



NR 180

State of Wisconsin

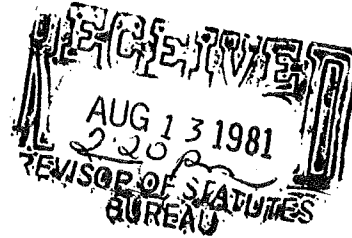
DEPARTMENT OF NATURAL RESOURCES

Carroll D. Besadny  
Secretary

BOX 7921  
MADISON, WISCONSIN 53707

IN REPLY REFER TO: \_\_\_\_\_

STATE OF WISCONSIN )  
 )  
DEPARTMENT OF NATURAL RESOURCES ) ss



TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Carroll D. Besadny, 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-3-81 was duly approved and adopted by this Department on May 27, 1981. 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 General Executive Facility #2 in the City of Madison, this 10<sup>th</sup> day of August, 1981.

*Carroll D. Besadny*  
Carroll D. Besadny, Secretary

10-1-81

(SEAL)

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD  
REPEALING AND RECREATING RULES

.....  
IN THE MATTER of repealing and recreating .  
sections NR 180.15 and NR 180.16(1) of the .  
Wisconsin Administrative Code, pertaining .  
to financial responsibility for closure and .  
long-term care and waste management fund. .  
.....

SW-3-81

Analysis Prepared by the Department  
of Natural Resources

State law requires owners or operators of licensed solid waste disposal facilities to provide proof of financial responsibility for closure and long-term care of the facilities.

The existing NR 180.15 provides formulas and a mechanism by which owners or operators can calculate the amount of money that must be set aside for closure and long-term care. Experience with the formulas indicates that they will not provide for a sufficient set aside of money to assure that the closure and long-term care responsibilities will be fulfilled.

The proposed NR 180.15 eliminates the incorrect formulas and provides new formulas that an owner must use to provide proof of financial responsibility for closure and long-term care. The proposed formulas provide greater flexibility in calculating the amount of proof of responsibility required. Thus an owner may evaluate his site-specific situation, use the appropriate calculation to meet his needs, and submit a proposal with justification for department concurrence.

In addition, NR 180.15 has been revised for the purpose of clarification.

The change in NR 180.16 is made to correct a statute citation.

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Pursuant to the authority vested in the State of Wisconsin Natural Resources Board by sections 144.431, 144.435, 144.44, 144.441 and 227.014, Wisconsin Statutes, the State of Wisconsin Natural Resources Board hereby repeals and recreates rules interpreting and implementing sections 144.44 and 144.441, Wisconsin Statutes, as follows:

SECTION 1 - Section NR 180.15 is repealed and recreated to read:

NR 180.15 FINANCIAL RESPONSIBILITY FOR CLOSURE AND LONG-TERM CARE. (1) APPLICABILITY. (a) Closure. The owner of a site for the land disposal of solid waste which is approved and licensed after May 20, 1978, or which was initially licensed between May 21, 1975 and May 20, 1978 and whose owner successfully applied before May 21, 1980 for a determination that the site's design and plan of operation comply substantially with the requirements of this chapter, shall submit, as part of the initial operating license application, proof of financial responsibility to ensure compliance with the closure requirements of the site's approved plan of operation.

(b) Long-term care. The owner of a site for the land disposal of solid waste which is approved and licensed after May 20, 1978, or which was initially licensed between May 21, 1975, and May 20, 1978, and whose owner successfully applied before May 21, 1980, for a determination by the department that the site's design and plan of operation comply substantially with the requirements of this chapter, shall be responsible for the long-term care of the site for either 20 or 30 years after site 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 site life, proof of financial responsibility to ensure compliance with the long-term care requirements of the plan of operation.

(c) Successors in interest. Any person acquiring rights of ownership, possession or operation of a licensed site shall be subject to all requirements of the license for the site and shall provide proof of financial responsibility to the department in accordance with this section prior to the transfer of ownership, possession, or operation of the site.

(2) METHODS OF PROVIDING PROOF OF FINANCIAL RESPONSIBILITY. Financial assurances for closure and long-term care shall be established separately. To provide proof of financial responsibility, the applicant shall use one of the following methods for each account:

(a) Performance or forfeiture bond. 1. If the owner chooses to submit a bond, it shall be in the amount determined according to sub. (4)(b) 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.

2. 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 site 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.

3. Each bond shall provide that as long as any obligation of the owner for closure or long-term care remains the bond shall not be cancelled by the surety, unless a replacement bond or other proof of financial responsibility under this section is provided to the department. If the surety proposes to cancel such a bond, notice shall be provided to the department 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. 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 thereof, 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.

(b) Deposit with the department. If the owner deposits cash, certificates of deposit, or U.S. government securities with the department, the amount of the deposit shall be determined according to sub. (4)(a) and shall be submitted as part of the initial license application. Deposits placed with the department shall be segregated and, if applicable, 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 requests a hearing in writing within 60 days after the mailing of the notification, the department shall, prior to using the funds, hold a hearing under s. 227.064, Stats., 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) Escrow account. If the owner establishes an escrow account, it shall be with a bank or a financial institution located within the state of Wisconsin which is examined and regulated by the state or a federal agency in the amount determined according to sub. (4)(a). 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. An originally signed duplicate of the escrow agreement 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 requests a hearing in writing within 60 days after the mailing of the notification, the department shall, prior to using the funds, hold a hearing under s. 227.064, Stats., 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.

(d) 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 federal agency. The trust corpus shall consist of cash, certificates of deposit or U.S. government securities in the amount determined according to sub. (4)(a). All interest payments shall be accumulated in the account. An originally signed duplicate of the trust agreement 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 requests a hearing in writing within 60 days after the mailing of the notification, the department shall, prior to using the funds, hold a hearing under s. 227.064, Stats., 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.

Note: These forms may be obtained from the Department of Natural Resources, Bureau of Solid Waste Management, P.O. Box 7921, Madison, Wisconsin 53707.

(3) COST ESTIMATES. (a) For the purpose of determining the amount of proof of financial responsibility that is required in sub. (1), the owner shall estimate the total cost of closure for the point in time in the site's operation when the extent and manner of its operation make closure most expensive, estimate the annual cost of long-term care of the site for the period of owner responsibility and submit the estimated closure and long-term costs together with all necessary justification to the department for approval as part of the plan of operation submittal. The costs shall be reported on a per unit basis. The source of estimates shall be indicated.

(b) At a minimum, closure costs shall include cover material, topsoil, seeding, fertilizing, mulching and labor.

(c) At a minimum, long-term care costs shall include land surface care; gas monitoring; leachate pumping, transportation, monitoring and treatment; and groundwater monitoring, collection and analysis.

(d) The estimated annual rate of inflation shall be calculated by dividing the latest published gross national product implicit price deflator by the deflator published for the previous year in the survey of current business of the bureau of economic analysis, U.S. department of commerce. The result is the estimated annual rate of inflation.

(e) The estimated annual rate of interest shall be the rate specified by the financial institution managing the fund or deposit.

(4) FORMULAS FOR CALCULATING THE AMOUNT OF THE PROOF OF FINANCIAL RESPONSIBILITY. (a) Deposits in escrow, trust or department accounts. 1. 'Deposits for closure.' The formula for closure shall be:

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

in which

D = the 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

SL = the estimated active life of the site in years

i = the estimated annual rate of interest

c = the period of closure

2. 'Deposits for long-term care.' a. The following statistics used in calculating the amounts deposited to the long-term care account shall be specified in the plan of operation: the rate of outpayment during the period of long-term care, expressed in equal or unequal annual amounts, and the equal annual rate of inpayment, expressed as either "real" or "actual" dollars.

b. The following general formula shall be used in the calculation.

$$A = R$$

When equal annual outpayments are used, R shall be expressed as:

$$R(1+f)^{SL} \left( \frac{1+f}{1+i} \right)^c \left[ \frac{1 - \left( \frac{1+f}{1+i} \right)^{LTC}}{\left( \frac{1+i}{1+f} \right) - 1} \right]$$

When unequal annual outpayments are used, R shall be expressed as:

$$R_x (1+f)^{SL} \left( \frac{1+f}{1+i} \right)^{x+c}$$

When equal "actual" dollar inpayments are used, A shall be expressed as:

$$A(1+i) \left[ \frac{(1+i)^{SL} - 1}{i} \right]$$

When equal "real" dollar inpayments are used, A shall be expressed as:

$$A(1+i)^{SL+1} \left[ \frac{1 - \left( \frac{1+f}{1+i} \right)^{SL}}{i-f} \right]$$

in which:

A = the unknown annual inpayment for long-term care

i = the estimated annual rate of interest

f = the estimated annual rate of inflation

SL = the estimated active life of the site in years

R = the estimated annual costs

x = the year of long-term care

LTC = the period of long-term care

c = the period of closure

(b) Performance or forfeiture bonds. 1. 'Bonds for closure.' The formula for closure shall be:

$$CB = C(1 + f)^{SL+c}$$

in which:

CB = the unknown amount of the Closure Bond

C = the estimated closure cost

f = the estimated annual rate of inflation

SL = the estimated active life of the site

c = the period of closure

2. 'Bond for long-term care.' a. The rate of outpayment shall be as specified in <sup>Sec</sup> par. (4)(a)2., the rate of inpayment shall be in equal "actual" dollars as specified in the plan of operation.

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

$$PB(SL) = R(1 + f)^{SL+1+c} \frac{(1 + f)^{LTC} - 1}{f}$$

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

$$PB(SL) = R_x (1 + f)^{SL+x+c}$$

in which:

PB = the unknown annual Performance Bond amount for long-term care

f = the estimated annual rate of inflation

SL = the estimated active life of the site in years

R = the estimated annual costs

LTC = the long-term care period

x = the year of long-term care

c = the period of closure

(5) ADJUSTMENT OF FINANCIAL RESPONSIBILITY. The owner of a site for the land disposal of solid waste shall prepare a new closure cost estimate whenever a substantial change in the closure plan affects the cost of closure and a new long-term care cost estimate whenever a substantial change in the long-term care requirements of the plan of operation affects the cost of long-term care. Proof of the increase in value of all bonds, escrow accounts and trust accounts established under this section 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 increase or decrease the amount of proof of financial responsibility accordingly.

(6) 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 site is in violation of any of the requirements for closure or long-term care specified in the approved plan of operation, the department 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 the escrow or trust accounts, or the performance or forfeiture bonds to carry out these requirements.

(7) AUTHORIZATION TO RELEASE FUNDS. (a) 'Closure.' When an owner or operator has completed closure, the owner may apply to the department for release of the bond or return of the money held on deposit, in escrow, or in trust for closure of the site. Such application shall be accompanied by an itemized list of costs incurred. Upon determination by the department that complete closure has been accomplished, the department shall authorize release and return of all funds accumulated in such accounts or give written permission for cancellation of a bond. Such determinations shall be concluded within 90 days of the application.

(b) '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, or deposit with the department, or for reduction in a bond equal to the estimated costs for long-term care for that year. Such 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 may authorize release of the funds or approve a reduction in a bond. Prior to authorizing a release of funds or bond reduction, the department shall determine that adequate funds exist to complete required long-term care work for the remaining period of owner responsibility. Such determinations shall be concluded 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 owner responsibility shall be released to the owner.



SECTION 2 - Section NR 180.16(1) is repealed and recreated to read:

(1) All owners or operators of licensed land disposal sites shall contribute to the waste management fund established by s. 25.45, Stats., for each ton of solid waste received and disposed of at the site from May 21, 1978, until the site is closed and no longer receives waste, except as otherwise provided in s. 144.441 (3), Stats.

The foregoing rules were approved and adopted by the State of Wisconsin Natural Resources Board on May 27, 1981.

The rules contained herein shall take effect as provided in section 227.026(1) intro., Wisconsin Statutes.

Dated at Madison, Wisconsin

August 10, 1981

STATE OF WISCONSIN

DEPARTMENT OF NATURAL RESOURCES

By

Carroll D. Besadny  
Carroll D. Besadny, Secretary

(SEAL)



State of Wisconsin

DEPARTMENT OF NATURAL RESOURCES

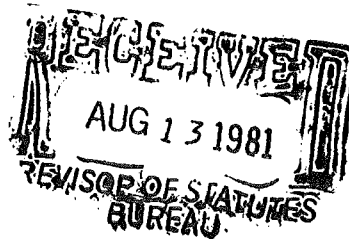
Carroll D. Besadny  
Secretary

August 10, 1981

BOX 7921  
MADISON, WISCONSIN 53707

IN REPLY REFER TO: 1020

Mr. Orlan L. Prestegard  
Revisor of Statutes  
411 West  
C A P I T O L

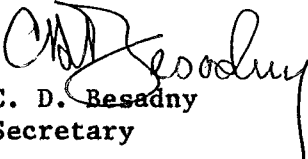


Dear Mr. Prestegard:

Enclosed are two copies, including one certified copy, of State of Wisconsin Natural Resources Board Order No. SW-3-81. These rules were reviewed by the Assembly Committee on Environmental Resources and the Senate Committee on Agriculture and Natural Resources pursuant to s. 227.018, Stats. There were no comments.

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

Sincerely,

  
C. D. Besadny  
Secretary

Enc.