



# ***MINERAL EXTRACTION OPERATIONS***

## **Mineral Extraction in Dane County**

Mineral resources in Dane County are nonmetallic in nature including sand, gravel and limestone. Sand and gravel resources are often referred to as “pits”. The term “quarry” is appropriate for limestone because such operations require controlled blasting to remove material. The most familiar uses for such nonmetallic mineral resources are road building and maintenance. The materials are also used in the construction of residential, commercial and public buildings, bridges, sewer and septic systems, and use in erosion control measures.

There are 95 active mineral extraction sites in Dane County. Fifty-five (55) of these are non-conforming (NC) sites. NC sites are exempt from Zoning (Chapter 10 of the Dane County Code of Ordinances). In addition, there are a few inactive NC sites. Most towns in Dane County have at least one non-conforming site.

The vast majority of these 95 sites in Dane County are located in the areas designated as agricultural use in town land use plans and are zoned in one of the agricultural categories (A-1, A-1 Exclusive and A-2).

Mineral extraction operations locate where mineral deposits exist. The location of such mineral resources is dependent on nature (specifically geology) versus land use or zoning districts. Mineral deposits having potential for extraction are usually located in land zoned agricultural (A1-EX, A-1, and A-2). Deposits under areas that are already built upon or zoned residential do not have any practical potential for extraction.

## **Regulation of Nonmetallic Mining**

### **State Rules**

Mineral extraction operations are subject to state rules regarding dust control, blasting, safety and reclamation.

### **County Rules**

Mineral extraction operations must meet the requirements of Chapter 14 (Erosion Control and Stormwater Management), Chapter 74 (Nonmetallic Mining Reclamation), and Chapter 10 (Zoning) of the Dane County Code of Ordinances (DCCO).

### **Chapter 10 - Zoning**

To begin or expand a mineral extraction operation in Dane County, the operator must first apply for and receive a conditional use permit (CUP). If the property is not zoned appropriately, a rezoning request must also be made. Mineral extraction operations are conditional uses in the A-1, A-1 Exclusive, A-2, A-3, C-2, and M-1 districts.

The approval process for a conditional use is different from that of a rezone. Decisions on conditional uses do not go on to the County Board. Instead, the decision rests with the Zoning

and Land Resources (ZLR) Committee. Town input is provided via the Town Action Report that is forwarded on to the ZLR. The recommendations and findings of the town are advisory to the ZLR Committee.

Section 10.191 of the Dane County zoning ordinance contains procedure and standards of operation for mineral extraction operations. Section 10.191(2) states that “The application for the conditional use permit necessary to conduct a mineral extraction operation shall include a written description of the proposed operation including a time schedule of development and termination, a site plan and a reclamation plan”. Other requirements include that excavations below the grade of an abutting roadway must be set back from the street or highway a distance at least equal to the distance that is required for buildings and structures under s. 10.17, topsoil from the area of operation shall be saved and stored on site for reclamation, and that the applicant must meet requirements of Chapter 74 (Nonmetallic Mining Reclamation).

The DCCO provides standards that the ZLR must consider in granting a conditional use permit (CUP). Section 10.255(2)(h) states that “No application for a conditional use shall be granted by the zoning committee unless such committee shall find that all of the following conditions are present:

1. That the establishment, maintenance, or operation of the conditional use will not be detrimental to or endanger the public health, safety, comfort or general welfare.
2. That the uses, values and enjoyment of other property in the neighborhood for purposes already permitted shall be in no foreseeable manner substantially impaired or diminished by establishment, maintenance or operation of the conditional use.
3. That the establishment of the conditional use will not impede the normal and orderly development and improvement of the surrounding property for uses permitted in the district.
4. That adequate utilities, access roads, drainage and other necessary site improvements have been or are being made.
5. That adequate measures have been or will be taken to provide ingress and egress so designed as to minimize traffic congestion in the public streets; and
6. That the conditional use shall conform to all applicable regulations of the district in which it is located”.

Section 10.255 (2)(c) says that town findings and recommendations should be stated in terms of the six standards described in Section 10.255(2)(h).

In addition, according to Section 10.123(3)(a)(1) of the zoning ordinance, the ZLR Committee must also consider the following factors when approving CUPs in the A-1 Exclusive District:

- a. The statement of purposes of the zoning ordinance and the A-1 Exclusive Agriculture District.
- b. The potential for conflict with agricultural use.
- c. The need of the proposed use for a location in an agricultural area.
- d. The availability of alternative locations.
- e. Compatibility with existing or permitted use on adjacent lands.
- f. The productivity of lands involved.

- g. The location of the proposed use so as to reduce to a minimum the amount of productive agricultural lands converted.
- h. The need for public services created by the proposed use.
- i. The availability of adequate public services and the ability of affected local units of government to provide them without an unreasonable burden.
- j. The effect of the proposed use on water or air pollution, soil erosion and rare or irreplaceable natural resources.

Section 10.255(2)(j) provides a process to appeal the decision of the Zoning and Land Resources (ZLR) Committee. An appeal from a decision of the ZLR is taken to the County Board. A three-quarter vote of supervisors present and voting reverses or modifies the action of the ZLR.

### **Conditional Use Permit (CUP) Submittal Requirements**

When applying for a CUP for mineral extraction, operators must supply a considerable amount of information. This information is then available on file at the county Zoning Division. It is reasonable that similar information be provided as the operator presents their proposal at the Town level.

### ***Required Information***

An applicant is required to provide the same information that is required of any conditional use permit. See attached *Information for Filing an Application for a Conditional Use Permit (CUP)*.

***Suggested Information*** – county staff recommends providing the following information. It provides answers to questions commonly asked by the ZLR.

- 1) A written statement containing the following information:
  - a) General description of the operation.
  - b) Existing use of the land.
  - c) Existing natural and archaeological features, including water bodies, drainage patterns, approximate depth to groundwater, and wildlife habitat.
  - d) The types and quantities of materials that would be extracted.
  - e) Geologic composition and depth to the mineral deposit.
  - f) Where extracted materials will be hauled and over what transportation routes.
  - g) Proposed dates to begin extraction, end extraction, and complete reclamation.
  - h) Types, quantities, and frequency of use of equipment to extract, process, and haul.
  - i) Whether blasting, drilling, crushing, screening, or washing would be performed.
  - j) Any proposed temporary or permanent structures (e.g., scales, offices).
  - k) Proposed hours of operation.
  - l) Any special measures that will be used for spill prevention and control, dust control, transportation, or environmental protection.
  - m) Proposed use after reclamation.
- 2) A site/operations plan drawn to scale, at least 11" by 17" in size, and showing the following information:
  - a) Boundaries of the extraction site.
  - b) Existing contour lines (not more than 10 foot intervals).
  - c) Existing roads, driveways, and utilities.
  - d) Existing natural features, including lakes, streams, floodplains, and wetlands.
  - e) All residences within 1,000 feet of the property.
  - f) Specific location of proposed extraction area, staging area, equipment storage.
  - g) Proposed location and surfacing of driveways (paving recommended for entries).

- h) Proposed phasing plan, if any (recommended for larger sites).
  - i) Proposed fencing of property and gating of driveways.
  - j) Proposed location of stockpiles.
  - k) Proposed location and type of screening berms and landscaping.
  - l) Proposed temporary and permanent structures, including scales and offices.
- 3) A reclamation plan map drawn to scale, at least 11" by 17" in size, and showing the following information:
- a) Proposed finish contour lines (not more than 10 foot intervals).
  - b) Proposed use after reclamation.
  - c) Any other information to satisfy NR135: Nonmetallic Mining Reclamation Administrative Rules.

### **Standard list of conditions**

The county has developed a standard set of conditions for towns, applicants and the ZLR to consider in granting a CUP. This standard set is intended to be a starting point for developing appropriate conditions. See attached *Standard Conditions of Approval for Mineral Extraction Operations*. Conditions are critical because they provide the opportunity to tailor the permit to a particular site and operation. Conditions are developed from a number of sources including county staff, town boards, operators, neighbors, and the ZLR.

### **Chapter 74 – Nonmetallic Mining Reclamation**

Dane county adopted Chapter 74 as required by state law (Chapter 295, Subchapter I, State Statutes), and the associated administrative rule (Chapter NR135). NR135 establishes uniform reclamation standards for all nonmetallic mining operations in Wisconsin. The standards are applied both to active mines and future mining sites but NOT to abandoned sites.

The standards are implemented locally. Law states that counties *must* adopt an ordinance. It is important to remember that NR135 relates to reclamation only and therefore does not interfere with local requirements related to siting or operation of mineral extraction sites. This means operators still have to have proper zoning and apply for a Conditional Use Permit (CUP) to meet Dane County zoning requirements (Chapter 10 of the Dane County Code of Ordinances).

NR135 was published on October 1, 2000 and became effective on December 1, 2000. Counties were required to have a reclamation ordinance in effect by June 1, 2001. Dane County didn't quite make that deadline. The Dane County Board adopted *Ordinance Amendment #42, Creating Chapter 74, Nonmetallic Mining Reclamation Ordinance*, on July 19, 2001. The fees, which are contained in Chapter 12 of the Dane County Code of Ordinances (DCCO), were not approved until August 16<sup>th</sup>. The operators' deadline to submit an application for an automatic permit was August 1, 2001. All final reclamation permits must be issued by January 1, 2004.

The process for getting a reclamation permit is different for existing and new mines. Existing mines had until August 1<sup>st</sup>, 2001 to apply for an automatic permit. These involved a simple form on which the operator or owner provided basic information and signed a statement that was a promise to submit a reclamation plan within a three-year period.

For a new mine, the operator needs to develop a reclamation plan and submit it to Dane County for approval. A reclamation plan delineates and describes all acreage that will be subject to reclamation following the completion of extraction and mining activities. It provides the post-mining land use within the mine plan area and the methods of reclamation necessary to achieve

the target land use. Reclamation plans are reviewed by county staff and approved by the zoning administrator.

No mining may be conducted without a reclamation permit and corresponding financial assurance. The financial assurance will guarantee that the work necessary to provide a stable and productive post mining condition is properly performed at no expense to the taxpayers.

Section 74.122(1) requires the zoning administrator to provide a copy of the submitted reclamation permit application to the municipality in which the mine is located as well as to any municipality whose corporate boundaries are within one-quarter mile of the mine site. In addition, reclamation plans are available for review at the Department of Planning and Development in Room 116 of the City-County building.

Chapter 74 does apply to nonconforming (NC) mineral extraction sites. NC status exempts operations from Chapter 10 (zoning) only. Owners and operators must get a nonmetallic mining reclamation permit.

In effort to preserve mineral resources for the needs of future generations, NR135 also contains provisions for registration of mineral deposits. Sub VI of NR135 says “Since 1994, an owner of a marketable deposit of minerals under NR135.53-64 could register that site with the Dane County Register of Deeds, with Dane County Zoning, and with the municipality in which the deposit is located. Registration must be accompanied by a geologist’s statement that the site contains marketable deposits of minerals”.

Once registered, a site may not receive a building permit or zoning change that would permanently interfere with a potential mineral extraction operation. There are exceptions, but generally, the municipality and County should note the location of the mineral deposit on their official maps. The registration lasts for 10 years with a chance of a renewal for another 10 years. Registration does not signify zoning approval for the site and there can be objections if there are not marketable deposits on the site or if the current zoning would prohibit mineral extraction.

For further information about NR135 I recommend the following DNR website:  
[www.dnr.state.wi.us/org/aw/wm/mining/nonmet.htm](http://www.dnr.state.wi.us/org/aw/wm/mining/nonmet.htm)

### **Additional Planning Considerations**

Although NR135 can seem like simply an additional layer of regulation, it can also be viewed as an opportunity to both enhance creativity in post-mining land use and to minimize land use conflicts. This is especially true in light of the new Wisconsin Comprehensive Planning Legislation (a.k.a. Smart Growth). Identifying non-metallic mining resources is found in State Statutes *Section 66.1001(2) Contents of a Comprehensive Plan*. Nonmetallic resources are included in Section 66.1001(2)(e) “Agricultural, natural and cultural resources element”.

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*For further information about Dane County rules and resources, visit [www.countyofdane.com](http://www.countyofdane.com)*