

## **ELL 03-01**

### **ORDINANCE ESTABLISHING OPERATIONAL STANDARDS FOR NONMETALLIC MINING IN THE TOWN OF ELLINGTON.**

**SECTION 1. PURPOSE.** The purpose of this ordinance is to protect and manage nonmetallic resources in the Town of Ellington and to assure nonmetallic mining activities are conducted in a manner to minimize environmental degradation and conflicts with other land uses in the Town of Ellington, Outagamie County, Wisconsin.

**SECTION 2. SCOPE.** This ordinance establishes minimum standards for the operation of nonmetallic mining in the Town of Ellington.

**SECTION 3. APPLICABILITY.** This ordinance applies to all nonmetallic mining sites in the Town of Ellington except as expressly exempted herein. In the event any provision of this ordinance is less restrictive than any provision of Ordinance Z-38-02, Chapter 17, Section 17.47, the provision in the Outagamie County Nonmetallic Mining Ordinance shall prevail.

**SECTION 4. EXEMPTIONS.** This ordinance does not apply to the following activities:

- (1) Excavations or grading by a person solely for domestic or farm use at that person's residence or farm.
- (2) Excavations or grading conducted for the construction, reconstruction, maintenance or repair of a highway, railroad, airport facility, or any other transportation facility where the excavation or grading is entirely within the property boundaries of the transportation facility.
- (3) Grading conducted for preparing a construction site or restoring land following a flood or natural disaster.
- (4) Excavations for building construction purposes conducted on the building site.
- (5) Nonmetallic mining at nonmetallic mining sites that affect less than one acre of total area over the life of the mine.
- (6) Any mining operation, the reclamation of which is required in a permit obtained under ch. 293, Stats.

- (7) Any activities required to prepare, operate, or close a solid waste disposal facility under ch.289, Stats., or a hazardous waste disposal facility under ch. 291, Stats., that are conducted on the property where the facility is located, but an applicable nonmetallic mining reclamation ordinance and the standards established in this chapter apply to activities related to solid waste or hazardous waste disposal that are conducted at a nonmetallic mining site that is not on the property such as activities to obtain nonmetallic minerals to be used for lining capping, covering or constructing berms, dikes or roads.
- (8) Dredging for navigational purposes, to construct or maintain farm drainage ditches and for the remediation of environmental contamination and the disposal of spoils from these activities.

## SECTION 5. DEFINITIONS.

- (1) **Existing mine.** A nonmetallic mine where nonmetallic mining existed or was commenced prior to the effective date of adoption of this ordinance.
- (2) **Financial assurance.** A commitment of funds or resources by an operator sufficient to pay for remediation activities required by this ordinance.
- (3) **Nonmetallic mineral.** A product, commodity or material consisting principally or naturally occurring, organic or inorganic, nonmetallic, nonrenewable material. Nonmetallic minerals include, but are not limited to, stone, sand, gravel, asbestos, beryl, diamond, clay, coal, feldspar, peat, talc and topsoil.
- (4) **Nonmetallic mining.**
  - (a) Operations or activities at a nonmetallic mining site for the extraction from the earth of mineral aggregates or nonmetallic minerals for sale or use by the operator. Nonmetallic mining includes use of mining equipment or techniques to remove materials from the in-place nonmetallic mineral deposit, including drilling and blasting, as well as associated activities such as top soil removal, excavation, grading and dredging. Nonmetallic mining does not include removal from the earth of products or commodities that contain only minor or incidental amounts of nonmetallic minerals, such as commercial sod, agricultural crops, ornamental or garden plants, forest products, Christmas trees or plant nursery stock.
  - (b) Processes carried out at a nonmetallic mining site that are related to the preparation or processing of the mineral aggregates or nonmetallic minerals obtained from the nonmetallic mining site. These processes include, but are not limited to stockpiling of materials, blending mineral aggregates or nonmetallic

minerals with other mineral aggregates or nonmetallic minerals, blasting, grading, crushing, screening, scalping, pulverizing, and dewatering.

- (5) **Nonmetallic mining reclamation.** The rehabilitation of a nonmetallic mining site to achieve a land use specified in a nonmetallic mining reclamation plan, including removal or reuse of nonmetallic mining refuse, grading of the nonmetallic mining site, removal, storage and replacement of topsoil, stabilization of soil conditions, reestablishment of vegetative cover, control of surface water and groundwater, prevention of environmental pollution and if practicable the restoration of plant, fish and wildlife habitat.
- (6) **Nonmetallic mining refuse.** Waste soil, rock and mineral as well as other natural site material resulting from nonmetallic mining. Nonmetallic mining refuse does not include marketable by-products resulting directly from or displaced by the nonmetallic mining that are scheduled to be removed from the nonmetallic mining site within eight months after extraction is concluded.
- (7) **Nonmetallic mining site.** All contiguous areas of present or proposed mining described in par (a), subject to the qualifications in par (b).
  - (a) Nonmetallic mining site includes the following:
    - 1. The location where the nonmetallic mining is proposed or conducted.
    - 2. Storage and processing areas that are in or contiguous to areas excavated for nonmetallic mining.
    - 3. Areas where nonmetallic mining refuse is deposited.
    - 4. Areas affected by activities such as the construction or improvement of private roads or haulage ways for nonmetallic mining.
    - 5. Areas where grading or regrading is necessary.
    - 6. Areas where nonmetallic mining reclamation activities are carried out or structures needed for nonmetallic mining reclamation, such as topsoil stockpile areas, revegetation test plots, or channels for surface water diversion, are located.
  - (b) Nonmetallic mine site does not include any of the following areas:
    - 1. Those portions of sites listed in par. (a) not used for nonmetallic mining or purposes related to nonmetallic mining following August 1, 2001.

2. Separate, previously mined areas that are not used to nonmetallic mineral extraction after August 1, 2001 and are not contiguous to mine sites, including separate areas that are connected to active mine sites by public or private roads.
  3. Areas previously mined but used after August 1, 2001 for a non-mining activity, such as stockpiles of materials used for an industrial process unrelated to nonmetallic mining.
- (8) **Operator.** Any person who is engaged in, or who has applied for a permit to engage in, nonmetallic mining, whether individually, jointly or through subsidiaries, agents, employees, contractors or subcontractors.
- (9) **Registered geologist and hydro geologist.** A person who is registered as a professional geologist or hydro geologist pursuant to ss. 443.037 and 443.09, Stats.
- (10) **Registered professional engineer.** A person who is registered as a professional engineer pursuant to ss. 443.04 and 443.09, Stats.

**SECTION 6. OPERATIONAL STANDARDS.** Operational standards shall apply to all new nonmetallic mining sites and to all existing nonmetallic mining sites.

- (1) **Setbacks.** Setbacks for operations, activities and processes shall be as follows:
- (a) Excavation and grading including berm construction of exterior boundary or tract - 25 feet. (Except excavations and berms existing at the effective date of adoption of this ordinance.)
  - (b) No operations shall be permitted within 100 feet of any exterior boundary of the tract or within 250 feet of any building intended for human occupancy existing at the time of permit application.
  - (c) No blasting or operation of stationary processing equipment shall be permitted within 350 feet of any building intended for human occupancy existing at the time of permit application.
  - (d) Haulage ways except entrances/exits - 25 feet. (Except haulage ways existing at the effective date of adoption of this ordinance.)
- (2) **Berms.** Topsoil and subsoil shall to the maximum extend possible be bermed to screen operations from view from adjoining property owners and to provide a noise barrier from adjoining property owners for all processing operations. Berms shall not exceed a slope of 3 feet horizontal to one foot vertical (3:1). Berms shall not be located less than 250

feet of any building intended for human occupancy without written permission of the owner.

- (3) **Hours of Operation.** Hours of operation shall be limited to between the hours of 6:00 a.m. to 6:00 p.m. on weekdays and 6:00 a.m. to 2:00 p.m. on Saturdays. The Town of Ellington may authorize extended hours of operation in connection with public works contracts within specified periods. Operations shall not be conducted on Sundays or legal holidays.
- (4) **Groundwater.**
  - (a) **Quantity.** Any nonmetallic mining operation shall be conducted in a manner that does not cause a permanent lowering of the water table that results in adverse effects on private wells in the area or that results in adverse effects on surface waters or significant reduction in the quantity of groundwater reasonable available for future users of groundwater.
  - (b) **Quality.** Any nonmetallic mining operation shall be conducted in a manner which does not cause groundwater quality standards in Chapter NR 140 to be exceeded at a point of enforcement standards application.
  - (c) **Monitoring.** Any nonmetallic mining operation within four feet of the water table, any nonmetallic mining operation that proposes to extract groundwater for processing or washing aggregate and any nonmetallic mining operation engaging in blasting operations shall install not less than three monitoring wells identifying benchmarks for groundwater elevation, gradient and quality with subsequent sampling and testing of each monitoring well on at least an annual basis. Groundwater shall be analyzed for the following: (1) specific conductance (field measured); (2) pH (field measured); (3) water level; (4) temperature; (5) hardness; (6) arsenic; (7) lead; (8) iron; (9) manganese; (10) sulfate; and (11) chloride. Analysis shall be performed by a state certified laboratory. Groundwater quality shall be determined by compliance with the enforcement standards contained in Chapter NR 140.
  - (d) **Groundwater Well Guarantee.** Mining operations will not adversely affect the quantity or quality of groundwater at off site properties. If mining operations adversely affect an off site water supply well, the operator will repair or replace the well to provide the same quality of groundwater obtained from the well prior to the mining operations. This guarantee applies to all existing wells located within 1320 feet of the nonmetallic mine. The mining operator shall make a reasonable effort to measure the water levels in these wells prior to beginning quarry operations, so that property owners and operators will have a record of baseline conditions if a dispute arises.

- (e) **Water Use Plan.** Any nonmetallic mining operation that proposes to extract groundwater shall prepare a Water Use Plan that identifies measures to minimize groundwater use including storage, treatment and reuse of extracted groundwater. The Water Use Plan shall be prepared by a registered hydro geologist.
- (5) **Surface Water.** All excavations and operations shall be designed such that surface runoff from adjacent properties will be diverted from entering the excavation. Surface water runoff from within the site shall be properly managed such that sedimentation levels into any natural drainageway or waterway will not be higher than preoperation levels. No process water shall be directly discharged into any natural drainageway or waterway.
- (6) **Erosion Control.** All excavations and operations shall be subject to the following minimum erosion control requirements:
  - (a) Vegetation shall not be removed until right before excavation.
  - (b) Areas of exposed soil erosion must be timely protected by seeding, mulching, riprapping, sodding, diverting surface water, placing straw bales or silt screens, constructing settling basins or similar methods.
  - (c) All drainageways must be stabilized. Drainage must be filtered where necessary to prevent siltation.
- (7) **Dust.** The following precautions shall be taken to reduce fugitive dust:
  - (a) Application of asphalt, water or suitable chemicals on unpaved roads or other areas used by haul trucks which can create airborne dust.
  - (b) Posting and maintenance of a 10 MPH speed limit on paved or unpaved roads or other areas used by haul trucks inside the facility's property line.
  - (c) Covering, treatment or securing of materials likely to become airborne from haul trucks during transport, prior to any transportation off site.
  - (d) One or more of the following measures to suppress fugitive dust in connection with crushing, screening, and conveying processes:
    - 1. Use, where possible, of water or approved chemicals for control of dust.
    - 2. Installation and use of hoods, enclosures, buildings, fans and air cleaning devices to enclose and vent the areas where materials are handled.

3. The use of spray bars or other wet dust suppression methods.
- (8) **Noise.** All operations shall be conducted to minimize noise. Noise levels shall be not exceed 72 dBA at or beyond the lot line. Temporary construction activities and emergency sound devices are exempt.
- (9) **Ingress - Egress.**
- (a) Haulage way entrances shall intersect with public roads as nearly as possible at right angles.
  - (b) Haulage ways within 100 feet of their intersection with a public road shall not exceed a grade of eight percent.
  - (c) Haulage ways within 100 feet of their intersection with a public road shall be hard-surfaced with bituminous asphalt.
  - (d) No fence, wall vegetation, berm or stockpile shall be erected, placed, planted or allowed to grow in such a manner as to obstruct vision between a height of 2-1/2 feet and 10 feet above the centerline grades of the intersecting public road and haulage way in the area bounded by the right-of-way line of the public road and the hard surface edge of the haulage road and a line joining the points along such line 50 feet from the point of intersection.
- (10) **Blasting.**
- (a) **Time Limitations.** Blasting shall be limited to weekdays between the hours of 8:00 a.m. to 4:00 p.m. Drilling shall be limited to between the hours of 7:00 a.m. to 5:00 p.m. on weekdays and 7:00 a.m. to 12:00 p.m. on Saturdays. There shall be no blasting or drilling on Sundays or legal holidays.
  - (b) **Vibration and Methods.** The ground vibration preventive action limit for blasting shall be .25 inches per second and the ground vibration enforcement action limit (violation) for blasting shall not exceed .30 inches per second. The amount of explosives shall not exceed 4,000 lbs per blast or 100 lbs per each delay. The height of the face to be blasted shall not exceed 30 feet except by permission of the Town due to unusual natural conditions such as seam locations.
  - (c) **Blasting Monitoring.** The Operator shall monitor and record the levels of ground vibration and airblast for each blast, measured at or near the dwelling, public building, place of employment, school, church, or community or institutional building located closest to the site of the blast which is not owned or controlled by the Operator.



- (d) **Blasting Logs / Submission.** The Operator shall maintain a blasting log of each blast and shall keep the blasting logs on-site for the entire permit period. Upon written request by the Town, the Operator shall submit to the Town copies of the Prior month's blasting logs redacted to exclude sensitive competitive information but including at least the date, time and location of the blast and the recorded peak levels of ground vibration and airblast; information regarding any particular blast(s); or furnish copies of complete blasting logs to the Town, provided that the Town undertakes in writing to provide appropriate trade secret protections for such documents and information. The Operator shall defend and hold the Town harmless from and against any challenge to the appropriateness of such trade secret protections.
- (e) **Blasting Notification.** A resident notification list shall be established by the Operator for the purpose of notifying neighbors at home in the vicinity of the site of imminent blasting activity. This list shall be maintained and utilized by the Operator on a "request basis only" for all residents in the vicinity of the site who asked to be notified prior to any blast. This list will be submitted to the Town Clerk. The Operator's responsibility to provide such pre-blast notification shall be satisfied by a single mailing or by a single telephone call whether or not the resident requesting notice is actually reached, provided, however, a message shall be left if possible. A mailing list or a telephone directory of neighbors requesting notification shall be kept at the site. A pre-blast contact diary shall be maintained by the Operator at the site including the date of blast, neighbors contacted or attempted to be contacted, and any pertinent remarks. The Operator shall promptly submit a copy of such diary entries to the Town Clerk.
- (f) **Complaints.** The Operator shall maintain a log of all complaints received, whether received directly from residents or from Town officials. Such log will include at least the time and date of the complaint, the name of the complainant, a summary of complaint, and a summary of what, if any, action was taken regarding the complaint. Upon written request of the Town, the Operator shall submit a copy of the complaint log to the Town.
- (g) **Building and Well Inspections.** The provisions below regarding building and well inspections shall apply to all buildings and wells which exist as of the date of the granting of the requested permit and which are located wholly or partially within 1,320 feet from the exterior boundaries of extraction activities at the site.
1. The Operator shall be responsible for the cost of conducting inspections of the eligible buildings to document any existing cracking (repaired or unrepaired) or other conditions which might be alleged to have resulted from blasting. The purpose of such inspections shall be to provide baseline comparative data in the event of any future claims of damage



resulting from blasting. Such inspections shall be conducted by a qualified third-party consultant with substantial expertise and experience in conducting inspections relating to alleged blasting damage.

2. The Operator shall be responsible for the cost of conducting inspections and test on the eligible wells designed to determine and document the static water level, the type and positioning of the pump, the condition of the well, and any contamination. The purpose of such inspections shall be to provide baseline comparative data in the event of any future claims of water table draw-down or other well problems allegedly resulting from operations. Such inspections shall be conducted by a qualified third-party consultant with substantial expertise and experience in determining static water level and assessing well conditions and problems.
  3. Within 45 days prior to blasting, the Operator shall notify each eligible building and well owner in writing of the details of the building inspection and well inspection and testing program. The Operator may, in its sole discretion, update any such building inspection and well inspection from time to time.
  4. The Operator shall promptly notify the Town in writing of any eligible building or well owners who refuse to permit the building inspection and well inspection and testing.
  5. Within 60 days after completion of each building inspection and well inspection and testing, a copy of the inspection and testing report shall be mailed or delivered to the owner and to the Town Chairman.
- (h) **Building and Well Damage Claims.** As an alternative to judicial proceedings, any Owner claiming damage to a building or well as a result of blasting may provide written notice to the Operator and the Town particularizing the nature and the extent of the damage. The Operator shall investigate the claim with 7 days of receiving written notice from the Owner, including any inspection of the alleged damage. The Operator may, in its discretion, retain such experts as it deems necessary and appropriate to investigate the claim and conduct the inspection. Within 7 days of written notice to the Operator, the Operator shall make a written determination as to whether such damage has been caused by the blasting and, if so caused, the amount of compensation to be provided to the Owner. The Operator shall file its written determination with the Town. The Owner shall have 30 days to accept the determination of the Operator and any specific amount of compensation.

If the Owner does not accept the Operator's determination, he shall notify the

Operator of his disagreement in writing within 14 days of receipt of the operator's determination. The Owner may retain such experts as he deems necessary and appropriate to investigate the claim. The Owner shall within 30 days of his election not to accept the Operator's determination, make a written determination as to whether such damage has been caused by the Operator's blasting, and if so caused, the amount of compensation to be provided to the Owner. The Owner shall file its written determination with the Town.

If either party refuses to accept this amount or the determination as to cause, then the parties' experts shall select a third person to investigate and conduct an inspection who shall make a determination as to cause and the amount of compensation within 30 days. The cost related to the third determination shall be paid in equal amounts by both parties.

- (11) **Town Roads.** The operator of any nonmetallic mining site with ingress/egress to a Town Road shall, jointly with the Town Board or its designated agent, establish baseline conditions of the Road prior to the commencement of operations. The Operator shall be required to enter into a Road Maintenance Agreement for subsequent road repair reasonably attributable to the operation. Thereafter, the Operator and the Town Board shall meet to evaluate the condition of the road once every spring and once every fall.

## SECTION 7. FINANCIAL ASSURANCES.

- (1) **Operational Standards.** Following approval of a permit for nonmetallic mining, and as a condition of approval, the operator shall file a financial assurance with the Town of Ellington. The financial assurance shall provide that the operator shall faithfully comply with all applicable operational standards and requirements contained in Section 6. The amount of financial assurance shall not be less than \$250.00 per acre.
- (2) **Private Wells.** Following approval of a permit for nonmetallic mining, any operator subject to the requirements of Section 6 (4) shall file a financial assurance with the Town of Ellington to provide that the operator will faithfully comply with the private well replacement requirement in Section 6 (4-d). The amount of financial assurance shall not be less than \$3,000 per private well.
- (3) **Road Repair.** Following approval of a permit for nonmetallic mining, as a condition of approval, the operator shall file a financial assurance with the Town of Ellington to provide that the operator will faithfully comply with the road repair requirement in Section 7(11). The amount of financial assurance shall not be less than \$10.00 per lineal foot.
- (4) **Form and Management.** Financial assurance shall be provided by the operator and shall

be by a bond or an alternate financial assurance. Financial assurance shall be payable to the Town of Ellington and released upon termination of operations. Alternate financial assurances may include, but are not limited to cash, certificates of deposits, irrevocable letters of credit, irrevocable trusts, established escrow accounts, demonstration of financial responsibility by meeting net worth requirements, or government securities. Any interest from the financial assurance shall be paid to the operator. Certificates of deposit shall be automatically renewed or other assurances shall be provided before the maturity date. Financial assurance arrangements may include, at the discretion of the Town of Ellington, a blend of different options for financial assurance or a combination of financial assurance methods.

**SECTION 8. PLAN OF OPERATION.** Every new site and every existing site as a condition of permit shall submit a Plan of Operation to scale, showing the following information:

- (1) Statement of ownership of the parcel and control of the operation.
- (2) Extent of area to be excavated.
- (3) Location, width and grade of all existing and future easements, right-of-way and access roads to the site and on the site to be used in connection with operations.
- (4) Existing conditions including topography by not less than four-foot contour intervals; existing drainageways and waterways; existing vegetation, and existing buildings and structures on the site.
- (5) Proposed equipment and proposed locations of stationary equipment; proposed berm locations showing height and slope; proposed storage and stockpiling areas; and proposed drainage showing direction and flow of surface water drainage and drainage improvements.
- (6) Not less than two cross sections showing depth of topsoil and subsoil; depth of aggregate; and depth to groundwater.

**SECTION 9. ADMINISTRATION.**

- (1) **Reporting.** In addition to other reporting and submittal requirements herein, upon written request of the Town, a report to the Town shall be submitted with 30 days of the annual anniversary date of the permit. The report shall contain the following information: the depth of operations; any deviations from the plan of operations; and where applicable, groundwater elevations and sample results for groundwater monitoring wells.
- (2) **Nonmetallic Mining Permit.** A town of Ellington Nonmetallic Mining Permit

shall be required for each nonmetallic mining site in the Town of Ellington. An operator of an nonmetallic mining site shall obtain a Town of Ellington Nonmetallic Mining Permit within 60 days of adoption of this Ordinance. A Plan of Operation shall be submitted at the time of permit application. Compliance with the monitoring well requirements and building and well inspections shall be required within 120 days of adoption of this Ordinance.

- (3) **Permit Term and Fees.** A Town Nonmetallic Mining Permit shall run for a term of two years, renewable for subsequent two year terms. The permit fee shall be \$200.00.
- (4) **Violations and Penalties.** Any operator who violates any provision of this Ordinance or fails to comply with any requirement in this Ordinance shall, upon conviction, forfeit not less than \$100.00 nor more than \$500.00 for each offense, together with the cost of prosecution. Each day that a violation continues of a failure to comply exists shall constitute a separate offense.

Adopted and approved this 13 day of August, 2003.

TOWN BOARD CHAIRPERSON

Orville Nelson  
Orville Nelson

TOWN SUPERVISOR

Joseph Schumacher  
Joseph Schumacher

TOWN SUPERVISOR

Gary Egstad  
Gary Egstad

ATTESTED TO:  
TOWN CLERK

Donna Bentle  
Donna Bentle