

Updates to Wisconsin's Landfill Design and Operations Administrative Code

The Wisconsin Department of Natural Resources (DNR) has updated regulations in chapters NR 500 – 530, Wis. Adm. Code, affecting municipal solid waste (MSW) 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 DNR will work with affected facilities on implementing the code revisions, and will share more details soon regarding specific requirements and implementation timelines.

The information below is a summary of administrative code changes and is not comprehensive. To view the complete rule changes, go to [Wisconsin Legislature: CR 24-063](#). Find updated code language on the [Wisconsin Administrative Code webpage](#). The DNR encourages landfill owners and operators to review the facility's approved conditions and identify any that may conflict with new code requirements. If you have specific questions about your facility, contact your [assigned DNR engineer](#).

Requirement to notify DNR of leachate releases and fires

The new code requires active landfills to notify the Wisconsin Department of Natural Resources in writing within a specified time period when certain events occur. Find detailed requirements under [s. NR 506.17 \(5\), Wis. Adm. Code](#).

The DNR has created an [online form](#) for landfill owners and operators to submit detailed notification to the DNR. You can reach out directly to the [DNR engineer assigned to your facility](#) with questions or for notifications of ongoing events.

Required notifications include:

- Landfills must notify the DNR of a landfill surface fire within one day of the occurrence. This initial notification should be made to the [DNR engineer assigned to your facility](#). Additional, more detailed information must be submitted to the DNR within five days of the fire
- Landfills must notify the DNR of suspected landfill subsurface fire or elevated temperatures within five days of verification.
- Landfills must initially notify the DNR of a leachate seep or leachate spill outside the limits of filling within one day of the occurrence. Send this notification directly to the [DNR engineer assigned to your facility](#). The landfill must also report the seep or spill to the DNR Spills Hotline at 1-800-943-0003 if it leaves the landfill footprint.
- Additional, more detailed information must be submitted to the DNR within five days of the discovery of the seep or spill.
- Landfills must also notify the DNR of completion of cleanup of the leachate seep or spill within 30 days of discovery of the occurrence.

Changes affecting landfill design and construction

The following code changes will affect both future design and construction of previously approved landfill cells. Talk with your assigned DNR hydrogeologist and engineer if you have questions about how these apply to your projects.

The DNR expects landfills to implement the following for 2026 construction, as well as future design:

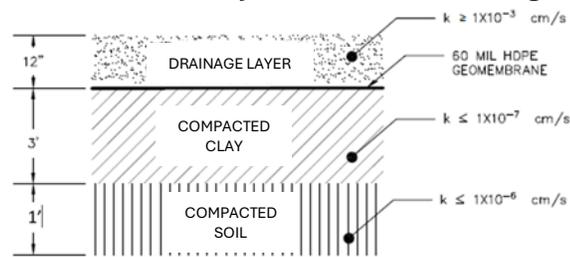
- Geotextiles must be at least 16 ounces/yard² rather than the current 12 ounces/yard², unless otherwise approved by the DNR in writing.
- Leachate pipes must have a minimum 6-inch *inside* diameter.
- When excavating soil designated to be used for a liner or final cover for the landfill, an initial site inspection is not required at the soil borrow sources if the DNR previously issued a storm water discharge permit.

Landfills wishing to implement any of the following must include proposals in their feasibility submittals, plans of operation or a plan modification for a previously approved plan of operation:

- An optional landfill liner design that uses 3 feet of clay soils and 1 foot of compacted soils instead of 4 feet of clay soils (see Figure 1).



Figure1: Alternative composite 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
- Alternative landfill cover designs to be proposed as long as they meet performance criteria and adequately protect public health, welfare and the environment.
 - Intermediate waste grades are permitted up to 10% of the depth of waste in a location. Requests for 5% - 10% intermediate waste grades are required to establish owner financial responsibility for removal of wastes that do not settle.

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.

Changes affecting landfill monitoring

Multiple changes reflect best management practices (BMPs) 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. The DNR expects landfills to implement monitoring changes by the spring 2026 sampling season.

- MSW landfills that have chemical oxygen demand (COD) in their groundwater monitoring plan can replace it with dissolved organic carbon (DOC).
- Landfills should follow the new Table 6 in ch. NR 507 for reporting gas extraction well data. This includes:
 - Work with your assigned DNR engineer to create a point ID for site conditions, and report site conditions data to that point.
 - Use the new ground conditions parameter code (point ID 12).
 - Landfills can stop reporting the percent valve opening from their gas monitoring.
- Submittal deadlines for certain well sampling and analytical data changed from 60 days after completing sampling and analysis 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

- Establishes 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 feasibility reports for a vertical-only expansion of an existing landfill.
- The DNR may approve delaying final cover placement for up to two years after an MSW landfill attains either final waste grades or maximum interim waste grades.
- An MSW 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.

New requirements for annual operations report

- The due date for all landfill annual operations reports (required under s. NR 506.19) is now April 30 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.
- Landfills should also include any specific annual report elements conditioned in their approval that are in addition to what is required in code
- When ready to submit your report, contact you assigned DNR engineer so they can set up a Box.com link to transfer the files.

Changes affecting owner financial responsibility

- Increases the limit 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%.

