding the disturbance should be covered with effective protection at all times during the activity. Disturbed areas must be protected from surface water (or other liquid) entry, or other adverse impacts on the landfill. Disturbed areas should also be managed to prevent wastes inadvertently leaving the area and adversely impacting human health or the environment.

Persons proposing permanent structures on landfills should understand that problems with foundation stability and explosive gases, along with many other factors, make for potential health and safety issues that are difficult to overcome. Any proposed structures that will be placed on the landfill should be designed to prevent the accumulation of methane gas in and around the structure and should include a plan for monitoring methane in the structures.

Note: Proposed construction activities on a closed landfill that are not part of the post closure plan, would be considered a major amendment to the post closure plan and must be approved by the Director and are a major modification to the post-closure care permit.

After the post-closure period has ended, activities can occur on a closed landfill provided the activity is conducted in accordance with all applicable ordinances, regulations, statutes, etc.

Note UAC R315-302-2(6) requires an attachment to the deed to any property that has been used as a landfill. The attachment cannot be removed at the end of the post-closure period.