

# RECLAMATION PLAN

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_

SITE LOCATION: \_\_\_\_\_

TOTAL AREA OF MINE: \_\_\_\_\_

## PLAN REQUIREMENTS Section 13.00 Polk County Non-Metallic Mining Reclamation Ordinance (NMMRO).

1. Maps of the non-metallic mining site including the general location, property boundaries, the area, extent, geologic composition and depth of the non-metallic mineral deposit, the distribution, thickness and type of topsoil, the approximate elevation of ground water, the location of surface waters and the existing drainage patterns. (NMMRO Section 13.20(1))

Map of site: See attached sheet labeled \_\_\_\_\_.

Map of geologic composition and depth: See attached sheet labeled \_\_\_\_\_.

Distribution of topsoil: \_\_\_\_\_

Thickness and type of topsoil: \_\_\_\_\_

Approximate elevation of groundwater: \_\_\_\_\_

Location of surface waters and existing drainage patterns: See attached sheet labeled \_\_\_\_\_.

2. Information available to the mine operator on biological resources, plant communities, and wildlife use at and adjacent to the proposed or operating mine site. (NMMRO section 13.20(3))

*Do a site analysis of plant communities and wildlife in and around mine site. Make sure to determine whether or not threatened or endangered species inhabit the site.*

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3. Existing topography as shown on contour maps of the site at five feet, unless the Polk County Land and Water Resources Department requests greater detail or requirements of a Conditional Use Permit. (NMMRO section 13.20(4))

Map of site: See attached sheet labeled \_\_\_\_\_.

4. Location of manmade features on or near the site. (NMMRO section 13.20(5))

*Show the location of buildings, towers, manmade berms, etc. on a plan view drawing.*

Map of site: See attached sheet labeled \_\_\_\_\_.

5. For existing mines, a plan view drawing showing the location and extent of land previously affected by non-metallic mining, including the location of stockpiles, wash ponds and sediment basins. (NMMRO section 13.20(6))

Show all erosion control practices on site map.

Map of site: See attached sheet labeled \_\_\_\_\_.

6. The reclamation plan shall specify a proposed post-mining land use for the non-metallic mine site. The proposed post-mining land use shall be consistent with local land use plans and local zoning at the time the plan is submitted, unless a change to the land use plan or zoning is proposed. The proposed post-mining land use shall also be consistent with all applicable local, state, or federal laws in effect at the time the plan is submitted. (NMMRO section 13.30(1))

Proposed post-mining land use for the non-metallic mine site must take into account current land use and land use needs at the time mining is completed.

Survey the surrounding area to determine what is the foreseeable land use for the area.

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7. Land used for non-metallic mineral extraction in areas zoned under an exclusive agricultural use ordinance pursuant to s. 91.75, Stats., shall be restored to agricultural use. (NMMRO section 13.30(2))

Check the deed and with the governing township to determine if the property is zoned under exclusive agriculture or in the Farmland Preservation Program.

Zoned Exclusive Agriculture (circle one):                      YES      NO

Farmland Preservation Program (circle one):                      YES      NO

8. A description of the proposed earthwork and reclamation, including final slope angles, high wall reduction, benching, terracing and other structural slope stabilization measures. (NMMRO section 13040(1))  
Final reclaimed slopes covered by topsoil or topsoil substitute material may not be steeper than a 3:1 horizontal to vertical incline unless alternative requirements are approved under s. 18 (NMMRO), and stable slopes can be demonstrated based on site-specific engineering analysis. (NMMRO 11.50(1) or 11.50(2)).

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9. The methods of topsoil or topsoil substitute material removal, storage, stabilization and conservation that will be used during reclamation. (NMMRO section 13.40(2))

Describe where topsoil and subsoil will be stripped, placed, and stabilized.

Describe erosion control practices that will be used while soils are not stable.

The Wisconsin Construction Site Handbook is recommended for determining adequate erosion control practices for the site.

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10. A plan or map which shows anticipated topography of the reclaimed site and any water impoundments or artificial lakes needed to support the anticipated future land use of the site. (NMMRO section 13.40(3))

Map of site: See attached sheet labeled \_\_\_\_\_.

11. A plan or map which shows surface structures, roads and related facilities after the cessation of mining. (NMMRO section 13.40(4))

Map of site: See attached sheet labeled \_\_\_\_\_.

12. The estimated cost of reclamation for each stage of the project or the entire site if reclamation staging is not planned. (NMMRO section 13.40(5))

YEAR	Number of Acres	Per Acre Cost of Reclamation	Total Cost per year

*Total:*

13. A revegetation plan 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. (NMMRO section 13.40(6))

Revegetation using a variety of plants indigenous (native) to the area is favored. (NMMRO 11.80(5)).

The NRCS, Critical Area Planting Standard (Std. 342) is recommended for depth of topsoil, seedbed preparation, methods and rates.

The NRCS, Mulching Standard (Std. 484) is recommended for mulching.

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14. Quantifiable standards for revegetation adequate to show that a sustainable stand of vegetation has been established which will support the approved post-mining land use. Standards for revegetation may be based on the percent vegetative cover, productivity, plant density, diversity, or other applicable measures. (NMMRO section 13.40(7))

Percent vegetative cover, productivity, plant density, diversity, or other applicable measures should be based on preventing erosion.

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15. A plan and a narrative showing erosion control measures to be employed during reclamation activities. These shall address how reclamation activities will be conducted to minimize erosion and pollution of surface and groundwater. (NMMRO section 13.40(8))

The Wisconsin Construction Site Handbook is recommended for determining adequate erosion control practices for the site.

Map of site: See attached sheet labeled \_\_\_\_\_.

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16. A description of any areas which will be reclaimed on an interim basis sufficient to qualify for the waiver of fees, Wisconsin Administrative Code, and release of financial assurance and which will be subsequently disturbed prior to final reclamation. Descriptions shall include an identification of the proposed areas involved, methods of reclamation to comply with the standards in Part II and timing of interim and final reclamation, as authorized by s. NR 135.41, Wisc. (NMMRO section 13.40(9))

A map can be used to show location.

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17. A plan, and if necessary, a narrative showing Best Management Practices to be employed before and during non-metallic mine operation. These shall address how to minimize erosion and pollution of the surface and groundwater resources. (NMMRO section 13.40(8)).

Recommend using the Wisconsin Construction Site Handbook for determining adequate erosion control practices for the site.

A map can be used to show location.

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18. The reclamation plan shall contain criteria for assuring successful reclamation in accordance with s. 11.80. (NMMRO section 13.50).

Performance standards are based on protecting against erosion, protecting groundwater and surface water.

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19. The operator shall provide a signed certification that reclamation will be carried out in accordance with the reclamation plan. The operator shall also certify that the Best Management Practices are installed and maintained. The landowner and lessee, if different from the operator, shall also provide signed certification that they concur with the reclamation plan and will allow its implementation.

In the following situations, the landowner and lessee, if different from the mine operator, are not required to submit a written certification. The operator shall provide written evidence that the landowner and lessee, if different from the operator, have been provided with a written copy of the reclamation plan, and that:

- a. The mine operator has submitted a reclamation plan for an existing mine in accordance with Polk County Non-Metallic Mining Reclamation Ordinance section 12.20, or
- b. The operator has submitted a reclamation plan for a new or reopened mine in accordance See Polk County Non-Metallic Mining Reclamation Ordinance section 12.20 which is located on land for which a lease agreement or memorandum of lease between the landowner and applicant was recorded prior to August 1<sup>st</sup>, 2001. (NMMRO 13.60).

I, \_\_\_\_\_, (operator) certify that reclamation will be carried out in accordance with the reclamation plan and that the Best Management Practices are installed and maintained.

\_\_\_\_\_  
Operator's Signature

\_\_\_\_\_  
Date

I, \_\_\_\_\_, (landowner) certify that I have received a copy of the reclamation plan, read it and understand it. I further certify that I concur with the reclamation plan and will allow its implementation.

\_\_\_\_\_  
Landowner Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Landowner Signature

\_\_\_\_\_  
Date