

ADMINISTRATIVE RULES Fiscal Estimate & Economic Impact Analysis

1. Type of Estimate and Analysis <input type="checkbox"/> Original <input checked="" type="checkbox"/> Updated <input type="checkbox"/> Corrected	2. Date 07/16/2024
3. Administrative Rule Chapter, Title and Number (and Clearinghouse Number if applicable) NR 500 - General Solid Waste Management Requirements NR 504 - Landfill Location, Performance, Design And Construction Criteria NR 506 - Landfill Operational Criteria NR 507 - Environmental Monitoring For Landfills NR 508 - Responses When A Groundwater Standard Is Attained Or Exceeded NR 509 - Initial Site Reports For Landfills NR 510 - Pre-feasibility Reports For Landfills NR 512 - Feasibility Reports For Landfills NR 514 - Plan Of Operation And Closure Plans For Landfills NR 516 - Landfill Construction Documentation NR 520 - Solid Waste Management Fees And Financial Responsibility Requirements NR 524 - Training And Certification Requirements For Solid Waste Disposal Facility Operators	
4. Subject Revisions to chs. NR 500 to 524 related to landfill design and operation, solid waste management fees, financial responsibility and reporting requirements. Board Order WA-11-22	
5. Fund Sources Affected <input type="checkbox"/> GPR <input type="checkbox"/> FED <input type="checkbox"/> PRO <input checked="" type="checkbox"/> PRS <input type="checkbox"/> SEG <input type="checkbox"/> SEG-S	6. Chapter 20, Stats. Appropriations Affected s. 20.370 (4) (dg) Solid waste management
7. Fiscal Effect of Implementing the Rule <input type="checkbox"/> No Fiscal Effect <input checked="" type="checkbox"/> Increase Existing Revenues <input type="checkbox"/> Increase Costs <input type="checkbox"/> Decrease Costs <input type="checkbox"/> Indeterminate <input type="checkbox"/> Decrease Existing Revenues <input type="checkbox"/> Could Absorb Within Agency's Budget	
8. The Rule Will Impact the Following (Check All That Apply) <input checked="" type="checkbox"/> State's Economy <input checked="" type="checkbox"/> Specific Businesses/Sectors <input checked="" type="checkbox"/> Local Government Units <input type="checkbox"/> Public Utility Rate Payers <input checked="" type="checkbox"/> Small Businesses (if checked, complete Attachment A)	
9. Estimate of Implementation and Compliance to Businesses, Local Governmental Units and Individuals, per s. 227.137(3)(b)(1). The department's estimate of the implementation and compliance costs that are reasonably expected to be incurred by or passed along to businesses, local governmental units, and individuals as a result of initial years of implementation of the proposed rule is \$2,576,218 in 2027 and \$2,727,768 in 2028, with a total of \$5,303,986 in those two years. The department's estimate of the implementation and compliance costs that are reasonably expected to be incurred by or passed along to businesses, local governmental units, and individuals as a result of the highest two cost years of the proposed rule is \$6,145,856 (\$3,077,428 in 2036 and 2037, each).	
10. Would Implementation and Compliance Costs Businesses, Local Governmental Units and Individuals Be \$10 Million or more Over Any 2-year Period, per s. 227.137(3)(b)(2)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
11. Policy Problem Addressed by the Rule This proposed rule amends portions of chs. NR 500 to 524, Wis. Adm. Code, to incorporate changes to solid waste landfill design and operational requirements, solid waste management fees, financial responsibility, and reporting requirements. This proposed rule reflects current industry standards and experience gained over the last 30 years related to the design,	

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construction and operation of solid waste landfills while continuing to protect public health and the environment.

The proposed rule is a broad update of municipal solid waste (MSW) and industrial landfill requirements and fees—the first major update to these rules since 2006. Many of the proposed rule revisions reflect existing policies and practices and the proposed rule would provide additional clarification or criteria. The revisions would streamline processes by eliminating ambiguity or the need for certain conditions or grants of exemption. Some of the proposed rule revisions reflect new allowances or requirements requested by stakeholders, such as an additional design option for the liner of a MSW landfill. The proposed rule would improve the management of landfills in Wisconsin and create efficiencies in plan reviews by codifying common requirements and applying consistent regulations statewide. The proposed rule would include updates to fees and owner financial responsibility and reporting requirements, which have not been updated since 2006 or earlier, to provide additional staffing and resources for better customer service.

12. Summary of the Businesses, Business Sectors, Associations Representing Business, Local Governmental Units, and Individuals that may be Affected by the Proposed Rule that were Contacted for Comments.

The department contacted the following entities to solicit comments on the economic impact of the proposed rule:

- All active licensed landfill owners and operators.
- Trade groups including the Associated Recyclers of Wisconsin, Solid Waste Association of North America—Badger Chapter, National Waste and Recycling Association—Badger Chapter, Wisconsin Counties Solid Waste Management Association, and the department’s Waste and Materials Management Study Group.
- Feedback on the proposed rule was also solicited from the Technical Advisory Committee associated with the proposed rule. The Committee met throughout the rule development phase from April 2023 through February 2024. The committee consists of solid waste industry association representatives, landfill owners and operators, landfill design consultants, an environmental group representative, and a university representative.
- Email notification of the proposed rule and this economic impact analysis was sent to all people registered to receive information through the department’s email lists associated with solid waste news.

The proposed rule will primarily affect landfill owners and operators, including both public entities and private companies and their contractors. Adjusted landfill license surcharge fees applied to waste going to landfills would minimally affect individual generators of waste statewide.

13. Identify the Local Governmental Units that Participated in the Development of this EIA.

The department solicited comments and local governmental unit participation on the economic impact of the rule by notifying the Wisconsin Counties Association and the Wisconsin Counties Solid Waste Management Association, League of Wisconsin Municipalities, and Wisconsin Towns Association. No local governmental units requested to participate in the development of this EIA.

14. Summary of Rule’s Economic and Fiscal Impact on Specific Businesses, Business Sectors, Public Utility Rate Payers, Local Governmental Units and the State’s Economy as a Whole (Include Implementation and Compliance Costs Expected to be Incurred)

Proposed changes to landfill design or operation requirements and fees may result in both economic savings and costs for landfill owners and operators. There are currently 58 active licensed MSW and industrial landfills and thousands of closed landfills in Wisconsin. State residents and businesses are indirectly affected by state solid waste management policies and standards because they rely on the existence of an efficient system for disposing of solid waste and the protection from risks to public health and the environment that state solid waste codes provide. Regulations ensure modern landfills are well-engineered and managed for the disposal of solid waste. Landfills are located, designed, operated and monitored to ensure compliance with regulations and to protect the environment from contaminants that may be present in the waste stream.

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Portions of the rule may have a positive economic impact on landfill facility owners and operators due to reduced construction costs or other efficiencies that minimize operation costs. The costs and benefits will likely vary for each landfill based on differences in locally available construction materials and costs across the State. Increased operating costs can be offset by benefits and efficiencies realized from other changes within the proposed rule.

The rule proposes changes to plan review and licensing fees consistent with s. 289.61, Wis. Stats., which requires the department adopt by rule a graduated schedule of reasonable license and review fees for solid waste license and review activities at a level anticipated to recover the solid waste program staff review costs. Any impacts from modified fees may be passed on by facility operators to the generators of the waste being managed (businesses, municipalities and residential customers).

The proposed rule amends multiple components of solid waste landfill management such as solid waste landfill design and operational requirements, solid waste management fees, financial responsibility, and reporting requirements. Not all of these changes impose implementation and compliance costs to the relevant stakeholders. Therefore, the economic impact analysis (EIA) below first discusses the proposals that have minimal to no economic impact, and secondly the portion of rules that lead to reasonable economic impact.

PROPOSED RULE CHANGES WITH MINIMAL TO NO ECONOMIC IMPACT

The implementation and compliance costs are negligible for these proposed rule changes. In many instances, the stakeholders benefit from the rule amendments. These implementation and compliance costs are not included in the overall Estimate of Implementation and Compliance to Businesses, Local Governmental Units and Individuals (Section 9).

1. Amendments to rules reflecting current practices and policies

Several of the proposed rule changes codify more modern, existing practices now utilized by the industry since the last updates to this code or codify conditions applied uniformly to a majority of landfill design and operations, and therefore these amendments have minimal to no economic impact. The amendments reflecting current practices and policies are summarized below:

- Codifying a currently allowed practice to allow native seed mixes to be used on the final cover of closed landfill areas.
 - Codifying existing long-term care requirements after closure of a landfill that are currently specified in each landfill's plan of operation, including: maintaining signs and restricted access, removing vegetation that would impact the cover, preventing erosion or ponding of water, continued control and collection of gas and leachate, and continued monitoring of groundwater.
 - Codifying existing annual report requirements that are currently specified in each landfill's plan of operation.
 - Proposing several minor edits to clarify proper operation, maintenance, reporting of sampling results, and labeling of monitoring devices used to inspect and collect data on the performance of a facility relating to leachate and gas production or the effect on the quality of the air, groundwater, surface water, or soils. These edits reflect current practices utilized by landfill owners and operators and best management practices in the solid waste management industry.
 - Updating language regarding geotechnical information required in a feasibility report. Overall intent remains the same as current code, but some minimum qualitative standards are established, and the rule codifies some
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currently required submittals.

- Codifying current practice where the department may issue an initial site construction approval that allows initiation of specific construction activities prior to issuing the plan of operation approval.
- Codifying current practice that the department 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. This allows time for potential settling of the waste and adding new waste to the existing landfill footprint.
- Allowing an MSW landfill to have waste placed temporarily up to 10 percent higher than the approved final waste grades. If more than 5 percent of the approved final waste grade is requested, the landfill owner or operator must establish financial responsibility for closure of the additional waste amount.
- Codifying performance requirements and corrective action expectations for gas extraction systems. These have been standard conditions in plan approvals for over 10 years.
- Proposing various efficiencies that prevent the need for currently required exemptions or case-by-case review, such as allowing reduced separation distance between the top of the competent bedrock surface and the bottom of the clay component of a liner if approved by the department in writing.

2. Amendments to rules that are not mandatory

There are several proposed rule changes that have minimal to no economic impact because they are optional for a landfill owner to propose in a plan of operation. If utilized by a landfill, they may have a significant economic benefit.

- Alternative landfill liner design

The proposed rule allows an alternative landfill liner design to be proposed for composite-lined MSW landfills. Current code requires that composite liners consist of a 60-mil HDPE geomembrane and four feet of clay. If a landfill chooses the alternative liner option, which consists of a compacted soil sub-base and only three feet of clay in the liner design, it would likely be an economic benefit. Cost savings would result from not needing to purchase, transport, and place as much clay soil. This is an option, not a requirement, for design of a landfill in areas that may have limitations on obtaining the current minimum four foot clay component for a landfill liner. (This does not apply to industrial landfills that accept high-volume industrial waste because those facilities already have an alternative option in current code.)

The department reviewed three years of data that indicate private MSW landfills construct approximately three landfill phases or cells per year and public MSW landfills construct approximately two landfill phases per year. It is assumed that that the average number of acres constructed for each phase is 10 acres. Adopting the use of three-foot composite clay liner instead of four-foot composite clay liner could result in total cost savings of \$1,108,350 per year for private MSW landfills [$c=(a-b) \times 10 \text{ acres} \times 3 \text{ landfill cells}$] and \$738,900 for public MSW landfills [$d=(a-b) \times 10 \text{ acres} \times 2 \text{ landfill cells}$]. The potential total savings per year from the use of the optional landfill liner design is **\$1,847,250**.

Table 1: Potential cost savings per year from use of alternative landfill liner design

Activities	Cost (\$ per acre)		Cost saving (\$ per year)		Total cost saving (\$) (c+d)
	Without rule: (a)	With rule (b)	Private MSW (c)	Public MSW (d)	
Excavating, loading, and hauling of clay to landfill site from source ten miles away, direct placement into cell, clay compaction and subbase preparation	\$147,781	\$110,836	\$1,108,350	\$738,900	\$1,847,250

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Note: These cost estimates do not consider additional savings for reduced consultant time and cost for on-site quality assurance, and costs for required additional leachate collection line installation on first and last landfill phase construction. The cost breakdown for each operation is not available.

Data Source: Tetra Tech consultant (2024), member of rulemaking Technical Advisory Committee

- **Alternative final cover design**

The proposed rule allows alternative final cover design proposals for MSW landfills. The proposed design must meet certain performance-based criteria and adequately protect public health, welfare, and the environment but is otherwise open to new design proposals. The potential economic impact of this option can vary depending on the design. MSW landfills would likely choose an alternative option if it would lead to cost savings compared to current regulations. The likely cost savings from a specific cover design is not available.

- **Allowing reduced frequency of cleaning leachate collection lines**

The proposed rule can allow high volume industrial waste landfills to reduce frequency of cleaning leachate collection lines from annually to every-other-year or as approved by the department—thus saving the cleaning cost. This may be approved if there is no historic record of blockages or other issues with the performance of the lines. The potential savings from the reduced frequency of cleaning depends on the length of leachate line at each landfill, the cost for mobilization of equipment and crews onsite, and costs per hour to clean those lines. These costs vary per site and the department does not have this information. However, an industrial landfill representative of the rule's Technical Advisory Committee provided an example case where the reduced frequency of cleaning leachate lines could lead to a potential average cost saving estimate of \$856 per year at a landfill.

Costs vary because of leachate line length at each landfill, but the one-time cost of cleaning leachate lines is estimated to be \$1,730 [*\$1,200 as mobilization cost to contract staff and equipment and \$530 for approximately 2 hours x \$265 per hour = \$530 to clean leachate pipes*]. Because the proposed optional rule allows a qualifying landfill to clean out every-other-year, there will be an average saving of \$856 [$\$1,730/2 = \856] per year.

- **Allowing closed landfills to adjust owner financial responsibility (OFR) amounts for leachate collection and management**

The proposed rule allows closed landfills already in a long-term care period (which is typically up to 40 years after closure) to adjust owner financial responsibility amounts for leachate collection and management after assessing leachate generation rates of a minimum ten-year period. As a result, closed landfills that have lower leachate generation rates than anticipated at the time of designing the landfill may adjust the amount of OFR required. This would result in cost savings for landfills.

Although the department does not have evidence of OFR reductions from the proposed rule changes, a member of the rule's Technical Advisory Committee noted that this change could mean approximately 40 percent savings for long-term care OFR amounts at an example landfill, equaling approximately \$1,060,000. If half of the closed landfills currently in long-term care with OFR can take advantage of this code change, it would reduce total OFR amounts by about \$16 million – a rough estimate. As OFR amounts range from \$20,000 to \$8.1 million per facility, it is difficult to provide a meaningful average reduction of OFR per facility.

3. Amendments to OFR calculations

Amendments were also made to requirements related to owner financial responsibility that are expected to have minimal economic impact.

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- All currently active and many closed landfills are required to designate a funding mechanism that the state can access to properly close a landfill or provide long-term care. The primary change proposed for OFR requirements in this rule is to apply a five-year average inflation factor to future OFR calculation rather than a single most recent year factor. The five-year average would effectively smooth the fluctuation of year-to-year increases or decreases when conducting annual calculations, the result of which would be to reduce the year-to-year changes in required OFR. Another proposed change is to use a discount rate equal to the projected rate of inflation plus 1.5 percent. Reducing the discount rate, from 2 percent to 1.5 percent, would have minimal to no economic effect over time on overall OFR costs. It would likely increase the amount required for a landfill owner to set aside when newly calculated, but decreases the amount needed in future years. All funds in an interest-bearing long-term care OFR account will be returned to the landfill owner/operator (principal and interest) after work is completed. The impact of this proposed code change depends on actual future interest and inflation rates. If interest equals inflation, the impact is zero. If interest is less than inflation, there could be a cost to the owner/operator. If interest is greater than inflation – normally about 1 to 2 percent or greater – there could be savings or positive impacts for the owner/operator. Because it is not possible to predict these rates and applying a five-year average inflation factor dampens the impact of individual high interest rate years, the economic impact is expected to be minimal.

4. Amendments to Initial Site Inspection Requirements

The proposed rule states that when excavating soil designated to be used for a liner or final cover for the landfill, which has to meet certain performance criteria, an initial site inspection (ISI) is not required at the soil borrow sources if a storm water discharge permit was previously issued. This is because the department's storm water program has previously reviewed the site for the same elements in the initial site inspection.

- For all types of landfills combined, there is an average of two feasibility proposals per year that would first require an initial site inspection. It is estimated that total savings per year is approximately \$5,000 $[(\$1,210 \text{ department ISI fee} + (\$80/\text{hr} \times 8 \text{ hours} \times \text{travel \& pay for 2 contractors}) \times 2 \text{ ISI's per year}) = \$4,980]$

5. Amendments to Vertical-Only Expansion Requirements

The proposed rule also reduces the requirements for locational criteria and information submittals for vertical-only expansions of an existing landfill.

- Because no additional land area will be impacted if a landfill grows vertically, information from soil borings, new well installations, or bedrock descriptions would not need to be submitted to the department or evaluated. This results in savings to consultant time and costs for landfill owners. An estimate of savings is approximately \$100,000 per vertical-only expansion. These occur infrequently: only six of the 58 currently active landfills have conducted a vertical-only expansion, but there were two in the last three years.

PROPOSED CHANGES WITH ECONOMIC IMPACT

The proposed administrative code changes will directly affect the implementation and compliance costs of landfill owners/operators (private and public) and waste generators (households, private businesses) and will affect the state economy. Table 2 summarizes the estimated average annual implementation and compliance cost for each category of proposed rule changes and the overall total in the years right after initial rule implementation, should the rule be adopted. There are no plan review fee changes in 2026. Therefore, the two-year implementation and compliance cost estimate reflects changes in 2027 and 2028. The total cost of additional implementation and compliance costs of the proposed rule is \$5.3 million in two years (without adjusting for inflation), with 2027 costs estimated to be \$2.6 million and 2028 costs estimated to be \$2.7 million. The subsequent annual costs of the proposed rule are approximately \$2.7 million.

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Table 3 summarizes the estimated average annual implementation and compliance cost for each category of proposed rule changes for the years 2036 and 2037. The table provides estimates of the total implementation and compliance costs in the first two years during which the highest proposed fees would occur. These estimates do not account for inflation or changes to landfill numbers or average tons disposed of in the state because it is difficult to accurately predict what those types of changes might be in 2036 and 2037.

How these costs are estimated and how proposed rules will affect private and public entities is discussed in detail below.

Table 2. Estimate of Total Annual Implementation and Compliance Costs to Businesses, Local Governmental Units and Individuals, Initial Rule Implementation

Proposed Rule Changes	First Year (2026)	Second Year (2027)	Third Year (2028)	2-Year Total (2027 + 2028)
Landfill Design and Construction Costs	\$1,667,700*	\$1,667,700	\$1,667,700	\$3,335,400
Landfill Plan Review Fees	\$0	\$209,200	\$360,750	\$569,950
License Surcharge Fee	\$699,318	\$699,318	\$699,318	\$1,398,636
Total Costs	\$2,367,018	\$2,576,218	\$2,727,768	\$5,303,986

*Note: Summed landfill design and annual construction costs incurred by private industrial—\$719,748 from Table 4, and private MSW—\$435,384 from Table 5, and public MSW—\$512,568 from Table 7.

Table 3. Estimate of Total Annual Implementation and Compliance Costs to Businesses, Local Governmental Units and Individuals, Highest Proposed Cost Years

Proposed Rule Changes	2036	2037	2-Year Total (2036 + 2037)
Landfill Design and Construction Costs	\$1,667,700	\$1,667,700	\$3,335,400
Landfill Plan Review Fees	\$360,750	\$360,750	\$712,500
License Surcharge Fee	\$1,048,978	\$1,048,978	\$2,097,956
Total Costs	\$3,077,428	\$3,077,428	\$6,145,856

Impacts on Specific Businesses and Business Sectors (Private Businesses)

The proposed rule would primarily affect landfill owners and operators. This section describes the annual economic costs to private landfill companies that would be designing and constructing future expansions to existing landfills or building new landfills. Private landfills are categorized as municipal solid waste (MSW) landfills that accept household and business waste and industrial landfills that primarily accept wastes from their own company or a specific type of waste, such as coal ash, papermill sludge, or foundry sand. Tables 4 and 5 summarize the potential implementation and compliance costs for private MSW and industrial landfill owners and operators. The narrative below provides additional detail.

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Table 4. Estimated Private MSW Landfill Design and Construction Annual Costs

Proposed Code Change	Current Annual Cost Estimate (a)	Annual Cost Under Proposed Rule (b)	Additional Annual Cost (c = b - a)
A. Change to 6" inside diameter of all leachate collection pipes	\$1,133,640	\$1,605,180	\$471,540
B. Use of at least 16 ounces/yard ² geotextiles	*	*	\$150,000
C. Baseline sampling requirements in NR 507.18**	\$0	\$98,208	\$98,208
Total			\$719,748

*Data unavailable. Estimated using [Average 3 construction events/year x \$5,000 increase x 10 acres=\$150,000]

**Estimated using [\$49,104 sampling cost x sampling at 2 landfills/year = \$98,208]

Table 5. Estimated Private Industrial Landfill Design and Construction Annual Costs

Proposed Code Change	Current Annual Cost Estimate (a)	Annual Cost Under Proposed Rule (b)	Additional Annual Cost (c = b - a)
A. Change to 6" inside diameter of all leachate collection pipes	\$755,760	\$1,070,120	\$314,360
B. Use of at least 16 ounces/yard ² geotextiles	*	*	\$100,000
C. Baseline sampling requirements in NR 507.18**	\$0	\$21,024	\$21,024
Total			\$435,384

*Data unavailable. Estimated using [Average 2 construction events/year x \$5,000 increase x 10 acres=\$100,000]

**Estimated using [\$21,024 sampling cost * sampling at 1 landfill/year]

Using a three-year average of actual construction events at Wisconsin landfills, private municipal solid waste (MSW) landfills construct approximately three landfill phases or cells per year and private industrial landfills construct approximately two landfill phases per year. Calculations assume that the average number of acres constructed for each phase is 10 acres. This is a conservative overestimate of the acreage built per year for some landfills but provides a high-end economic impact estimate.

Proposed code change A. Requiring the inside diameter of all leachate collection pipes be a minimum six inches, rather than a six-inch outside diameter.

Private MSW: Avg 3 construction events/year * 2000' pipe per acre * 10 acres/event/year = 60,000' of leachate collection pipe installed per year

$(60,000' * \$26,753/1000 = \$1,605,180) - (60,000' * \$18,894/1000 = \$1,133,640) = \$471,540 \text{ impact}$

Industrial: Avg 2 construction events/year * 2000' pipe per acre * 10 acres/event/year, = 40,000'

$(40,000' * \$26,753/1000 = \$1,070,120) - (40,000' * \$18,894/1000 = \$755,760) = \$314,360 \text{ impact}$

Prices above are based on the following information provided by a Tetra Tech member of the Technical Advisory Committee (2024)

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Pipe		2024 Unit Price	Quantity	Cost/ 1,000 feet
Current regulation	6" HDPE Leachate Collection Piping (pipe supplied by owner, contractor supplied fittings and installation)	\$18.89	1000'	\$18,894
Proposed amendment	8" HDPE Leachate Collection Piping (6" inside diameter, pipe supplied and installed by contractor)	\$26.75	1000'	\$26,753

Proposed code change B. Geotextiles used to line leachate collection trenches and on top of landfill liners are proposed to be at least 16 ounces/yard² rather than the current 12 ounces. The cost, provided by a Technical Advisory Committee member, was estimated at additional \$3,500-\$5,000 per acre.

Private MSW: Avg 3 construction events/year * \$5,000 increase * 10 acres = \$150,000 impact

Industrial: Avg 2 construction events/year * \$5,000 increase * 10 acres = \$100,000 impact

Proposed code change C. This proposed rule change would require baseline samples to be collected inside a landfill's proposed limits of waste to characterize groundwater quality, in addition to the current requirement to collect samples at monitoring wells located outside the proposed limits of waste. At least four rounds of baseline groundwater sample data are to be collected and included in the feasibility report.

If there are NR 140 groundwater standard exceedances, an additional four sample rounds would have to be collected and included in the plan of operation report, to have a minimum of eight sample concentrations that are used to calculate alternative concentration limits (ACLs) for those substances and wells for which an NR 140 exemption has been granted to an NR 140 standard (preventive action limit (PAL) or enforcement standard (ES)). The total number of wells where additional baseline sampling would be required is 9 wells for a proposed 60 acre landfill in a fine-grained soil environment.

Baseline samples would be collected for detection monitoring parameters listed in ch. NR 507 Appendix I, Tables 1, 1A, and 2 for each waste type. Baseline samples would also be collected for the substances of public health and welfare concern listed in ch. NR 507, Appendix I, Table 3 and VOCs listed in Appendix III.

This analysis calculates the estimated laboratory analytical cost for an extreme case. Most proposed landfills are for less than 60 horizontal acres and in many cases all eight sample rounds for every substance listed in NR 507, Table 3 parameters are not necessary. The cost to mobilize and collect the samples would not be expected to be a significant additional cost because mobilization and sample collection would already be required for collecting baseline samples at all of the other wells for the proposed landfill.

The estimated combined laboratory analytical cost total is:

$\$505$ (NR 507, Table 1) + $\$177$ (NR 507, Table 3) = $\$682$ per sampling event, per well

-If a total of eight sample rounds were collected for each substance at a well (which would be an extreme case), the total analytical cost per well would be $\$682/\text{well} * 8 \text{ sample rounds} = \$5,456/\text{well}$

-For an MSW landfill, the total cost for nine wells would be approximately $\$5,456/\text{well} * 9 \text{ wells} = \$49,104$

-For an industrial landfill, the total cost for nine wells would be approximately the same as at an MSW landfill minus the cost to analyze for VOCs which is \$390/sample: $[\$115$ (NR 507, Table 1) + $\$177$ (NR 507, Table 3)] * 8 sample rounds * 9 wells = $\$21,024$

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To determine the economic impact from this rule change to each landfill type and ownership, this analysis assumes at least two privately owned MSW, two publicly owned MSW and one industrial landfill are engaged in a geotechnical investigation involving baseline sampling for a proposed new landfill or expansion each year.

- *Privately owned MSW landfill: \$49,104 x 2 = \$98,208 impact*
- *Industrial landfill: \$21,024 impact*

Proposed code change D. Adjustments to landfill plan review fees in NR 520.

Table 6 includes proposed plan review fees, most of which have not been changed since 2006, for all municipal solid waste landfills and industrial solid waste landfills. The fees are based on the average hours to conduct plan reviews multiplied by the salary and fringe benefit costs of the assigned hydrogeologist and engineer doing the review. Additional implementation and compliance costs resulting from the proposed code change were estimated using the number of plans or submittals in fiscal year 2023. Based on comments from the rule’s Technical Advisory Committee, the fee adjustments are proposed to be implemented stepwise starting in 2027 and fully implemented in 2028. No changes to these fees will be made in 2026, which would be the first year of rule implementation.

Table 6. Adjustments to Plan Review Fees in NR 520 – All Landfills

Review/Submittal	Current annual cost per plan review (a)	Number of submittals (b)	Annual cost per plan review under proposed rule in 2027 (c)	Annual cost per plan review under proposed rule in 2028 (d)	Additional cost estimate in 2027 <i>b*(c-a)</i>	Additional cost estimate in 2028 and annually after <i>b*(d-a)</i>
Feasibility Report	\$22,000	3	\$33,000	\$44,000	\$33,000	\$66,000
Plan of Operation	\$7,700	3	\$16,500	\$22,000	\$26,400	\$42,900
Plan of Operation Modification and Supplemental Reviews	\$1,650	60	\$2,625	\$3,500	\$58,500	\$111,000
Expedited Plan Modification	\$1,000	13	\$1,750	\$1,750	\$9,750	\$9,750
Construction Documentation	\$1,100	33	\$2,250	\$3,000	\$37,950	\$62,700
Initial Site Inspections and Construction Inspections	\$550	80	\$900	\$1,210	\$28,000	\$52,800
Low Hazard Exemption	\$550	10	\$2,000	\$2,000	\$14,500	\$14,500
Long-Term Care License	\$6,600	1	\$7,700	\$7,700	\$1,100	\$1,100
Total cost - all landfills					\$209,200	\$360,750
Private MSW and industrial landfills (75% of landfills)					\$156,900	\$270,562
Public MSW landfills (25% of landfills)					\$52,300	\$90,188

Approximately 75 percent of landfills are private MSW and industrial landfills. Therefore, three quarters of the fee impact was applied to those landfills, resulting in additional compliance costs of \$156,900 [$0.75 \times \$209,200 = \$156,900$] in 2027

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and \$270,562 [$0.75 \times \$360,750 = \$270,562$] in 2028 and subsequent years. About 25 percent of landfills are public MSW landfills. Therefore, one quarter of the fee impact was applied to those landfills, resulting in additional compliance costs of \$52,300 [$0.25 \times \$209,200 = \$52,300$] in 2027 and \$90,188 [$0.25 \times \$360,750 = \$90,188$] in 2028 and subsequent years.

Not all landfills have plan submittals each year and submittals could vary year to year per landfill. However, if split across the 44 private landfills (18 MSW, 26 industrial), the annual individual cost would be approximately \$6,150 per private landfill.

Section 289.61, Wis. Stats. provides the department authority to adopt by rule a graduated schedule of reasonable license and review fees to be charged for solid waste license and review activities. Based on comments during rulemaking from the rule's assigned Technical Advisory Committee, the proposed rule limits the increase of plan review fees to cover only a portion of total actual plan review costs, not the full costs as authorized by s. 289.61, Wis. Stats. The department recognizes that a larger adjustment in fees would be difficult for some landfill owners and is therefore not proposing fees to fully cover actual expenses.

Impacts on Public Utility Rate Payers

There are no expected direct impacts on public utility rate payers.

Impacts on Local Governmental Units

The proposed rule will primarily affect landfill owners and operators. This section describes the annual economic impact to 14 municipally (county) owned landfills that would be designing and constructing future expansions to existing landfills or building new landfills (Table 7).

Table 7. Estimated Public MSW Landfill Design and Construction Annual Costs

Proposed Code Change	Current Annual Cost Estimate (a)	Annual Cost Under Proposed Rule (b)	Additional Annual Cost (c = b - a)
A. Change to 6" inside diameter of all leachate collection pipes	\$755,760	\$1,070,120	\$314,360
B. Use of at least 16 ounces/yard ² geotextiles	*	*	\$100,000
C. Baseline sampling requirements in NR 507.18**	\$0	\$98,208	\$98,208
Total			\$512,568

*Data unavailable. Estimated using [*Average 2 construction events/year * \$5,000 increase * 10 acres=\$100,000*]

**Estimated using [*\$49,104 sampling cost * sampling at 2 landfills/year=\$98,208*]

Using the most recent three-year average, municipally owned MSW landfills construct approximately two landfill phases or cells per year. Similar to private landfills, calculations assume that the average number of acres constructed for each phase is 10 acres, which is an overestimate for some.

Proposed code change A. Requiring the inside diameter of all leachate collection pipes be a minimum six inches, rather than a six-inch outside diameter.

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Public MSW: Avg 2 construction events/year * 2,000' pipe per acre * 10 acres/event/year = 40,000' of leachate collection pipe installed per year
 $(40,000' * \$26,753/1000 \text{ feet of pipe} = \$1,070,120) - (40,000' * \$18,894/1000 \text{ feet per pipe} = \$755,760) = \underline{\$314,360}$
impact

Proposed code change B. Geotextiles used to line leachate collection trenches and on top of landfill liners must be at least 16 ounces/yard² rather than the current 12 ounces. The cost increase was estimated at \$3,500-\$5,000 per acre.

Public MSW: Avg 2 construction events/year * \$5,000 increase * 10 acres = \$100,000 impact

Proposed code change C. See same item C above for private businesses. To determine the economic impact from this proposed rule change to each landfill type and ownership, this analysis assumes at least 2 privately owned MSW, 2 publicly owned MSW and 1 industrial landfill are engaged in a geotechnical investigation involving baseline sampling for a proposed new landfill or expansion each year.

Publicly owned MSW LF: $\$49,104 \times 2 = \underline{\$98,208}$ impact

Proposed code change D. Adjustments to landfill plan review fees in NR 520. See same item D and Table 6 above. Approximately 25 percent of landfills are public MSW landfills. Therefore, one quarter of the fee impact was applied to those landfills, resulting in additional compliance costs of \$52,300 [$0.25 \times \$209,200 = \$52,300$] in 2027 and \$90,188 [$0.25 \times \$360,750 = \$90,188$] in 2028 and subsequent years.

Not all landfills have plan submittals each year, and submittals could vary year to year per landfill. However, if split across the 14 public landfills, the annual individual cost would be approximately \$6,440 per public landfill.

Fiscal Impact and Impacts on State Economy

Proposed code change E: Landfill License Surcharge Fee

Since 2006, program expenses have increased faster than license surcharge fee revenues. Limited revenue has made it increasingly difficult for the department to maintain a high level of customer service to the regulated community and the public. The proposed changes in this rule directly address this problem by proposing to increase the surcharge fee to cope with inflation. The state economy would be impacted by the proposed adjustment of the landfill license surcharge fee applied to waste disposed of at MSW landfills and industrial landfills. The modified fees may be passed on by facility operators to the generators of the waste being managed (businesses, municipalities and residential customers). Revenue from the landfill license surcharge fee goes directly into a segregated account to support the department's Waste and Materials Management Program, which is statutorily required to establish minimum standards for the location, design, construction, operation, monitoring and maintenance of solid waste facilities. The department uses these funds to employ staff and provide resources and technical assistance to ensure that facilities are located and operated with the goal of proper waste management that prevents negative impacts to soil, groundwater, air, and human health. The entire state and its economy greatly benefit from a well-functioning waste management system.

If the plan review fee adjustments noted earlier are not made and the license surcharge fee is not adjusted, the department's Waste and Materials Management Program will continue to lack funds to fill vacancies, resulting in slower response times for industry and lack of ability to respond to some public issues impacting environmental and public health. Waste Program staff review all landfill design proposals, do inspections of landfill construction and operations, and review results from groundwater monitoring around landfills. If the Waste Program is unable to fill one or two existing vacancies because of the lack of funds, this type of work could be limited or take longer.

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State residents and businesses are indirectly affected by state solid waste management policies such as adjustment of the landfill license surcharge fee. The current fee charges \$0.15 per ton for most types of waste. This fee is collected by landfills and submitted to the department along with quarterly tonnage reports. The proposed rule adjusts this fee incrementally over time based on past and projected future inflation. The license surcharge fee is paid by waste generators: the general public and businesses throughout Wisconsin.

About 6,993,185 tons (five-year average tonnage as reported by landfills) of waste is generated in Wisconsin annually to which the surcharge fee is applied. Most of the waste is reported as “municipal solid waste” that is a mix of household and business waste. The proposed rule increases the surcharge fee from \$0.15 to \$0.25 per ton in 2026, \$0.27 per ton in 2031, and \$0.30 per ton in 2036. Based on the current surcharge fee of \$0.15 per ton and shown in Table 8, the total fees collected annually is about \$1,049,000 [$\$0.15 \text{ per ton of waste} \times 6,993,185 \text{ tons} = \$1,048,978$]. With the proposed fee of \$0.25 per ton, the total fees collected would be approximately \$1,748,000 [$\$0.25 \text{ per ton of waste} \times 6,993,185 \text{ tons} = \$1,748,296$]. The additional annual fees collected under the current rule would be about \$700,000 [$\$1,748,296 - \$1,048,978 = \$699,318$] until 2030, \$839,182 annually from 2031 to 2035, and \$1,048,978 beginning in 2036.

It is assumed that half of solid waste disposed of in Wisconsin landfills is from households (single- and multi-family residences) and about half from businesses/private industry. The impact of increasing the landfill license surcharge fee to \$0.25 per ton of waste disposed of at a landfill would be very small for individual households and businesses in Wisconsin. Even at the highest proposed fee adjustment, \$0.30 per ton in 2036, the per household cost impact is an increase of \$0.19 per year, and the cost impact on individual businesses is an increase of \$5 per year (Table 8).

The impact of the adjusted surcharge fee is estimated using a conservative approach— without accounting population growth, increase in household and business units, and increase of waste generation. Further, it is important to note that the impact of fee adjustments on businesses, in general, could be mitigated by reducing the amount of waste produced and sent to a landfill. Waste reduction and costs for waste management can be reduced by focusing on recycling, food waste diversion, and other reuse options.

Table 8. Estimated Annual Impact from License Surcharge Fee Adjustment

Year	License surcharge fee per ton of waste disposed (a)	Average annual fee collection (b = a * 6,993,185 tons)	Additional fee increase in comparison to current rule (c = b - \$1,048,978)	Public Impact		Private Impact		
				Total fees borne by housing units (d = c/2)	Average fee borne per housing unit (e = d/ 2,776,558) ¹	Total fees borne by business (f = c/2)	Average fee borne per business unit (g = f/ 108,122) ²	Average fee borne per small business unit (h = g * 86%) ³
Current rule	\$0.15	\$1,048,978	-	-	-	-	-	-
First year of proposed code change (2026)	\$0.25	\$1,748,296	\$699,318	\$349,659	\$0.13	\$349,659	\$3	\$2.8
Second year of proposed code change (2027)	\$0.25	\$1,748,296	\$699,318	\$349,659	\$0.13	\$349,659	\$3	\$2.8
Sixth year of proposed code change (2031)	\$0.27	\$1,888,160	\$839,182	\$419,591	\$0.15	\$419,591	\$4	\$3
Eleventh year of proposed code change (2036)	\$0.30	\$2,097,956	\$1,048,978	\$524,489	\$0.19	\$524,489	\$5	\$4

¹ 2,776,558 WI Housing Units as of 4/1/2022 (https://doa.wi.gov/DIR/Tot_HUs_Comm_2022.pdf);

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²108,122 firms in Wisconsin in 2020 (U.S. Census Statistics of U.S. Businesses)

³ 86% of all businesses/86% of fees impact; (93,112 firms in Wisconsin with 24 or fewer employees in 2020) (U.S. Census Statistics of U.S. Businesses)

Using data reported by landfills on specific types of waste disposed in 2022, the following portions of the above impacts on businesses could be assumed:

- The estimated impact on all businesses combined that generate electrical utility ash and related industrial waste would be \$53,000 in 2026.
- The estimated impact on all businesses combined that generate papermill sludge, unusable papermaking materials, and related industrial waste would be \$62,000 in 2026.
- The estimated impact on all businesses combined that generate foundry sand waste and general industrial waste would be \$24,000 in 2026.

15. Benefits of Implementing the Rule and Alternative(s) to Implementing the Rule

All landfill owners and operators will benefit from updating, clarifying, and codifying regulations related to landfill design and operation, including alternative options for landfill liner and cover, options for including additional waste prior to closure, and easier submittals and lower fees for vertical-only expansions. Many policies will be codified in this rule for consistent application of regulations statewide, ensuring an even playing field among competing landfills. The rulemaking process included six meetings with the Technical Advisory Committee to gather ideas. Many changes were made to rule proposals based on committee feedback.

State residents and businesses can rely on the existence of an efficient system for disposing of solid waste and the protection from risks to public health and the environment that sound implementation of the state solid waste codes provide.

The Waste and Materials Management Program has implemented a system of continuous process improvement over the years. Over time the program has:

- Created document review and approval templates for staff to utilize and updated checklists to determine appropriate criteria, statutes, and codes from all relevant department programs.
- Set up required peer reviews of documents to help train as well as ensure statewide consistency and increased efficiency.
- Utilized expedited plan modification reviews when applicable.
- Designated lead engineer and hydrogeologist program coordinator positions from existing staff numbers to be a resource to staff and stakeholders and to facilitate efficient decision making.
- Attended trainings and webinars to ensure staff are aware of new technology proposed by industry.

Additional efficiencies in the proposed rule include:

- Elements to save industry and department staff time, including: no initial site inspection required for a soil borrow source if a storm water permit is already in place; codifying things the department typically conditions or exempts, like minimum separation distance between the limits of disturbance and a delineated wetland boundary or approving separation distance between bedrock and liner.

The department will also increase work efficiencies from some proposed changes and from adjustments to solid waste fees.

- Additional funds will allow for IT improvements and information access: digitization of paper files in order to ease access and sharing and save consultant time; creating digital submittal portals to make it faster and easier to submit data and information directly to the department and providing more GIS mapping information online to save time.

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If the proposed rule is not implemented, regulation of landfills will continue as is, which has proved effective in protecting the environment and public health. However, it limits the department's ability to incorporate modern industry advances in landfill design or create more efficient regulatory processes. Without this rule, the department would continue to evaluate requests for alternatives and exemptions to landfill design and construction on a more time consuming, case-specific basis. In addition, the fee structure currently in place does not reflect changes in operational costs due to inflation since 2006 and is financially unsustainable.

16. Long Range Implications of Implementing the Rule

- Ensuring an efficient and effective Waste and Materials Management Program to implement the state's waste management policies is good for everyone – the public, industry, the environment.
- Department staff will be able to efficiently respond to stakeholder needs, resulting in an effective statewide waste management system capable of handling the amount of waste generated in Wisconsin.
- State residents and businesses can rely on the existence of an efficient system for disposing of solid waste and the protection from risks to public health and the environment that state solid waste codes provide.
- The fee system is fair, understandable, and tied to legitimate department needs.
- The department will utilize fee money efficiently and fee balances will not accumulate unreasonably over time.
- The fee system will provide for a sustainable program with competent and responsive staff.

17. Compare With Approaches Being Used by Federal Government

The proposed rule is consistent with and as protective as federal criteria under Subtitle D of the Resource Conservation and Recovery Act (RCRA, 40 CFR Part 258). The department plans to obtain U.S. Environmental Protection Agency approval of the rule revisions and maintain its authority to regulate solid waste disposal facilities in Wisconsin.

18. Compare With Approaches Being Used by Neighboring States (Illinois, Iowa, Michigan and Minnesota)

Michigan, Minnesota, Illinois, and Iowa, as well as Wisconsin, all have solid waste management laws and permit programs based on federal law and approved by the U.S. Environmental Protection Agency. Federal solid waste law allows states implementation flexibility, thus creating differences across states. Solid waste programs in these states have different funding mechanisms, different numbers of landfills, different amounts of staff and pay levels, and different regulations. Due to these differences, it is not possible to do a meaningful side-by-side comparison. The landfill permitting and licensing for all include a technical decision-making process focusing on the ability of the proposed landfill design to meet all criteria and standards to protect public health and the environment. Each state regulates the construction, operation and closure of facilities and projects that manage, process and dispose of solid waste.

- The rule proposes to codify existing annual report requirements that are currently specified in each landfill's plan of operation. Three states - Illinois, Iowa, and Minnesota - require annual reports be submitted highlighting landfill operations from the previous year.
- The rule proposes notification deadlines for landfills to send certain information to the department, such as notification of a landfill surface fire within one day, notification of a subsurface fire or elevated temperatures within five days of verification, and notification of a leachate seep or leachate spill outside the limits of waste within one day of discovery. Minnesota requires notification of 'emergency situations' such as landfill fires and spills. Michigan requires landfills to develop and maintain an 'Emergency Response and Remedial Action Plan' for situations such as landfill fires or spills.
- The rule proposes changing the minimum inside diameter of all leachate collection or transfer pipes to be 6 inches, rather than the current 6-inch outside diameter requirement. This provides a minimum numerical standard, and the four adjacent states require minimum standards to allow for sufficient flow and access for cleaning leachate pipes, but without a specific diameter.
- The proposed rule allows for alternative final cover design proposals for municipal solid waste landfills. The

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design must meet certain performance-based criteria but is open to new design proposals. All four adjacent states also allow for alternative final cover design proposals.

- The proposed rule codifies current practice that the department 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. This allows time for potential settling of the waste and adding new waste to the existing landfill footprint. Information was found that Michigan allows delaying placement of final cover up to one year.
 - The rule proposes allowing a municipal solid waste landfill to have waste placed temporarily up to 10 percent higher than the approved final waste grades, which assumes that settling will occur before final closure and placement of a final cover. This would allow a landfill to accept additional waste and delay the need for an expansion or a new landfill. No information was found related to this type of allowance in adjacent states.
 - The proposed rule allows a specific alternative landfill liner design than what is currently required in code for composite lined landfills (composite liners consisting of a 60-mil HDPE geomembrane and four foot thick clay liner are currently required for all municipal solid waste landfills). This is an option, not a requirement, for design of a landfill in areas that may have limitations on obtaining the current minimum four foot clay component for a landfill liner. All four neighboring Midwest states have minimum liner design requirements similar to Wisconsin's and allow for an alternative landfill liner design.
 - In Michigan, municipal solid waste landfills must have a secondary (bottom) composite liner - made of two feet of compacted clay or a manufactured equivalent liner and a 60-mil plastic liner - in addition to a primary (top) composite liner - made of two feet of clay or a manufactured equivalent and a 60-mil synthetic liner. The secondary composite liner is not required if a proposed landfill location already has a natural soil barrier that is demonstrated to provide equal protection (such as 10 feet of natural low permeability clay) or alternate system that is approved by the director and which prevents the migration of hazardous substances at least as effectively as the other options specified in Michigan rule. Additional leachate collection system components are also required along with a layer, typically two feet of sand, protecting those components.
 - In Minnesota, the liner system in combination with the cover system must achieve an overall site efficiency of 98.5 percent collection or rejection of the precipitation that falls on the disposal area and minimize the amount of leachate leaving the site to the soil and groundwater system below the site. The liner must be four feet of natural soil (clay) barrier or a composite liner with two feet of clay and a 60-mil synthetic liner. An alternative liner system design may be used when approved by the MN agency's commissioner, and is based on the ability of the proposed liner system to control leachate migration, meet performance standards, and protect human health and the environment.
 - Illinois requires its landfill liners have at least five feet of clay in a natural soil liner, or three feet of clay and a 60-mil synthetic liner. Alternative liners may be proposed if the landfill operator demonstrates that alternative technology or material provides equivalent or superior performance to the standard requirements, the technology or material has been successfully utilized in at least one application similar to the proposed application, and methods for manufacturing quality control and construction quality control can be implemented.
 - Iowa requires liner construction to include two feet of compacted soil with a synthetic liner, and has also approved four foot natural soil (clay) liners. Alternate liner designs may be proposed if evidence is provided that the liner can keep contaminant levels below state standards, as monitored downgradient of waste and within 50 feet of the waste boundary. Iowa code states that it must consider at least the following when approving an alternative liner design: the hydrogeologic characteristics of the facility and surrounding land, the climatic factors of the area, the volume and physical and chemical characteristics of the leachate, the sensitivities and limitations of the modeling demonstrating the applicable point of compliance, and practicable capability of the owner or operator.
 - The proposed rule adjusts the license fee surcharge paid to the department based upon the number of tons or
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equivalent volume of solid waste disposed of at each landfill during each quarterly reporting period (currently 15.0 cents/ton): 25.0 cents/ton effective January 1, 2026, 27.0 cents/ton effective January 1, 2031, and 30.0 cents/ton effective January 1, 2036. These ‘tipping fees’ are assessed per ton of waste disposed of in Wisconsin landfills and are the only tipping fees in administrative code. All other tipping fees, when combined total \$13 per ton, are designated in statute and cannot be impacted by this rule. Revenue from all tipping fees are used at multiple agencies for multiple purposes, including local government recycling grants; programs overseeing air, water, and soil clean up; and general department operations and debt service. The current \$0.15/ton license fee surcharge tipping fee goes directly to the department’s Waste and Materials Management Program to cover a portion of general operations expenditures. The rule also proposes updated plan review fees, most of which had not been changed since 2006, for municipal solid waste landfills and industrial solid waste landfills. Together these fees encompass a portion of funding that supports overall solid waste management work being done by the department, additional funds are provided through legislative appropriations in the biennial budget.

It is difficult to compare funding mechanisms state by state because there are several different methods of assessing fees and determining how the revenue is allocated to one or multiple purposes or programs. The information below does not compare apples to apples information with the proposed rules, the total fees and funding for solid waste work is likely incomplete, but is provided for general awareness:

- In Michigan, 36 cents is charged for each ton or portion of a ton of solid waste or municipal solid waste incinerator ash that is disposed of in a landfill. Michigan’s governor proposed budget recommendations in early 2024 to increase this solid waste surcharge from \$0.36 to \$5.00 per ton. It would generate funds for contaminated site cleanup program, brownfield redevelopment, recycling, and waste program oversight. Other landfill fees found in Michigan law include permit application fees to construct a new landfill of \$3,000, to construct a lateral expansion of an existing landfill of \$2,000, and \$1,500 for a vertical expansion.
- In Minnesota, waste management services (waste haulers, transfer stations, incinerators, landfills, local governments) collect and submit to the state a solid waste management tax charged for the solid waste services they provide. The tax rate is 9.75 percent of the sales price charged by the service provider for residential waste, and 17 percent for commercial clients. 70 percent of tax collected goes into Minnesota’s Environmental Fund and 30% goes into the state general fund.
- Illinois does not charge fees for landfill plan reviews or inspections. The only fees are the tipping fees referenced in the Illinois Environmental Protection Act: if more than 150,000 cubic yards of non-hazardous solid waste is permanently disposed of at a site in a calendar year, the total fee per ton is \$2.22. The fees provide funding for the delegated county enforcement program, various solid waste collection programs and the related staff support for each, as well as solid waste permitting programs.
- In Iowa, fees are paid on each ton landfilled. The base fee is \$4.25 per ton, however, based on penalties and rewards for the landfill’s waste diversion efforts, each landfill pays slightly more or slightly less than the base amount. Landfill operators remit a portion of the fee to the state each quarter. The remaining funds are to be used for planning and environmental protection activities at the local level.

19. Contact Name

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ATTACHMENT A

1. Summary of Rule's Economic and Fiscal Impact on Small Businesses (Separately for each Small Business Sector, Include Implementation and Compliance Costs Expected to be Incurred)

It is assumed that no private solid waste landfills operating in Wisconsin meet the definition of a small business under s. 227.114 (1), Wis. Stats. ("small business" means a business entity, including its affiliates, which is independently owned and operated and not dominant in its field, and which employs 25 or fewer full-time employees or which has gross annual sales of less than \$5,000,000).

In general, all small businesses in the state may have a minimal economic impact because of changes to fees applied to solid waste disposed of in landfills. The definition of 'small business' in s. 227.114 (1), Wis. Stats., does not match how small businesses are defined by the U.S. Census Statistics of U.S. Businesses, but the data are used here to show the limited impact an increase in landfill license surcharge fees would be on each individual business.

Table 9. Impact to small businesses from adjustment to the license surcharge fee for waste disposal

Year after proposed code change	License surcharge fee per ton of waste disposed (a)	Average annual fee collection ¹ (b = a * 6,993,185 tons)	Additional fee increase in comparison to current rule (c = b - \$1,048,978)	Private Business Impact		
				Total fees borne by business (d = c/2)	Average fee borne per business unit (e = d/ 108,122) ²	Average fee borne per small business unit (f = e * 86%) ³
Current rule	\$0.15	\$1,048,978	-	-	-	-
First year (2026)	\$0.25	\$1,748,296	\$699,318	\$349,659	\$3	\$2.80
Second year (2027)	\$0.25	\$1,748,296	\$699,318	\$349,659	\$3	\$2.80
Sixth year (2031)	\$0.27	\$1,888,160	\$839,182	\$419,591	\$4	\$3
Eleventh year (2036)	\$0.30	\$2,097,956	\$1,048,978	\$524,489	\$5	\$4

¹ Based on 5-year average tonnage in each category of waste to which the surcharge fee is applied (6,993,185 tons). A majority of waste is reported as "municipal solid waste" that is a mix of household and business waste.

² 108,122 firms in Wisconsin in 2020 (U.S. Census Statistics of U.S. Businesses)

³ 86% of all businesses/86% of fees impact; 93,112 firms in Wisconsin with 24 or fewer employees in 2020 (U.S. Census Statistics of U.S. Businesses)

Refer to Table 8 for additional details.

2. Summary of the data sources used to measure the Rule's impact on Small Businesses
 Noted above.

3. Did the agency consider the following methods to reduce the impact of the Rule on Small Businesses?

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- Less Stringent Compliance or Reporting Requirements
- Less Stringent Schedules or Deadlines for Compliance or Reporting
- Consolidation or Simplification of Reporting Requirements
- Establishment of performance standards in lieu of Design or Operational Standards
- Exemption of Small Businesses from some or all requirements
- Other, describe:

Impacts to small businesses would likely only be on the amount paid to dispose of waste at landfills.

4. Describe the methods incorporated into the Rule that will reduce its impact on Small Businesses

Impact is minimal to none on individual small businesses.

5. Describe the Rule's Enforcement Provisions

Enforcement provisions are included in ch. 289, subch. VIII, Wis. Stats., which include causing written notice to be served upon an alleged violator or initiating actions through the Department of Justice.

6. Did the Agency prepare a Cost Benefit Analysis (if Yes, attach to form)

Yes No
