

Chapter NR 520

**SOLID WASTE MANAGEMENT FEES AND FINANCIAL  
RESPONSIBILITY REQUIREMENTS**

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**NR 520.01 Purpose.** The purpose of this chapter is to ensure that efficient, nuisance-free and environmentally acceptable solid waste management procedures are practiced in Wisconsin and to establish solid waste license and review fees, environmental fees and financial responsibility requirements. This chapter is adopted under ss. 144.43 to 144.47, and 227.11, Stats.

History: Cr. Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.02 Applicability.** (1) Except as otherwise provided, this chapter governs all solid waste facilities as defined by s. 144.43(5), Stats., except hazardous waste facilities as defined by s. 144.61(5m), Stats., and regulated under ch. NR 181 and metallic mining operations as defined in s. 144.81(5), Stats., and regulated under ch. NR 182.

(2) This chapter does not apply to the design, construction or operation of industrial wastewater facilities, sewerage systems and waterworks treating liquid wastes approved under s. 144.04, Stats., or permitted under ch. 147, Stats., nor to facilities used solely for the disposal of liquid municipal or industrial wastes which have been approved under s. 144.04, Stats., or permitted under ch. 147, Stats., except for facilities used for the ultimate disposal of solid waste.

History: Cr. Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.03 Definitions.** The terms used in this chapter are defined in s. NR 500.03.

History: Cr. Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.04 Licenses and fees.** (1) **ISSUANCE OF AN OPERATING LICENSE.** No person may operate or maintain a solid waste facility without an operating license from the department unless an exemption is granted under s. NR 500.08. The license period shall be a minimum of one year.

(a) Application for an initial license for a new solid waste facility may be submitted at any time during the license period. Initial licenses issued during the license period shall expire at the end of that license period. Fees for initial licenses are proratable. The license period is divided into

6-month periods. The applicant for initial licensing of a facility shall submit the appropriate fees as shown in Table 1 or Table 2, "Fee Schedule", whichever is applicable.

(b) The department will mail application forms to renewal applicants. Application for renewal of a solid waste disposal license shall be submitted to the department. Applicants failing to submit the relicensing application within the specified time shall pay a late processing fee equal to 50% of the renewal fee or \$150.00, whichever is less, in addition to the relicensing fee.

(c) Application for an operating license shall be submitted on forms supplied by the department and shall be accompanied by the appropriate fees as shown in Table 1 or Table 2, "Fee Schedule", whichever is applicable.

(d) License fees for solid waste facilities are not refundable.

(2) **TRANSFER OF AN OPERATING LICENSE.** The department will issue a new operating license to a person acquiring rights of ownership, possession or operation of a licensed facility in accordance with s. 144.444, Stats. Feasibility approvals and plan of operation approvals are not transferable prior to the licensing of a facility.

(3) **LICENSURE DURING THE CLOSURE AND LONG-TERM CARE PERIOD.** The owner or operator and any successor in interest shall maintain a license during the closure and long-term care period indicated in s. 144.441, Stats. The license fees are specified in Table 2.

(4) **PLAN REVIEW AND LICENSE FEES.** For the purposes of plan review and license fees charged to land disposal facilities as provided in Table 2, the following shall apply:

(a) Plan review fees shall be charged on the basis of the design capacity of the facility, cell or module for which plans have been submitted. As an example, if a plan of operation report is submitted for a one million cubic yard facility, a review fee for a facility greater than 500,000 cubic yards applies. Construction documentation reports, however, may be submitted over time for several modules. Each construction documentation report review would be charged on the basis of the design capacity of the module submitted. For construction documentation reports for which a design capacity cannot be applied, such as sedimentation basins or remedial actions, a review fee of \$200.00 shall apply.

(b) License fees shall be based on the design capacity of the facility being licensed including solid waste already deposited at the facility. For facilities which do not have a plan approval, the department shall make a reasonable estimate of the capacity of the facility based on licensed acreage and probable depth of fill and shall charge a fee accordingly.

(5) **CONSTRUCTION INSPECTION FEES.** A construction inspection fee of \$500.00 per inspection required under s. NR 500.09 shall be paid to the department by the applicant at the time of submittal of a construction documentation report or as specified in the plan approval. A maximum of 10 inspections per major phase of construction may be required.

History: Cr. Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.05 Financial responsibility for closure and long-term care. (1) CLOSURE.** The owner of an approved facility for the land disposal of solid  
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waste shall submit, as part of the initial operating license application and annually thereafter for the period of active facility life, proof of financial responsibility to ensure compliance with the closure requirements of the approved plan of operation.

(2) **LONG-TERM CARE.** The owner of an approved facility for the land disposal of solid waste shall be responsible for the long-term care of the facility for either 20 or 30 years after facility closure, unless the owner's responsibility is terminated earlier in accordance with s. 144.441 (2) (d), Stats. An owner responsible for long-term care shall specify at the time of submittal of the plan of operation whether the owner chooses to be responsible for 20 years, subject to department approval, or 30 years and shall submit, as part of the initial operating license application and annually thereafter for the period of active facility life, proof of financial responsibility to ensure compliance with the long-term care requirements of the plan of operation.

(3) **SUCCESSORS IN INTEREST.** Any person acquiring rights of ownership, possession or operation of a licensed facility shall be subject to all requirements of the license for the facility and shall provide any required proof of financial responsibility to the department in accordance with this section. The previous owner shall maintain proof of financial responsibility until the person acquiring ownership, possession or operation of the facility obtains department approval of proof of financial responsibility.

History: Cr. Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.06 Methods of providing proof of financial responsibility.** Financial assurances for closure and long-term care shall be established separately. The owner shall specify, as part of the plan of operation submittal, which method of providing proof of financial responsibility will be used for closure and for long-term care. To provide proof of financial responsibility, the applicant shall use one of the following methods for each account:

(1) **PERFORMANCE OR FORFEITURE BOND.** (a) If the owner chooses to submit a bond, it shall be in the amount determined according to s. NR 520.08(3) and (4) conditioned upon faithful performance by the owner and any successor in interest, of all closure or long-term care requirements of the approved plan of operation. The bond shall be delivered to the department as part of the initial operating license application. Bond forms shall be supplied by the department.

(b) Bonds shall be issued by a surety company authorized to do surety business in this state. At the option of the owner, a performance bond or a forfeiture bond may be filed. The department shall be the obligee of the bond. Surety companies may have the opportunity to complete the closure or long-term care of the facility in lieu of cash payment to the department if the owner or any successor in interest fails to carry out the closure or long-term care requirements of the approved plan of operation. The department shall mail notification of its intent to use the funds for that purpose to the last known address of the owner. If the owner submits a written request for a hearing to the secretary of the department within 20 days after the mailing of the notification, the department shall, prior to using the funds, hold a hearing for the purpose of determining whether or not the closure or long-term care requirements of the approved plan of operation have been carried out.

(c) Each bond shall provide that, as long as any obligation of the owner for closure or long-term care remains, the bond may not be cancelled by the surety, unless a replacement bond or other proof of financial responsibility under this section is provided to the department by the owner. If the surety proposes to cancel such a bond, the surety shall provide notice to the department and to the owner in writing by registered or certified mail not less than 90 days prior to the proposed cancellation date. Not less than 30 days prior to the expiration of the 90-day notice period, the owner shall deliver to the department a replacement bond or other proof of financial responsibility under this section, in the absence of which all disposal operations shall immediately cease and the bond shall remain in effect as long as any obligation of the owner remains for closure or long-term care. The surety may discharge its obligation under the bond at anytime by paying the unused portion of the bond to the department.

(d) If the surety company becomes bankrupt or insolvent or if its authorization to do business is revoked or suspended, the owner shall, within 30 days after receiving written notice, deliver to the department a replacement bond or other proof of financial responsibility under this section, in the absence of which all disposal operations shall immediately cease and the bond shall remain in effect as long as any obligation of the owner remains for closure or long-term care.

(2) **DEPOSIT WITH THE DEPARTMENT.** If the owner chooses to deposit cash, certificates of deposit or U.S. government securities with the department, the amount of the deposit shall be determined according to s. NR 520.08(1) and (2) and shall be submitted as part of the initial license application. Cash deposits placed with the department shall be segregated and invested in an interest bearing account. All interest payments shall be accumulated in the account. The department shall have the right to use part or all of the funds to carry out the closure or long-term care requirements of the approved plan of operation if the owner fails to do so. The department shall mail notification of its intent to use funds for that purpose to the last known address of the owner. If the owner submits a written request for a hearing to the secretary of the department within 20 days after the mailing of notification, the department shall, prior to using the funds, hold a hearing for the purpose of determining whether or not the closure or long-term care requirements of the approved plan of operation have been carried out.

(3) **ESCROW ACCOUNT.** If the owner establishes an escrow account, the amount shall be determined according to s. NR 520.08(1) and (2) and the account shall be with a bank or financial institution located within the state of Wisconsin which is examined and regulated by the state or a federal agency. The assets in the escrow account shall consist of cash, certificates of deposit or U.S. government securities. All interest payments shall be accumulated in the account. A duplicate original of the escrow agreement with original signatures shall be submitted to the department as part of the initial operating license application. Escrow account forms shall be supplied by the department. The department shall be a party to the escrow agreement, which shall provide that there shall be no withdrawals from the escrow account except as authorized in writing by the department. The escrow agreement shall further provide that the department shall have the right to withdraw and use part or all of the funds in the escrow account to carry out the closure or long-term care requirements of the approved plan of operation if the owner fails to do so.

The department shall mail notification of its intent to use funds for that purpose to the last known address of the owner. If the owner submits a written request for a hearing to the secretary of the department within 20 days after the mailing of the notification, the department shall, prior to using the funds, hold a hearing for the purpose of determining whether or not the closure or long-term care requirements of the approved plan of operation have been carried out.

(4) **IRREVOCABLE TRUST.** If the owner creates an irrevocable trust, it shall be exclusively for the purpose of ensuring that the owner or any successor in interest will comply with the closure or long-term care requirements of the approved plan of operation. The trust agreement shall designate the department as sole beneficiary. The trustee shall be a bank or other financial institution located within the state of Wisconsin which has the authority to act as a trustee and whose trust operations are regulated and examined by the state or a federal agency. The trust corpus shall consist of cash, certificates of deposit or U.S. government securities in the amount determined according to s. NR 520.08(1) and (2). All interest payments shall be accumulated in the account. A duplicate original of the trust agreement with original signatures shall be submitted to the department for approval as part of the initial operating license application. Trust forms shall be supplied by the department. The trust agreement shall provide that there shall be no withdrawal from the trust fund except as authorized in writing by the department. The trust agreement shall further provide that sufficient monies shall be paid from the trust fund to the beneficiary in the event that the owner or any successor in interest fails to complete the closure or long-term care requirements of the approved plan of operation. The department shall mail notification of its intent to use funds for that purpose to the last known address of the owner. If the owner submits a written request for a hearing to the secretary of the department within 20 days after the mailing of the notification, the department shall, prior to using the funds, hold a hearing for the purpose of determining whether or not the closure or long-term care requirements of the approved plan of operation have been carried out.

(5) **LETTER OF CREDIT.** (a) If the owner chooses to submit a letter of credit, it shall be in the amount determined according to s. NR 520.08 (3) and (4) and available exclusively for the purpose of assuring that all closure or long-term care requirements of the approved plan of operation will be complied with. The original letter of credit shall be delivered to the department as part of the initial operating license application. Letter of credit forms shall be supplied by the department.

(b) Letters of credit shall be issued by a bank or financial institution which is examined and regulated by a federal agency, or in the case of a bank or financial institution located within the state of Wisconsin, which is examined and regulated by the state or a federal agency. The department shall be the beneficiary of the letter of credit.

(c) The letter of credit shall provide either that the unused portion of the letter of credit shall be payable in full to the department upon the expiration of the letter of credit or that as long as any obligation of the owner for closure or long-term care remains, the letter of credit may not be cancelled by the bank or financial institution, unless a replacement letter of credit or other proof of financial responsibility under this section is provided to the department by the owner. If the bank or financial institution proposes to cancel a letter of credit, the bank or financial institu-

tion shall provide notice to the department and the owner in writing by registered or certified mail not less than 90 days prior to the proposed cancellation date. Not less than 30 days prior to the expiration date of the 90-day notice period, the owner shall deliver to the department a replacement letter of credit or other proof of financial responsibility under this section, in the absence of which all disposal operations shall immediately cease and either the letter of credit shall remain in effect as long as any obligation of the owner remains for closure or long-term care or the unused portion of the letter of credit shall be payable in full to the department.

(d) If the bank or financial institution becomes bankrupt or insolvent or if its authorization to do business is revoked or suspended, the owner shall, within 30 days after receiving written notice, deliver to the department a replacement letter of credit or other proof of financial responsibility under this section, in the absence of which all disposal operations shall immediately cease and the letter of credit shall either remain in effect as long as any obligation of the owner remains for closure or long-term care or be payable in full to the department.

(e) The letter of credit shall further provide that the department has the right to withdraw and use part or all of the funds to carry out the closure or long-term care requirements of the plan of operation if the owner fails to do so. The department shall mail notification of its intent to use the funds for that purpose to the last known address of the owner. If the owner submits a written request for a hearing to the secretary of the department, within 20 days after the mailing of the notification, the department shall, prior to using the funds, hold a hearing for the purpose of determining whether or not the closure or long-term care requirements of the approved plan of operation have been carried out.

(6) NET WORTH TEST. (a) Only a company that meets the definition in s. 144.443 (1) (b), Stats., may use the net worth method of providing proof of financial responsibility.

(b) The company shall comply with the net worth test requirements of s. 144.443 (4) and (6) or (7), Stats., and the minimum security requirements of s. 144.443 (8) or (9), Stats., whichever is applicable.

(c) A company using the net worth test to provide proof of financial responsibility for more than one facility shall use the total cost of compliance for all facilities in determining the net worth to closure and long-term care cost ratio.

(d) The department determinations under the net worth test shall be done in accordance with s. 144.443 (5), Stats.

(7) INSURANCE. (a) If the owner chooses to submit an insurance policy for closure or long-term care, it shall be issued for the maximum risk limit determined according to s. NR 520.08 (5) and (6). A certificate of insurance shall be delivered to the department as part of the initial operating license application. Certificate of insurance forms shall be supplied by the department.

(b) At a minimum, the agent or broker shall be licensed as a surplus lines insurance agent or broker. The department shall determine the acceptability of a surplus lines insurance company to provide coverage for proof of financial responsibility. The department shall base the determi-

nations on any evaluations prepared in accordance with s. 618.41 (6) (d), Stats., by the office of the commissioner of insurance. The department shall be the beneficiary of the insurance policy.

(c) The insurance policy shall provide either that the unused proceeds of the policy shall be payable in full to the department upon expiration of the policy or that, as long as any obligation of the owner for closure or long-term care remains, the insurance policy may not be cancelled by the insurer unless a replacement insurance policy or other proof of financial responsibility under this section is provided to the department by the owner. If the insurer proposes to cancel an insurance policy, the insurer shall provide notice to the department and to the owner in writing by registered or certified mail not less than 90 days prior to the proposed cancellation date. Not less than 30 days prior to the expiration of the 90-day notice period, the owner shall deliver to the department a replacement insurance policy or other proof of financial responsibility under this section, in the absence of which all disposal operations shall immediately cease and either the policy shall remain in effect as long as any obligation of the owner remains for closure or long-term care or the proceeds of the policy shall be payable in full to the department.

(d) If the insurance company becomes bankrupt or insolvent or if the company receives an unfavorable evaluation under s. 618.41 (6) (d), Stats., the owner shall, within 30 days after receiving written notice, deliver to the department a replacement insurance policy or other proof of financial responsibility under this section in the absence of which all disposal operations shall immediately cease and the policy shall either remain in effect as long as any obligation of the owner remains for closure or long-term care or be payable in full to the department.

(e) The insurance policy shall further provide that funds, up to an amount equal to the maximum risk limit of the policy, will be available to the department to carry out the closure and long-term care requirements of the approved plan of operation if the owner fails to do so. The department shall mail notification of its intent to use the funds for that purpose to the last known address of the owner. If the insurer or owner submits a written request for a hearing to the secretary of the department within 20 days after the mailing of the notification, the department shall, prior to using funds, hold a hearing for the purpose of determining whether or not the closure or long-term care requirements of the approved plan of operation have been carried out.

(f) Each insurance policy shall contain a provision allowing assignment of the policy to a successor owner or operator. Assignment may be conditioned upon the consent of the insurer, provided consent is not unreasonably refused.

Note: These forms may be obtained from the Department of Natural Resources, Bureau of Solid Waste Management, P.O. Box 7921, Madison, WI 53707 or any DNR district office.

(8) OTHER METHODS. The department shall consider other financial commitments made payable to or established for the benefit of the department to ensure the owner or operator will comply with the closure and long-term care requirements of the approved plan of operation. The department shall review the request of any owner or operator to establish proof of financial responsibility to determine whether the proposed method provides a degree of assurance that is comparable to that pro-

vided by the methods listed in this section. The owner shall submit the request and all supporting information as part of the plan of operation.

History: Cr. Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.07 Cost estimates.** (1) **GENERAL.** For the purpose of determining the amount of proof of financial responsibility that is required in s. NR 520.06, the owner shall estimate the total cost of closure for the point in time during operation of the facility when the extent and manner of its operation make closure most expensive, estimate the annual cost of long-term care of the facility for the period of owner responsibility and submit the estimated closure and long-term care costs together with all necessary justification to the department for approval as part of the plan of operation submittal. The costs shall be based on a third party performing the work and reported on a per unit basis. The source of estimates shall be indicated.

(2) **CLOSURE COSTS.** At a minimum, closure costs shall include; the purchasing, hauling, placement and documentation testing of the final cover material and topsoil; seeding, fertilizing, mulching and labor; the installation of gas venting devices; the cost of preparing an engineering report documenting the work performed and a 10% contingency.

(3) **LONG-TERM CARE COSTS.** At a minimum, long-term care costs shall include, where applicable, land surface care; gas monitoring; unsaturated zone monitoring; leachate pumping, transportation, monitoring and treatment; groundwater monitoring including sample collection and analysis; leachate collection line cleaning on an annual basis; and a 10% contingency. For the purposes of preparing the long-term care cost estimates, all monitoring requirements specified in the plan of operation shall be assumed to apply over the entire long-term care period. Leachate strengths shall not be assumed to decrease over time and the calculation of leachate generation volumes shall be performed assuming that the waste is at field capacity unless an alternative method is approved by the department in writing. Only detailed performance data will be considered when evaluating estimates for leachate strengths and leachate generation volumes. Leachate treatment costs shall be based on those available from a municipal wastewater treatment plant capable of accepting the leachate in accordance with the applicable requirements of its WPDES permit.

(4) **INFLATION RATE.** The estimated rate of inflation shall be the latest percent change in the annual gross national product implicit price deflator published in the survey of current business by the bureau of economic analysis, U.S. department of commerce.

(5) **INTEREST RATES.** The estimated annual rate of interest for escrow accounts or trust accounts shall be the rate specified by the financial institution managing the fund or deposit. The estimated annual rate of interest for deposits with the department, bonds or letters of credit shall be the rate specified by the department.

History: Cr. Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.08 Formulas for calculating the amount of the proof of financial responsibility.** The owner shall, as part of the plan of operation submittal, perform the calculation of the formula for the chosen method of providing proof of financial responsibility for closure and for long-term care.

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(1) DEPOSITS IN ESCROW, TRUST OR DEPARTMENT ACCOUNTS FOR CLOSURE. The formula for interest bearing accounts for closure shall be:

$$D = C \frac{(1 + f)}{(1 + i)}$$

in which:

- D = unknown deposit for closure
- C = the estimated cost of closure in today's dollars for the maximum area to be open at any point in time
- f = the estimated annual rate of inflation, expressed as a decimal
- i = the estimated annual rate of interest, expressed as a decimal

(2) DEPOSITS IN ESCROW, TRUST OR DEPARTMENT ACCOUNTS FOR LONG-TERM CARE. The following information used in calculating the amounts deposited to the interest bearing accounts for long-term care shall be specified in the plan of operation submittal: the rate of outpayment during the period of long-term care, expressed in equal annual outpayments or unequal annual outpayments, and the equal annual rate of inpayment, expressed as either real dollar inpayments or actual dollar inpayments.

(a) When equal annual outpayments, actual dollar inpayments and a closure period are used, the formula shall be expressed as:

$$A = \left[ R(1+f)^{RSL} \left( \frac{1+f}{1+(f+.02)} \right)^e \left[ \frac{1 - \left( \frac{1+f}{1+(f+.02)} \right)^{LTC}}{\left( \frac{1+(f+.02)}{1+f} \right) - 1} \right] \right] \div \left[ (1+i) \left[ \frac{(1+i)^{RSL} - 1}{i} \right] \right]$$

(b) When equal annual outpayments, actual dollar inpayments and no closure period are used, the formula shall be expressed as:

$$A = \left[ R(1+f)^{RSL} \left[ \frac{1 - \left( \frac{1+f}{1+(f+.02)} \right)^{LTC}}{\left( \frac{1+(f+.02)}{1+f} \right) - 1} \right] \right] \div \left[ (1+i) \left[ \frac{(1+i)^{RSL} - 1}{i} \right] \right]$$

(c) When unequal annual outpayments, actual dollar inpayments and a closure period are used, the formula shall be expressed as:

$$A = \left[ \sum_x \left[ R_x (1+f)^{\text{RSL}} \left( \frac{1+f}{1+(f+.02)} \right)^{x+c} \right] \right] \div \left[ (1+i) \left[ \frac{(1+i)^{\text{RSL}} - 1}{i} \right] \right]$$

(d) When unequal annual outpayments, actual dollar inpayments and no closure period are used, the formula shall be expressed as:

$$A = \left[ \sum_x \left[ R_x (1+f)^{\text{RSL}} \left( \frac{1+f}{1+(f+.02)} \right)^x \right] \right] \div \left[ (1+i) \left[ \frac{(1+i)^{\text{RSL}} - 1}{i} \right] \right]$$

(e) When equal annual outpayments, real dollar inpayments and a closure period are used, the formula shall be expressed as:

$$A = \left[ R (1+f)^{\text{RSL}} \left( \frac{1+f}{1+(f+.02)} \right)^c \left[ \frac{1 - \left( \frac{1+f}{1+(f+.02)} \right)^{\text{LTC}}}{\left( \frac{1+f}{1+(f+.02)} \right) - 1} \right] \right] \div \left[ (1+i)^{\text{RSL}+1} \left[ \frac{1 - \left( \frac{1+f}{1+i} \right)^{\text{RSL}}}{i-f} \right] \right]$$

(f) When equal annual outpayments, real dollar inpayments and no closure period are used, the formula shall be expressed as:

$$A = \left[ R (1+f)^{\text{RSL}} \left[ \frac{1 - \left( \frac{1+f}{1+(f+.02)} \right)^{\text{LTC}}}{\left( \frac{1+f}{1+(f+.02)} \right) - 1} \right] \right] \div \left[ (1+i)^{\text{RSL}+1} \left[ \frac{1 - \left( \frac{1+f}{1+i} \right)^{\text{RSL}}}{i-f} \right] \right]$$

(g) When unequal annual outpayments, real dollar inpayments and a closure period are used, the formula shall be expressed as:

$$A = \left[ \sum_x \left[ R_x (1+f)^{\text{RSL}} \left( \frac{1+f}{1+(f+.02)} \right)^{x+c} \right] \right] \div \left[ (1+i)^{\text{RSL}+1} \left[ \frac{1 - \left( \frac{1+f}{1+i} \right)^{\text{RSL}}}{i-f} \right] \right]$$

(h) When unequal annual outpayments, real dollar inpayments and no closure period are used, the formula shall be expressed as:

$$A = \left[ \sum_{x=1}^{LTC} \left[ R_x (1+f)^{RSL} \left( \frac{1+f}{1+(f+.02)} \right)^x \right] \right] \div \left[ (1+i)^{RSL+1} \left[ \frac{1 - \left( \frac{1+f}{1+i} \right)^{RSL}}{i-f} \right] \right]$$

in which:

- A = the unknown inpayment for long-term care per year of active facility life
- i = the estimated annual rate of interest, expressed as a decimal
- f = the estimated annual rate of inflation, expressed as a decimal
- (f + .02) = the estimated rate of inflation plus 2% expressed as a decimal
- RSL = the estimated remaining life of the facility in years rounded to the nearest whole number
- R = the estimated annual costs
- R<sub>x</sub> = the estimated unequal annual costs
- x = the year of long-term care
- LTC = the period of long-term care
- c = the closure period as a fraction of one year, expressed as a decimal
- Σ = the sum from year 1 through the last year of LTC

(3) **BONDS AND LETTERS OF CREDIT FOR CLOSURE.** The formula for non-interest bearing accounts for closure shall be:

$$CB = C (1+f)$$

in which:

- CB = the unknown amount of the bond or letter of credit for closure
- C = the estimated closure cost
- f = the estimated annual rate of inflation, expressed as a decimal

(4) **BONDS AND LETTERS OF CREDIT FOR LONG-TERM CARE.** For non-interest bearing accounts for long-term care, the rate of outpayment shall be as specified in s. NR 520.08 (2) and the rate of inpayment shall be in equal actual dollar inpayments.

(a) When equal annual outpayments are used, the formula shall be expressed as:

$$PB = \left[ R(1+f)^{RSL+1+c} \left[ \frac{(1+f)^{LTC} - 1}{f} \right] \right] \div RSL$$

(b) When unequal annual outpayments, are used, the formulas shall be expressed as:

$$PB = \left[ \sum \left[ R_x (1+f)^{RSL+x+c} \right] \right] \div RSL$$

in which:

PB = the unknown bond or letter of credit amount for long-term care to increase per year of active facility life

i = the estimated annual rate of interest, expressed as a decimal

f = the estimated annual rate of inflation, expressed as a decimal

(f + .02) = the estimated rate of inflation plus 2% expressed as a decimal

R = the estimated annual costs

$R_x$  = the estimated unequal annual costs

LTC = the long-term care period

RSL = the estimated remaining life of the facility in years rounded to the nearest whole number

x = the year of long-term care

c = the closure period as a fraction of one year, expressed as a decimal

$\Sigma$  = the sum from year 1 through the last year of LTC

(5) INSURANCE TO COVER CLOSURE. The formula for closure shall be:

$$CI = C (1+f)$$

in which:

CI = the unknown amount of the closure insurance

C = the estimated closure cost

f = the estimated annual rate of inflation, expressed as a decimal

(6) INSURANCE TO COVER LONG-TERM CARE. The rate of outpayment shall be as specified in s. NR 520.08 (2).

When equal annual outpayments are used, the formula shall be:

$$INS = \left[ R (1 + f)^{RSL + 1 + c} \left[ \frac{(1 + f)^{LTC} - 1}{f} \right] \right]$$

When unequal annual outpayments are used, the formula shall be:

$$INS = \left[ \sum \left[ R_x (1 + f)^{RSL + x + c} \right] \right]$$

in which:

INS = the unknown amount of the long-term care insurance

f = the estimated annual rate of inflation, expressed as a decimal

RSL = the estimated remaining active life of the facility in years

R = the estimated annual costs

R<sub>x</sub> = the estimated unequal annual costs

LTC = the long-term care period

x = the year of long-term care

c = the closure period as a fraction of a year, expressed as a decimal

Σ = the sum of year 1 through the last year of LTC

History: Cr. Register, January, 1988, No. 385, eff. 2-1-88.

NR 520.09 Changing methods of proof of financial responsibility. The owner of a solid waste land disposal facility may change from one method of providing proof of financial responsibility under s. NR 520.06 to another, but not more than once per year. A change may only be made on the anniversary of the submittal of the original method of providing proof of financial responsibility. The amount of the new method of providing proof of financial responsibility shall be in the amount that is

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equal to the amount that would have accumulated had the new method been used as the original method.

History: Cr, Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.10 Adjustment of financial responsibility.** Proof of the increase in the amount of all bonds, letters of credit, escrow accounts and trust accounts, or other approved methods established under this chapter shall be submitted annually to the department. The department may adjust the amount of the required proof of financial responsibility for closure or long-term care based upon prevailing or projected interest and inflation rates and the latest cost estimates, and may annually require the owner to adjust the amount of proof of financial responsibility accordingly. The owner of a facility for the land disposal of solid waste shall prepare and submit a new closure cost estimate whenever a change in the closure plan affects the cost of closure, and a new long-term care cost estimate whenever a change in the long-term care requirements in the approved plan of operation affects the cost of long-term care.

History: Cr, Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.11 Access and default.** Whenever on the basis of any reliable information, and after opportunity for a hearing, the department determines that an owner or operator of a solid waste land disposal facility is in violation of any of the requirements for closure or long-term care specified in the approved plan of operation, the department and its designees shall have the right to enter upon the facility and carry out the closure or long-term care requirements. The department may use part or all of the money deposited with it, or the money deposited in escrow or trust accounts, or performance or forfeiture bonds, or letters of credit, insurance, or funds accumulated under other approved methods to carry out the closure or long-term care requirements.

History: Cr, Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.12 Authorization to release funds. (1) CLOSURE.** When an owner or operator has completed closure, the owner may apply to the department for release of the bond, insurance or the letter of credit or return of the money held on deposit, in escrow, or in trust for closure of the facility. The application shall be accompanied by an itemized list of costs incurred and a report under the seal of a registered professional engineer which documents that the facility has been closed in accordance with the plan of operation approval and ch. NR 514. Upon determination by the department that complete closure has been accomplished, the department shall authorize in writing the release and return of all funds accumulated in such accounts or give written permission for cancellation of the bond, insurance or letter of credit. Determinations shall be made within 90 days of the application.

**(2) LONG-TERM CARE.** One year after closure, and annually thereafter for the period of owner responsibility, the owner who has carried out all necessary long-term care during the preceding year may make application to the department for reimbursement from an escrow account, trust account, deposit with the department, or other approved methods, or for reduction of the bond, insurance or letter of credit equal to the estimated costs for long-term care for that year. The application shall be accompanied by an itemized list of costs incurred. Upon determination that the expenditures incurred are in accordance with the long-term care requirements anticipated in the approved plan of operation, the department

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may authorize in writing the release of the funds or approve a reduction in the bond, insurance or letter of credit. Prior to authorizing a release of the funds or a reduction of the bond, insurance or letter of credit, the department shall determine that adequate funds exist to complete required long-term care work for the remaining period of owner responsibility. Determinations shall be made within 90 days of the application. Any funds remaining in an escrow account, trust account, or on deposit with the department at the termination of the period of owner responsibility shall be released to the owner.

History: Cr. Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.13 Bankruptcy notification.** The owner or operator of a facility for the land disposal of solid waste shall notify the department by certified mail of the commencement of a voluntary or involuntary proceeding under the bankruptcy code, 11 USC s. 101, et seq., naming the owner or operator as debtor, within 10 days after commencement of the proceeding.

History: Cr. Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.14 Environmental fees. (1) WASTE MANAGEMENT FUND.** All owners or operators of approved licensed solid waste land disposal facilities shall pay to the department a tonnage fee for each ton of solid waste received and disposed of at the facility, or a minimum waste management fund base fee as specified in s. 144.441 (5) (c), Stats., whichever is greater, until the facility no longer receives waste and begins closure activities, except as otherwise provided in s. 144.441 (3) (b) or (c), Stats. The department shall deposit all tonnage and waste management base fees into the waste management fund provided for in s. 25.45, Stats. The department may use the money accumulated in the waste management fund only at approved facilities. The monies in the waste management fund shall be expended exclusively as set forth in s. 144.441 (6), Stats.

(a) For all approved solid waste land disposal facilities the owner or operator shall pay fees into the waste management fund in accordance with s. 144.441 (4) or (5), Stats., whichever is greater.

(b) For those companies which have provided proof of financial responsibility by the net worth method under s. 144.443 (4) and (8), Stats., the fees to be paid by the owner or operator into the waste management fund shall be in accordance with s. 144.441 (4) (h) or (5), Stats., whichever fee is greater.

(c) For all nonapproved solid waste land disposal facilities, the total annual tonnage fees for all solid waste received by the facility shall be reduced by the amount of the environmental repair base fee. If the environmental repair base fee for a nonapproved facility is greater than the annual tonnage fee imposed under s. 144.441 (4), Stats., the waste received by the facility is exempt from the waste management tonnage fee for that year.

(d) The hazardous waste tonnage fees established in s. 144.441 (4) (b), (c), (e) and (f), Stats., shall be paid for each ton of hazardous waste received and disposed of at an approved solid waste land disposal facility.

**(2) ENVIRONMENTAL REPAIR FUND.** (a) All owners or operators of licensed solid waste land disposal facilities shall pay to the department an environmental repair fee for each ton of solid waste received and dis-

posed of at the facility, until the facility no longer receives waste and begins closure activities. The environmental repair fee shall be as specified in s. 144.442 (1m) (c) and (cm), Stats.

(b) All licensed nonapproved facilities shall pay to the department an environmental repair base fee for each calendar year until the facility no longer receives waste and begins closure activities. The environmental repair base fees shall be as specified in s. 144.442 (2) (b), Stats. The environmental repair base fees may be reduced in accordance with s. 144.442 (2) (d), Stats. The environmental repair surcharge shall be as specified in s. 144.442 (3), Stats.

(c) The department shall deposit all environmental repair fees, environmental repair base fees, and environmental repair surcharge fees into the environmental repair fund provided for in s. 25.46, Stats. The monies in the environmental repair fund shall be expended exclusively as set forth in s. 144.442 (6) and (6m), Stats.

(3) **GROUNDWATER FUND.** All owners or operators of licensed solid waste land disposal facilities shall pay to the department a groundwater fee for each ton of solid waste received and disposed of at the facility, until the facility no longer receives wastes and begins closure activities. The amount of the groundwater fee shall be as specified in s. 144.441 (7) (c), Stats. The department shall deposit all groundwater fees into the groundwater fund as provided for in s. 25.48, Stats. The monies in the groundwater fund shall be expended as set forth in ss. 20.115 (1) (s), 20.370 (2) (mq) and (ms), 20.435 (1) (q) and 20.445 (1) (q), Stats.

(4) **CERTIFICATION.** The owner or operator of a licensed solid waste land disposal facility shall certify, on a form provided by the department, the amount of solid waste received and disposed of during the preceding reporting period. The department shall specify the term of the reporting period on the certification form. The department shall mail the certification form to the owner or operator every January. The certification form shall be completed and returned to the department if the tonnage or categories of solid waste disposed of during the preceding reporting period are different from the year immediately preceding the reporting period. The certification form shall be returned to the department within 45 days after mailing of the form by the department to the owner or operator. The department shall mail the fees notice in May and the owner or operator has 30 days after mailing of the fees notice to remit the appropriate fees to the department. An owner or operator failing to remit the appropriate fees within 30 days after mailing of the fees notice to the owner or operator shall pay a late processing fee of \$50.

History: Cr. Register, January, 1988, No. 385, eff. 2-1-88.

**NR 520.15 Determination of waste tonnages.** (1) **DETERMINATION BY OWNER OR OPERATOR.** The owner or operator shall, subject to department approval, use one of the following methods for determining the number of tons of waste received and disposed of at the solid waste land disposal facility.

(a) The owner or operator may use actual weight or volume records.

(b) The owner or operator may establish by field measurement the volume of waste disposed and convert to a weight using an assumed compaction density and cover material ratio using the conversion factors in table 3.

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(c) The owner or operator may conduct a survey during a representative period of operation to establish average representative weights or volumes of waste disposed. Changes in seasonal population shall be considered when establishing representative weights or volumes.

(d) The owner or operator may use a waste generation rate of 2 pounds per capita per day and apply it over the number of days in the reporting period. Changes in seasonal population shall be considered when applying a per capita generation rate. This method may be used only for rural facilities serving a population equivalent of 2,500 or less and receiving little or no industrial waste.

(2) CONVERSION FACTORS. The conversion factors in table 3 shall be used. All conversion factors are based on wet densities. The densities provided for domestic residential waste and commercial waste in table 3 are subject to mechanical compaction, such as packer trucks or enclosed roll off containers coupled to hydraulic compactors. If the waste is loose, 200 pounds per cubic yard shall be used as the conversion factor.

TABLE 3

CONVERSION FACTORS

Municipal solid waste	
As delivered	
Domestic residential	425 pounds/cubic yard
Commercial	375 pounds/cubic yard
Industrial - other than specified below	300 pounds/cubic yard
Bulky	400 pounds/cubic yard
Trees and brush	300 pounds/cubic yard
Demolition	1,250 pounds/cubic yard
Liquids	8.34 pounds/gallon
Compacted in place	
Facilities receiving only demolition waste	1,400 pounds/cubic yard
Municipal wastewater sludge	8.34 pounds/gallon
	1,684 pounds/cubic yard
Municipal incinerator ash	
As delivered - uncompacted	1,500 pounds/cubic yard
In-field - compacted	2,700 pounds/cubic yard
Pulp and papermill sludge	
As delivered - uncompacted	1,800 pounds/cubic yard
In-field - consolidated	2,200 pounds/cubic yard
Utility ash - fly and bottom	
As delivered - uncompacted	2,200 pounds/cubic yard
In-field - compacted	2,400 pounds/cubic yard
Foundry wastes	
As delivered - uncompacted	2,600 pounds/cubic yard
In-field - compacted	3,000 pounds/cubic yard

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(c) DEPARTMENT ESTIMATES. The department may estimate by waste category the number of tons received at a solid waste land disposal facility. The estimate shall appear on the certification form and shall be based on the number of tons received and reported for the previous reporting period.

History: Cr. Register, January, 1988, No. 385, eff. 2-1-88.

**TABLE 1**  
**FEE SCHEDULE — ALL FACILITIES EXCEPT LANDFILLS AND SURFACE IMPOUNDMENTS**

NR	Facility Type	License Required	Plan Review Required	Plan Review Fees <sup>(1) (2)</sup>		License Fees			
				Plan of Operation	Facilities Construction Documentation	0-6 months	6-12 months	12-18 months	18-24 months and 2 yr renewals
500.08	Exemption Request	No	Yes	500					
502.05	STORAGE FACILITY								
	Containerized	Yes	No			40	80	120	160
	Non-containerized	Yes	Yes	600	150	75	150	225	300
502.06	Collection and Transportation	Yes	No			40	80	120	160
502.07	Transfer Facility	Yes	Yes	300	150	75	150	225	300
502.08	Processing Facility <sup>(3)</sup>	Yes	Yes	600	150	75	150	225	300
502.09	Incineration <sup>(3)</sup>	No	No						
502.10	Air Curtain Destructor	Yes	Yes	300	150	75	150	225	300
502.11	Woodburning	Yes	Yes	150		75	150	225	300
502.12	One Time Disposal	No	Yes	150					
502.13	Small Demolition Facilities	No	Yes	500	150				
518	Land Spreading	No	Yes	500					

(1) The plan review fees specified in Table 1 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 1 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.

**TABLE 2**  
**FEE SCHEDULE — LANDFILLS AND SURFACE IMPOUNDMENTS**

Facility Type	Plan Review Fees <sup>(1) (2)</sup>							License Fees				
	License Required	Plan Review Required	Initial Site Report <sup>(3)</sup> NR 510	Feasibility Report NR 512	Plan of Operation NR 514	Construction Documentation <sup>(8)</sup> NR 516	Closure Plan NR 514	0-6 months	6-12 months	12-18 months	18-24 months and 2 yr renewals	Closure & Long-term care period <sup>(10)</sup>
Landfills and Surface Impoundments <sup>(5)</sup>	Yes	Yes										
50,000 yds	Yes	Yes	700	1500	1500	150	150	100	200	300	400	500
50,000-500,000 yds	Yes	Yes	700	3000	2500	200 <sup>(7)</sup>	900	400	800	1200	1600	1000
500,000 yds	Yes	Yes	700	4500	2500	400	1200	1125	2250	3375	4500	1500
Plan Modification <sup>(6)</sup>	No	Yes		600	600 <sup>(9)</sup>		150					

(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 determines that the total review time is not likely to exceed 4 hours.

(3) For an initial site report submittal which includes more than one location, the applicant shall pay a separate fee, as shown in Table 2, for each location.

(5) The applicant shall pay a maximum 2-year license fee of \$1600 for landfills which are licensed to accept only wastewater treatment plant sludge, ash, foundry waste, wood waste, demolition waste and other wastes of a similar nature not requiring daily cover pursuant to ch. NR 506.

(6) A plan modification, as referred to in Table 2, is a submittal which proposes to modify a feasibility report, plan of operation or closure plan previously approved by the department. This fee also applies to a submittal which proposes to change the design management zone (DMZ) or requests recalculation of indicator preventive action limits (PAL's) as defined in ch. NR 140. The \$600 fee applies to facilities which request a modification to the DMZ or indicator PAL's and have an approved plan of operation and the \$150 fee applies to those facilities which have an approved closure plan.

(7) This review fee also applies to construction documentation reports for which a design capacity cannot be applied, such as sedimentation basins or remedial actions.

(8) These review fees apply to each facility construction documentation report submitted.

(9) This fee also applies to any facility which requests an exemption to the groundwater standards contained in ch. NR 140.

(10) This fee is a one-time payment only for the term of the licensee's long-term care responsibility.