

## Appendix F - Earth Materials Extraction, Processing and Site Reclamation

### Intent

It is the purpose of this Article to establish regulations and standards for surface mining operations and to provide for conservation and reclamation of lands affected by the surface mining in order to restore them to optimum future productive use consistent with the protection of the public health and the environment.

### Exemption and Exemption Procedure

An owner will be exempt from the requirements of obtaining a Special Use permit pursuant to this Section provided each of the following conditions are satisfied.

1. The surface mining operations are conducted upon a recorded parcel of land not exceeding 2 acres.
2. Less than 10 feet overburden is removed, extracted or processed for the single purpose of improving the agricultural use of that parcel or another parcel in his ownership or that his spouse or children. Agricultural purposes do not include extraction of sand, gravel or limestone.

The owner shall file with and to the satisfaction of the Zoning Enforcement Officer an affidavit that the foregoing conditions are applicable. Such mining operations may be conducted without a hearing before the Planning & Zoning Commission and without approval of the President and Board of Trustees. The Zoning Enforcement Officer shall make available to the owner/operator, the necessary form of application and affidavit and issue a Certificate of Exemption if warranted. This certificate shall not eliminate the need for any other required permits.

### Compliance with State and Federal Regulations

It shall be unlawful for any owner/operator to engage in surface mining in an area where the overburden shall exceed 10 feet in depth or where the operation will affect more than 10 acres during the permit year without first obtaining from the Illinois Department of Mines and Minerals a permit to do so, pursuant to the *Surface-Mined Land Conservation and Reclamation Act. 225ILCS 715/1 et.seq. as amended.*

All owner/operators shall comply with the Regulations of USEPA and any State or Federal regulatory agencies for occupational health and safety and obtain any necessary permits prior to issuance of the Special Use permit. Before the onset of any operations the Zoning Enforcement Officer must be provided with copies of all necessary permits.

## Application

In addition to the information required as part of the special use permit application, the following information is required.

1. Ownership of land.
2. Minerals to be mined.
3. Character and composition of vegetation and wildlife on land to be affected.
4. Current assessed valuation of lands to be affected.
5. Assessed valuation shown by 2 quadrennial assessments next preceding the currently effective assessment.
6. The nature, depth and proposed disposition of the overburden.
7. The estimated depth to which the mineral deposit will be mined.
8. The technique to be used in surface mining.
9. Estimated type and volume of excavation.
10. The equipment proposed to be used.
11. Practices and methods proposed to be used to minimize noise, dust, air contaminants and vibration and to prevent pollution of surface or underground water.
12. The recycling of water used for washing and grading.
13. The proposed usage or drainage of excess water.
14. The simultaneous reclamation plan including methods of accomplishment, phasing and timing.
15. Current and past uses of land.
16. Location of existing roads, and anticipated access and haulage roads planned to be used or constructed in conducting surfacing mining.
17. Location and names of all streams, creeks and bodies of water within lands to be affected.

18. Drainage on and away from the lands to be affected including directional flow of water, natural and artificial drainways and waterways and streams or tributaries receiving the discharge.
19. Royalty fee to be paid to Village on all sand and gravel products.

### **Maps and Plans**

1. The owner/operator shall furnish the Village Clerk with a copy of the aforesaid statements, maps, plans and other related exhibits for review of the reclamation plan no less than 30 days before the Planning & Zoning Commission hearing.
2. The Zoning Enforcement Officer shall prepare a written report and oral statement on the reclamation plan and enter it into evidence at the Planning & Zoning Commission hearing.
3. All surface mining approvals shall expire 10 years from the date they were approved by the Village Board unless the Village President and the Board of Trustees approve a lesser time. At the public hearing with the Planning & Zoning Commission, a time limit will be established in which the operator will complete the mining of the parcel. If mining is not completed at the agreed time, the owner/operator will be required to request a renewal of the Special Use through Planning & Zoning Commission or cease operation. The maximum allowable time limit will be 10 years. The Zoning Enforcement Officer will be responsible for monitoring the operation throughout the life of the operation and Special Use.

### **Renewal of a Special Use**

A renewal of a Special Use shall be for a period of time not more than 10 years.

1. A request to renew a Special Use that involves acreage or equipment, in addition to that allowed in the original Special Use, shall be treated in the same manner as the initial application.
2. A request to renew a Special Use when no additional acreage or equipment will be brought into use shall be handled in the following manner.

If the owner/operator is not able to finish mining the acreage described in the Special Use permit in the time specified, he shall apply to the Planning & Zoning Commission. A public hearing will be held. The maps required by this Ordinance for the initial hearing shall be revised, updated and resubmitted along with a statement of the current status of the mining reclamation. A new map describing conditions present on the site shall be furnished as described in "EXISTING CONDITIONS" of the Standards.

The applicant shall furnish the Village Clerk with a copy of the aforesaid maps, plans and other related exhibits for review of the revised or extended reclamation plan no less than 30 days before the Planning & Zoning Commission hearing.

The Zoning Enforcement Officer shall prepare a written report and oral statement on the revised or extended reclamation plan and enter it into evidence at the Planning & Zoning Commission hearing.

Any application for a renewal of a Special Use under this Section shall be filed with the Planning & Zoning Commission prior to 120 days before the expiration date of the original Special Use or any renewal thereof. A failure to file a request for renewal within the required time designated in this Section shall result in a required cessation of mining and sale of product upon the expiration of the Special Use.

## **Bonds**

All owner/operators shall be required to obtain the proper permits and submit a bond or other acceptable form of surety. If the bond is required by the State the owner/operator shall be required to provide the Village Clerk with a photocopy. A bond will be required by the Village of not less than \$2,500.00 dollars for each acre to be affected. The actual dollar amount will be established during the hearing process with the Planning & Zoning Commission based upon 150% of the engineer's estimate of the cost of reclamation per acre average at the time mining is to be performed. This estimate shall take into consideration inflation of costs in future years. The actual operation shall be monitored by the Zoning Enforcement Officer, and the Officer shall prepare a written report on the progress, before partial or full release of the surety.

The surety shall be held in the Village Clerk. Such bond will remain in effect until the affected lands have been reclaimed in accordance with the reclamation plan and the terms of the allowed are approved by the Zoning Enforcement Officer at the Annual Review of the operation. Land shall not be mined unless a bond for that land has been posted with the Village Clerk. The form and type of surety shall be approved by the Village Attorney. The bond shall be for the surety of completion of reclamation and the initial bond amount shall be set on the anticipated 3 year working basis with reasonable allowance for inflation of costs. Before the end of each 3 year period, the Zoning Enforcement Officer's evaluation of the past work shall be required for release of or reduction of the bond amount for the past 3 year period and at that time, re-bonding shall be established for the next 3 year period or fraction thereof. Before the end of each 1 year period, the Zoning Enforcement Officer's evaluation and the approval of the past years work shall be required for release of or reduction of the bond amount and at the time, rebonding shall be established for the next 1 year period or fraction thereof.

## **Reclamation Regulations**

The reclamation plan map and statement of sequential operation and reclamation shall be followed to produce a finished condition that complies with the reclamation plan map and the provisions of this Section so as to provide for the return to a useful purpose of the affected land.

### **Changing the Reclamation Plan**

In the event that a change in the reclamation plan is necessary due to the unanticipated characteristics of the area concerned, the Zoning Enforcement Officer shall be provided with appropriate documentation, study the proposed change and review them. Changes may be made in the Reclamation Plan upon the mutual consent of the owner/operator and the Zoning Enforcement Officer. The change shall preserve as substantially as possible the original Reclamation Plan, but shall also provide for the previously unknown variables.

### **Finished Conditions**

The finished conditions of all land affected by surface mining shall be:

1. Graded to a rolling topography traversable by machines necessary for maintenance in accordance with planned use, with slopes having no more than 15% grade. In the case of those lands to be reclaimed in accordance with the filed plan for forest plantations, recreation or wildlife, the final cut spoil, the outside slope of the box cut spoil, the outside slope of all overburden deposition area, and the side slopes of haulage road inclines shall not exceed 30% grade; but such slopes need not be reduced to less than the original grade of the overburden of the area prior to mining.
2. Designed to control conditions that could cause erosion on site or on surrounding properties.
3. Designed to eliminate large undrained depressions other than artificial lakes, or depressions designed specifically for erosion control.
4. Designed so that any surface drainage from the property shall leave the property at the original natural drainage points. If this is not possible, the drainage plans must be approved by the Zoning Enforcement Officer as part of the overall submission. Drainage volume shall not be increased over what it would have been if the site was left in its former use and water conservation practices were applied. The finished condition must meet the standards for stormwater retention-detention contained within the Subdivision Ordinance.

5. Covered with arable topsoil to a minimum depth of 6 inches, and shall have a minimum of 10% organic material, except that no greater depth of topsoil or percentage of organic material shall be required than that originally existing on the property prior to commencement of operations.
6. Successfully planted (after replacement of the topsoil) with trees, shrubs, legumes, grasses or ground cover in accordance with the reclamation plan in order to avoid erosion numbers and sizes of plantings should be included in the overall submission.
7. Whenever production and/or procession on any property has been completed, then all processing plants, buildings (other than those shown on the reclamation plan), structures (except fences) and equipment shall be entirely removed from the property within 1 year after completion.

### **Operations and Reclamation Requirements**

The operation and reclamation of extractive product areas shall be in accordance with the following conditions:

1. Existing trees, shrubs, and other types of woody vegetation along road frontages shall be protected and maintained. Weeds and other unsightly noxious vegetation shall be cut or trimmed as may be necessary to present a reasonably neat appearance, to prevent grass fires or hazard of grass fires.
2. No extraction operations shall be conducted in such manner that the groundwater table of surrounding properties is harmfully lowered. Water pumped from the site for the purpose of washing shall be retained in a pond until the silt and clay settles and then the water shall be recycled in the area affected. Groundwater quality shall be monitored and maintained on a regular basis in accordance with acceptable monitoring practices. Groundwater monitoring parameters are established and periodically updated by the McHenry County Board of Health manual entitled "The Manual for Groundwater Monitoring and Protection at Earth Material Extraction Sites". Results of the monitoring shall be made available to the Zoning Enforcement Officer as required.
3. If the subject areas shall front on a village road which is used for access to site, the owner/operator shall, coincidental with commencement of operations, bring that village road up to the paving standards defined for industrial roads in accordance with street standards required in the Subdivision Ordinance, from the entrance to the subject area to the nearest Federal, State or County road used by the operator. The owner/operator shall repair any section of road damaged as a result of gravel hauling operations, but shall not be responsible for the normal wear and tear of the road. This provision shall not be construed to require the operator to purchase

additional right-of-way.

4. All operations shall be conducted in a safe manner, especially with respect to hazards to person, damage to adjacent lands or improvements and wells, and damage to any street by slides, sinking or collapse of supporting soil adjacent to an excavation.
5. The following apply to mining conditions only - not to reclamation conditions:
  - A. Surface mining operations that remove and do not replace the lateral support shall not approach property lines or established right-of-way lines of any public roads, streets or highways closer than a distance of 30 feet unless a lesser distance is mutually agreed to by the operator and adjacent property owner and submitted in writing.
  - B. The bottom of the slope of the mined face of the excavation shall not be closer to the point determined per "A" above, than a distance equal to  $1 \frac{1}{2}$  times the depth of excavation.
  - C. If consolidated materials occur in the mined face, the slope of the face may be steeper than  $1 \frac{1}{2}$  to 1 slope per "B" for the depth(s) of those materials, however all other mined slopes of unconsolidated materials shall be no steeper than those per "B".
  - D. In the case that the right-of-way has not been recently surveyed by a registered land surveyor and clearly marked, the right-of-way line shall be assumed to be, for the purpose of this section, a minimum of 40 feet from the centerline of the road.
6. All active operation shall be contained by an earthen berm of not less than 6 feet in height or a farm fence of not less than 54 inches in height, of such a design so as to allow the free flow of wild animals, but to discourage trespass by humans and farm animals. Berms that will remain in place for 1 year or longer shall be planted with grass, shrubs and trees and maintained as a visual and acoustical screen. They shall be designed so that they do not erode into the road or highway right-of-way or onto the adjoining property.
7. The processing and stockpiling of sand and gravel shall not be conducted within 300 feet of any adjoining residential zoned property line.
8. The hours of operation for all activities other than maintenance functions shall be from 5:00 a.m. to 9:00 p.m. from August 1 until October 31. The rest of the year the hours of operation shall be restricted to 6:00 a.m. to 6:00 p.m.

9. Operations shall be conducted so that noise levels and air and water standards comply with Federal, State and County standards.
10. Access ways and on-site roads shall be maintained in a dust-free condition either by oiling or by spraying with calcium chloride or other products of like effect.
11. The premises shall be neat and orderly, free from junk, trash or unnecessary debris. Buildings shall be maintained in a sound condition, in good repair and appearance. Salvageable equipment stored in a non-operating condition shall be suitable screened or garaged.
12. Enough topsoil must be stockpiles to meet the finished conditions in the reclamation regulations above.
13. At all times, the owner or operator shall take adequate measures to ensure that contaminated surface water run-off shall not enter ponds or other areas of open standing water.
14. The owner or operator shall be responsible to pay for compliance monitoring based on cost.
15. Additional conditions as appropriate for the specific site.

## **Enforcement**

The Zoning Enforcement Officer, in conjunction with other appropriate departments, shall annually review each surface mining Special Use. In addition to the reclamation plan/map; the owner/operator shall provide the Zoning Enforcement Officer with an annual air photo of his total operation, enlarged to a scale of 1 inch equals 100 feet or other scale that would adequately display the property affected on a 30 inch square format. All aerial photos shall meet the Zoning Enforcement Officers standards. The first photo shall be taken during the first year in operation and subsequent photos shall be taken in the same month of the following years. Each year's photo shall be presented at the same scale for the purpose of comparison. Photos shall be submitted prior to the issuance of annual operating permit.

The Zoning Enforcement Officer shall prepare a report and submit it to the Planning & Zoning Commission for their review. If it is determined that the operator is not in compliance with this Ordinance, the Bonding Requirements, the simultaneous operation and reclamation statement or the reclamation plan/map, the Zoning Enforcement Officer shall stop all operations other than reclamation work needed to bring the operation into compliance.

Every 3 years, at the time of annual review, bonding, release of bond and re-bonding shall be checked as specified in the section on Bonds. In addition, the operator shall provide the Zoning Enforcement Officer with topographic survey with 2 foot contours, at the same scale as the air photo, said topographic survey to show status of existing conditions on subject site.

Before release of a bond, an on-site inspection of the acreage reclaimed shall be made by the Zoning Enforcement Officer in conjunction with other appropriate departments to check for compliance with the Reclamation Plan and any conditions of the Special Use. A random count procedure shall be used to check seeding, plantings and depth of topsoil.