# Updates to Wisconsin's Landfill Design and Operations Administrative Code

The Wisconsin Department of Natural Resources has updated regulations affecting municipal solid waste and industrial landfills. Many of these changes are designed to create consistency or provide additional clarity. Most of these changes take effect Oct. 1, 2025.

The rulemaking process included six meetings with a Technical Advisory Committee made up of solid waste industry association representatives, landfill owners and operators, and landfill design consultants. Many changes were made to rule proposals based on committee feedback.

The information below is a summary of administrative code changes and is not comprehensive. To view the complete rule changes, go to <u>Wisconsin Legislature</u>: <u>CR 24-063</u>.

## **Changes affecting landfill design**

- Allows for reduced separation distance between the seasonal high groundwater table and the bottom of the clay component of a landfill liner if the design includes an underdrain system.
- Allows a reduced separation distance between the top of the competent bedrock surface and the bottom of the clay component if approved by the DNR in writing.
- Geotextiles must be at least 16 ounces/yard<sup>2</sup> rather than the current 12 ounces, unless otherwise approved by the DNR in writing.
- Allows an optional landfill liner design that uses 3 feet of clay soil and 1 foot of compacted soil instead of 4 feet of clay (see Figure 1).

Figure1: Optional landfill liner design

- 1 foot of prepared sub-base under all portions of the clay liner
- · 3 feet of clay at the base of the liner
- 4 feet of clay under the leachate collection sump
- 2 feet of clay for the 3:1 side slopes
- Allows for alternative landfill cover designs to be proposed as long as they meet performance criteria and adequately protect public health, welfare and the environment.
- Increases minimum leachate pipe diameters from 6 inches to a 6-inch inside diameter.
- When excavating soil designated to be used for a liner or final cover for the landfill, an initial site inspection is not required at the soil borrow sources if the DNR previously issued a storm water discharge permit.

### **Changes affecting landfill operation**

- The DNR may require that gas be extracted from a landfill earlier than what is currently required to meet air quality regulations if there are any of the following:
  - persistent odor issues;
  - leachate seeps caused by gas pressure;
  - reoccurring surface emissions greater than 500 ppm methane above background; or
  - areas with stressed vegetation or other physical signs of landfill gas emergence.



- Reduced frequency of leachate collection line cleaning is allowed for high-volume industrial waste landfills if there is no historic record of blockages or other issues with the performance of the lines.
- Landfills must notify the DNR of the following events:
  - o a landfill surface fire;
  - a subsurface fire or elevated temperatures; and
  - o a leachate seep or leachate spill outside the limits of waste.

#### **Changes affecting landfill monitoring**

- Multiple changes reflect best management practices in the solid waste management industry for proper
  operation, maintenance, reporting of sampling results, and labeling of monitoring devices relating to
  leachate and gas production or the effect on the quality of the air, groundwater, surface water or soils.
- Submittal deadlines for certain well sampling and analytical data changed from 60 days after completing sampling and analysis (an undefined, variable date) to 90 days after the end of the sampling period.
- When a groundwater standard is attained or exceeded at any groundwater monitoring well *or water supply well*, landfills must implement corrective action responses.

#### **Changes affecting submittals and DNR review**

- Establishing minimum site-specific information that a geotechnical investigation must obtain for a feasibility report. This codifies site-specific geotechnical information that DNR review staff routinely request that defines the physical characteristics of the proposed landfill's location.
- Reduced requirements for locational criteria and information submittals for a vertical-only expansion of an existing landfill.
- The DNR may approve delaying final cover placement for up to two years after a municipal solid waste landfill attains either final waste grades or maximum interim waste grades.
- A municipal solid waste landfill may temporarily place waste up to 10% higher than the approved final waste grades when compared to the depth of waste at that location. If requesting more than 5% of the approved final waste grade, the landfill owner or operator must establish financial responsibility for closure of the additional waste amount.
- The due date for all landfill annual operations reports (required under s. NR 506.19) is now April 30 (previously, different landfills had different dates conditioned in DNR approvals) and the required information to be included is standardized.
- Surveys of landfill boundaries and environmental monitoring devices, annual topographic surveys, or other activities as requested by the DNR must be conducted by a licensed professional land surveyor or by a qualified technician who is directly supervised by a licensed professional land surveyor.

# **Changes affecting owner financial responsibility**

- The limit increased from \$100,000 to \$250,000 (the standard Federal Deposit Insurance Corporation insurance limit) for the amount of cash or certificates of deposit allowed for certain methods used for providing proof of financial responsibility.
- A closed landfill already in a long-term care period may adjust owner financial responsibility costs for leachate collection and management after assessing a minimum 10-year period of leachate generation rates.
- Calculation of owner financial responsibility costs will now use a five-year average inflation factor, rather than the most recent single year, and a discount rate equal to the projected rate of inflation plus 1.5%.

