## Chapter NR 340

## NONMETALLIC MINING AND RECLAMATION ASSOCIATED WITH NAVIGABLE WATERWAYS AND ADJACENT AREAS

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**Note:** Chapter NR 340 as it existed on August 31, 1991 was repealed and a new chapter NR 340 was created effective September 1, 1991.

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NR 340.01 Purpose. (1) This chapter is promulgated pursuant to ss. 30.19, 30.195, 30.20, and 227.11, Stats., in order to accomplish consistency in the application of ss. 30.19, 30.195 and 30.20, Stats., to nonmetallic mining and to give effect to the purpose for which those sections were enacted. Sections 30.19, 30.195 and 30.20, Stats., require that a permit may only be granted if an activity will not injure or be detrimental to public rights or interests in the waterway involved. It is recognized that without adequate controls serious degradation of water quality, fish and wildlife habitat, and public interests in recreation and scenic beauty could occur during and after the excavation, dredging or grading in or near navigable waterways. It is the purpose of this chapter to avoid unnecessary adverse effects and minimize the unavoidable adverse effects caused during and after such activities, to provide for the expeditious rehabilitation of affected land, and to restrict excavation, dredging and grading where the adverse effects cannot be minimized or avoided. Chapters NR 115, 116, 117, 269 and 500 to 520 are applicable to nonmetallic mining projects authorized pursuant to this chapter. Other administrative rules may also be applicable.

**(2)** A secondary purpose of this chapter is to codify the definitions of certain terms in s. 30.19, Stats.

**History:** Cr. Register, August, 1991, No. 428, eff. 9-1-91; correction in (1) made under s. 13.93 (2m) (b) 7., Stats., Register, October, 1995, No. 478; correction in (1) made under s. 13.93 (2m) (b) 7., Stats., Register, September, 2000, No. 537.

NR 340.015 Policy. (1) The natural resources board recognizes, and has taken into consideration, the sensitivity of streams to the large-scale removal of native materials from the streambed and immediate banks. The potential consequences of this removal can be significant where the equilibrium of the stream is altered and compensating aggradation or degradation of the channel occurs downstream from the project location, or where the stability of the streambank is reduced and erosion, slope failure and siltation result. Aquatic resources can be significantly harmed when human-induced erosion, deposition, aggradation or degradation occur. The board also recognizes the difficulty in predicting when or where such effects will occur and, especially, the difficulty of preventing or reducing the magnitude of those effects once they have been detected.

(2) It is the policy of the natural resources board that nonmetallic mineral excavation in the channel and immediate banks of streams be carefully regulated in order to avoid or minimize adverse effects on aquatic resources. Therefore, the department shall, in its review of permit applications under this chapter, presume that excavation in the channel and immediate banks should be avoided where reasonable alternatives are available. The department shall require applicants to convincingly demonstrate a need for excavation of the channel or immediate banks by demonstrating after investigation that reasonable alternatives are not available. The department will only concur in such excavation when the applicant has demonstrated by a preponderance of the evidence that the excavation is technically, economically and environmentally feasible and meets other applicable requirements of law.

- **(3)** The natural resources board has also determined that:
- (a) No operation may be authorized in navigable waterways designated in s. NR 102.10 as outstanding resource waters which will result in a lowering of water quality or impair any use of the navigable waterway in any way.
- (b) An operation of the type described in this chapter may not impair any existing use or result in a lowering of water quality of any high quality waters designated in s. NR 102.04 (3) (a) to (d) without satisfaction of the antidegradation requirements contained in ch. NR 207 and 40 CFR 131.12. These high quality waters include any navigable waterways where the water quality exceeds that required to achieve the fully fishable/swimmable goals of the federal clean water act (33 USC 1251-1287).

History: Cr. Register, August, 1991, No. 428, eff. 9-1-91.

**NR 340.02 Definitions.** In this chapter and in ss. 30.19, 30.195 and 30.20, Stats.:

- (1) "Abandonment of operations" means the cessation of nonmetallic mining operations for more than 180 consecutive days where the cessation is not specifically set forth in an operator's application and permit, or by other written request. Abandonment of operations does not include the cessation of activities due to labor strikes or natural disasters.
- (3) "Buffer zone" means an undisturbed strip of land which may require additional planting of trees or shrubs to screen the operations from view or act as a sediment trap along waterways, property lines, and roads or highways.
- **(4)** "Channel aggradation" means the accumulation of material in a stream channel caused by upland erosion, channel scour or changes in channel geometry resulting in the loss of aquatic habitat.
- (5) "Channel degradation" means the loss of material from a streambed and banks caused by bank erosion or channel scour that results in lowering of the streambed and/or widening the channel
  - **(6)** "Department" means the department of natural resources.
- (7) "Environmental pollution" has the meaning specified in s. 299.01 (4), Stats.
- **(9)** "Nonmetallic mining", "nonmetallic mining operation" or "operation" means excavation, grading or dredging operations or activities in navigable waterways and adjacent upland, to ex-

tract merchantable minerals such as stone, sand, gravel or rock and nonmetallic minerals such as asbestos, beryl, clay, feldspar, peat, talc and topsoil for sale or use by the operator because of their intrinsic values. Related on-site processes and activities such as stockpiling of materials, crushing, screening, scalping, dewatering and blending are also included.

- (10) "Nonmetallic mining refuse" or "refuse" means all waste soil, rock, mineral, liquid, vegetation and other material resulting from an operation. Refuse does not include merchantable by-products directly resulting from or displaced by the operation.
- (11) "Nonmetallic mining site" or "site" means the area disturbed by an operation, including the surface area from which materials have been or will be removed, the surface area covered by or to be covered by refuse and mineral stockpiles, and land disturbed or to be disturbed by the construction or improvement of haulageways.
- **(12)** "Operation schedule" means a timetable for the commencement, duration and cessation of operations. The timetable shall apply to each sequential stage of staged operations.
- (13) "Operator" means any person engaged in, or who has applied for a permit to engage in, nonmetallic mining operations, whether individually, jointly or through subsidiaries, agents, employees, contractors or subcontractors.
- (14) "Permit" means any permit which may be required under s. 30.19, 30.195 or 30.20, Stats., of an operator as a condition precedent to commencing nonmetallic mining operations at a nonmetallic mining site.
- (15) "Progressive reclamation" means sequential reclamation activities for each stage of the operation schedule.
- (16) "Reasonable alternatives" means the use of a substitute upland site having similar material or, where substitute sites are unavailable, modifying the operation plan or reclamation plan to minimize impacts to or stabilize the streambed and banks where the objectives of the operator can still be substantially met.
- (17) "Reclamation" means the rehabilitation of the nonmetallic mining site including, but not limited to, establishment of adequate vegetative cover, stabilization of soil conditions, prevention of environmental pollution and restoration of fish, plant and wildlife habitat.

**History:** Cr. Register, August, 1991, No. 428, eff. 9-1-91; correction in (7) made under s. 13.93 (2m) (b) 7., Stats., September, 2000, No. 537; emerg. r. (18) and (20), eff. 4-19-04; emerg. r. (2), (8) and (19), eff. 5-19-04; CR 04-085: r. (2), (8) and (19) Register April 2005 No. 592, eff. 5-1-05; CR 04-086: r. (18) and (20) Register April 2005 No. 592, eff. 5-1-05.

- **NR 340.03 Applicability. (1)** Except as provided in s. NR 340.035, this chapter applies to all nonmetallic mining operations that require:
- (a) A permit or contract pursuant to s. 30.20, Stats., to remove material from the bed of a natural navigable waterway or a public artificial waterway;
- (b) A permit pursuant to s. 30.195, Stats., to change the course of or straighten a navigable stream; or
- (c) A permit pursuant to s. 30.19, Stats., to grade or otherwise remove topsoil from the bank or to enlarge a navigable waterway.
- **(2)** This chapter applies to permits granted after February 1, 1979. However, ss. NR 340.07, 340.08 and 340.09 apply to any permits issued prior to February 1, 1979.

History: Cr. Register, August, 1991, No. 428, eff. 9-1-91.

**NR 340.035 Exemption.** This chapter does not apply to nonmetallic mining operations of less than one acre where the department determines that there is little likelihood for adverse environmental effects. However, permits pursuant to ss. 30.19,

30.195 and 30.20, Stats., are required and any applicable requirement of this chapter may be incorporated into the permit.

History: Cr. Register, August, 1991, No. 428, eff. 9-1-91.

- **NR 340.04 Permit application.** The application for a s. 30.19, 30.195 or 30.20, Stats., permit shall be submitted by the operator on a form provided by the department and shall include the following:
- (1) A description of the existing natural and physical conditions of the site, including necessary maps and cross sections, referenced to recoverable benchmarks, concerning:
  - (a) Soil and geologic composition of the project site;
  - (b) Location, dimensions and elevations of surface waters;
- (c) The elevation of ground water throughout the nonmetallic mining site;
  - (d) Hydraulic cross sections of the floodplains of any streams;
  - (e) Location of manmade features in the site;
- (f) Detailed map and description of the nature and extent of existing excavations, stockpiled materials, topsoil and refuse in the site;
  - (g) Historical and archaeological features, if known;
  - (h) Existing drainage patterns; and
- (i) Existing topography. Contour maps of the site shall have contour intervals of no more than 2 feet where ground elevations will be changed and no more than 5 feet where ground elevations will not be changed, except that a wider contour interval may be approved in areas of steep topography.
- **(2)** A legal description of all land within the site which the applicant owns, leases or has an option to purchase or lease;
- (3) An operation and reclamation plan in accordance with s. NR 340.05;
- (4) Evidence that the operator has applied for or obtained all necessary local, state and federal permits and licenses for the operations:
- **(5)** A statement explaining what the excavated material is to be used for;
- **(6)** A brief description of the investigation conducted to identify upland alternative sites having similar material to be used, and efforts made to obtain the material, including but not limited to offers to purchase or obtain options on the material or sites; and
- (7) Other information pertinent to the operation as the department may require to make a decision under the applicable statute. **History:** Cr. Register, August, 1991, No. 428, eff. 9-1-91.
- **NR 340.05** Operation and reclamation plans. Each permit application shall include, in addition to information required in s. NR 340.04, an operation schedule and a detailed plan describing:
- (1) The location, extent, depth and manner of operations anticipated for each stage of a staged operation including proposed means of loading and transporting material and the estimated volume and quantity of material to be extracted, accompanied by an adequate documentation of the basis for the estimates.
- **(2)** The final configuration of the site including depth, location and extent of stockpiled materials, and disposal of refuse. The various types of materials involved shall be characterized.
- **(3)** The progressive and final reclamation plans detailing the manner, time and location of:
- (a) The removal, stockpiling and protection of all materials in conformance with the appropriate floodplain zoning ordinance and ch. NR 116;

Note: Net changes in ground contours in the floodway of a stream, including

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temporary stockpiling, that may cause an increase in the 100-year flood elevation require an hydraulic analysis and may require other action such as amending a flood profile or securing flooding easements to comply with ch. NR 116 or a local floodplain zoning ordinance.

- (b) Measures to screen the operation from view considering the general shoreland zoning requirements of s. NR 115.05 (1) (c) and the possible need for a buffer zone of sufficient width to prevent environmental pollution;
  - (c) Grading and stabilization of the site;
- (d) Measures for diversion and drainage of ground and surface water from the site where necessary to prevent pollution of ground or surface water;
- (e) Erosion and drainage control, and revegetation such as outlined in the department publication entitled Wisconsin construction site best management practice handbook for the slope and soil type or the Wisconsin department of transportation standard specifications for road and bridge construction minimum seeding requirements for rights-of-way, with diverse, self-regenerative species utilized where consistent with final reclamation.

**Note:** Since the methods cited above in par. (e) may not be appropriate for all conditions encountered, the operator may submit alternate techniques designed to achieve stabilization of the site.

- (3m) In addition to all other requirements of this chapter, reclamation plans required by this section shall include a designation of post-mining land use and comply with the reclamation standards established in ch. NR 135.
- (4) Estimated cost of progressive and final reclamation of the site.
- **(5)** An acknowledgement of continuing responsibility for restoration and revegetation of the site until stabilization has been determined adequate by the department.
- **(6)** Other information pertinent to the operation as the department may require to make a decision under the applicable statute. **History:** Cr. Register, August, 1991, No. 428, eff. 9-1-91; cr. (3m), Register, September, 2000, No. 537, eff. 12-1-00; correction in (3) (b) made under s. 13.92 (4) (b)
- **NR 340.055 Financial assurance.** A bond or alternative financial assurance is required for each site and multiple sites of less than one acre by the same operator, except that government units are not required to obtain bonds or alternative financial assurance.
- (1) NOTIFICATION. The department shall determine the required financial assurance level for progressive reclamation in staged operations or for reclamation in unstaged operations and shall notify the operator. Following approval of the permit, and as a condition of the permit, the operator shall file a bond as provided in sub. (2) or alternative financial assurance as provided in sub. (3) with the department. The bond or alternative financial assurance amount shall be sufficient to cover the cost to the state of hiring a contractor to complete reclamation or progressive reclamation in staged operations. The operator shall file the required bond or alternative financial assurance with the department prior to commencing the operation. Upon notification by the department of bond or alternative financial assurance approval, the operator may commence operations and reclamation activities.
- (2) BOND REQUIREMENTS. (a) Bonds shall be issued by a surety company licensed to do business in this state. At the option of the operator, a performance bond or a forfeiture bond may be filed. Surety companies may complete the reclamation plan in lieu of cash payment to the department.
- (b) Each bond shall provide that the bond may not be cancelled by the surety, except after not less than 90 days notice to the department in writing by registered or certified mail. Not less than 30 days prior to the expiration of the 90 day notice of cancel-

- lation, the operator shall deliver to the department a replacement bond in absence of which the existing bond shall remain in effect.
- (c) The bond shall provide that the operator will faithfully perform all requirements of ch. 30, Stats., and all provisions of this chapter and the permit.
- (d) The bond shall be payable to the "State of Wisconsin, Department of Natural Resources".
- (e) The bonding level for reclamation or progressive reclamation in staged operations shall be the larger amount of either \$2,000 per acre or \$0.25 per cubic yard of material excavated based on 1989 dollars unless the operator justifies a lesser amount to the department's satisfaction.
- (3) ALTERNATIVE FINANCIAL ASSURANCE. (a) The operator may provide alternative financial assurance in lieu of a bond. Alternative financial assurance may include any of the following: cash; a certificate of deposit; an irrevocable letter of credit; an irrevocable trust, an escrow account, a government security; or any other demonstration of financial responsibility. Certificates of deposit shall be automatically renewable or other assurances shall be provided before the maturity date.
- (b) Each form of alternative financial assurance shall provide that it may not be cancelled, except after not less than 90 days notice to the department in writing by registered or certified mail. Not less than 30 days prior to the expiration of the 90-day notice of cancellation, the operator shall deliver to the department a replacement form of alternative financial assurance in absence of which the existing alternative financial assurance shall remain in effect.
- (c) The alternative financial assurance shall provide that the operator will faithfully perform all applicable requirements of ch. 30, Stats., and all provisions of this chapter and the permit.
- (d) The alternative financial assurance shall be payable to the "State of Wisconsin, Department of Natural Resources".
- (e) The level of alternative financial assurance for reclamation or progressive reclamation in staged operations shall be the larger amount of either \$2,000 per acre or \$0.25 per cubic yard of material excavated based on 1989 dollars unless the operator justifies a lesser amount to the department's satisfaction.

**Note:** The base of 1989 dollars requires that the bonding level must be adjusted to reflect inflation or the cost of living increases. For 1992, the inflation of 4.6 % for 1989, 6.1% for 1990 and 3.1% for 1991, or a total of 14% (1.046 x 1.061 x 1.031 = 1.144) must be added to the listed rates resulting in amounts of \$ 2280 per acre or \$ 0.285 per cubic yard. For permits issued after 1992, remember to correct for cost of living adjustments for all years back to 1989. For more detail please see the Department's: Waterway and Wetland Handbook, Chapter 105, NONMETALLIC MINERAL MINING AND RECLAMATION (2001), http://www.dnr.state.wi.us/org/water/fhp/handbook/PDFs/ch105.pdf

- (4) BOND OR ALTERNATIVE FINANCIAL ASSURANCE REEVAL-UATION. The department may reevaluate and adjust the amount of the progressive reclamation bond or security deposit required for reclamation. Reclaimed areas may be released from the bond or alternative financial assurance coverage. Reevaluation shall be made pursuant to subs. (1) and (2).
- (5) MULTIPLE PROJECT PERMIT BOND OR ALTERNATIVE FINANCIAL ASSURANCE. Any operator who obtains a permit from the department for 2 or more sites may elect, at the time the second or subsequent site is approved, to post a single bond or alternative financial assurance in lieu of separate bonds or alternative financial assurances on each site. Any single bond or alternative financial assurance so posted shall be in an amount equal to the estimated cost to the state determined under subs. (1) and (2) for all sites. When an operator elects to post a single bond or alternative financial assurance in lieu of separate bonds previously posted on individual sites, a separate bond or alternative financial assurance may not be released until the new bond or alternative financial assurance has been accepted by the department.

- **(5m)** INTEREST. Any interest earned by the bond or alternate financial assurance provided under this section shall be paid to the person operating the nonmetallic mining or reclamation project.
- (6) BOND OR ALTERNATIVE FINANCIAL ASSURANCE RELEASE. The department shall release the operator's bond or alternative financial assurance if it finds, after inspection of the site, that the operator has fully carried out and completed reclamation of the site in accordance with the operation and reclamation plan, and has otherwise complied with ss. 30.19, 30.195 and 30.20, Stats., and this chapter. Final inspection shall be made not less than one year, nor more than 2 years, after the completion of reclamation.
- (7) ABANDONED SITES. Bonds or alternative financial assurances for any site abandoned at the time a permit expires may not be released unless it is shown that no operations have occurred at that site and no potential for environmental pollution exists as a result of an operator's actions or inactions.

**History:** Cr. Register, August, 1991, No. 428, eff. 9-1-91; CR 06-024: am. (intro.), (1), (4), (5), (6) and (7), r. and recr. (3), cr. (5m) Register November 2006 No. 611, eff. 12-1-06.

- **NR 340.06 Permits.** (1) Permits shall be granted where the department finds that the provisions of this chapter and the relevant standards contained in ss. 30.19, 30.195 and 30.20, Stats., have been met.
- (2) The initial permit issued to an operator shall be valid for a period not greater than 10 years. If no proceeding for revocation or violation of the permit has been initiated during the term of the permit and there are no other changed or previously unknown circumstances, including environmental considerations, the permit may, after notice and opportunity for hearing, be renewed for succeeding periods of up to 10 years.
- **(3)** Permits shall be conditioned on compliance with the following:
- (a) Operations shall be limited to the dimensions and depth approved by the department;
- (b) Any permanent pond created in the 100-year floodplain by operations where fish entrapment is likely to occur shall be of sufficient permanency, size, depth and quality to sustain fish and aquatic life and shall be open to the public for fishing after reclamation has been completed. A marked, easily usable public access shall be provided from the adjacent waterway;
- (c) There may be no stockpiling or storage of materials contrary to s. 30.12, Stats., ch. NR 116, or any local floodplain zoning ordinance;
  - (d) Progressive and final reclamation of the site;
- (e) If deemed necessary by the department, banks and drainages to navigable waterways shall be stabilized prior to and during project operations, and drainages shall be filtered where necessary to prevent siltation and water turbidity;

**Note:** Operations that do not meet the effluent limitations in ch. NR 269 will require a separate Wisconsin pollutant discharge elimination system (WPDES) permit.

- (f) The operator shall notify the department in writing at least 15 days prior to initial commencement of operations and not more than 15 days after the final reclamation;
- (g) Other requirements as are necessary, such as incorporation of a buffer zone, to ensure project operation and progressive and final reclamation in a manner consistent with this chapter and to ensure the prevention of environmental pollution as defined in s. 283.01 (6m), Stats.; and
- (h) That the operator acknowledges through acceptance of the permit that the department shall retain continuing jurisdiction in the matter.
  - (i) Reclamation as proposed in the plan required by s. NR

- 340.05 shall comply with the reclamation standards established in ch. NR 135.
- (4) Permits shall be denied if the department finds that the operation will not conform with the minimum requirements in this chapter and the standards in ss. 30.19, 30.195 and 30.20, Stats., as applicable, or if the applicant has previously failed and continues to fail to comply with ss. 30.19, 30.195 and 30.20, Stats., or any permit issued under these sections, as they relate to nonmetallic mining, or this chapter, including failure to obtain a permit prior to any operation.

**History:** Cr. Register, August, 1991, No. 428, eff. 9-1-91; cr. (3) (i), Register, September, 2000, No. 537, eff. 12-1-00; correction in (3) (g) made under s. 13.93 (2m) (b) 7., Stats., January 2002 No. 553.

- **NR 340.07 Violations.** (1) An operator found either conducting project operations without the required permits or violating the conditions of a permit shall be ordered to cease all operations immediately and submit a reclamation plan for the land already affected. Continued operation and after-the-fact permit approval shall be prohibited until the reclamation plan has been approved by the department and any necessary progressive reclamation has been completed.
- **(2)** The department may cancel and rescind the permit of any operator who is in violation of this chapter.
- **(3)** The procedures in subs. (1) and (2) shall be in addition to any other remedies the department may seek.
- (4) If the department determines that abandonment of operations has occurred, the operator is in violation of the permit and may not be eligible for permit modification, extension or transfer. **History:** Cr. Register, August, 1991, No. 428, eff. 9-1-91.
- **NR 340.08 Permit modifications.** (1) An operator, at any time prior to expiration of the permit, may apply for amendment or cancellation of a permit or for a change in the reclamation plan for a site. The application describing the amendment, cancellation or change shall be submitted by the operator on a form provided by the department and shall identify the tract of land to be added to or removed from the permitted site or to be affected by a change in the operation and reclamation plan. Any increase in the size of the site shall be subject to the notice and potential hearing provisions of s. 30.02, Stats. The department may deny a permit modification when an operator is in violation of the existing permit.

Note: 2003 Wis. Act 118 repealed s. 30.02, Stats.

- **(2)** When one operator succeeds to the interest of another in any uncompleted operation, the department shall release the first operator from the responsibilities imposed by s. 30.19, 30.195 or 30.20, Stats., and this chapter, as to the operation only if:
- (a) Both operators are in compliance with the requirements and standards of this chapter and any permits granted under this chapter; and
- (b) The successor operator assumes the responsibility of the former operator to complete the reclamation.

History: Cr. Register, August, 1991, No. 428, eff. 9-1-91.

- **NR 340.09 Permit extensions. (1)** Requests for permit extensions shall be submitted in writing to the department prior to the expiration date of the existing permit.
- (2) No permit extension may be granted unless the operation is in compliance with the terms of the existing permit.
  - (3) Permit extensions may be granted for up to 3 years.
- (4) Permit extensions may be conditioned upon correction of any unanticipated environmental damage occurring during the original permit.

History: Cr. Register, August, 1991, No. 428, eff. 9-1-91.

NR 340.10

**NR 340.10 Inspections.** Each operation shall be inspected by department personnel at least once annually to ensure that the operation is in conformance with the operation's permit and progressive reclamation plan.

**History:** Cr. Register, August, 1991, No. 428, eff. 9-1-91.

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