

TITLE 62: MINING
CHAPTER I: DEPARTMENT OF NATURAL RESOURCES

PART 300
SURFACE MINED LAND CONSERVATION AND RECLAMATION ACT

SUBPART A: SURFACE MINED LAND CONSERVATION AND RECLAMATION ACT

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AUTHORITY: Implementing and authorized by the Surface Mined Land Conservation and Reclamation Act [225 ILCS 715].

SOURCE: Adopted January 6, 1976; codified at 8 Ill. Reg. 4507; amended at 14 Ill. Reg. 3548, effective February 22, 1990; amended at 20 Ill. Reg. 9546, effective July 1, 1996; recodified from the Department of Mines and Minerals to the Department of Natural Resources at 21 Ill. Reg. 16192; amended at 22 Ill. Reg. 8407, effective April 28, 1998; amended at 23 Ill. Reg. 11231, effective August 26, 1999; amended at 26 Ill. Reg. 4372, effective March 11, 2002; amended at 37 Ill. Reg. 6779, effective May 1, 2013; amended at 41 Ill. Reg. 10490, effective July 28, 2017.

SUBPART A: SURFACE MINED LAND CONSERVATION AND RECLAMATION ACT

Section 300.10 Introduction

a) Authority

This Subpart implements the Surface Mined Land Conservation and Reclamation Act of 1971. This Part applies to all surface mining activity conducted in the State. Any rules previously promulgated pursuant to the Act are declared null and void on January 6, 1976. Upon approval, conditional or unconditional, of the Illinois permanent program by the Secretary of the Interior, the following rules and statutory provisions become inapplicable to operations mining coal: Rules 201-5, 301-2, 401-3, 501-2, 601-2, 701-9, 801-2, 901-2, 1001-2, and 1201-3, and Sections 4, 5, 8, 11, and 12 of the Surface Mined Land Conservation and Reclamation Act. Eight months after the date of such approval, the remainder of this Part shall become inapplicable to operations mining coal.

b) Definitions

Whenever used or referred to in this Subpart, unless a different meaning clearly appears from the context:

"Acid forming materials" means those materials capable of producing toxic conditions when exposed.

"Act" means the Surface Mined Land Conservation and Reclamation Act (the Act).

"Affected land" in addition to the meaning described in the Act means an area of land from which, on or after September 17, 1971, overburden is removed for surface mining or upon which overburden or refuse is deposited. It also means any area of land utilized at surface coal mines for drainage ditches, haulage roads, earth stockpile areas, and borrow pits.

"Amendment" means any request by a holder of a surface mining permit issued by the Department to the Department to change such permit by adding or transferring acreage within a geographically distinct mining site covered by that permit. This definition shall not be construed to include an alteration or correction of an application for a permit under Section 300.20(e)(3) of this Part.

"Area coal strip mines" means those mines whose operations involve more than five cuts in an unmined topography with slopes less than 20% grade.

"Boxcut" means the first open cut which results in the placing of overburden on unmined land adjacent to the initial pit and normally outside of the area to be mined.

"Consolidated materials" means materials of sufficient hardness or ability to resist weathering and to inhibit erosion or sloughing.

"Department" means Department of Natural Resources, or such department, bureau, or commission as may lawfully succeed to the powers and duties of such Department.

"Director" means the Director of the Department of Natural Resources or such officer, bureau, or commission as may lawfully succeed to the powers and duties of such Director.

"Final cut" means the last pit created in a surface mined area.

"Geographically distinct mining site" means pit or pits associated with the same processing plant, which have similar soil types, vegetation, topography and land uses.

"Gob" means that portion of refuse consisting of waste coal, rock, pyrites, slate, or other unmerchantable material of relatively large size which is separated from the mineral in the cleaning process.

"Haulage road" means the area upon which the mined mineral is moved by truck or other vehicles from the pit to either a preparation plant, or to the nearest public road whenever a preparation plant is not used; but, in no case, shall this definition be construed to include a public road.

"Highwall" means that side of the pit adjacent to unmined land.

"Interested persons" means any individual, partnership, corporation, association, or public or private organization which has made a timely request to the Director for notice with respect to a public hearing under Section 5(f) of the Act. This definition shall be construed to include any county board which is entitled to notice under the Act or this Part.

"Operator" means any person, firm, partnership, or corporation engaged in and controlling a surface mining operation, and includes political subdivisions and instrumentalities of the State of Illinois.

"Overburden" means all of the earth and other materials which lie above natural deposits of coal, clay, stone, sand, gravel, or other minerals, and also means such earth and other materials disturbed from their natural state in the process of surface mining.

"Permit period" means the period of time from the date of issuance of the surface mining permit until the tenth succeeding June 30 or until the termination date on the permit, if said date will occur prior to the tenth succeeding June 30.

"Pit" means a tract of land, from which overburden has been or is being removed for the purpose of surface mining.

"Reclamation" means conditioning areas affected by surface mining to achieve the purpose of the Act and rules made pursuant thereto.

"Record" means, in the case where a hearing is held, that compilation of information presented to the Department in the matter, including, but not limited to, the transcript of any hearing and any prehearing conference held, submissions and documents, the original application for permit and other pertinent materials; in the case where no hearing is held, "record" means that compilation of information presented to the Department in the matter.

"Refuse" means all waste materials directly connected with the cleaning and preparation of minerals mined by surface mining and discarded equipment and machinery.

"Slurry" means that portion of refuse separated from the mineral in the cleaning process, consisting of fines and clays in the preparation plant effluent, and which is readily pumpable.

"Surface mining" means the mining of any minerals by removing the overburden lying above natural deposits thereof, and mining directly from the natural deposits thereby exposed, or the deposition of overburden therefrom.

"Surface mining permit" means a permit, granted by the Department, to engage in surface mining.

"Toxic conditions" means any conditions that will not support higher forms of plant or animal life in any place in connection with or as a result of the completion of surface mining.

(Source: Amended at 26 Ill. Reg. 4372, effective March 11, 2002)

Section 300.20 Permits

- a) Who Must Apply For a Permit
 - 1) A surface mining permit shall be required where:
 - A) Overburden exceeds 10 feet in depth, or
 - B) Where the surface mining and overburden area will affect more than 10 acres during the period of one year which shall be measured from July 1 to June 30 of the following year.
 - 2) Gob refuse disposal areas and slurry ponds created or laterally extended in conjunction with surface mining operations for which a permit is necessary as described in (a)(1) above shall be required to have Gob Refuse Disposal Permits or Slurry Pond Refuse Disposal Permits issued by the Department.
- b) How to Calculate Affected Acreage
 - 1) In order to calculate affected acreage for permit purposes under the Act and this Part, land shall be counted as being affected only one time during the life of a bond, and said land shall be affected during the permit period it is initially mined or converted to refuse disposal use.

- 2) "Affected land," following reclamation and release of bond, shall be considered to revert back to its original character as unmined land and should an application be made to reopen or remine the same land or a portion thereof, the same land shall be governed by the provisions of the Act as if such land never before had been mined or affected.
- c) Types of Permits
- 1) The following types of permits shall be issued by the Department:
 - A) Surface Mining Permit
 - B) Gob Refuse Disposal Permit
 - C) Slurry Pond Refuse Disposal Permit
 - 2) No operator who holds a permit to engage in surface mining by this Department may create or extend gob piles or slurry ponds for refuse disposal without a permit for such gob refuse or slurry pond refuse issued by the Department upon conditions consistent with the Act and this Part.
- d) Where and How to Apply For a Permit
- 1) Applications, notices, and other communications under the Act and this Part shall be:
 - A) delivered to an authorized representative of the Surface Mined Land Reclamation Division of the Department, or
 - B) addressed to:

Illinois Department of Natural Resources
Office of Mines and Minerals
One Natural Resources Way
Springfield, Illinois 62702-1271
 - 2) For purposes of the Act and of this Part, applications, notices, and other communications shall be deemed to have reached the Department on that day when it is actually received by the Department or an authorized representative of the Department.
 - 3) All forms submitted to the Department shall be executed by the operator, or his authorized representative.
 - 4) A separate permit shall be required for each geographically distinct mining site.
 - 5) A separate application shall be submitted for each type permit.

- 6) Applications for permits shall be submitted on official forms provided by the Department.
- e) Validity Period of a Permit; Mandatory Action by the Department; Alterations and Corrections to Applications; Penalties for Failure to Comply
 - 1) Validity Period of a Permit
 - A) A surface mining permit shall be effective from the date of its issuance until the tenth succeeding June 30, or until the termination date on the permit if said date will occur prior to the tenth succeeding June 30.
 - B) A gob refuse disposal permit shall be valid from the date of issuance for the active life of the disposal area.
 - C) A slurry pond refuse disposal permit shall be valid from the date of issuance for the active life of the disposal area.
 - 2) Mandatory Action by the Department; Notice of Later Decision
 - A) The Department shall take final action on an application and plan within 120 days after the date of the filing of an application for a permit under Section 300.60(a) of this Part. If no action on an application is taken by the Department within this time period, the permit applied for is deemed to be granted and the reclamation plan submitted with that application is deemed to be approved. But, if the Department gives written notice to the applicant that it will taken action later than 120 days after the date of the filing of an application for a permit, then the permit applied for is not deemed to be granted and the reclamation plan is not deemed to be approved when the 120 day period elapses.
 - B) In the event the Department gives written notice of a later decision (other than for a correction or alteration to an application as provided for in Section 300.20(e)(4)) the Department shall establish a reasonable time for the final action.
 - 3) Applications for Refuse Disposal Permits

Applications for Refuse Disposal Permits are subject to the same requirements of the Act and this Part as are applicable to the applications for Surface Mining Permits, except as may otherwise be specifically provided by the Act or this Part.

4) Alterations or Corrections to Applications for Permits

The Department may from time to time require an applicant to alter or correct his application. Such requirement shall be in writing to the applicant and such written communication to the applicant shall be considered to be notice of a later decision under subparagraph (e)(2)(A) of this Section. A copy of such written requirement shall be sent by first class mail to the County Clerk at the county seat of each county containing lands to be affected under the permit applied for, with directions that such copy be forwarded to the residence of the presiding officer of the county board or commissioner. After such alteration or correction is made by the applicant, is received by the Department, and is deemed satisfactory to the Department, the 120 day period begins again, less the number of days between the date of filing of the application for a permit and the date of notice given by the Department.

5) Penalties for Failure to Comply

Anyone who engages in surface mining or any of its related activities without a permit as required by the Act and this Part is subject to the penalties set forth in the Act and in this Part.

(Source: Amended at 26 Ill. Reg. 4372, effective March 11, 2002)

Section 300.30 Fees

a) Fees Generally

Each application for a permit shall require a separate fee payment. Permit fees are not to accompany the application. After receipt of the application, the Department will request the permit fee before issuance of the permit. The fee shall be in the form of a check made payable to the Illinois Department of Natural Resources, Office of Mines and Minerals.

b) Permit Fee Calculation

1) Surface Mining Permit

The fee for a surface mining permit shall be \$150 for every acre and fraction of an acre of land to be permitted. The permit fee shall only be paid once on an acre of land regardless of the number of permit periods it is mined, but, with respect to areas where the overburden is to be removed again and upon which the surety bonds have been released, a new permit, fees and bond will be required.

2) Refuse Disposal Permits

The fee for a gob refuse disposal permit and for a slurry pond refuse disposal permit shall be calculated in the same manner as the fee to engage in surface mining. The permit fee shall only be paid once on an acre of land regardless of the active life of a disposal area.

(Source: Amended at 37 Ill. Reg. 6779, effective May 1, 2013)

Section 300.40 Bonds

a) Bonds Generally

Bonds shall be in keeping with the Act and this Part. Each application for a permit shall require a separate bond. Bonds shall be issued to coincide with the permit period.

b) Bond Calculation

The amount of bond required to be filed with the Department before any surface mining or refuse disposal permit is issued shall be from \$600 to \$10,000 per acre or fractional part thereof, the exact amount to be determined by the Director after considering the various factors relating to the predictable reclamation cost.

Under circumstances in which a written agreement between the operator and a third party requires overburden to be removed, replaced, graded and seeded in a manner that the necessary bond penalty exceeds \$10,000 per acre, the Department shall require a bond amount sufficient to ensure the completion of the reclamation plan specified in the approved permit in the event of forfeiture. In no case shall the bond for the entire area under one permit be less than \$600 per acre or \$3,000, whichever is greater. The Director shall notify the applicant of the amount of the bond which must be filed by the applicant before a permit will be issued.

c) Definitions

- 1) Bond means surety bond or other security in lieu thereof.
- 2) Surety bond means an indemnity agreement in a sum certain payable to the Department, executed by the permittee as principal and supported by the performance guarantee of a corporation licensed to do business as a surety in Illinois.
- 3) Other security means an indemnity agreement in a sum certain executed by the permittee as principal that is supported by the deposit with the Department of one or more of the following:
 - A) A cash account, which shall be the deposit of cash in one or more federally-insured or equivalently protected accounts, payable only to the Department upon demand, or the deposit of cash directly with the Department;
 - B) Negotiable government securities, endorsed to the order of, and placed in the possession of, the Department;
 - C) An irrevocable letter of credit of any bank organized or authorized to transact business in Illinois, payable only to the Department upon presentation;

- D) Certificates of deposit, drawn on a federally insured bank, made payable or assigned to the Department and placed in its possession.
- d) Bond Requirements
- 1) Form
- Bonds required to be filed with the Department shall be in such form and content as the Director prescribes, payable to the "People of the State of Illinois".
- 2) Conditions Generally
- A) Each bond shall conform with the requirements of the Act and this Part and with the declared purpose for which the application for the permit is filed. The bond shall be in the amounts prescribed by the Act and established by the Director governing that declared purpose and the proposed area affected.
- B) Bonds shall remain in effect until the affected lands have been reclaimed, approved and released by the Department, pursuant to the Act and this Part.
- 3) Surety Bond Requirements
- A) Bonds shall be signed by the operator as principal, and by a good and sufficient corporate surety, approved by the Director and licensed to do business in Illinois as surety.
- B) Each surety bond shall provide that the bond shall not be cancelled by the surety except after not less than 90 days' notice to the Department. The notice shall be served upon the Department in writing by registered or certified mail to the following address:
- Illinois Department of Natural Resources
Office of Mines and Minerals
One Natural Resources Way
Springfield, Illinois 62702-1271
- C) Not less than 10 days prior to the expiration of the 90 days' notice of cancellation, the operator must deliver to the Department a replacement bond. If the bond is not delivered, all surface mine operations and use of slurry ponds and gob disposal areas by that operator must cease. The replacement bond shall be accompanied by a letter from the bonding company acknowledging the bond is in lieu of a formerly cancelled bond and identifying the dates of the permit period the bond is to cover.

- D) If the license to do business in Illinois of any surety upon a bond filed with the Department shall be suspended or revoked, the operator, within 30 days after receiving notice of the suspension/revocation from the Department, shall substitute for any surety a good and sufficient corporate surety approved by the Director and licensed to do business in Illinois as a surety. Upon the failure of the operator to make the substitution of surety, the Department shall have the right to suspend the permit of the operator until substitution has been made.
- 4) Other Securities Requirements
- A) Letters of credit shall be subject to the following conditions:
- i) The letter may only be issued by a bank organized or authorized to do business in the United States (issuing bank). If the issuing bank does not have an office for collection in Illinois, there shall be a confirming bank designated that is authorized to accept, negotiate and pay the letter upon presentment in Illinois.
 - ii) Letters of credit shall be irrevocable during their terms. A letter of credit used as security in areas requiring continuous bond coverage shall be forfeited and shall be collected by the Department if not replaced by other suitable bond or letter of credit at least 30 days before its expiration date.
 - iii) The letter of credit shall be payable to the Department upon demand, in part or in full, upon receipt from the Department of a notice of forfeiture issued in accordance with Section 300.170.
 - iv) The letter of credit shall provide on its face that the Department, its lawful assigns, or the attorneys for the Department or its assigns, may sue, waive notice and process, appear on behalf of, and confess judgment against the issuing bank (and any confirming bank) in the event that the letter of credit is dishonored. The letter of credit shall be deemed to be made in Sangamon County, Illinois, for the purpose of enforcement and any actions on the letter of credit shall be enforceable in the Courts of Illinois, and shall be construed under Illinois law.

- B) Certificates of deposit shall be subject to the following conditions:
 - i) The Department shall require that certificates of deposit be made payable to or assigned to the Department, both in writing and upon the records of the bank issuing the certificates. If assigned, the Department, shall require the banks issuing these certificates to waive all rights of setoff or liens against those certificates.
 - ii) The Department shall not accept an individual certificate of deposit in an amount in excess of \$100,000 or the maximum insurable amount as determined by the Federal Deposit Insurance Corporation (FDIC) or the Federal Savings and Loan Insurance Corporation (FSLIC).
- C) Cash accounts shall be subject to the following conditions:
 - i) The Department may authorize the permittee to supplement the bond through the establishment of a cash account in one or more federally-insured or equivalently protected accounts made payable upon demand to, or deposited directly with, the Department.
 - ii) Any interest paid on a cash account shall be returned to the permittee.
 - iii) The Department shall not accept an individual cash account in an amount in excess of \$100,000 or the maximum insurable amount as determined by the FDIC or the FSLIC.
- e) Request for Bond Review
 - 1) During the term of the permit, and until all bond has been released, the permittee, the county board of each county containing lands affected, or a municipality with legal jurisdiction over the permit area through an annexation or pre-annexation agreement with the permittee, may submit a written request to review the Department's required bond amount and calculations upon which the bond amount was based.
 - 2) The Department shall notify the permittee, county board and municipality whenever a request for bond review has been received. It shall be the permittee's responsibility to accurately identify in the permit application any applicable municipality with legal jurisdiction, pursuant to Section 300.50(a)(16).

- 3) Based upon review of the bond calculation, if the permittee, county board or municipality believes the bond amount to be inadequate or excessive, it may present written information to the Department in support of its position. That information must be based upon site specific conditions and supported by sound technical data, including, but not necessarily limited to, engineering cost estimates for earthmoving, grading and revegetation. All information submitted will be made available to the permittee, county board and municipality.
- 4) The Department shall render a written decision on each request for bond review within 60 days after receipt of all information specified in subsection (e)(3), and shall provide a copy of its decision to the permittee, county board and municipality. The Department's decision concerning the bond review request must be based upon site specific conditions and supported by sound technical data, including, but not necessarily limited to, engineering cost estimates for earthmoving, grading and revegetation. If the Department makes the determination that the bond amount is inadequate or excessive, the bond shall be adjusted in accordance with Section 8 of the Act.
- 5) The Department will make any site specific information in its possession available to the permittee, county or municipality upon request, with the exception that confidential information submitted by the permittee pursuant to Section 5(e)(15) of the Act may not be released to the county or municipality.
- 6) The Department's written decision on a request for bond review shall be considered the final agency action, and the permittee, county or municipality may request judicial review of that decision in accordance with the Administrative Review Law [735 ILCS 5/Art. III].

(Source: Amended at 41 Ill. Reg. 10490, effective July 28, 2017)

Section 300.50 Permit Application Requirements

a) General Requirements

Each geographically distinct mining site and refuse disposal area shall require a separate permit application, which shall be accompanied by a United States Geological Survey Topographical Map outlining the acreage to be affected and adequately showing the land surrounding the acreage to be affected. Each application for a permit, and each amendment to an application for a permit, shall be submitted to the Department pursuant to the Act and to this Part and shall contain the following items (subject to waiver by the Director with respect to amendments to applications as provided for in the Act):

- 1) a statement of the ownership of the land and of the ownership of the minerals to be mined;
- 2) a list of the minerals to be mined; or from which the refuse was derived;
- 3) the character and composition of the vegetation and wildlife on the lands to be affected;
- 4) the current and past uses of the lands to be affected;
- 5) the current assessed valuation of the lands to be affected and the assessed valuation shown by the 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) the location and names of all streams, creeks, bodies of water and underground water resources within the land to be affected;
- 10) drainage on and away from the lands previous to being affected during mining and after mining and reclamation is completed including directional flow of water, natural and artificial drainage and waterways, and streams or tributaries receiving the discharge;
- 11) the location of buildings and utility lines within lands to be affected;
- 12) disclosure of the forfeiture or notice of forfeiture of any reclamation bond or reclamation security filed by the applicant or any operator related to the applicant, with this state or any other state, agency of state government or unit of local government. For the purposes of this subsection (a)(12), "operator related to the applicant" means:
 - A) any person, corporation or entity, directly or indirectly controlling, controlled by or under common control of the individual or corporate applicant, or
 - B) any officer or director of an entity or corporation performing similar functions with respect to another entity, corporation or person related to the individual or corporate applicant;
- 13) the results of core drillings of consolidated materials in the overburden when required by the Department, provided that the Department may not require core drillings at the applicant's expense in excess of one core drill for every 25 acres of affected land;

- 14) a detailed soil map of medium intensity prepared by Soil Conservation Service, U.S. Department of Agriculture, which shows the kind and extent of soils to be affected by coal surface mining during the forthcoming permit period. This requirement may be waived by the Director upon the written request of the applicant filed with and at the time of application, which request verifies that:
 - A) such a map is either not in existence or not readily available, and
 - B) to have such a map prepared or made available would necessitate an undue delay.

In the event that the requirement for this map is waived, the applicant shall submit a comparable map approved by the Director. Operators of aggregate mines are not required to submit this map;

- 15) the desired effective date of the permit; and
- 16) the name, address, contact person and phone number of any municipality with legal jurisdiction over the proposed permit area through an annexation or pre-annexation agreement.

AGENCY NOTE: As provided for in the Act, information respecting the minerals to be mined, respecting the estimated depth to which the mineral deposit will be mined, and respecting the results of core drillings if required by the Department shall be held confidential by the Department upon the written request of the operator.

b) Reclamation Plan and Map

- 1) Each application for a permit, and each amendment to an application for a permit, submitted to the Department under the Act and this Part, shall contain a conservation and reclamation plan for each geographically distinct mining site or refuse disposal site to be affected during the permit period. Included with the plan shall be maps of the area to be affected (with the same scale as recommended in Section 300.160(d) of this Part) designating which parts of the lands shown are to be reclaimed for:
 - A) forest;
 - B) pasture;
 - C) crop;
 - D) horticultural;
 - E) homesite;

- F) recreational;
 - G) industrial; or
 - H) other uses, including food, shelter and ground cover for wildlife.
- 2) The reclamation plan, together with the reclamation maps shall:
- A) provide for timely compliance with all operator duties as set forth in Section 6 of the Act and this Part by feasible and available means; and
 - B) provide for storage of all overburden and refuse.
- c) Copies Required

Each application for a permit, and each amendment to an application for a permit, shall be submitted to the Department in duplicate.

(Source: Amended at 26 Ill. Reg. 4372, effective March 11, 2002)

Section 300.60 Role of County Government in Reclamation

- a) Notice, Date of Application, Responsibilities of County Clerks

The application for surface mining permit, except those portions of such application which have been kept confidential at the request of the applicant, which request was made pursuant to Section 5(e)15 of the Act, and the proposed conservation and reclamation plan and maps shall be made available in duplicate for public inspection and for consideration by the county board within whose jurisdiction said lands will be affected by surface mining. The applicant shall deliver copies of the applications, plans, and maps to the county clerk at the county seat of each county containing lands to be affected prior to filing the application, plan, and map with the Department. The county clerk shall retain one (1) such set of copies and forward forthwith one (1) set of copies to the residence of the presiding officer of the county's board or commission by registered mail return receipt requested. An acknowledgement that the copies have been received and forwarded as prescribed, bearing the signature of the county clerk or his representative, as set forth in amended MLCR Form 1a, shall be filed with the Department at the time of filing the application for a permit. This application shall be filed, as provided for in Section 300.20(d) of this Part, immediately upon receipt of this acknowledgement. The date of the filing of the application for a permit shall be the same date as the date of the acknowledgement by the county clerk pursuant to this Section.

- b) Time for Hearings; County Board Plans
- 1) The Department shall hold a public hearing regarding a proposed conservation and reclamation plan if any county board with which the plan is filed pursuant to the Act and to this Part requests such a hearing. The county board must request a hearing within forty-five (45) days of the filing of the application for a permit. If a county board requests a hearing, the Department will fix the time and place of the hearing. In cases where no public hearing is held on a proposed plan, the Department will consider written testimony from county boards when submitted no later than forty-five (45) days following the filing of the application for a permit. The Department shall immediately serve copies of such written testimony on the applicant and give the applicant a reasonable opportunity to respond by written testimony.
 - 2) The county board may propose the use for which lands covered by a plan are to be reclaimed. The county board must file such proposal with the Department and the applicant within forty-five (45) days of receiving the plan. If the county board does not request a hearing within forty-five (45) days of receiving the plan but does submit a proposal, the Department will not hold a hearing. If the county board submits a proposal but has not requested a hearing, the Department will allow the applicant to submit written comments on the proposal and will allow the county board to make a written reply to such comments.
 - 3) A county board may file with the Department a written waiver of its rights to request a hearing or to propose the use for which lands are to be reclaimed.
 - 4) The county board may supplement or amend its proposal prior to the hearing if it has given to the applicant, the Department and interested persons ten (10) days written notice prior to the hearing which notice shall state the changes proposed.

Section 300.70 Departmental Consideration of Reclamation Plans

- a) Approval of Plans

The Department shall approve a conservation and reclamation plan if the plan complies with the Act and this Part, and if the completion of the plan will in fact accomplish every duty required of the operator. The Department's approval of a plan shall be based on the advice of technically trained foresters, agronomists, economists, engineers, planners and other relevant experts having experience in reclaiming surface mined lands. The Department shall consider the view filed by the county board in writing with the Department. The Department shall consider the short and long term impact of the proposed mining on:

- 1) vegetation;
 - 2) wildlife;
 - 3) fish;
 - 4) land use;
 - 5) land values;
 - 6) local tax base;
 - 7) economy of the region and of the State;
 - 8) employment opportunities;
 - 9) air pollution;
 - 10) water pollution;
 - 11) soil contamination;
 - 12) noise pollution;
 - 13) drainage.
- b) Alternative Land Uses
- The Department may consider feasible alternative land uses for which reclamation might prepare the affected land and may analyze the relative costs and effects of those alternatives.
- c) Notice
- The Department shall send notice of any hearing to be held pursuant to Section 5 of the Act to the applicant, the county board, all interested persons who have requested, in writing, notice with respect to that particular parcel of land to be affected by the application and plan, and to the principal newspapers, television and radio stations serving the area. The Department will publish notice of the hearing in a newspaper of general circulation within the county. The notice will be sent not less than 10 nor more than 35 days prior to the date fixed for the hearing.
- d) Hearing Officer
- 1) The Department will appoint a hearing officer to conduct the hearing. The hearing officer shall not reside or have an office within the county and shall be either a State employee or a licensed attorney. The hearing officer

shall conduct a fair hearing and shall take all necessary action to avoid delay, to maintain order, and to develop a clear and complete record.

- 2) He shall have all powers necessary to these ends, including but not limited to the power to:
 - A) Rule upon motions and requests consistent with the law and this Part;
 - B) Change the time and place of the hearing and adjourn the hearing from time to time or from place to place within the county of the affected lands and to give due notice of such action consistent with the notice requirement of subsection (c) of this Section;
 - C) Administer oaths;
 - D) Examine and cross-examine witnesses and direct witnesses to testify;
 - E) Admit or exclude evidence on the issues;
 - F) Hear oral argument on the facts or the law; and
 - G) Require prior submission of expert testimony in writing, require prior submission of exhibits, and make such orders as appropriate to preserve the right of cross-examination with respect thereto.
- e) Prehearing Conferences
 - 1) The hearing officer, on his own motion, or on the motion of any applicant or interested party, the Department or the county board, or representatives of same, may direct all such entities or their representatives to appear at a specified time and place for a conference for:
 - A) The simplification of the issues;
 - B) Obtaining stipulations and admissions of fact;
 - C) The identification and, if practicable, the scheduling of witnesses to be called;
 - D) If appropriate, the advance submission at the prehearing conference by any applicant or interested person, the Department or county board of documentary evidence to be marked for identification. All evidence thus submitted shall be marked for identification. When portions only of a document are to be relied

upon, the offering party shall prepare the pertinent excerpts thereof, adequately identified, and shall supply copies of such excerpts together with the original document to the hearing officer for examination and study by all other parties;

- E) Such other matters as may aid in the fair, orderly and expeditious disposition of the proceeding.
- 2) The hearing officer may, following a prehearing conference, issue an order setting forth the agreements reached by the parties or representatives, the schedule of witnesses, and a statement of issues for the hearing. Such order shall control the subsequent course of the proceeding unless modified for good cause by subsequent order. Notwithstanding any provision of this subsection, witnesses may present testimony and other material may be introduced and received as evidence at the hearing, so long as such testimony or other evidence is otherwise admissible under the Act and this Part.
- f) Hearing Procedures
 - 1) The applicant shall appear at any hearing held pursuant to a request of the county board. The Department through its representatives shall appear at any such hearing.
 - 2) Any applicant, the Department or interested persons may be represented by an authorized officer, employee, or other representative. All such entities and the county board shall have the right to be represented by counsel.
 - 3) The hearing officer may allow the county board, the applicant, and any interested persons to make an opening statement or closing argument. The county board, the applicant, the Department, and any interested persons shall have the right to cross-examine witnesses.
 - 4) Where necessary in order to prevent undue prolongation of the hearing, the hearing officer may limit the number of times any witness may testify, may limit repetitious or cumulative testimony, and may establish reasonable limits on the amount of time each witness may testify. The hearing officer shall establish a time period during which members of the public shall be heard. Every effort will be made to allow all such persons who wish to make a statement to do so within the discretion of the hearing officer.
 - 5) A verbatim transcript of the hearing shall be maintained by a reporter appointed by the Department, and shall constitute a part of the record. Copies of the transcript shall be furnished upon request at cost.

- 6) If an applicant, county board or interested person objects to the admission or rejection of any evidence or to any other ruling of the hearing officer during the hearing, he shall state briefly the grounds of such objection. The transcript shall not include argument or debate on an objection except as ordered by the hearing officer. The ruling of the hearing officer on any objection shall be a part of the record. No interlocutory appeal may be taken from any ruling of the hearing officer.
 - 7) The record shall remain open for rebuttal statements for 10 days following the close of the hearing, or for such other reasonable time as the hearing officer may direct.
- g) Admission of Evidence
- 1) The hearing officer may, insofar as practicable, exclude evidence which is immaterial, irrelevant, or unduly repetitious.
 - 2) If relevant and material evidence is contained in a report or document containing immaterial or irrelevant matter, such immaterial or irrelevant matter shall be excluded and shall be segregated insofar as practicable, subject to the direction of the hearing officer.
 - 3) Whenever evidence is excluded from the record, the party offering such evidence may make an offer of proof, which shall be included in the transcript. The offer of proof shall consist of a brief statement describing the evidence to be offered. If the evidence consists of a brief statement or affidavit, or an exhibit, it shall be inserted into the transcript in toto. In such event, it shall be considered a part of the transcript if the Department decides that the hearing officer's ruling in excluding the evidence was erroneous.
 - 4) Any relevant and material documentary evidence shall be received in evidence, including affidavits, published scientific articles, and official documents, regardless of whether or not the affiant, author, or maker is available for cross-examination. Where any such evidence is admitted without cross-examination, or where cross-examination is limited for any purpose by the hearing officer, the Department shall consider the extent to which an opportunity for cross-examination was provided in determining the weight to be accorded evidence appearing in the record.
 - 5) If the Department relies on any report or other document in its consideration of the application, not admitted into evidence at a hearing, nor submitted to the Department pursuant to the Act and this Part in a situation where no hearing is held, the Department will include a copy of such document in the record.

- h) Decision of the Department
- 1) The Department shall approve a reclamation plan and issue the permit applied for, if it determines that such plan best complies with the Act and this Part in all respects. The Department's decision with respect to such plan shall be based upon the record. Nothing in the Act or in this Part shall be construed as preventing the Department or its representatives or any hearing officer appointed pursuant to the Act and this Part from taking administrative notice of any fact, law, rules or regulations commonly known, but not formally introduced or otherwise made a part of the record with respect to such plan.
 - 2) Whenever the Department does not approve the applicant's plan, or whenever the plan approved by the Department does not conform to the views of the county board expressed in accordance with Section 5(f) of the Act, the Department will issue a statement of its reasons for its determination and will make such statement public. A copy of this decision and statement shall be mailed by the Department to the applicant and to the county clerk of each county containing land to be affected by registered mail return receipt requested. The county clerk shall forward such decision and statement to the presiding officer of such county board by registered mail return receipt requested. The Department's action with respect to any plan and permit application shall be deemed to occur on the day the Department mails such decision and statement to the applicant and county clerk.
- i) Modification of a Reclamation Plan After Denial of an Application For Permit Under Subsection (h)

If an application for permit is denied pursuant to subsection (h), the applicant may submit a modified reclamation plan as part of its original application within 10 days after the Department's issuance of its decision and statement of its reasons for such decision. Such modified plan shall be submitted in writing to the county board of each county containing land to be affected, as provided for in the Act and in Section 300.60(a) of this Part. The county board shall have 10 days from the date of the filing of such modified plan with the Department to direct written testimony and documentary evidence regarding such modified plan to the Department. If the Department determines that the modified plan best complies with the Act, this Part and the terms of the previous decision and statement on the original plan, it shall approve the reclamation plan and issue the permit applied for to the applicant. The Department's decision with respect to such modified plan shall be based on the original record of the hearing on the plan and on the written submissions allowed for under this subsection.

(Source: Amended at 26 Ill. Reg. 4372, effective March 11, 2002)

Section 300.80 Public Filing of Approved Plans

a) Where to File

The approved reclamation plan shall be filed by the operator in duplicate with the clerk of each county containing lands to be affected, and such plan shall be available for public inspection at the office of the clerk until reclamation is completed and the bond is released in accordance with the provisions of the Act and this Part. Upon receipt of the approved reclamation plan, the county clerk shall forward one (1) copy to the presiding officer of the county's board or commission.

b) Proof of Filing

Proof of filing the approved reclamation plan and the prescribed forwarding of same shall be submitted to the Department by an acknowledgement to said effect bearing the signature of the county clerk or his representative, as set forth in amended MLCR Form 1b.

Section 300.90 Amendments to Permits

a) Surface Mined Affected Lands

1) Amendment to Increase Affected Acreage

An operator may make application to amend his surface mining permit to include additional acreage at any time during the permit period. The fee for such an amendment to a permit shall be at a rate per acre consistent with the prescribed rate for the new total estimated acreage to be affected and such fee shall be submitted upon request by the Department. The additional bond or security which shall be required, if such an amended permit is granted shall be at a rate per acre consistent with the Act and Section 300.40(b) of this Part. The Director shall notify the applicant of the amount of the additional bond or security to be filed and the additional fees to be submitted by the applicant before the amended permit will be issued.

2) Amendment to Transfer Acreage Under Permit Within a Geographically Distinct Mining Site

An operator may make application to amend his surface mining permit by requesting to transfer acreage from within an area under permit to another area outside the permit area but within the same geographically distinct mining site at any time during the permit period. Upon approval of the Department, such amendment shall be allowed without additional fees except as may be provided elsewhere in this subsection.

- 3) Requirements for Amendments to Permits Under Subsections (a)(1) and (a)(2)

Any application for an amendment to a surface mining permit allowed under subsections (a)(1) and (a)(2) of this Section shall be governed by those provisions of the Act and this Part that apply to applications for a surface mining permit. Such provisions and rules shall include, but are not limited to, provisions and rules concerning notice to county boards, dates of application, responsibilities of county clerks, times for hearings, county board proposals, and Departmental consideration of reclamation proposals and recommendations generally.

- 4) Request to Reduce Affected Acreage

An operator may make application to withdraw acreage covered by permit, except affected land, at any time during the permit period. Upon approval by the Department, the bond shall be reduced proportionally but there shall be no refund of fees.

- b) Amendments to Permits for Refuse Disposal Lands

An operator may make application to increase acreage or to transfer acreage under permit within a geographically distinct disposal site at any time during the permit period for the Slurry Pond Disposal Permits or for Gob Refuse Disposal Permits. An application for an amendment shall be made in the fashion referred to in subsection (a)(3). The fee for an amendment to a permit to increase acreage shall be at a rate per acre consistent with the prescribed rate for the new total estimated acreage to be affected, and the fee shall be submitted upon request of the Department. The additional bond or security which shall be required, if an amended permit is granted, shall be at a rate per acre consistent with the Act and Section 300.40(b) of this Part. The Director shall notify the applicant for the amount of the additional bond or security to be filed and the additional fees to be submitted by the applicant before the amended permit will be issued.

(Source: Amended at 26 Ill. Reg. 4372, effective March 11, 2002)

Section 300.95 Transfer of Permits

- a) An operator may transfer any existing permit to a second operator, after first notifying the Department of the intent to transfer the permit.
- b) The Department shall transfer any existing permit to a second party upon written notification from both parties and the posting of an adequate performance bond by the new permittee, in accordance with Section 300.40.

(Source: Added at 26 Ill. Reg. 4372, effective March 11, 2002)

Section 300.100 Reclamation Planning

a) Statement

- 1) It shall be the responsibility of the Department to encourage operators to consider the advantages of:
 - A) long range reclamation planning, and
 - B) multiple land use planning.
- 2) Long range reclamation planning means determining several years in advance of mining a tract of land how and for what purpose the acreage to be affected by such mining will be reclaimed after mining operations are completed on that tract of land. Multiple land use means reclaiming a tract of land for several different but compatible purposes. For example, a tract of land may be reclaimed on various different portions of the acreage to be affected for the following purposes:
 - A) use as a pasture for farm animals;
 - B) use as a recreational area for fishing and picnicking; and
 - C) use as a means of providing food and ground cover for wildlife through the use of trees and shrubs.
- 3) The Department shall encourage operators to consult with local and regional planning organizations, as well as local units of government, for advice and assistance in reclamation planning. The Department shall cooperate fully with operators who demonstrate a desire to develop a comprehensive reclamation program for future mined acreage. A long range reclamation program cannot be approved by the Department except insofar as such program is a part of an application for a surface mining permit, but the Department shall offer opinions as to the feasibility of comprehensive reclamation programs as developed for a specific tract of land upon the request of an operator.

b) Determining Uses For Which to Reclaim Land

On all lands to be affected the operator, in consultation with competent authorities, shall determine which parts of the affected land shall be reclaimed for forest, pasture, crop, horticultural, homesite, recreational, industrial, or other uses including, but not limited to, food, shelter, and ground cover for wildlife. Site conditions and soil capabilities shall be the determining factors when selecting the type of reclamation for a particular area. It is recommended that a trained technician capable of conducting soil sample analysis be consulted.

Section 300.110 General Reclamation Requirements

- a) Time Requirement For Completion of Reclamation
 - 1) All reclamation provided for in the Act and this Part shall be carried to completion by the operator prior to the expiration of 3 years after active use, as determined by the Department.
 - 2) Exceptions

When extension of the reclamation period is necessary to allow continued mining operation otherwise permitted by the Act and this Part, or to accomplish acceptable reclamation, such request for extension shall be justified in writing to the Department. It shall be within the discretion of the Department to grant such extension consistent with the Act and this Part. If lands are not satisfactorily reclaimed and if the Department shall deny request for an extension of the reclamation period, the Department shall declare forfeiture of the surety bond or security on such land not satisfactorily reclaimed or, in the alternative, the Director shall provide that the operator cover such areas within one year with material capable of being vegetated in accordance with vegetative standards adopted by the Department.
- b) Grading Requirements
 - 1) Fifteen Percent Requirement

All land affected by surface mining, except as otherwise provided for in the Act and this Part, shall be graded to a rolling topography traversable by machines necessary for maintenance in accordance with planned use. Such slopes shall have no more than a 15% grade.
 - 2) Exceptions to Fifteen Percent Requirement
 - A) The grade shall not exceed 30% on any of the following:
 - i) lands to be reclaimed to forest plantation or recreational or wildlife land uses;
 - ii) the outside slopes of all overburden deposition areas; and
 - iii) the outside slopes of all box cut spoil areas.
 - B) The final cut spoil and the side slopes of haulage road inclines can remain at a slope equal to the angle of repose of the material, provided the material can support vegetative cover.
 - C) In no case shall the Department require grading to a lesser slope than the original grade of the overburden existing prior to mining.

3) Terrace Requirement

Where acceptable soil conservation practices make it advisable to do so, the Department shall require operators, consistent with Section 300.130 of this Part, to terrace reclaimed lands for the prevention of excessive erosion.

4) Highwalls, except those created by the aggregate mining industry, shall be reshaped to a maximum slope of two-to-one or 50% to the anticipated water level or dry pit bottom unless otherwise excepted by the Director.

c) Land Not Requiring Reclamation

In cases where pools or lakes capable of supporting aquatic life may be formed by rainfall or drainage runoff from adjoining land, the depressed haulage roads or final cuts or any other area to be occupied by pools or lakes, if approved by the Department, shall not require any further reclamation. Where the Director determines that a road, dry pit bottom or ditch is consistent with and necessary to the conservation and reclamation plan for an area, no further reclamation shall be required.

d) Land to be Reclaimed For Row-Crop Agriculture

- 1) When the Director determines that the land to be affected is capable of being reclaimed for row-crop agricultural purposes and suitable for row-crop agricultural purposes based on United States Soil Conservation Service soil survey classifications of the affected land prior to mining, and when the Director determines that the optimum future use of the land affected is for row-crop agricultural purposes, the affected land shall be graded to the approximate original grade of the land and all or part of the darkened surface soil, as defined in the Act, shall be segregated during the stripping process and replaced as a final cover as a last step in the required grading. When available in such depth, at least 18 inches of the darkened surface soil shall be segregated and replaced. When less than 18 inches of darkened surface soil exists all such lesser amounts shall be segregated and replaced. In no case shall less than the top 8 inches of surface soil, darkened or not, be segregated and replaced. This segregation and replacement requirement may be altered by the Department only if it is determined upon the advice of competent soil scientists that other material available in the case overburden would be suitable in meeting the reclamation requirements. Below the darkened surface soil the replaced material shall be suitable as an agricultural root medium. The Department shall determine by rules what constitutes a suitable agricultural root medium by composition and depth. On all lands to be reclaimed the operator shall not be required to create a soil condition better than that which existed prior to surface mining.

- 2) Slope classifications of lands before mining are:
 - A) 0%-2%;
 - B) 2%-5%;
 - C) 5%-10%.
- 3) Approximate original grade means the grading of affected lands that were originally of the subsections (d)(2)(A) and (2)(B) slope classifications to a maximum slope not to exceed 5% slope with a planned erosion control system approved by the Director for 3%-5% slopes.
- 4) Approximate original grade means the grading of affected lands that were originally of the subsection (d)(2)(C) 5%-10% slope to a maximum slope not to exceed 10% and shall have a planned erosion control system approved by the Director.
- 5) Planned terrace systems, when utilized as part of a planned erosion control system, shall be constructed according to U.S. Department of Agriculture Natural Resources Conservation Service specifications.
- 6) Slopes on all affected lands shall be measured from the drainage divide to the base of the slope or to the intermittent water course as the lowest point. Abrupt slope changes between these points are not acceptable except for unusual conditions such as ditches, terraces, and roads.
- 7) The length of slope and contour of the restored surface shall be conducive to those farming operations normally associated with row-crop production. Farming operations as used here shall include such measures or practices necessary to provide adequate drainage and erosion control for sustained row-crop production.
- 8) The materials under the darkened surface soil suitable as a root medium shall contain no more than 20% coarse material greater than 2mm in size by volume. No more than half of the coarse material may be between 3 inches and 10 inches in the greatest dimension. No fragments shall be greater in size than 10 inches in the greatest dimension. In no case may clay material of less than 2 microns be greater than 40% by weight.
- 9) These texture requirements do not apply if the soil conditions of the affected land prior to mining did not meet the standards included herein (i.e., if more than 20% coarse material by volume existed in the root medium below the darkened surface soil prior to mining, the same percentage of coarse material in the root medium will be allowed after mining; if more than 1/2 of the coarse material consisted of rocks in the 3-10 inch size category prior to mining, that same percentage will be permitted after mining and if more than 40% by weight of clay materials

less than 2 microns in size existed in the root medium below the darkened surface soil prior to mining, a like percentage by weight will be allowed after mining in the material under the darkened surface soil).

- 10) In addition to meeting texture requirements, the materials under the darkened surface soil must be chemically suitable as an agricultural root medium. Materials suitable as an agricultural root medium shall be of a vertical thickness adequate, including the darkened surface soil, to ensure a total depth of 4 feet. Pyritic material capable of producing toxic acidic conditions shall not be incorporated within the surface 4 foot layer of finally graded lands.
- 11) The Director may alter the slope and texture requirements under this subsection only upon a clear and convincing showing that to vary such requirements would better effectuate the purposes of the Act than would enforcing the standards therein.
- 12) Location of texture compliance samples will be determined by random methods similar to those described in Section 300.120(b)(2)(B)(i) of this Part and texture analysis shall be determined by methods as subscribed by the Department.
- 13) The final cut and submerged roadways may remain if the Department determines that such final cut or roadway would form a water impoundment capable of supporting desirable uses such as water for livestock or wildlife; and if to be used for fish life, shall have minimum depths in accordance with standards for fish stocking as recommended by the Department. All impoundments and structures must be included in the reclamation plan for approval or disapproval by the Department. The boxcut spoil shall be graded in accordance with Section 6 of the Act, and with this Part.

e) Water Impoundments

All runoff water shall be impounded, drained, or treated so as to reduce soil erosion, damage to unmined lands and the pollution of streams and other waters. The operator shall construct, in accordance with Section 300.150 of this Part, earth dams, where lakes may be formed, in accordance with sound engineering practices if necessary to impound waters, provided the formation of the lakes or ponds will not interfere with underground or other mining operations; other subsequent uses of the area approved by the Department; or damage adjoining property. Such water impoundments shall be approved by the Department based on the expected ability of the lakes or ponds to support desirable aquatic life and shall have minimum depths in accordance with standards for fish stocking in the various areas of the State recommended by the Department.

f) Covering Toxic Materials

Acid forming materials present in the exposed face of the mined mineral seam or seams shall be covered with not less than 4 feet of water or other materials, which shall be placed with slopes having no more than 30% grade, capable of supporting plant and animal life. Final cuts or other depressed affected areas, no longer in use in mining operations, which accumulate toxic waters will not meet reclamation requirements.

g) Vegetative Cover Essential

Unless the approved reclamation plan is inconsistent with vegetative cover, the soil shall be prepared and planted with trees, shrubs, grasses and legumes to provide suitable vegetative cover, in accordance with standards adopted by the Department and as set forth in Section 300.120 of this Part.

h) Minimum Distance of Excavation to Public Right-of-Ways and Adjacent Property Owners

Surface mining operators that remove and do not replace the lateral support within a 3 month period shall not, unless mutually agreed upon, by the operator and the adjacent property owner, approach property lines, established right-of-way lines of any public roads, streets or highways closer than a distance equal to 10 feet plus 1 1/2 times the depth of the excavation except where consolidated materials or materials of sufficient hardness or ability to resist weathering and to inhibit erosion or sloughing exists in the highwall, the distance from the property line or any established right-of-way line shall not, unless mutually agreed, be closer than a distance equal to 10 feet plus 1 1/2 times the depth from the natural ground surface to the top of the consolidated material or materials. When the operator desires to remove the lateral support and replace it within a 3 month period, the operator shall submit to the Department a written request for that purpose, outlining how the lateral support shall be replaced within 3 months. The request shall be approved or denied by the Department within 30 days.

i) Planting Stock Unavailable

If the operator is unable to acquire sufficient planting stock of desired tree species from State nurseries or acquire those tree species elsewhere at comparable prices, the Department shall grant the operator an extension of time until planting stock is available to plant such land as originally planned, or shall permit the operator to select an alternate method of reclamation in keeping with the provisions of the Act and with this Part.

j) Removal of Abandoned Haulage Roads and Mine Drainage Ditches

All abandoned haulage roads and all mine drainage ditches shall be removed and graded, except where the Director determines that a road or ditch is consistent with and necessary to the conservation and reclamation plan.

k) Land Fill Requirements

The reclamation requirements under Section 6 of the Act and this Part do not apply to affected land use for a land fill if the land fill is approved by the Environmental Protection Agency. The Environmental Protection Agency may regulate the amount of land to be used for that purpose and may establish a time schedule for the orderly and timely completion of the land fill. Any affected land designated for a land fill and not used for that purpose within 5 years is subject to the reclamation provisions of Section 6 of the Act and this Part.

(Source: Amended at 26 Ill. Reg. 4372, effective March 11, 2002)

Section 300.120 Criteria For Types of Land Reclamation

a) Reforestation

1) Minimum Stocking Standard

Five hundred (500) living trees per acre will be the minimum standard for acceptable stocking after one (1) growing season. In this text the term "trees" will include acceptable shrubs. Survival counts may be made after the second growing season if requested by the operator. In such a case, four hundred fifty (450) living trees per acre will be the minimum standard for acceptable stocking after the second growing season.

2) Sampling Procedure to Determine Stocking

Determine the average spacing between planted rows and between trees within rows. From this calculate the number of planting spots per acre (and for the area to be examined) as shown below:

$$\frac{43,560}{\text{Spacing between rows (feet) X Spacing between trees in row (feet)}} = \text{planting spots/acre}$$

A) Determine the number of planting spots that must be examined to constitute a ten percent (10%) sample.

B) Plot four (4) randomly selected lines across the area, perpendicular to the planted tree rows. All planted species will be taken into consideration. Based on the number of rows across a given area, determine the number of rows that must be examined for the ten percent (10%) sample, assuming that ten (10) or twenty (20) planting spots will be examined along each row.

- C) Locate a series of transects perpendicular to, and balanced along the random lines as shown in Illustration A. The transect's width will extend on either side of a planted row halfway to the adjacent rows. Each planting spot on the transect will be examined and if a living tree, either planted or an acceptable volunteer, occurs then that spot will be tallied as "living" on a tally meter. If no such living trees occur, tally the spot as "dead" on another tally meter. A planting spot will be considered as a rectangle defined by the transect boundaries and extending along a row from a given planted tree halfway to adjacent planted trees. After transect tallies have been completed calculate the Percent Survival as follows:

$$\frac{\text{Number of Planting Spots With Live Trees of Acceptable Species}}{\text{Number of Planting Spots With Live Trees of Acceptable Species PLUS Number of Planting Spots With Dead Trees or No Trees or Unacceptable Species}} = \text{Percent Survival}$$

- D) Volunteer species that are acceptable or unacceptable will vary for different parts of the State, with compatibility of species, and with soil and site conditions. Acceptability will be based on decisions made by the reclamation technician engaged in an examination of a given site.
- E) The number of acceptable live trees per acre can be calculated by multiplying the percent survival times the number of planting spots per acre.
- F) Both temporary and permanent water and roads will be omitted from the sampling area.
- G) Openings, or failed spots, larger than one-quarter (1/4) acre will be identified on the plan map by the examiner and will not be approved until replanted and the minimum stocking standard attained.

b) Pasture or Crop

- 1) Rates of seeding per acre and cultural methods shall be governed primarily by those suggested in Bulletin 628, "Reclaiming Illinois Strip Coal Land With Legumes and Grasses," University of Illinois Agricultural Experiment Station, or by other research or successful experience with pasture or meadow seedings on Illinois or similar mined lands.
- 2) Top quality seed shall be used and it is suggested that seed be used bearing the official state tag giving the purity and germination. Legume seed shall

be properly inoculated. Seeding methods, fertilization, weed, insect and disease control shall be in accordance with established methods.

A) Minimum Establishment Standards

A sixty-five percent (65%) stand of seeded legumes and/or perennial grass shall be required in August through October of the seeding year or an eighty-five percent (85%) stand shall similarly be required the year following seeding. If an eighty-five percent (85%) stand is not achieved the year following seeding, the area shall be reworked and reseeded. If approved by the Director in advance, planting to grain or other crops on suitable land shall meet the requirements.

B) Stand Sampling Procedure

Percent (%) stand shall be determined as follows:

- i) Twenty (20) points shall be selected in the seeded area. The approximate points shall be determined on an aerial photograph by placing a grid over the area on the photograph so that one hundred (100) or more intersections fall in the seeded area. Twenty (20) of the intersections shall be selected using appropriate tables of random numbers. These points in the field shall be located within one hundred (100) feet from the photograph. The exact point shall be decided by throwing some object without looking. Bare areas will not be avoided.
- ii) A twenty (20) foot engineer's measuring tape shall be extended directly south of a selected point.
- iii) Whether or not seeded grasses and legumes occur in each two-tenths (.2) foot segments along the tape shall be recorded. If a plant or any part of a plant occurs in a segment that segment shall be considered to have vegetative cover.
- iv) Percent vegetative cover shall be the number of two-tenths (.2) foot segments along the twenty (20) foot tape that have seeded vegetation.

c) Recreational Developments

- 1) Each area, regardless of the primary land use to be emphasized, should be individually appraised taking into account all factors to ensure potential recreational development and use. It is understood that in those cases where primary use is to be recreation, developments will include only

requirements necessary to establish the completed base for a fully operational recreation area. However, all proposals for recreational development shall clearly delineate the potential for a functional operation and plan of maintenance.

- 2) Areas may be highly variable in size depending on the type and combination of different activities considered possible, as well as the projected population of users.
 - A) Grading of Displaced Overburden
 - i) One (1) acre out of ten (10) is to be graded so as to be reasonably level and adequately drained. Such graded areas should be distributed in keeping with planned use.
 - ii) All areas for recreation shall reflect minimal grading requirements (maximum of thirty percent (30%) slope) as specified in Section 6A of the Act.
 - B) Access
 - i) Maintainable roads shall be established to provide access to lakes and parking sites associated with areas planned for possible future development under the basic recreational plan.
 - ii) Actual location of such roads are to make accessible all portions of the area within a distance not to exceed one-half (1/2) mile and planned so as to connect such roads with all graded acreages. (Refer to subparagraph (c)(2)(A)(i) of this subsection (c).)
 - C) Revegetation
 - i) A minimum of thirty percent (30%) of the total land area shall be planted to trees or shrubs which will maximize wildlife populations and/or contribute to the scenery of the area. These must meet the stand requirements established for reforestation.
 - ii) All other land not planted to trees and shrubs shall be seeded to grasses and/or legumes of greatest value to wildlife and which reflect those species considered adaptable to the region as well as which might be most appropriate for the planned recreational use. Stand requirements must be equivalent to those established for pasture.

D) Miscellaneous

- i) A recreational plan should emphasize use of the existing water. For areas where recreation is to be the primary use, unless endowed with other exceptional attributes, these should contain not less than five percent (5%) of its total area with acceptable water (at least eight (8) feet deep and three (3) acres in size; seven to ten percent (7%-10%) is preferable). These waters must be stocked with fish in accordance with recommendations by the Division of Fisheries, Illinois Department of Natural Resources.
- ii) Bodies of water, irrespective of size and depth, are desirable for various wildlife and hence should be provided, wherever feasible, with plans for development and management.
- iii) All aspects of game propagation and management shall be in accordance with recommendations by the Division of Wildlife Resources, Illinois Department of Natural Resources.
- iv) Exceptions to regulations should allow for interesting and challenging deviations from the more traditional plans for recreation development so as to permit development of certain scenic or landscaping opportunities, planned sites of isolation, or interesting and unusual hiking and riding trails. Further, exceptions are in order so as to encourage best integration of recreational developments as a part of the total land use concept such as when an area rejects agricultural or forestry as the dominant use. Such exceptions, however, shall not violate the requirements established by the Act with reference to grading and revegetation.
- v) Recreational development for water filled quarries, sand excavation, etc., shall include adjacent lands sufficient to permit sites for parking and access. Landscaping shall be so planned as to provide publicly acceptable environments. Where deemed feasible by the divisions of Fisheries and Wildlife Resources, Illinois Department of Natural Resources, fish stocking and game propagation and management shall be included in the plan for development and maintenance.

Section 300.130 Reclamation of Gob Disposal Areas and Outside Slopes of All Overburden Deposition Areas

a) Temporary Gob Refuse Areas

Gob disposal areas that will be covered with four (4) feet of earth material capable of supporting vegetation within a four (4) month period are exempt from surety bond. The operator shall request permission for the commencement of such a program and keep the Department advised of locations and progress should permission be granted. Establishment of a refuse area without approval shall be considered a violation.

b) Erosion Control and Vegetation

The slopes of new or laterally extended gob piles and outside slopes of all deposition areas shall be treated with appropriate vegetation and water disposal practices to prevent erosion of the slopes, exposing toxic materials and the deposition of sediment below.

c) Covering

Gob piles not capable of supporting vegetation shall be covered a minimum depth of four (4) feet with soil material capable of being vegetated and an acceptable cover shall be established.

d) Slopes

The outside slope of all overburden deposition areas and gob piles shall not be steeper than thirty percent (30%).

e) Vegetative Treatment for Gob Disposal Areas

- 1) Reforestation – Five hundred (500) trees will be the minimum standard for acceptable stocking and shall be determined by the method described in Section 300.120(a). A nurse crop of oats, rye, rye grass or similar species is suggested to minimize erosion.
- 2) Pasture – An eighty-five percent (85%) stand of seeded legumes and/or perennial grass shall be required in August through October of the seeding year. Areas not meeting the standard shall be reworked and reseeded.
- 3) Mulching – is suggested at a rate of two (2) tons of hay or straw per acre. Mulch should be anchored with asphalt or mulch net.

f) Vegetative Treatment

Vegetative treatment for outside slopes of overburden deposition areas shall meet the standards as established in either Section 300.120(a) or Section 300.120(b).

g) Engineering Procedure For Erosion Control and Water Disposal

Appropriate water disposal practices, such as diversions and terraces, unless excepted by the Director, shall be applied. These structures will be vegetated as described in subsection (e) above.

1) Terraces – Slopes having a vertical height greater than forty (40) feet shall have a terrace constructed at the mid-point of the slope. On slopes having a height greater than eighty (80) feet, two (2) such terraces will be installed at equal intervals. Other methods of interrupting the outside slope of unconsolidated deposition areas, having a height exceeding forty (40) feet, may be approved by the Director where such measures will effectively control erosion of the slope and sediment deposition on surrounding areas.

A) Size – Terraces shall have a minimum top width of twelve (12) feet and a minimum depth of one and five-tenths (1.5) feet. The channel may be parabolic, V-shaped, or trapezoidal. The ridge shall have a minimum top width of three (3) feet at the design depth and shall have side slopes not steeper than three-to-one (3:1). They shall be large enough to carry the design flow of the outlet at a safe velocity (see Illustration B).

B) Slope – Terraces and channels will have a minimum average slope of two-tenths (.2) feet per one hundred (100) feet to provide drainage to the outlets.

C) Outlets – Closed conduit or other acceptable structural outlets shall be provided at the lowest point in the terrace profile to collect and conduct the water stored in the terrace to a stable outlet. The capacity of the outlets shall be such that the available storage in the terrace and the outlet release shall be sufficient to control the twenty-four (24) hour, ten (10) year frequency runoff without overflow from the terraces. The outlet must be capable of releasing the stored water in a twenty-four (24) hour period. These requirements may be met by providing the storage and outlet capacities shown in Table A.

TABLE A
Water Storage – Outlet Capacity

Storage Provided (Watershed Inches)	Minimum Outlet Capacity (cfs per acre of watershed)
Greater than 2.0	0.1
1.0 to 2.0	0.2
0.5 to 1.0	0.4
0.3 to 0.5	1.0
Less than 0.3	2.0

AGENCY NOTE: One (1) acre-inch released in twenty-four (24) hours equals forty-two thousandths (0.042) cfs.

- 2) Water Disposal Above Slopes –
 - A) The top of the spoil areas shall be away from the outer slope.
 - B) The top of gob piles shall be shaped to provide storage for excess rainfall and conduits shall be installed to conduct the collected water to adequate outlets. The entire area shall be uniformly graded to carry all water to satisfactory outlets. The storage area and outlets shall be sufficient to control the twenty-four (24) hour, ten (10) year frequency runoff without flowing over the outer slope. These requirements may be met by providing the outlet and storage capacities, as described under subparagraph (g)(1)(C) above, "Terrace Outlets."

- 3) Diversions – Diversions shall be constructed at the base of all outside deposition areas having a height greater than forty (40) feet to divert the water from the slopes to areas where it can safely be disposed of.
 - A) Capacity – Diversions must have the capacity to carry the peak runoff from a twenty-four (24) hour, ten (10) year frequency storm with a free board of not less than five-tenths (0.5) feet.
 - B) Cross Section – The channel may be parabolic, V-shaped, or trapezoidal. The diversion shall be designed to have stable side slopes not steeper than three-to-one (3:1). The ridge shall have a minimum top width of three (3) feet at the design depths. The cross sectional area and the slope shall be such that the design discharge can be safely carried at a non-erosive velocity.
 - C) Outlets – Each diversion must have an adequate outlet. The outlet may be grassed waterway, vegetated area, grade stabilization structure, or stable water course.

- 4) Closed Conduits or Other Acceptable Structural Outlets For Terrace and Storage Area Outlets
- Closed conduit or other acceptable structural outlets shall be designed for a minimum fifty (50) year life. Materials meeting appropriate ASTM's and Commercial Standards shall be selected for this purpose. Materials selected shall be consistent with the corrosive nature of the materials in which they are placed. They shall be strong enough to withstand the loads due to fill and settlement.
- A) Size – The minimum size of closed conduits will be four (4) inches.
- B) Intakes –
- i) Where the amount of water stored is less than five-tenths (0.5) watershed inches, an intake or riser extending above the ground shall be included to direct the flow into the underground outlet.
- ii) The intake shall be of sturdy construction and securely connected to the outlet conduit. The minimum height of the inlet shall be eighteen (18) inches. Openings shall be placed in the inlet from the ground level to the top to permit flow to enter and restrict the entrance of trash. Openings shall be slots one (1) inch wide and four (4) inches high, or shall be the equivalent. Openings shall be sufficiently numerous to pass the required flow even when some are obstructed. Where less than five-tenths (0.5) watershed inches of storage are provided, the outlets shall be sized as full-flow structures having appropriate inlets at the entrance. If a large number of storage areas will be emptied with a common underground outlet, overtopping of lower storage areas may occur if the same conduit size is used throughout. This should be prevented by providing appropriate conduit sizes, grades, or restricting devices at inlets, to prevent pressure flow in the outlets.
- C) Outlet Protection – Where the flow from the outlets will cause erosion at the discharge point, riprap or other suitable protection will be provided.
- D) Installation – The pipe conduit or other acceptable structural outlet shall be placed on a firm foundation to the lines and grades shown on the plans. The width of the pipe trench shall be a minimum of two and five-tenths (2.5) diameter of the pipe. The bottom of the trench shall be shaped to receive one-sixth ($\frac{1}{6}$) of the periphery of the pipe. The trench shall be sloped on a minimum of one-to-one

(1:1). Selected backfill material shall be placed around the pipe in six (6) inch (maximum) layers and each layer shall be thoroughly compacted by hand-held compactors. Compaction equipment, such as a sheepsfoot roller, shall not be used within two (2) feet of the pipe. The area over the pipe shall be crowned a minimum of three (3) inches to provide for settlement.

Section 300.140 Reclamation of Slurry Pond Disposal Areas

Screening Vegetation Engineering Practices

Slurry must be confined in depressed mined areas or areas bounded by levees or dams constructed from material capable of supporting acceptable vegetation and built in accordance with sound engineering practices. Such areas shall be screened with border plantings of tree species which by their seeding habits will encourage propagation of vegetation to these areas, and levees or dams built to confine slurry shall be established to adapted species of grasses. The stand requirements shall meet the standards established in Section 300.120(b). Levees and dam construction methods are described in Section 300.150.

Section 300.150 Water Impoundment Structures

a) Dams

- 1) This Section establishes the minimum acceptable standards for the design and construction of water impoundment structures under the Surface Mined Land Conservation and Reclamation Act when failure of the structures would not result in loss of life; in damage to homes, commercial or industrial buildings, main highways, or railroads; or in interruption to the use or service of public utilities.
- 2) The standards established here are applicable to structures where the vertical distance between the lowest point along the centerline of the dam and the top of the dam does not exceed thirty (30) feet. For structures in excess of this height a registered engineer in the State of Illinois shall prepare the necessary plans and specifications as required by the Department.

b) Site Conditions

The maximum practical use of good sites shall be encouraged including the multiple use of the stored water, and possible future needs for additional water during the effective life of the structure.

- 1) Depth of Water – The minimum depth for impoundment water shall be in accordance with standards established by the Department of Natural Resources for fish stocking, except when such impoundments are to be used in connection with water treatment or industrial use only.
- 2) Foundation –
 - A) The soil on which an embankment is to be placed shall consist of material that has sufficient bearing strength to support the embankment without excessive consolidation. The foundation shall consist of relatively impervious material which will prevent excessive passage of water.
 - B) The foundation area shall be cleared of all trees, stumps, roots, brush, boulders, sod, and debris. All channel banks and sharp breaks shall be sloped to no steeper a ratio than one-to-one (1:1). All topsoil containing excessive amounts of organic matter shall be removed. The surface of the foundation area shall be thoroughly scarified, moisture adjusted to facilitate compaction and completed in accordance with the requirements for the embankment, before placement of the embankment material. Cutoff trenches shall be used except in cases which are exempt by the Department. When used, a cutoff trench shall be excavated to a more impervious material underlying the base of the embankment and shall be backfilled with suitable material as specified for earth embankment, subparagraphs (d)(5) below.
- c) Design Criteria

Site conditions shall be such that the design storm runoff, as indicated under this subsection, can be safely passed through spillways provided.

 - 1) Principal Spillway – The following are the minimum requirements for the principal spillway:
 - A) Drainage area ten (10) acres or less – A minimum of a four (4) inch diameter smooth or six (6) inch diameter corrugated metal pipe shall be provided. A well vegetated earth spillway may be approved by the Department as a principal spillway provided it is properly designed to convey the peak flow to a stable grade to a minimum point ten (10) feet past the toe of the embankment.
 - B) Drainage area ten to thirty (10-30) acres – A pipe conduit spillway is required. The minimum pipe size shall be six (6) inch smooth or eight (8) inch corrugated metal pipe.

- C) Drainage area thirty to two hundred fifty (30-250) acres and all areas having a potential of creating a hazard to life or property -- A registered engineer in the State of Illinois shall prepare the necessary plans and specifications as required by the Department.

2) Pipe Conduits and Outlets

- A) The outlet pipe shall discharge the peak flow to a stable grade to a minimum point ten (10) feet past the toe of the embankment. The following pipes are acceptable: cast iron, wrought iron, steel, asphalt coated corrugated metal, and concrete. All pipe joints shall be made watertight by the use of watertight couplings or gaskets, or by welding or caulking. Concrete pipe shall meet the requirements of ASTM specification C-76 or equivalent and shall be laid in a concrete bedding or cradle. Corrugated pipe shall be at least sixteen (16) gauge and smooth steel shall be at least three-sixteenths (3/16) inch in thickness. All pipe shall be capable of withstanding the external loading.
- B) The pipe conduit barrel shall be placed on a firm foundation to the lines and grades shown on the plans. Selected backfill material shall be placed around the conduit in six (6) inch layers and each layer shall be thoroughly compacted by means of hand-held tampers.
- C) The flowline of the outlet and of the pipe shall be at least two (2) feet, but not more than four (4) feet, above the flowline of the outlet channel. The outlet shall be placed on an earthen berm or timber or concrete support. If the pipe diameter exceeds twelve (12) inches and the grade downstream is unstable, a timber or a concrete prop shall be provided. All pipes thirty (30) inches or larger and all pipes discharging continuous or prolonged flows shall be propped. Protection shall be provided to prevent the development of a scour hole which will undermine the pipe or its support. Stability checks, when required, shall be based on maximum pipe discharge. Although "propped" outlets are in most common usage, "standard," "flared," or "Saint Anthony Falls (SAF)" outlets are also acceptable when the grade below is stable.

3) Anti-Seep Collars

Concrete or metal anti-seep collars shall be installed around the pipe conduit within the normal saturation zone. The anti-seep collars and their connections to the pipe shall be watertight. Sufficient collars shall be provided to increase the length of seepage along the pipe by twenty percent (20%). The length of seepage along a collar shall be taken as two (2) times the minimum projection of the collar measured perpendicular to

the pipe. The upstream collar shall be placed ten to fifteen (10-15) feet from the inlet of the conduit. Additional collars shall be spaced at not greater than twenty-five (25) feet intervals.

4) Trash Guards

Where necessary to prevent clogging of the conduit, an approved type of trash guard shall be installed at the inlet or riser.

d) Earth Embankment

1) Top Width – The minimum top width of the embankment shall be eight (8) feet for embankments less than ten (10) feet in height and twelve (12) feet for embankments between ten to twenty (10-20) feet in height. For embankments exceeding twenty (20) feet in height, a registered engineer shall prepare the plans and specifications as required by the Department.

2) Side Slopes – The upstream slope shall be no steeper than two and five-tenths (2.5) horizontal to one (1.0) vertical, and the downstream slope shall be no steeper than two (2.0) horizontal to one (1.0) vertical. The combined upstream and downstream side slopes of the settled embankment shall not be less than five (5) horizontal to one (1) vertical.

3) Freeboard – The minimum elevation of the top of the settled embankment shall be three (3.0) feet above the water surface in the reservoir with the principal spillway flowing at design depth.

4) Allowance for Settlement – Allowance for settlement shall be made throughout the design. The height of the embankment shall be increased by the amount needed to insure that the design top elevation shall be maintained after all settlement has taken place. This increase shall be not less than ten percent (10%). Ordinarily, any point on the constructed slopes should not vary from the planned slope by more than one (1) foot horizontally or six (6) inches vertically.

5) Placement of Fill –

A) The material placed in the embankment shall be free of sod, roots, frozen soil, and other objectionable material. All acid producing material must be excluded from the embankment.

B) The placing and spreading of the embankment material shall be started at the lowest point of the foundation and brought up in approximately nine (9) inch horizontal layers. Each layer shall be thoroughly compacted as required by the Department by controlled movement of equipment. The moisture content of embankment material shall be such that compaction can be obtained with the equipment used.

- C) The distribution and gradation of materials throughout the embankment shall be such that there will be no lenses, pockets, streaks, or layers of material differing substantially in texture or gradation from the surrounding material. The most impervious material shall be used in the center portion of the fill.
 - D) A protective cover shall be established on all exposed surfaces of the embankment, spillway, and borrow areas. It is recommended that top soil be placed on the back slope and the front slope above the water line and on the top of the fill to facilitate the establishment of vegetation. The earth fill and spillway areas will be fenced to exclude livestock unless excepted by the Director of the Department.
- 6) Foundation Cutoff (Core-Trench) –
- A) A cutoff of relatively impervious material shall be provided under the embankment except when an impervious base such as a haulage road forms the foundation. In this case the foundation shall be adequately scarified and recompacted. The cutoff, when used, shall extend along the centerline of the embankment and its abutments as required and be deep enough to extend into a relatively impervious layer. The layer of impervious material shall be thick enough to provide stability.
 - B) The cutoff shall have a bottom width and side slopes adequate to accommodate the equipment used for excavation, backfill, and compaction operations. The side slopes shall not be steeper than one (1) horizontal to one (1) vertical. The cutoff shall be backfilled with suitable material. Compaction, as required by the Department, shall be obtained by controlled movement of equipment. The trench, if feasible, shall be kept free of standing water during backfill operations.
- 7) Embankment Drains – Where toe drains are used, they should be placed one-half (1/2) the distance from downstream toe of fill and the centerline of fill. Drains are strongly recommended when the embankment or its foundation consists of highly permeable soils and/or embankments greater than twenty (20) feet high.
- e) Levees
- 1) Levees are constructed to confine slurry within a designated area.

- A) Conditions Where Practice Applies: Areas bounded by levees shall be such that practical and economical construction, accessibility and maintenance can be obtained. Mineral soils which are stable in levee embankments shall be used for construction. The use of organic soils is not permissible.
- B) Design Criteria: The design and installation shall be based on engineering surveys and investigations.

2) Height –

- A) The design height of the earth levee shall be equal to the sum of the requirements for deposit of slurry, allowance for wave height, freeboard, and settlement. Estimates of wave heights shall be based on local experience, or on hydraulic studies. A pipe outlet of a size acceptable to the Department shall be installed with a minimum difference in elevation of three (3) feet between the lowest point on the rim of the levee and the invert of the outlet pipe. In no case shall the final elevation of slurry or water level on the slurry pond be closer to the lowest point on the rim than three (3) feet.
- B) The allowance for settlement shall be based on consideration of the properties of the soil material and the anticipated compaction but shall be not less than ten percent (10%) of the design height.

3) Cross Section –

- A) A maintenance road shall be constructed and maintained on top of all levees. The minimum requirements for the cross section of the levees shall be as follows:

Design Slurry Height Feet	Minimum Top Width Feet	Steepest Side Slope Feet
0-10	12	2:1
10-25	12	2½:1
Over 25		

- B) (A registered engineer in the State of Illinois shall prepare plans and specifications as required by the Department.) Side slopes of three-to-one (3:1) on water side and two-to-one (2:1) on land side may be used instead of two-and-one-half-to-one (2 1/2:1) for each side. The combined water side and land side, side slopes of the levee shall not be less than five (5) horizontal to one (1) vertical.

4) Ditches and Borrow Pits –

A) Minimum berm widths between the toe of the levee and the edge of an excavated channel or borrow, shall be:

Fill Height	Minimum Berm Width
Under 6 feet	10 feet
Over 6 feet	15 feet

B) A land-side ditch or borrow pit shall be far enough away from the levee so that a line drawn between

i) the point of intersection of the design water line with the water side of the levee, and

ii) land-side toe of the levee at the ground line

shall not intersect its cross section.

5) Pipe Conduits and Outlets --

A) The outlet pipe shall discharge the peak flow to a stable grade to a minimum point ten (10) feet past the toe of the embankment. The following pipes are acceptable: cast iron, wrought iron, steel, asphalt coated corrugated metal, and concrete. All pipe joints shall be made watertight by the use of watertight couplings or gaskets, or by welding or caulking. Concrete pipe shall meet the requirements of ASTM Specification C-76 and shall be laid in a concrete bedding or cradle. Corrugated pipe shall be at least sixteen (16) gauge and smooth steel shall be at least three-sixteenths (3/16) inch in thickness. All pipe shall be capable of withstanding the external loading.

B) The pipe conduit barrel shall be placed on a firm foundation to the lines and grades shown on the plans. Selected backfill material shall be placed around the conduit in six (6) inch layers and each layer shall be thoroughly compacted. The flowline of the outlet end of the pipe shall be two (2) feet, but not more than four (4) feet, above the flowline of the outlet channel. The outlet shall be placed on an earthen berm or timber or concrete support. If the pipe diameter exceeds twelve (12) inches and the grade downstream is unstable, a timber or a concrete prop shall be provided. All pipes thirty (30) inches or larger and all pipes discharging continuous or prolonged flows shall be propped. Protection shall be provided to prevent the development of a scour hole which will undermine the pipe or its support. Stability checks, when required, shall be based on maximum pipe

discharge. Although "propped" outlets are in most common usage, "standard," "flared," or "Saint Anthony Falls (SAF)" outlets are also acceptable when the grade below is stable.

- C) All conduits through the levee below the design highwater line shall be equipped with anti-seep collars designed to increase the distance of the seepage line along the conduit by at least twenty percent (20%).
- 6) Core Trench – A foundation cutoff or core trench shall be installed where there are layers of permeable soils or layers creating a piping hazard through the foundation at a depth less than three-fourths (3/4) the height of the levee below natural ground level. The cutoff trench shall be of sufficient depth and width and backfilled with select soil to minimize such hazard.
- 7) Vegetative Cover and Riprap Construction: the soil on which a levee is to be placed shall consist of material that has sufficient bearing strength to support the levee without excessive consolidation. The foundation must consist of relatively impervious material which will prevent excess passage of water.
- A) The foundation area shall be cleared of all trees, stumps, roots, brush, boulders, sod, and debris. All channel banks and sharp breaks shall be sloped to no steeper a ratio than one-to-one (1:1). All topsoil containing excessive amount of organic matter shall be removed. The surface of the foundation area shall be thoroughly scarified before placement of the levee embankment material.
 - B) Cutoff trenches shall be used except in cases which are exempt by the Department. When used, a cutoff trench shall be excavated to a more impervious material underlying the base of the levee embankment and shall be backfilled with suitable material in the manner specified below. The trench shall be kept free of standing water during backfill operations.
 - C) The material placed in the levee fill shall be free of sod, roots, frozen soil, and other objectionable material. All acid producing material must be excluded from the fill. The placing and spreading of the fill material shall be started at the lowest point of the foundation, and brought up in approximately nine (9) inch horizontal layers. Each layer shall be thoroughly compacted as required by the Department by controlled movement of equipment. If the fill material is of varying texture and gradation, the most impervious material shall be placed toward the water side of the levee.

- D) A banquette shall be placed to reinforce the land-side toe where a levee crosses an old channel or where excessively porous fill or poor foundation conditions justify such reinforcement. Such banquettes shall be used if during construction the channel crossing is under water or saturated.
- E) The design shall include a top width of the banquette equal to or greater than the fill height of the levee above the top of the banquette. The banquette top shall be finished to an elevation not less than a foot above normal ground level and it shall be sloped towards the land side for drainage. The land side slope of the banquette shall be not steeper than the land side slope of the levee.
- F) An alternate design of the banquette may be used where design is based on detailed site investigation, laboratory analysis and adequate compaction will be obtained.

Section 300.160 Affected Acreage Map

a) When to File

On or before April 1 of each year, every permit holder shall submit to the Department and to the county clerk, MLCR Form 3, "Detail Map of Affected Land." This map shall be of the land from which the overburden has been removed, together with the unmined land upon which the overburden is deposited. An extension to this filing date may be granted when, in the opinion of the Department, the extension is for good cause (e.g., extended periods of illness, extreme inclement weather, acts of civil unrest, or other emergency situations) and not due to lack of diligence on the part of the operator.

b) Execution

The forms shall be duly executed and duplicate maps shall be attached showing the land affected during the fiscal year just ended. The Department may require the map to be executed by an engineer registered in the State of Illinois.

c) Form

The map shall be planned as a continuous map, as far as possible, so that the land affected each year may be added and indicated on the map by the dates it was affected. All maps are to be blue or black line prints or scaled aerial photographs.

d) Scale

The scale of the map shall be reasonable to the area of land affected so as to show necessary detail and so that the area affected may be included within a map, width not to exceed 42 inches.

Suggested Scales:	Up to 10 acres	– 1" = 100'
	Up to 40 acres	– 1" = 200'
	40 acres & above	– 1" = 400'

e) Detail

All maps shall show section, township, range and county lines coming within the scope of the map access to the area from the nearest public road and all weather roads within the mined area; a title containing name of operator, address, scale of map, by whom map was drawn, name of surveyor or engineer.

f) Amendment to Permit Required

If the area of affected land is in excess of the estimated acreage in the original permit and any amendments thereto, an application for an amendment to the permit necessary to include such additional acreage shall be made consistent with the Act and this Part, including, but not limited to, Section 300.90 of this Part.

(Source: Amended at 26 Ill. Reg. 4372, effective March 11, 2002)

Section 300.170 Violations and Forfeiture

a) Notice of Violation

The Department shall give written notice by registered or certified mail to the operator of any violation of the Act or noncompliance with any of this Part. The operator shall have forty-five (45) days to correct the deficiency or deficiencies set forth in the notice.

b) Forfeiture Proceedings

If corrective measures, approved by the Department, are not commenced within forty-five (45) days, the Department may initiate forfeiture proceedings against the operator in the amount of the bond or security in effect at the time of default for every acre or portion thereof with respect to which the operator has defaulted. Prior to initiating forfeiture proceedings against the operator, the Department shall notify the operator in writing of the alleged violation or noncompliance and shall afford the operator the right to appear before the Department at a hearing to be held not less than thirty (30) days after the receipt of such notice by the operator. At the hearing the operator may present for the consideration of the Department

statements, documents and other information with respect to the alleged violation. After the conclusion of the hearing, the Department shall either withdraw the notice of violation or shall request the Attorney General to institute proceedings to have the bond of the operator forfeited as to the land involved.

c) Penalty for Forfeiture

Any operator against whom forfeiture proceedings have been required shall not be issued a permit for further surface mining in Illinois except if he provides additional assurances satisfactory to the Director that such proceedings shall not again become necessary.

d) Penalties – Injunction

1) Any person required by this Act to have a permit who engages in surface mining without previously securing a permit to do so as prescribed by this Act, is guilty of a business offense and shall be fined not less than \$50 nor more than \$1,000. Each day of operation without the permit required by this Act shall be deemed a separate violation.

2) Authorized representatives of the Department shall by injunctive procedures close down at once any operator found to be surface mining without a permit or in violation of this Act. No liability whatsoever shall accrue to the Department or its authorized representative in closing down any operator pursuant to this Section.

Section 300.180 Bond Release Procedure

a) Full Release of Bond

As soon as all reclamation work prescribed in the conservation and reclamation plan approved by the Department is completed, the operator may notify the Department by completing and forwarding MLCR Form 6, "Notice of Completed Reclamation," and a map of the acreage to be released if different from the original affected acreage map, to the Department. Upon receipt of MLCR Form 6, "Notice of Completed Reclamation," the Department shall proceed as soon as practical to make its determination as to approval of the reclamation work and shall either forward the "Notice of Release," MLCR Form 7, to the operator, the bonding agency, the county clerk of each county containing lands affected, and each municipality listed in the permit application pursuant to Section 300.50(a)(16) or notify the operator in writing of all reasons for disapproval.

b) Partial Release of Bond

An operator may have the amount of the bond or security reduced to \$100 per acre when the Department determines that grading and construction of soil conservation structures and covering with materials capable of supporting

vegetation in accordance with the conservation and reclamation plan has been satisfactorily completed on a parcel of affected land. As soon as all the grading work prescribed in the conservation and reclamation plan approved by the Department is completed, the operator may notify the Department by completing and forwarding MLCR Form 6, "Notice of Completed Reclamation." The Department shall proceed as soon as practical to make its determination as to approval of the grading work and either forward the "Notice of Partial Release," MLCR Form 7, to the operator, the bonding agency, the county clerk of each county containing lands affected, and each municipality listed in the permit application pursuant to Section 300.50(a)(16) or notify the operator in writing of all reasons for disapproval. After partial release of the bond, the \$100 bond per acre or security shall then remain in effect until the reclamation process is completed.

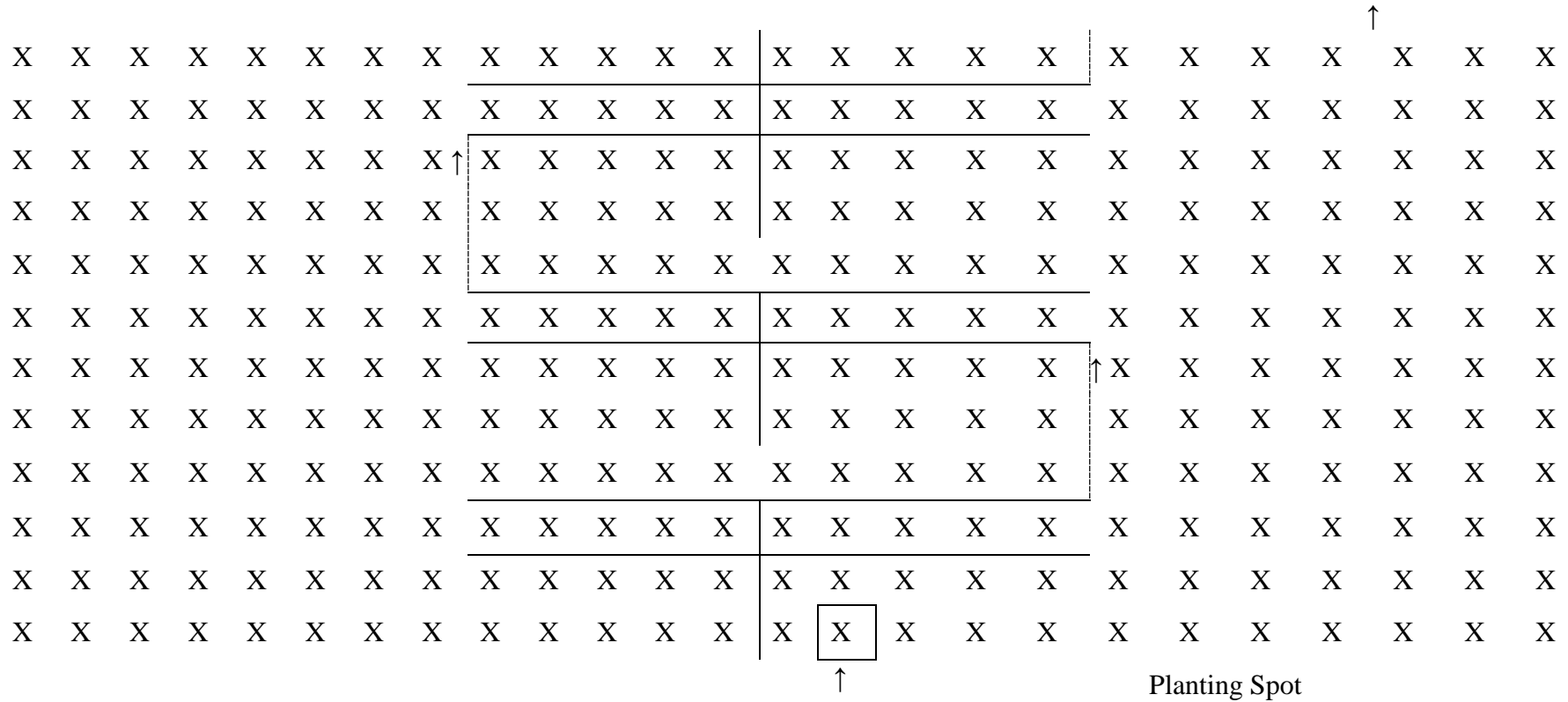
c) Review of Released Bond

A release of bond under either subsection (a) or (b) may be reviewed under the procedures outlined in Section 300.40(e) of this Part.

(Source: Amended at 26 Ill. Reg. 4372, effective March 11, 2002)

Section 300.ILLUSTRATION A Tree Sampling Procedure

TREE SAMPLING PROCEDURE



X X X X X

Transect

Path of Examiner

Section 300.ILLUSTRATION B Typical Sections

TYPICAL SECTIONS

