

**A GUIDE TO PREPARING AND REVIEWING FINANCIAL ASSURANCE
FOR RECLAMATION OF NONMETALLIC MINING SITES IN
WISCONSIN**



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**Produced by the Wisconsin Department of Natural Resources
Bureau of Waste Management**



A Guide to Preparing and Reviewing Financial Assurance for Reclamation of Nonmetallic Mining Sites in Wisconsin

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PHOTOGRAPH

The cover photographs shows a reclaimed nonmetallic mining site located in Marathon County, Wisconsin. The photograph was taken by Tom Portle.

A GUIDE TO PREPARING AND REVIEWING FINANCIAL ASSURANCE FOR RECLAMATION OF NONMETALLIC MINING SITES

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Disclaimer

This document is intended solely as guidance and does not contain any mandatory requirements except where requirements found in statute or administrative rule are referenced. This guidance does not establish or affect legal rights or obligations and is not finally determinative of any of the issues addressed. This guidance does not create any rights enforceable by any party in litigation with the State of Wisconsin or the Department of Natural Resources. Any regulatory decisions made by the Department of Natural Resources in any matter addressed by this guidance will be made by applying the governing statutes and administrative rules to the relevant facts.

I. Introduction

Purpose

This guidance document is intended to provide basic information and technical assistance for use in the preparation and review of financial assurance (bonds, letters of credit, escrow accounts, etc.) for nonmetallic mine operations in the state of Wisconsin. This guidance includes an overview of financial assurance, references relevant rules, and provides a general flow chart for the process of securing financial assurance. In addition, this guidance provides attachments including technical information and helpful publications and web sites, an optional calculation worksheet and summary table as well as information on the various types of financial assurance. It is targeted to both applicants for reclamation permits and those who review reclamation plans and financial assurances for approval.

Background and Overview

Both the Nonmetallic Mining Reclamation Rule, Ch. NR 135, Wis. Adm. Code, and a reclamation ordinance enacted in the jurisdiction in which a mine or proposed mine is located, require that mine operators possess a nonmetallic mine reclamation permit in order to extract nonmetallic minerals. This permit must be obtained from a county or local regulatory authority (RA) and is based upon an approved nonmetallic mining reclamation plan. This reclamation plan is the basis for the estimate of the cost of reclamation and for the dollar amount of financial assurance¹. In order to facilitate regulatory review, it is highly recommended that the various costs associated with each reclamation activity or reclamation phase be documented in the reclamation plan.

Both the ordinance enacted by the county or local entity and NR 135.40, Wis. Adm. Code, require the posting of financial assurance by operators or other holders of a nonmetallic mining reclamation permit to guarantee implementation of the approved reclamation plan. Financial assurance must be posted with the RA prior to mining, except in the case where an operator holds an automatic reclamation permit. The financial assurance is intended to ensure that the regulatory authority has access to funds adequate to implement site reclamation in the unlikely event of default on the part of the permittee.

Note: As required by NR 135.40 (3), Wis. Adm. Code, and the county or local reclamation ordinance, the amount of financial assurance posted must be based on the actual cost for the county or local regulatory authority to hire an outside company (not the operator) to carry out the approved reclamation plan.

¹ Keep in mind that the dollar amount of financial assurance normally does not represent the total cost of reclamation for all acreage to be affected during the active life of the mining operation. Rather, as per s. NR 135.40 (3) financial assurance is more often representative of "progressive" or phased reclamation for "outstanding reclamation costs" as dictated by the approved reclamation plan.

II. Overview of Financial Assurance Process²

The following flowchart may be useful as a general guide to the steps an operator may need to follow during the process of providing acceptable financial assurance. Financial assurance is part of the process for obtaining a reclamation permit, which is based on the approval of a reclamation plan and the posting of financial assurance.

1.

The operator contacts the regulatory authority to begin the process of obtaining a reclamation permit. This process will ultimately result in an approval decision regarding the plan and a target post-mining land use and a credible estimate of the cost of reclamation (financial assurance).

?
2.

The operator prepares the reclamation plan, and proposes a dollar amount to represent the total cost of each reclamation activity and for each phase of reclamation. This results in an estimate of financial assurance requirements at any given point in time.

?
3.

This cost estimate is submitted to the RA with the reclamation plan.

?
4.

If the plan is approved, the RA then provides written notification of the acceptability of the financial assurance estimate to the operator [s. NR 135.40(1)].

?
5.

A form of financial assurance is then selected by the permittee and posted with the RA to cover financial assurance [s. NR 135.40(4)]. As a condition of the permit, financial assurance, payable exclusively to the regulatory authority, is filed with the RA [s. NR 135.40(2)]. Please see **Attachment D** for an explanation as to the various forms of financial assurance.

Note: Once financial assurance has been established the amount is reviewed periodically by the RA to assure that it equals outstanding reclamation costs per s. NR 135.40(3). Any interest from the financial assurance must be paid to the operator per s. NR 135.40(4).

² This is only a summary of the requirements of s. NR 135.40 and users should refer to the official code or contact their regulatory authority for specific requirements or for flexibility in the development of arrangements to better suit the needs of all affected parties.

III. Calculating and Presenting Reclamation Cost Estimates for the Purpose of Documenting Financial Assurance Needs

The following financial assurance estimate summary table may be used by an applicant submitting a mine reclamation plan or by a regulatory authority during review of the operator's financial assurance estimate. To support the summary table we have provided a financial assurance estimation worksheet that may be used to obtain the cost information needed to complete this summary table (**Attachment B**). The use of this summary table (with or without the backup worksheet) will make it easier to ensure that all the reclamation activities in the reclamation plan are considered, as per s. NR135.19(4)(e), when estimating the current cost of reclamation. It is hoped that use of the summary table to convey the results of the financial assurance estimation worksheet will: (1) save time and effort for both the operator and the RA and (2) improve accuracy in estimating reclamation costs and financial assurance needs.

Financial Assurance Estimate Summary Table

| Element / Reclamation Activity | Dollar Amount |
|---|----------------------|
| A. Earthwork and Grading | |
| B. Topsoil Management | |
| C. Revegetation Plan | |
| D. Erosion Control: Stabilization of Soil Conditions | |
| E. Maintenance and Monitoring Prior to Release of Financial Assurance and Until Declaration Of Completion (DOC) | |
| F. Management of Refuse or Other Solid Waste (may Include Removal of Structures, Roads, Foundations, etc.) | |
| G. Other Reclamation Activities (List as Many as Necessary) | |
| GRAND TOTAL | |

IV. Providing Financial Assurance: Selecting the Form of and Typical Cost to Operators

Many operators will need to apply to a financial institution or bank in order to obtain financial assurance. First, the operator will select the form of financial assurance that best fits with his or her situation (**Attachment E** contains a summary of the various forms of financial assurance). A surety company, local bank or other financial institution (provider) will then evaluate the operator's request and determine whether to provide the financial surety and at what rate. The criteria typically used in this evaluation have to do with credit worthiness and risk type factors. These may include: strength of the business, overall financial strength and track record, credit history, ability to meet objectives and minimize debt, references and character. If financial assurance is granted, the provider will also look at an annual cost (0.75% to 1.35% of total reclamation cost)³, which corresponds to the institutions risk for covering the applicant (mining company, operator or permittee).

As an example, a bond, at an annual rate of 0.77% (preferred customer), for reclamation costs amounting to \$100,000 would cost the permittee \$770 each year. A bond, at an annual rate of 1.35% (on the high end), for reclamation costs amounting to \$100,000 would cost the permittee \$1,350 each year. For comparison, an irrevocable letter of credit would have an annual rate of roughly 1% .

The law and rule allow for several alternative means of providing financial assurance. The reader can refer to **Attachment E** or NR 135.40(4) for descriptions of the various methods.

³ Surety Information Office (SIO): <http://www.sio.org>.

Attachment A

Bibliography: Helpful References, Web Pages and Other References

- Flambeau Mining Company *Mining Permit Application* for the proposed Flambeau Mine (Ladysmith, Wisconsin). Volume I - Report Narrative Revised December 1989. Prepared by Foth & Van Dyke.
- Nicolet Minerals Company *Mine Permit Application* for the proposed Crandon Mine (Crandon, Wisconsin). May 1995 (updated December 1998). Prepared by Foth & Van Dyke.
- Pennsylvania Department of Environmental Protection Bureau of Mining and Reclamation: <http://www.dep.state.pa.us/dep/deputate/minres/bmr/programs/bonding.htm>.
- R.S. Means Company, Inc.
Construction Plaza, 63 Smiths Lane
Kingston, MA 02364-0800
1-800-334-3509
<http://www.rsmeans.com/cworks>
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http://www.dnr.state.wi.us/org/aw/wm/publications/mining/Publ_WA_834_2002.pdf.
- Wisconsin Department of Natural Resources, Division of Administration. Administrative & Field Services 2003-05 Capital Development Cost Estimating Workbook - Site Development.
- Wisconsin Department of Transportation. 1999 through 2001. Wisconsin Division of Highways, Average Contract Unit Prices, Highway Construction (these are derived average costs as reported across the state of Wisconsin and are based on bids on highways, bridges, and airports). The complete list can be found at:
<http://www.dot.state.wi.us/dtid/bhc/pdf/aupfy2001e.pdf> or go to
<http://www.dot.state.wi.us/dtid/bhc/hwybids.html> and scroll down the page a little and select the file under "Average unit price list".

Attachment B

Worksheet for Calculating Financial Assurance Needs

This optional worksheet is provided for use in completing the Financial Assurance Estimate Summary Table in Part III. An attempt has been made to match the summary table and the worksheet. The user is advised that no list, summary table, or worksheet can include all possible reclamation activities. That is to say, the reclamation activities included in any given reclamation plan vary widely with the approved the post-mining land use, the unique physical site conditions (soils, hydrology, proximity to sensitive resources), and other considerations such as adjacent land uses. Because of this the table is designed to focus on common reclamation activities and has been arranged approximately in descending order from the most common to the least common. In addition, to increase flexibility the summary table and the worksheet provide additional space so you may include any reclamation activities not specifically listed.

The cost of any given reclamation activity can be calculated in more than one way. First, by tabulating the costs for each activity according to materials, equipment, and labor. The total dollar amount is then calculated. Second, an alternative approach in which one assumes a flat fee for each specific activity (grading, erosion control, topsoil, revegetation). In this case the dollar amount is obtained on a per acre basis for each reclamation activity. The total dollar amount is then calculated. Third, a hybrid approach that combines both methods, as seems best, may be used.

The below table can be used to directly enter the numbers. The attached Microsoft Excel file contains formulas within the worksheet and will automatically perform the multiplication and addition.



FA Worksheet

Worksheet for Calculating Financial Assurance

Units can be measured in cubic yards, acres, hours, ounces, feet, gallons, etc.
 Multiply the cost per unit with the number of units to get a dollar amount.

| | | FA WORKSHEET | | | | | |
|---------------------------------|---|-------------------------|-------------------------------|--------------|--------------------------|----------------------------|------------------------|
| | | | Calculation Method | Units | Cost per unit | Number of units | Amount (\$) |
| A. EARTHWORK AND GRADING | | | | | | | |
| | final grading | | | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | slope stabilization | | | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | TOTAL FOR A | |
| B. TOPSOIL | | | | | | | |
| | redistribution of stockpiled topsoil | | | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | scarification of subsoil | | | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |

| | | | | | | |
|-----------------------------|--|--|--------------------|--|--|-------------|
| | purchase substitute topsoil and application | | | | | |
| | | | flat fee <i>or</i> | | | |
| | | | materials | | | |
| | | | equipment | | | |
| | | | labor | | | |
| | | | subtotal | | | |
| | | | | | | |
| | | | | | | TOTAL FOR B |
| C. REVEGETATION PLAN | | | | | | |
| | | | | | | |
| | seeds and plant material | | | | | |
| | | | flat fee <i>or</i> | | | |
| | | | material 1 | | | |
| | | | material 2 | | | |
| | | | material 3 | | | |
| | | | subtotal | | | |
| | | | | | | |
| | seed application | | | | | |
| | | | flat fee <i>or</i> | | | |
| | | | equipment | | | |
| | | | labor | | | |
| | | | subtotal | | | |
| | | | | | | |
| | plant installation | | | | | |
| | | | flat fee <i>or</i> | | | |
| | | | equipment | | | |
| | | | labor | | | |
| | | | subtotal | | | |
| | | | | | | |
| | lime | | | | | |
| | | | flat fee <i>or</i> | | | |
| | | | materials | | | |
| | | | equipment | | | |
| | | | labor | | | |
| | | | subtotal | | | |
| | | | | | | |

| | | | | | | | |
|---------------------------|---|--|--------------------|--|--|-------------|--|
| | fertilizer | | | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | | | | | |
| | | | materials | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | | |
| | mulch or other | | | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | | | | | |
| | | | material | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | | |
| | irrigation | | | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | | | | | |
| | | | material | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | | |
| | | | | | | TOTAL FOR C | |
| | | | | | | | |
| D. EROSION CONTROL | | | | | | | |
| | | | | | | | |
| | erosion control materials | | | | | | |
| | (matting, straw bales, silt fences, sediment ponds, swales, etc.) | | | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | | | | | |
| | | | material 1 | | | | |
| | | | material 2 | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | | |
| | benches or terraces | | | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | | | | | |
| | | | material | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | | |
| | | | | | | TOTAL FOR D | |
| | | | | | | | |

| | | | | | | | |
|--|--|--|--|--|--|-------------|--|
| | | | subtotal | | | | |
| | | | | | | | |
| | | | concrete/asphalt removal | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | | | | | |
| | | | materials | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | | |
| | | | foundation | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | | | | | |
| | | | materials | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | | |
| | | | catch basin/sediment pond removal | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | | | | | |
| | | | materials | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | | |
| | | | | | | TOTAL FOR F | |
| | | | | | | | |
| G. OTHER RECLAMATION ACTIVITIES | | | | | | | |
| | | | | | | | |
| | | | fill material | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | | | | | |
| | | | materials | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | | |
| | | | well abandonment | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | | |
| | | | remove electrical supply | | | | |
| | | | flat fee <i>or</i> | | | | |

| | | | | | | | |
|--|----------------------|--|--------------------|--|--|--------------------|--|
| | | | | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | | |
| | fence removal | | | | | | |
| | | | flat fee <i>or</i> | | | | |
| | | | | | | | |
| | | | equipment | | | | |
| | | | labor | | | | |
| | | | subtotal | | | | |
| | | | | | | | |
| | | | | | | TOTAL FOR G | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | TOTAL FOR A | |
| | | | | | | TOTAL FOR B | |
| | | | | | | TOTAL FOR C | |
| | | | | | | TOTAL FOR D | |
| | | | | | | TOTAL FOR E | |
| | | | | | | TOTAL FOR F | |
| | | | | | | TOTAL FOR G | |
| | | | | | | | |
| | | | | | | GRAND TOTAL | |
| | | | | | | | |

Attachment C

A Partial List of Reclamation Activities

A. Earthwork and Grading

- ? final grading and/or regrading of the nonmetallic mining site
 - ? earthwork
 - ? final slopes or slope angles,
 - ? high wall reduction,
 - ? benching,
 - ? terracing
 - ? and other structural slope stabilization measures.
 - ? any reclamation blasting
-

B. Topsoil Management

(Removal, Storage, Substitute Soil, Redistribution)

- ? removal
 - ? storage
 - ? protection
 - ? the replacement or redistribution of topsoil or topsoil substitute material
 - ? topsoil substitute material "means soil or other unconsolidated material either used alone or mixed with other beneficial materials and which can provide the plant growth
 - ? on-site topsoil or topsoil substitute material or by obtaining topsoil or substitute material as needed to make up the volume of topsoil as specified in the reclamation plan.
 - ? all areas in the nonmetallic mine site where topsoil or topsoil substitute material is to be reapplied shall be graded or otherwise prepared prior to topsoil or topsoil substitute material redistribution to provide the optimum adherence between the topsoil or topsoil substitute material and the underlying material.
-

C. Revegetation Plan

A revegetation plan which shall include:

- ? timing and methods of seed bed preparation,
 - ? rates and kinds of soil amendments,
 - ? seed application timing, methods and rates,
 - ? mulching, netting
 - ? and any other techniques needed to accomplish soil and slope stabilization.
-

D. Erosion Control: Stabilization of Soil Conditions

A plan and, if necessary, a narrative showing erosion control measures to be employed during reclamation activities

- ? temporary or long-term erosion control
- ? straw bales
- ? construction of swale, ditch,
- ? temporary sediment pond
- ? silt fence
- ? riprap
- ? energy dissipaters
- ? terraces
- ? benching,
- ? other structural slope stabilization measures.
- ? other

E. Maintenance and Monitoring Prior to Release of Financial Assurance and Until Declaration of Completion (DOC)

- ? reports & evaluations including summarized data on revegetation, photodocumentation or other evidence that the criteria approved in the reclamation plan to ascertain success have been met; or
- ? the operator shall perform any maintenance necessary to prevent erosion, sedimentation or environmental pollution, comply with the standards of this subchapter, or to meet the goals specified in the reclamation plan.

F. Management of Refuse or Other Solid Waste (may Include Removal of Structures, Roads, Foundations, etc.)

- ? the removal or reuse of nonmetallic mining refuse
- ? removal of roads
- ? removal of structures
- ? removal of foundations
- ? other solid wastes shall be disposed of in accordance with applicable rules of the department adopted pursuant to chs. 289 and 291, Stats.

G. Other Reclamation Activities (List as Many as Necessary)

- ? fill material and activities whether fill is obtained on-site or off-site
- ? well abandonment
- ? removal of electrical supply
- ? removal of fences
- ? other

Attachment D

Typical Costs for Selected Reclamation Activities

We have provided a summary for some typical reclamation activities that may be performed at a mine site during reclamation. The table below is based on a number of sources including those referenced on a Wisconsin Department of Transportation Webpage. The numbers from the summary and/or the WisDOT Webpage can be used, as appropriate, to estimate the cost for reclamation activities included in nonmetallic mine reclamation plans or in the review of financial assurance needs estimates.

The WisDOT estimates were obtained from bids on highways, bridges, and airports in the state of Wisconsin. The complete list can be found at <http://www.dot.state.wi.us/dtid/bhc/hwybids.html>. Scroll down the page a little and select the file under “Average unit price list”.

| Item/Element | Source ⁴ |
|--|---------------------|
| Trees - 200/ac @ \$7.50 = \$1500/ac Shrubs - 200/ac @ \$5.00 = \$1,000/ac. Understory (grasses, wildflowers & sedges) \$1,500/ac | FMC * |
| Seed fertilize and mulch (grass & forbs) = \$2,000 per acre | NMC ** |
| Seed @ \$30.00 per pound | WisDOT *** |
| Mulch @ \$0.25 per square yard | WisDOT |
| Seed fertilize and mulch (savanna) @ \$2,500 per acre | NMC |
| Seed, fertilize and mulch @ \$2,000.00 per acre | NMC |
| Fertilize \$40 per CWT (100 lbs.) | WisDOT |
| Replace topsoil = \$2 per cubic yard | NMC |
| Regrade soil = \$1.50 per cubic yard | NMC |
| Remove (2ft.) soil = \$1.50 per cubic yard | NMC |
| Demolition = \$21 per cubic foot | NMC |
| Break up slabs = \$2.50 per square foot | NMC |
| On-site disposal of concrete = \$6.00/ cubic yard | NMC |
| Break up foundations = \$20/linear foot | NMC |
| Misc. erosion control (berms, riprap etc.) = \$50,000 (lump sum) | NMC |

⁴ Also see references under Attachment A

| | |
|---|---|
| Silt fence (installed) = \$0.82/linear foot | WDNR ADM. |
| Riprap = \$47 per cubic yard | WisDOT |
| Road Obliteration Bituminous = \$7 per square yard Concrete = \$11.65 per square yard | WDNR ADM. |
| Removal of Masonry building demolition @ \$17.80 per square foot Removal of Wood building demolition @ \$13.15 per square foot | WDNR ADM. |
| Landfill disposal of above @ \$20 to \$50 per ton | Dave Misterek, WDNR, Oshkosh Office |
| Surveying (property boundary, perimeter etc.) @ \$1.04 /linear ft. | WDNR ADM. |
| Hauling –10 mile round trip @ \$15/ cubic yard | WDNR ADM. |
| Average per acre reclamation cost for surface coal reclamation = \$5,500 (this very general per acre cost is based upon numerous sites in the state and is provided only to give a benchmark) | State of Pennsylvania Department of Environmental Protection, Bureau of Mining and Reclamation |
| Marker Posts = \$44.00 per linear foot | WisDOT |
| Culvert Pipe (12 INCH) = \$ 92.00 | WisDOT |
| Remove culverts @ \$2.00 per linear foot | FMC |
| Downspout (6-inch) = \$150 per linear foot | WisDOT |
| Abandoning wells = \$1,250 | WisDOT |

- * FMC = Flambeau Mining Company; data for reclaimed Flambeau Mine (Ladysmith, WI): 1989.
- ** NMC = Nicolet Minerals Company; data for reclamation of the proposed Crandon Mine (Crandon, WI): 1998.
- *** WisDOT = Wisconsin Department of Transportation: 2001.
- **** WDNR ADM. = Wisconsin DNR Division of Administration: 2002.

Attachment E

Description of Financial Assurance Options

Financial Assurance mechanisms may be placed in two basic categories:

- 1) Funds are actually *set aside* (escrows, trusts, and deposits with the Regulatory Authority)
- 2) *financial guarantees* (bonds, letters of credit, and insurance).

? Bond or surety bond (financial guarantee) - Also known as either:

- a *performance bond* - surety company promises to pay for or perform reclamation or
- a *forfeiture bond* - surety company promises to make a cash payment for the bond amount

A bond is an instrument provided by a surety company for which the permittee pays a fee. This is a 3-party agreement that serves as a guarantee that the provider will pay costs associated with fulfilling the permittee's obligations in the event of default

? Deposit with the Regulatory Authority (funds set aside) - A deposit of *cash*, *certificate of deposit* or *U.S. Government Securities* with the RA to guarantee performance of obligations under a reclamation permit.

? Escrow account (funds set aside) - The permittee transfers *cash*, *certificates of deposit* or *U.S. Government Securities* are and put into the custody of a third party, (usually a bank or financial institution). The escrow account is established by the permittee to satisfy the financial assurance requirements.

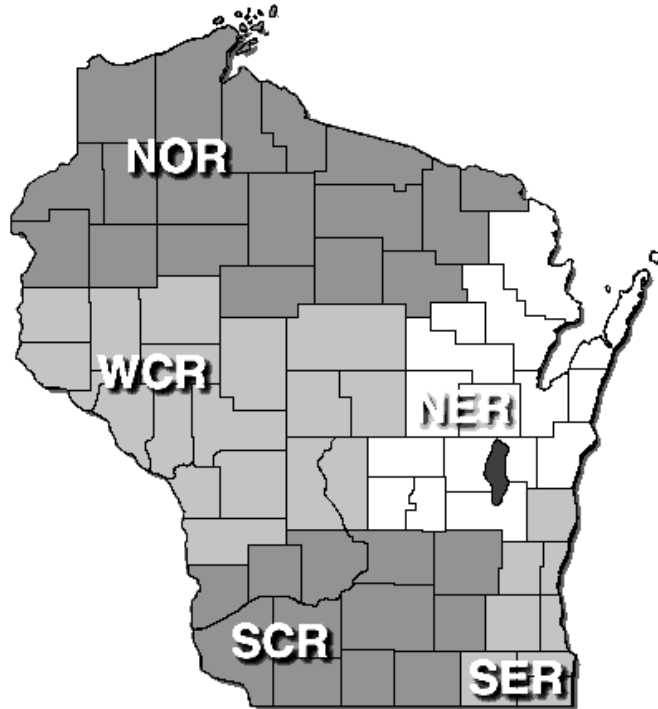
? Insurance (financial guarantee) - An applicant takes out a closure insurance policy from an insurance company. The policy must be issued in an amount adequate to cover the reclamation costs. The RA is the beneficiary of the policy.

? Irrevocable letter of credit (financial guarantee) - This is similar to a bond with a bank or financial institution taking the place of a surety. A irrevocable letter of credit is established solely for the purpose of guaranteeing performance of obligations under a reclamation permit. The bank or financial institution bank agrees to pay in event of default.

? Irrevocable trust (funds set aside) - A trust fund is an arrangement in which a separate legal entity, the trust, is created by the permittee to hold property or funds solely for the purpose of guaranteeing performance of obligations under a reclamation permit.

? Net worth test - Method in which a permittee may demonstrate the financial viability of their company. Please refer to NR 135.40 (13), Wis. Adm. Code, for details of the legal review requirements. To do this, an applicant must provide sufficient financial data to demonstrate compliance with minimum financial standards. The company must satisfy specific financial criteria and pass several financial ratios. The application must be supported by the opinion of an independent certified public accountant in order to establish proof of financial responsibility. The data used to demonstrate the financial viability must be taken from the company's audited financial statements from the most recently completed fiscal year. The financial information must be resubmitted every year, using the most current financial statement data.

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