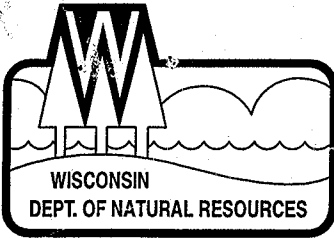


Clearinghouse Rule 96-178

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES



Tommy G. Thompson, Governor
George E. Meyer, Secretary

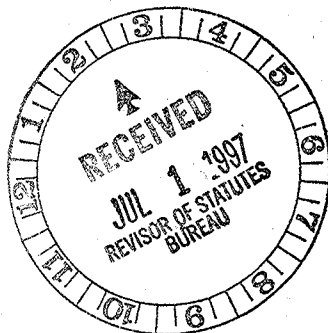
Box 7921
101 South Webster Street
Madison, Wisconsin 53707-7921
TELEPHONE 608-266-2621
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STATE OF WISCONSIN)
) ss
DEPARTMENT OF NATURAL RESOURCES)

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, George E. Meyer, Secretary of the Department of Natural Resources and custodian of the official records of said Department, do hereby certify that the annexed copy of Natural Resources Board Order No. SW-56-96 was duly approved and adopted by this Department on March 26, 1997. I further certify that said copy has been compared by me with the original on file in this Department and that the same is a true copy thereof, and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the Department at the Natural Resources Building in the City of Madison, this 18th day of June, 1997.



George E. Meyer
George E. Meyer, Secretary

(SEAL)

96-178

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD REPEALING, RENUMBERING, AMENDING, REPEALING AND RECREATING AND CREATING RULES

The Wisconsin Natural Resources Board proposes an order to repeal NR 504.06(5)(b) note, 512.09(2)(am), 512.12(4), 520.04(1m), 520.05(2) and (3); to renumber NR 514.09(1)(a)1. to 10., 520.04(1)(d) and 520.04(4)(b); to amend NR 502.06(2)(b), 503.09(3)(a), 503.10(3)(d)19., and (7)(g) Table 4, 504.02(1), 504.06(5)(e), 504.06(5)(t), 506.105(4)(c), 512.07, 512.09(2)(e) Table 1, 512.09(5), 512.10(3), 512.13(1), and (4), 512.14(1)(e), 514.08, 514.09(1)(a)(intro.) and (b), 516.06(2)(e), 516.07(2)(a)3. and (b), 520.05(1)(title), 520.07(5); to repeal and recreate Table 2 following NR 520.15(2)(c); and to create NR 520.04(1)(d) and (4)(b) relating to solid waste management.

SW-56-96

Analysis Prepared by the Department of Natural Resources

Statutory authority: ss. 289.05(1), 289.06, 289.24, 289.61 and 227.11(2)(a), Stats.

Statutes interpreted: ss. 289.05(1), 289.06, 289.24, 289.30 and 289.61, Stats.

This order amends the solid waste management rules in chs. NR 502, 503, 504, 506, 512, 514, 516, and 520. The proposed revisions include: increased program revenue to address very serious fiscal constraints which will occur in fiscal year 1997-98 when a temporary fee rule sunsets on December 31, 1997; provisions to allow landfill owners greater latitude to change non-critical aspects of their approved operational plans without waiting for written department approval; and corrections to editorial/typographical errors we have discovered in the NR 500 series.

Section 1. NR 502.06(2)(b) is amended to read:

NR 502.06(2)(b) Services for the collection and transportation of only ordinary solid waste from a single household or ~~ordinary household~~ solid waste amounting to less than 20 tons per year.

Section 2. NR 503.09(3)(a) is amended to read:

NR 503.09(3)(a) The landfill shall be operated, maintained and closed in a nuisance-free manner. Screening shall be provided from all residences within $\frac{1}{4}$ mile of the waste handling areas unless this requirement is waived in writing by the department.

Section 3. NR 503.10(3)(d)19. is amended to read:

NR 503.10(3)(d)19. A minimum one foot thick granular drainage blanket shall be placed on top of the clay-lined base and sidewalls. ~~If the drainage blanket contains gravel greater than 1/4 inch, then a nonwoven geotextile shall be installed below the drainage blanket. The geotextile shall have a minimum weight of 12 oz/yd².~~ The granular drainage blanket shall contain no more than 5% material by weight which passes the number 200 sieve, have a uniformity coefficient of less than 4 for gravel soils and less than 6 for sandy soils, and a hydraulic conductivity which is greater than or equal to 1×10^{-2} cm/sec at the anticipated field density.

Section 4. NR 503.10(7)(g) Table 4 is amended to read:

NR 503.10(7)(g)

TABLE 4

Leachate Sampling for Intermediate Size Construction & Demolition Waste Landfills

Monthly Leachate Sampling	Semi-Annual Leachate Sampling for 2 years	Annual Leachate Sampling following first 2 years
Leachate Volume Pumped	Field Conductivity	Field Conductivity
	Field pH	Field pH
	Alkalinity	Alkalinity
	Ammonia Nitrogen	Ammonia Nitrogen
	BOD _{5-day}	BOD _{5-day}
	Cadmium	Cadmium
	Chloride	Chloride
	COD	COD
	Groundwater elevation	Groundwater elevation
	Hardness	Hardness
	Iron	Iron
	Lead	Lead
	Manganese	Manganese
	Mercury	Mercury
	Sodium	Sodium
	Sulfate	Sulfate
	Total kjeldahl nitrogen	Total kjeldahl nitrogen
	Total suspended solids	Total suspended solids
	VOCs	VOCs

Section 5. NR 504.02(1) is amended to read:

NR 504.02 APPLICABILITY. (1) Except as otherwise provided, this chapter governs all landfills as defined in s. ~~144.43(2w)~~ 289.01(20), Stats., except landspreading facilities regulated under ch. NR 518, small demolition waste landfills regulated under ch. NR ~~502~~ 503, hazardous waste facilities as defined in s. ~~144.61(5m)~~ 291.01(8), Stats., and regulated under chs. NR 600 to 690 and metallic mining waste facilities regulated under ch. NR 182.

Section 6. NOTE Following NR 504.06(5)(b) is repealed.

Section 7. NR 504.06(5)(e) is amended to read:

NR 504.06(5)(e) The bedding material utilized in backfilling the leachate collection pipe trenches shall have a uniformity coefficient of less than 4, a maximum particle diameter or $1\frac{1}{2}$ inches, a maximum of 5% of the material which passes the number 4 sieve and consist of rounded to subangular gravel. A minimum depth of 4 inches of gavel shall be placed in the trenches prior to installation of the leachate pipes. The backfill shall also be placed such that a minimum of 6 inches of material exists above the top of the pipe and within the trenches. An additional 6 inches of material shall be mounded above the trench. In cases where the particle size of the drainage blanket is significantly less than the collection trench bedding, a properly designed graded soil filter or geotextile shall be utilized to minimize the migration of the drainage blanket material into the collection trenches. Limestone and dolomite may not be used in the leachate collection system unless no other suitable material is reasonably available.

Section 8. NR 504.06(5)(t) is amended to read:

NR 504.06(5)(t) A minimum one foot thick granular drainage blanket shall be placed on top of the geomembrane component of a composite liner and on top of the clay component of a clay liner. ~~If~~ For composite lined landfills, if the drainage blanket contains gravel greater than $\frac{1}{4}$ inch, then a nonwoven geotextile shall be installed below the drainage blanket. The geotextile shall have a minimum weight of 12 oz/yd². The granular drainage blanket shall contain no more than 5% material by weight which passes the number 200 sieve, have a uniformity coefficient of less than 4 for gravel soils and less than 6 for sandy soils, and a hydraulic conductivity which is greater than or equal to 1×10^{-2} cm/sec at the anticipated field density.

Section 9. NR 506.105(4)(c) is amended to read:

NR 506.105(4)(c) The tonnage records of untreated petroleum contaminated soil accepted annually shall be summarized and submitted with the annual tonnage certification report as required by s. NR 520.14(4). ~~A summary of all records~~

~~listed in pars. (a) and (b) shall be submitted as part of the annual report required in s. NR 506.19.~~

Section 10. NR 512.07 is amended to read:

NR 512.07 GENERAL FACILITY INFORMATION. The feasibility report shall identify the project title; name, address and phone number of the primary contacts including the proposed landfill's owner, operator and any consultants; present property owner; proposed landfill location by quarter-quarter section; total acreage of the property and proposed limits of filling; proposed landfill life, design capacity and date of closure; municipalities and industries to be served; anticipated waste types and characteristics; anticipated volumes of each major waste stream and any seasonal fluctuations taking into account waste reduction, reuse, recycling, composting and the recovery of energy from solid waste; anticipated cover frequency; mode of operation; ~~anticipated~~ proposed sub-base, base and final grades; preliminary design concepts; need for the landfill; and the alternatives to land disposal, including any proposed waste reduction and recovery services.

Section 11. NR 512.09(2)(am) is repealed.

Section 12. NR 512.09(2)(e) Table 1 is amended to read:

NR 512.09(2)(e)

Table 1

Non-Fine Coarse-Grained Soil Environments			
Piezometers	Water Table Observation Wells	Borings	Area
2	5	10	First 5 or less acres
-	1	2	Each additional 5 or less acres
1	-	-	Each additional 10 or less acres
Fine-Grained Soil Environments			
Piezometers	Water Table Observation Wells	Borings	Area
4 4	5	10	First 5 or less acres
2	1	2	Each additional 5 10 or less acres
<small>Note: All requirements contained in s. NR 512.11 also apply.</small>			

Section 13. NR 512.09(5) is amended to read:

NR 512.09(5) SAMPLE RETENTION. All soil and bedrock samples collected from the proposed property shall be retained in accordance with s. NR 507.05(2) and (3).

Section 14. NR 512.10(3) is amended to read:

NR 512.10(3) APPENDIX. All raw data including boring logs, soil tests, hydraulic conductivity tests, water level measurements, baseline water quality laboratory reports, and department well construction, well development, and well information forms shall be included in the appendices of the report. ~~The department storm water control form in accordance with s. NR 512.14(1)(e) shall also be included in the appendices of the report.~~

Section 15. NR 512.12(4) is repealed.

Section 16. NR 512.13(1) is amended to read:

NR 512.13(1) LOCATIONAL CRITERIA AND PERFORMANCE STANDARDS. A demonstration that the proposed landfill will meet the locational criteria and performance standards in s. NR 504.04. ~~A demonstration that the facility will meet location and performance standards in s. NR 504.04.~~

Section 17. NR 512.13(4)(title), (intro) and (a) are amended to read:

NR 512.13(4)(title) EXISTING FACILITY PERFORMANCE. (intro.) For a proposed contiguous, horizontal or vertical expansion of an existing landfill, ~~the following information on the compliance status and performance of the existing landfill shall be included~~ evaluated:

(a) ~~The discussion in the initial site report~~ any applicable pre-feasibility report on the compliance status and performance of the existing landfill shall be referenced in the feasibility report and any changes in the compliance status and performance of the existing landfill since the submittal of ~~the initial site report~~ any applicable pre-feasibility report shall be addressed.

Section 18. NR 512.14(1)(e) is amended to read:

NR 512.14(1)(e) Proposed methods for storm water control in accordance with ch. NR 216 and visual screening. ~~In accordance with s. NR 512.10(3), the department form for storm water control shall be included in the appendices of the feasibility report.~~

Section 19. NR 514.08 is amended to read:

NR 514.08 CLOSURE PLANS. Closure plans may be required by the department for solid waste disposal facilities which do not have an approved plan of operation under s. ~~144.44(3)~~ 289.30, Stats., or which are required by order or approval to develop a closure plan, as remediation for groundwater or surface water contamination, or to control gas migration. Closure plans shall present the complete plans and engineering analysis necessary for evaluation of the design, remaining operation, monitoring, closure and post closure care of the facility. The closure plans shall address all the requirements of s. NR 506.08. The department may require that the plans address any or all of the information contained in chs. NR 504, 507, 508, 512, 514 and 516.

Section 20. NR 514.09(1)(a)1. to 10. are renumbered NR 514.09(1)(a)4. to 13.

Section 21. NR 514.09(1)(a)(intro.) and (b)2. are amended to read:

NR 514.09(1)(a)(intro.) If requested by the owner or operator, this section applies to all proposals to modify provisions in approved plans of operation relating, except those identified in par. (b), that would not result in a violation of a statute or administrative rule, or an existing written condition contained in a department approval document, and would not require issuance of an exemption by the department. Modifications to which this section applies include, but are not limited to the following:

1. Revisions to surface water control systems.
2. Revisions to gas extraction systems.
3. Use of alternate borrow sources following the department's performance of initial site inspections.

(b)2. A change in the design or construction of landfill liners, final cover or leachate collection, transfer, recirculation or storage systems.

Section 22. NR 516.06(2)(e) is amended to read:

NR 516.06(2)(e) Daily summary reports shall be prepared for each day that installation of geomembrane or other geosynthetics is either attempted or accomplished for composite-capped landfills and shall contain the information required in s. NR 516.05(2)(~~e~~) (e).

Section 23. NR 516.07(2)(a)3. is amended to read:

NR 516.07(2)(a)3. Geomembrane density and melt index of the polymer shall be tested at a rate of one test per 100,000 ft² of geomembrane installed and a minimum of one test ~~on rolls from~~ for each batch of resin used to manufacture rolls delivered on site, unless documentation is provided which shows the manufacturer performed testing at the same frequencies.

Section 24. NR 516.07(2)(b) is amended to read:

NR 516.07(2)(b) Pre-qualification tests for geomembrane fusion welding machines shall be conducted by a minimum of 2 pre-qualification seams run per day per welding machine at the start up of each day by each seaming technician performing geomembrane welding, with that machine. At least one test shall be performed at the start of each work day, with tests at intervals of no greater than 5 hours and with additional test runs following work interruptions, weather changes, changes to machine settings for temperature or speed or as directed by the quality assurance engineer or qualified technician. At start up, extrusion welding machine performance shall be verified by a minimum of 2 test seams per day per machine, with additional testing as directed by the quality assurance engineer or qualified technician. A portion of each pre-qualification specimen shall be tested in the field for acceptable tensile strength. Test results shall be collated for documentation along with notes on

date, ambient temperature, technician and seaming machine used to make the seam, and results of field tests.

Section 25. NR 520.04(1)(d) is renumbered to NR 520.04(1)(e).

Section 26. NR 520.04(1)(d) is created to read:

NR 520.04(1)(d)1. In addition to the license fee specified in par. (a), owners or operators of landfills shall pay a license fee surcharge to the department based upon the number of tons or equivalent volume of solid waste disposed of at each landfill during each quarterly reporting period.

2. The amount of the surcharge payable under subd. 1 shall be determined by multiplying the number of tons or equivalent volume of solid waste disposed of during each quarterly reporting period by 9¢ per ton.

3. Owners or operators of landfills shall submit quarterly reports on forms supplied by the department accompanied by the amount of the surcharge calculated under this section within 30 days after the end of each successive reporting period.

4. Within 36 months after the effective date of this rule [revisor insert date], the department shall submit to the natural resources board a proposal with appropriate justification for the modification, continuation, or repeal of the surcharge payable under this paragraph.

Note: The department intends to continue to consult and seek the advice of representatives of persons affected by the license fee surcharge established by this rule for the purpose of making a recommendation to the natural resources board concerning whether or not the surcharge should continue after 36 months.

Section 27. NR 520.04(1m) is repealed.

Section 28. NR 520.04(4)(b) is renumbered to NR 520.04(4)(c)

Section 29. NR 520.04(4)(b) is created to read:

NR 520.04(4)(b) When an applicant requests in writing that the department's plan review determination be issued in a shorter time interval than the total time interval allowed under ss. 289.24(3), 289.29(4) and 289.30(6), Stats., or s. NR 500.07, and the department complies within one half of the total time interval allowed following receipt of a complete submittal, one of the following fees in addition to those specified in Table 2 or Table 3 shall apply:

1. \$3,000 for an initial site report.
2. \$3,000 for a pre-feasibility report.
3. \$10,000 for a feasibility report.
4. \$3,500 for a landfill, incinerator, municipal solid waste combustor, or processing facility plan of operation report.
5. \$1,000 for a landfill construction documentation report.

6. \$1,500 for a landfill plan modification.
7. \$1,000 for any other non-landfill submittal.

Section 30. NR 520.05(1) (title) is amended to read:

NR 520.05(1)(title) OWNER'S RESPONSIBILITY

Section 31. NR 520.05(2) and (3) are repealed. [Drafter's Note: It is the department's intention to retain the second NR 520.05(2) entitled Successors in Interest.]

Section 32. NR 520.07(5) is amended to read:

NR 520.07(5) INFLATION RATE. The rates of inflation applied to cost estimates approved by the department in previous years shall be the ~~percentage change in the annual gross domestic product implicit price deflator published in the survey of current business by the bureau of economic analysis, U.S. department of commerce for the appropriate years.~~ The projected rate of inflation to be applied in proof of financial responsibility calculations for all future years shall be equal to the annual gross domestic product implicit price deflator ~~published in the survey of current business by the bureau of economic analysis, U.S. department of commerce for the last full calendar year.~~

Section 33. Table 2 following NR 520.15(2)(c) is repealed and recreated to read:

TABLE 2

FEE SCHEDULE -- ALL FACILITIES EXCEPT LANDFILLS AND SURFACE IMPOUNDMENTS

<u>Facility Type</u>	<u>License Required</u>	<u>Plan Review Fee⁽¹⁾⁽²⁾</u>	<u>Construction Documentation Review Fee</u>	<u>License Fee</u>
Exemption Request	No	\$ 500	N/A	N/A
Beneficial Reuse	No	\$ 500	\$ 500	N/A
Collection & Transportation	Yes	N/A	N/A	\$ 100
Each Additional Truck		N/A	N/A	30 ⁽⁴⁾
Transfer Facility				
Small	Yes	\$ 600	\$ 300	\$ 150
Large (>100 tons/day)	Yes	\$1,500	\$ 600	\$ 500
Processing Facility ⁽³⁾	Yes	\$3,000	\$1,000	\$ 500
Storage Facility	Yes	\$1,500	\$1,000	\$ 500
Incinerator Facility ⁽³⁾	Yes	\$7,000	\$1,000	\$7,000
Air Curtain Destructor	Yes	\$ 300	\$ 150	\$ 150
Woodburning Facility	Yes	\$ 150	N/A	\$ 150
Municipal Waste Combustor	Yes	\$7,000	\$1,000	\$7,000
Land Spreading Facility				
Exempt	No	\$ 600	N/A	N/A
Non-Exempt	No	\$1,500	N/A	N/A
Infectious Waste Transportation	Yes	N/A	N/A	\$ 250
Each Additional Truck		N/A	N/A	\$ 20
Infectious Waste Annual Report	No	N/A	N/A	\$ 50 ⁽⁵⁾
Medical Waste Reduction Plan	No	\$ 600 ⁽⁶⁾	N/A	N/A

(1) The plan review fees specified in Table 2 cover the department's review from initial submittal through approval or denial of the report or plan. An applicant may withdraw and revise or supplement a report or plan prior to it being deemed complete and resubmit it without paying an additional review fee. The applicant shall pay a plan review fee as specified in Table 2 for resubmittal of a plan which has been withdrawn after having been determined to be complete.

(2) The department may waive any plan review fee if it determines that the total review time is not likely to exceed 4 hours.

(3) The department shall waive the plan review fees and license fees for a processing facility or incinerator which has a primary purpose of converting solid waste into usable materials, products or energy.

(4) The department may waive the additional license fee for trucks used only once or twice a year for spring/fall clean-up operations by municipalities.

(5) This is an annual filing fee.

(6) If the department requires a medical facility to submit its medical waste reduction plan under s. NR 526.22, the plan review fee must also be submitted.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on March 26, 1997

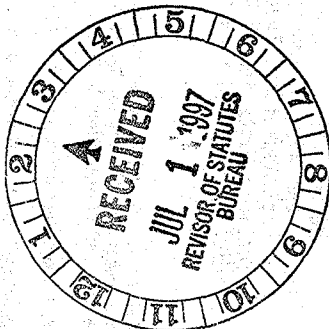
The rules shall take effect the first day of the month following publication as provided in s. 227.22(2)(intro.), Stats. except that Sections 26 and 27 shall take effect on the first day of the next calendar quarter following publication

Dated at Madison, Wisconsin June 18, 1997

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES

BY George E. Meyer
George E. Meyer, Secretary

(SEAL)





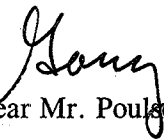
State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

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June 17, 1997

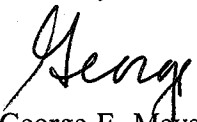
Mr. Gary L. Poulson
Assistant Revisor of Statutes
131 West Wilson Street - Suite 800
Madison, WI


Dear Mr. Poulson:

Enclosed are two copies, including one certified copy, of State of Wisconsin Natural Resources Board Order No. SW-56-96. These rules were reviewed by the Assembly Committee on Natural Resources and the Senate Committee on Agriculture and Environmental Resources pursuant to s. 227.19, Stats. Summaries of the final regulatory flexibility analysis and comments of the legislative review committees are also enclosed.

You will note that this order takes effect following publication. Kindly publish it in the Administrative Code accordingly.

Sincerely,


George E. Meyer
Secretary

Enc.

