

Appendix 3

AR PCEC, Regulation No. 15, AR Open-Cut Mining
and Land Reclamation

Pollution Control and Ecology Commission # 014.00-015

ARKANSAS POLLUTION CONTROL AND ECOLOGY COMMISSION



REGULATION NO. 15

ARKANSAS OPEN-CUT MINING AND LAND RECLAMATION

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POLLUTION CONTROL AND ECOLOGY COMMISSION
STATE OF ARKANSAS

Approved By Pollution Control and Ecology Commission
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CHAPTER ONE: TITLE AND PURPOSE

Reg.15.101 Title and Authority

The following rules and regulations of the Arkansas Pollution Control and Ecology Commission are promulgated pursuant to the authority of the Arkansas Open-Cut Land Reclamation Act (Act 827 of 1991, as amended) and the Arkansas Water and Air Pollution Control Act (Act 472 of 1949, as amended). This Regulation shall be known as Arkansas Pollution Control and Ecology Commission Regulation Number 15: Arkansas Open-Cut Mining and Land Reclamation” and may be referred to herein as “Regulation”.

Reg.15.102 Purpose

It is the purpose of this Regulation to protect the public health, safety, and the environment during and after completion of open-cut or stream bed mining operations.

CHAPTER TWO: DEFINITIONS

Reg.15.201 Definitions

Definitions as used in this Regulation unless the context otherwise requires:

“Act” means the Arkansas Open-Cut Land Reclamation Act;

“Affected land” means the area of land where open-cut mining has been or is taking place or upon which spoil has been deposited, or any other surface disturbance including haul roads, processing and loading facilities, or appurtenances related to the mining operations on or after July 1, 1977, until the land is reclaimed;

“Commercial purposes” means the sale of material from an open-cut mine as either a cash transaction, part of a contractual agreement involving payment for materials provided, or use in another process to create a product with value;

“Commission” means the Arkansas Pollution Control and Ecology Commission (APC&EC), or such commission or other entity as may lawfully succeed to the powers and duties of the Commission;

“Contemporaneous Reclamation” means a mining method for a sand and gravel operation where the mining and reclamation of the mine site has been planned such that the reclamation of the mined areas takes place at intervals or stages as prescribed by the Department and defined in the permit. This mining method reduces the amount of land affected by mining at any given point in time and reduces reclamation costs through efficient management of resources;

“Department” means the Arkansas Department of Environmental Quality or such department or other entity which may lawfully succeed to the powers and duties of the Department;

“Director” means the executive head and active administrator of the Department;

“Final cut” means the last pit created in an open-cut mined area;

“Highwall” means that side of the pit adjacent to unmined land;

“Material” means any commodity or natural deposit mined or treated as spoil during open-cut mining operations;

“Open-cut mining” means the surface extraction of clay, bauxite, sand, gravel, soil, shale or other materials for commercial purposes;

“Operator” means any person engaged in or controlling an open-cut mining or stream channel mining operation;

“Ordinary high water mark” means that line delimiting the bed from the bank and is found by

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ascertaining where the presence and actions of water are so usual and long, continuing in ordinary years, as to mark upon the soil of the bed a character distinct from that of the banks, with respect to vegetation and the nature of the soil;

“Peak” means a projecting point of spoil created in the open-cut mining process;

“Permit term” means the period of time beginning with the date upon which a permit is granted for open-cut mining of lands under the provisions of this act and ending on the date requested by the operator and specified by the Department, though not to exceed five (5) years;

“Person” means any individual, partnership, firm, company, public or private corporation, cooperative, association, joint-stock company, trust, estate, political subdivision or any agency, board, department or bureau of the state or any other legal entity whatever which is recognized by law as the subject of rights and duties;

“Pit” means a tract of land where open-cut mining is taking place;

“Reclamation for productive use” means conditioning areas affected by open-cut mining to make them suitable for any uses or purposes consistent with those enumerated in the declaration of policy;

“Ridge” means a lengthened elevation of spoil created in the open-cut mining process;

“Right-of-way” means the portion of land over or under which certain facilities, including, but not limited to roadways, pipelines or power lines, are built;

“Soil” means the unconsolidated mineral or organic material on the immediate surface of the earth that serves as a natural medium for the growth of plants, generally free of boulders, cobbles or other floating rock;

“Spoil” means all waste material and debris connected with open-cut mining and with the mechanical removal, cleaning and preparation of materials at the mine site;

“Streambed” or “stream channel” means that area that lies between the lines delimiting the bed from the bank on each side of a creek, branch, or river. Due to the naturally high turbidity and flow rate of certain rivers, the provisions of this Regulation do not apply to the following rivers: Arkansas, Mississippi, Ouachita (Louisiana State line to Remmel Dam), Red, Little River (not including Lake Millwood), White, North Fork of White (Norfork Dam to White), Black and St. Francis (mouth to 36° parallel); and

“Waterway” means the natural channel of any perennial or intermittent river, creek or stream.

CHAPTER THREE: PERMITTING

Reg.15.301 Permit Required

- (A) It shall be unlawful for any operator to engage in open-cut mining without first obtaining all appropriate permits from the Department.
- (B) An operator shall be deemed to be engaged in open-cut mining from the time he or she affects any land, until all affected land has been reclaimed and released by the Department.
- (C) Operators desiring to remove gravel or other materials from stream beds must obtain a permit to do so from the Department.
 - (1) The Department will not develop a general permit for the removal of gravel and other materials from stream beds.
 - (2) There shall be no mining in streams designated as “extraordinary resource waters” of the State as established in water quality standards duly promulgated by the Commission for all surface waters of the State of Arkansas (APC&EC Regulation No. 2). Refer to APC&EC Regulation 2 to determine what streams and waterbodies are considered to be “extraordinary resource waters.”
 - (3) All stream gravel mining operations on streams designated as “extraordinary resource waters” after January 1, 1995 may continue to operate under a permit issued by the Department for a period of two (2) years from the date of such designation. At the end of said two-year period, all mining activities must be terminated and the affected area reclaimed in accordance with the operator’s approved reclamation plan.
- (D) Previously mined and un-reclaimed land which is to become affected land during new open-cut mining operations must be permitted.
- (E) The Arkansas State Highway Department or its contractor shall not be required to obtain a permit for an open-cut mine where the material is used exclusively in the construction, reconstruction, improvement or maintenance of roadways. Reclamation of the area shall conform to the provisions of the standard specifications for highway construction upon discontinuation of use of the pit for the above listed purposes. This exemption does not alleviate any obligations to obtain appropriate permits from the Department, including but not limited to short-term authorizations or water quality permits.
 - (1) The occasional sale of material to the Highway Department by an operator does not exempt the operator from complying with the requirements of his or her permit, the Act or this Regulation.
 - (2) In the event the reclamation requirements of the operator interfere with a

contractual agreement with the Highway Department, the operator will be allowed to revise his or her reclamation plan and schedule of completion accordingly. However, any revision must be in compliance with the declaration of policy in the Act.

(F) The following subdivisions apply to governmental units:

- (1) County and municipal governments shall not be required to obtain a permit for open-cut mining operations on lands outside of the channel of a waterway for which said government entity has established rights when the material is used for construction, reconstruction, improvement or maintenance of streets, roads, highways or other public projects.
 - (a) The county or municipal government shall remove topsoil and spoil and store it on site.
 - (b) Upon completion of mining, the site shall be graded such that no slope will be steeper than one foot (1') vertical to three feet (3') horizontal and the topsoil shall be respread and the site revegetated in a manner to prevent pollution of the waters of Arkansas.
- (2) An agent or employee of a county government or municipal government acting in his or her official capacity may remove gravel or other materials from any stream in order to protect the integrity of bridges or low water crossings of any public roadway without obtaining a permit.
- (3) A governmental unit may remove gravel or other material from any stream in order to protect the integrity of a governmental owned or controlled structure without obtaining a permit.
- (4) The above exemptions do not preclude the governmental unit from obtaining any necessary U.S. Army Corps of Engineers permits or any necessary permits from the Department, including but not limited to short-term authorizations or water quality permits.
- (5) Flood control projects authorized by the U.S. Army Corps of Engineers shall be exempt from the mining permit requirement, provided, however, that certification under Section 401 of the Federal Clean Water Act is obtained for said project as well as any appropriate permits from the Department, including but not limited to short-term authorizations or water quality permits.
 - (a) In the event that authorization pursuant to Section 404 of the Federal Clean Water Act is determined by the U.S. Corps of Engineers not to be required for a specific flood control or bank stabilization project, the Department will review the proposed plan using the Section 401 water quality certification criteria.

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- (b) The Department shall issue the necessary authorizations and permits as deemed needed for the project once it has been established that the activity will not adversely affect water quality through the Section 401 water quality certification criteria review.
 - (6) Governmental units not specifically excluded pursuant to the above sections, shall obtain a permit from the Department as required by this Regulation.
- (G) The following subdivisions apply to landowners:
 - (1) The requirements of the Act, as amended, and this Regulation shall not apply to the noncommercial removal of clay, bauxite, sand, gravel, soil, shale or other materials from lands by the owner of said lands or by a contractor hired by the owner for the exclusive use by the land owner for construction, improvement or maintenance of roads or other projects on land owned by said owner, or any environmental improvements to previously disturbed lands, or the concurrent or short term, ninety (90) days or less, excavation of materials during the construction of buildings either for residential, commercial or industrial purposes. This exemption does not alleviate any obligation to obtain appropriate permits from the Department, including but not limited to short-term authorizations or water quality permits.
 - (2) Landowners may sell or barter gravel or other material from stream beds as a part of an approved flood control or bank stabilization project designed or approved by the U.S. Army Corp of Engineers, the Natural Resources Conservation Service, or the Arkansas Game and Fish Stream Team program without a mining permit from the Department. A landowner may remove sufficient stream bed material from one's own land for road maintenance, construction or other uses on said land without obtaining a mining permit. Except as provided above, material shall not be removed for the purpose of commercial sale without first obtaining a mining permit from the Department. This exemption does not alleviate any obligation to obtain appropriate permits from the Department, including but not limited to short-term authorizations or water quality permits.
- (H) The following subdivisions are exceptions to this section:
 - (1) Land affected by open-cut mining operations prior to July 1, 1971 are exempt from the Act and this Regulation unless subsequently affected after July 1, 1971.
 - (2) Nothing in this Regulation shall be construed to require any operator to reclaim or revegetate any previously exempted excavation sites such as soil and shale pits that were affected and abandoned prior to January 1, 1999.
 - (3) Nothing in this Regulation shall be construed to apply to the removal of soil, shale, or stone at a quarry operation that is regulated under Ark. Code Ann. §§ 15-

57-401 through 15-57-414.

- (4) Nothing in this Regulation shall be construed to apply to any excavation activity associated with the improvement or maintenance of any agricultural lands or associated irrigation systems.
- (5) The requirements of the Act, as amended, and the Regulation shall not apply to any area being excavated for soil or shale that is less than three (3) acres where an undisturbed buffer zone of not less than fifty feet (50') exists between the highwalls of the excavation site and any adjacent property line or to any size area being excavated if the area being excavated is at least one-fourth (1/4) of a mile from any adjacent property line.
- (6) The above-listed exemptions do not alleviate any obligation to obtain the appropriate permits from the Department, including but not limited to short-term authorizations or water quality permits.

Reg.15.302 Permits: In General

(A) Individual Permit

- (1) Any person desiring to engage in an open-cut mining operation that is not covered by a general permit authorized by the Department or stream bed mining shall make written application for an individual permit to the Department.
- (2) The application must include, but may not be limited to the following documents:
 - (a) Two (2) permit application forms;
 - (b) Permit application fee;
 - (c) Proof of right to mine the land;
 - (d) Maps as described in this Regulation;
 - (e) A mining plan;
 - (f) A plan of reclamation;
 - (g) Detailed bond determination;
 - (h) An acceptable bond instrument; and
 - (i) A disclosure form as provided by the Department.

(B) General Permit

- (1) Any person desiring coverage under a general permit from the Department shall make written notification to the Department. The notification must include the following documents:
 - (a) Notice of Intent form as provided by the Department;
 - (b) Notice of Intent fee of two hundred dollars (\$200);
 - (c) Proof of right to mine as described in Reg.15.305;
 - (d) A 7.5 minute topographic quadrangle map with the outline of the permit boundary clearly marked;
 - (e) A disclosure form as provided by the Department; and
 - (f) Reclamation Bond Instrument.
 - (2) The Department will not approve more than one (1) general permit on a single property. Mining operations that could exceed the acreage limitations of an approved general permit should apply for an individual permit.
- (C) A decision on issuance of a permit will be made by the Department upon submittal of a complete application or Notice of Intent. A complete application or Notice of Intent consists of all materials listed in this section for an individual permit or a general permit, and any additional written information or materials the Department determines to be necessary to comply with the Act and this Regulation.

Reg.15.303 Permit Application Requirements

- (A) The permit application must be made on a form(s) furnished by the Department.
- (B) The application form shall be prepared as two (2) originals with an original notarized signature of an owner, corporate officer, or duly authorized agent on each.
- (C) An agent must provide proof of his or her authority by a power of attorney or other such document signed by the principal.
- (D) The permit term shall not exceed five (5) years. At the Director's discretion and based on information contained in the operator's right to mine and other environmental concerns, including but not limited to, the proximity of the proposed mining operation to any water bodies, the permit term that is approved may be less than the maximum of five (5) years.
- (E) Minor revisions do not require public notice. An applicant for a new permit or major modification of an existing permit shall comply with the public notice requirements

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delineated in the Commission's regulations on administrative procedures.

- (F) Written comments on a new permit application or major modification of an existing permit with respect to the effects of the proposed mining operations on the environment may be submitted to the Department by any person within thirty (30) days after the last publication of the newspaper notice required by the Commission's regulations on administrative procedures.
- (G) The Department shall, immediately upon receipt of any written comments:
 - (1) Transmit a copy of the letter to the applicant;
 - (2) File a copy for public inspection with the permit application at the Department's North Little Rock office;
 - (3) Review the comments and prepare a written response to the comments prior to permit issuance; and
 - (4) Provide notice of date of permit issuance to all persons who submitted timely written comments.
- (H) An applicant for a new or major modification of an existing stream bed mining permit shall make a reasonable effort to notify all adjacent land owners that a complete application for a stream bed mining permit is on file with the Department. This notice shall also contain the permittee's name, mailing address, type of mine, commodity to be mined, and the location of the mine. The adjacent land owners shall be notified at the same time that the permit application is submitted to the Department. The applicant must provide a copy of the letter sent to each adjacent land owner with the application.
- (I) A permit issued under the provisions of the Act and this Regulation does not convey to the operator the right of access to the property proposed to be mined. Access must be granted under the Proof of Right to Mine as required in Reg.15.305.

Reg.15.304 Permit Application Fee

- (A) The application for a permit shall be accompanied by a fee of ten dollars (\$10.00) per acre with a two hundred dollar (\$200) minimum.
- (B) This fee must be paid by check or money order and made payable to the Arkansas Department of Environmental Quality.

Reg.15.305 Proof of Right to Mine

- (A) The applicant must provide the Department with proof that it has the right to mine the land for which a permit is requested.

- (B) Acceptable documentation to prove this right is as follows:
- (1) A copy of the lease agreement with the landowner. The agreement must contain a legal description of the land to be permitted and be signed by the applicant and landowner;
 - (2) A copy of the deed containing a legal description of the land in the event the applicant owns the land;
 - (3) A copy of a letter from the land owner expressly giving the applicant permission to conduct mining. The letter must contain a legal description of the land and be signed and notarized by the land owner;
 - (4) In the event mineral rights have been severed from the surface rights, an agreement signed by the mineral rights holder, the surface rights holder, and the applicant must be provided to the Department. The agreement shall contain legal descriptions of the mineral rights and surface rights, identify the conditions of the agreement, and give the applicant permission to conduct mining. The agreement must be provided to the Department along with proof of the surface rights holder's and mineral rights holder's respective ownership; or
 - (5) If the mining operation involves the removal of gravel or other material from within a stream channel where the property boundaries are defined by the centerline of the stream channel, then the site map should clearly identify the boundary of the mining area and the property line.

Reg.15.306 Maps

- (A) The applicant must provide the Department with a minimum of one (1) vicinity map, one (1) site map and one (1) reclamation map.
- (B) Additional maps may be submitted as needed. All maps must be to scale.
- (1) The vicinity map must be a 7.5 minute topographic quadrangle map as prepared by the U.S. Geological Survey, and contain the following:
 - (a) A clearly-marked permit area;
 - (b) The legal description of the area to be permitted; and
 - (c) A clearly-identifiable site entrance.
 - (2) The site map must be to scale (i.e. 1" = 200') and depict the following features:
 - (a) The permit area must be outlined and labeled on a site map showing dimensions and elevations.

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- (i) Boundaries of the mine site and elevations must be tied to temporary reference points established outside the mine site.
 - (ii) If the mine site is greater than forty (40) acres, an engineer or land surveyor who is registered in Arkansas must prepare the survey.
 - (iii) The Department may require sites smaller than forty (40) acres to submit a survey, if the site map calls for the construction of engineered structures such as dams, impoundments, shows complex ownership, or for other reasons;
 - (b) The location and identification of all affected and unaffected areas.
 - (i) All areas that will not be affected should be marked and labeled.
 - (ii) Areas to be affected such as haul roads, offices, maintenance shelter(s), loading and process facilities, ponds, scales, refuse storage, spoil storage area, top soil storage area, and excavation area must be clearly marked;
 - (c) Flow patterns in the event decant ponds or canals are used;
 - (d) The precautions taken to avoid affecting any nearby water body;
 - (e) Identification of any diversion ditches used to channel water from sensitive areas, including the flow patterns; and
 - (f) The mining plan.
- (3) The reclamation map should be of similar scale as the site map, and contain the following:
- (a) The permit area must be outlined and labeled;
 - (b) Identification of any roads to remain after reclamation;
 - (c) Identification of any water impoundments to remain after reclamation, including approximate size and location;
 - (d) Areas to be revegetated must be marked;
 - (e) Areas to remain unaffected must be marked; and
 - (f) Appurtenances for which the Department has given prior approval to remain must be identified and labeled.

Reg.15.307 Mining Plan

- (A) In order to adequately assess the environmental soundness of the proposed operation and assess the proposed bond amount and its relationship to the proposed reclamation plan a detailed mining plan must be submitted by the applicant.
- (B) The mining plan must include all provisions of this section.
- (C) The Department, in its discretion, may require the applicant to address other issues in the mining plan which may impact environmental preservation and the amount of reclamation bond to be posted.
- (D) Where applicable, the mining plan must include:
 - (1) Provisions to prevent unpermitted releases of water from the site, which provisions are to be identified on the site map and described in the mine plan narrative;
 - (2) A description of the functions of any ponds used as part of the process (i.e., decant ponds) and depiction on the site map;
 - (3) Methods used to restrict access to and warn the public of the dangers inherent in a mining operation such as fencing, natural or man-made barriers and warning signs;
 - (4) A description of plan to preserve topsoil for redistribution during reclamation, unless the Director approves otherwise;
 - (5) A detailed description of any incremental mining map(s) depicting the plan;
 - (6) Information on the thickness of the topsoil, overburden, and the resource material to be mined; and
 - (7) A description of plans for contemporaneous reclamation as required by the Department. For sand and gravel open-cut mining operations, a detailed description of the proposed incremental mining that will be conducted which incorporates contemporaneous reclamation.

Reg.15.308 Reclamation Plan

- (A) A reclamation plan to return all affected land at the proposed mine site to a useful purpose must be submitted by the applicant.
- (B) Stream channel operators must comply with the reclamation requirements of

Reg.15.401(B) and the applicable requirements of this section.

- (C) The applicant shall state the intended post mining use of all affected land.
- (D) The reclamation plan shall include:
 - (1) A detailed description of the plans for contemporaneous reclamation as part of the incremental mining plan set forth under the conditions of Reg.15.307(D)(7);
 - (2) A minimum of two (2) cross-sections of the permit area before mining and two (2) cross-sections of the same area as anticipated upon completion of the proposed reclamation. Cross-sections shall be tied to established elevations in the applicant's survey submitted along with the applicant's site map;
 - (3) A reclamation map which shows the planned reclamation goal on all of the permit area;
 - (4) A plan for the final contour of all reclaimed land. The following criteria apply to such plan:
 - (a) If the original slope of the affected land was less steep than one (1) vertical to three (3) horizontal (1:3), then no final slope shall be steeper than 1:3. If a pond is to be left, the banks must be graded at 1:3 to a point below the water surface at the annual low water level that will allow safe ingress and egress. Beyond this point the normal angle of repose for the material being used may be acceptable, provided it will provide adequate lateral support for the 1:3 slope preceding it;
 - (b) If the original slope of the affected land was steeper than one (1) vertical to three (3) horizontal (1:3), the Department may approve a final slope steeper than 1:3;
 - (c) If the material in which excavation is occurring is unconsolidated, in that it is lacking sufficient hardness or ability to resist weathering and inhibit erosion or sloughing, the Department may approve a final slope of approximate original contour, provided the operator can assure the integrity of this slope;
 - (d) If the material in which excavation is occurring is consolidated, in that it is of sufficient hardness or ability to resist weathering and inhibit erosion or sloughing, the Department may approve a slope deviation involving terracing, provided the reclamation plan meets the criteria as follows:
 - (i) Final slope of a reclaimed highwall must be approved by the Department as part of the written reclamation plan;

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- (ii) The top of excavation is to be fenced;
 - (iii) The uppermost terrace to be no more than ten feet (10') below top of excavation;
 - (iv) The remainder of a highwall must be terraced with no terrace face greater than twenty feet (20') in height;
 - (v) The terrace widths are no less than ten feet (10'); and
 - (vi) Each terrace is to be revegetated with trees or other approved vegetative cover.
- (5) Methods used to assure the proper pH of any water impoundments to be left as part of the reclamation. The impoundments must have a pH no less than six (6) or no greater than nine (9).
- (6) The methods used to assure the proper pH range shall include:
 - (a) The procedure for any water treatment;
 - (b) The design and maintenance of any diversion berms needed to channel water, which are depicted on the site map;
 - (c) In the event other naturally occurring water bodies in the area of the permit possess pH levels outside the six (6) to nine (9) pH range, and which levels are not caused by human influence, then a similar pH level may be accepted by the Department; and
 - (d) The Department may accept a deviation from the six (6) to nine (9) pH range due to water runoff from outside the affected area if the influent cannot be avoided through prior planning or sound engineering practice.
- (7) A plan to cover all acid-forming materials that become exposed with earth or spoil materials to a depth of not less than three feet (3'), or an alternative approved by the Department;
- (8) The location of any proposed fire lanes must be shown on the reclamation map, in the event reforestation is to be used as part of the reclamation. Fire lanes of not less than ten feet (10') in width must be constructed unless otherwise approved by the Department;
- (9) A list of the varieties and applicable seeding rate that will be used must be included with the reclamation plan. The applicant shall obtain recommendations on plant varieties and seeding rates based on the intended use of the land from state and federal agricultural or forestry agencies;

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- (10) Plans for reuse of salvaged topsoil, including the locations where and depth at which topsoil is to be spread; and
 - (11) A schedule for completion of the reclamation. If the operator fails to meet the completion date, the permit may, in the discretion of the Department, be extended in one -year increments from the termination of the permit.
 - (12) In the event that the applicant does not comply with its schedule of reclamation after no more than three (3) extensions have been granted, the bond or substituted security posted for such unsatisfactorily reclaimed land shall be forfeited.
- (E) Reclamation using only trees must be in accordance with the planting guidelines of the State Forestry Department and include provisions for erosion control.
- (F) Successful revegetation will be measured as follows:
- (1) Land reclaimed with grasses, etc. must attain a seventy percent (70%) coverage, such that any randomly selected twenty-four inch (24") diameter circle of vegetation must have no less than seventy percent (70%) coverage; or
 - (2) Land reclaimed with trees must have no less than fifty percent (50%) survival rate after two (2) growing seasons.
- (G) All equipment on site must be removed. Permanent structures may remain provided they serve a useful purpose and upon approval by the Department.
- (H) The results of the soil analysis made when the site slope is in condition for vegetating. A soil analysis shall be made as a basis for soil amendments, such as lime, fertilizer, or secondary micronutrients needed to support the growth of the vegetation species to be planted. Laboratory analysis shall be obtained from the University of Arkansas Cooperative Extension Service Office or any other public or private organization or person approved by the Department.

Reg.15.309 Reclamation Bond

- (A) The application for a mining permit shall be accompanied by a bond or substituted security for the affected or the proposed affected area in favor of the State of Arkansas through the Department.
- (B) The bond or substituted security must be effective prior to the date of issuance of the permit by the Department and continue in effect until released by the Department.
- (C) The bond amount must be sufficient to assure performance of the reclamation according to the approved reclamation plan for the permitted area in the event the reclamation must

be done by the Department through an independent contractor.

- (D) In the event the Department determines the proposed bond amount to be inadequate, the Applicant/Operator and any surety or indemnifier on the bond will be notified that the value of the required bond or substituted security must be increased as provided in the Act.
- (E) The operator may submit any of the following three (3) types of bonds:
 - (1) A surety bond;
 - (2) A collateral bond with supporting collateral consisting of irrevocable letters of credit or certificates of deposit in favor of the Department; or
 - (3) A self bond with unencumbered right to certain property to be held by the Department.
- (F) Recommended bond forms shall be provided by the Department. A variation of the language in all but the self bond form may be acceptable provided the requirements of the Act and this Regulation are incorporated and the Department approves the language.
- (G) In the event self bonding is used, the following conditions apply:
 - (1) The Applicant/Operator must use the self bond form provided by the Department;
 - (2) The Applicant/Operator shall pay to have the collateral to be offered appraised by a licensed appraiser approved by the Applicant/Operator and the Department;
 - (3) The Applicant/Operator must have unencumbered ownership of the collateral, and provide proof of such ownership to the Department;
 - (4) The value of the collateral as bond will be no more than eighty percent (80%) of the fair market value of the collateral as established by the appraiser;
 - (5) Any collateral that decreases in value due to usage (i.e., rolling stock) will not be acceptable;
 - (6) In the event the collateral consists of real property, an environmental audit of the area must be provided to the Department; and
 - (7) Where applicable, a lien will be filed against the collateral until the affected area is reclaimed and released by the Department.

- (H) In the event incremental mining and bonding is to be used, the bond amount for each increment must be determined by the operator and approved by the Department. The accepted amount for the first increment must then be posted with the Department prior to issuance of the permit. The approved bond amount for each succeeding increment must be posted before the land can be affected.
- (I) No bond or substituted security shall be canceled by the Surety or Indemnifier for any reason unless it has given no less than ninety (90) days' written notice of the cancellation to the Department's Legal Chief.
- (J) In no event shall a bond be canceled on a permitted area that at the time of cancellation has become affected land under the provisions of the Act and this Regulation.
- (K) If the license to do business of any corporate surety upon a bond filed with the Department pursuant to the Act and this Regulation shall be suspended or revoked, the operator, within thirty (30) days after receiving notice of such suspension or revocation, shall substitute for the surety a licensed corporate surety. In the event the operator fails to substitute the bond or substituted security upon cancellation or loss of value of its existing bond, the Department shall suspend the permit of the operator until the substitution is made.
- (L) No operator shall be eligible to receive a new, renewed, or modified permit who has had a permit revoked, bond forfeited, or who has outstanding substantial unmitigated violations of the Act or this Regulation, unless the Department finds, upon review, a demonstrable change of circumstances justifying an exception to these prohibitions.

Reg.15.310 Temporary Variances and Interim Authority

The issuance of temporary variances and interim authority shall comply with the requirements found in Ark. Code Ann. § 8-4-230.

Reg.15.311 Permit Renewal and Modification

- (A) In the event any area for which a permit applies is not mined or where mining operations have not been completed during the permit term, the permit as to such area may be extended by the Department upon application by the permittee. The permittee must mark the application form as "For an extension of time" and submit a review fee of one hundred dollars (\$100).
- (B) Prior to application for renewal or modification, the permittee should review the current mining plan, reclamation plan, and bond amount. In the event the permittee desires to renew or modify the mining or reclamation plan, the permittee must make application to do so and update the documentation. The permittee must review the bond amount taking into account inflation and any changes to the mining and reclamation plan.

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- (C) The permittee must mark any application for modification that does not include adding additional new acreage with "To amend" and submit a review fee of one hundred dollars (\$100).
- (D) In the event the permittee seeks to add additional acreage to the permit area, he or she must submit the following documents for modification:
 - (1) The permit application filed in duplicate and marked "To amend" on the designated blank;
 - (2) A permit application fee for the new acreage based on the fee schedule listed in Reg.15.304 in addition to the permit modification review fee of one hundred dollars (\$100);
 - (3) Proof of right to mine the new area as set out in Reg.15.305;
 - (4) A new site map with the new area clearly delineated from the current permit area;
 - (5) A mining plan for the new area as set out in Reg.15.307;
 - (6) A reclamation plan for the new area that is compatible with that of the current reclamation plan as set out in Reg.15.308;
 - (7) A detailed bond determination for the new area; and
 - (8) An acceptable bond instrument for the new area as set out in Reg.15.309.
- (E) General Permits.
 - (1) General permits may be renewed or modified by the Department after notice and opportunity for a public hearing.
 - (2) Under no circumstances will a modification of an existing general permit be approved without notice and opportunity for a public hearing.
- (F) General Permit Reissuance.
 - (1) An operator wishing to continue coverage under a general permit once that permit is reissued must submit written notification to the Department as found in Reg.15.302(B)(1) within thirty (30) days after the date of reissuance.
 - (2) The fee for continued coverage under a general permit will be one hundred dollars (\$100).

Reg.15.312 Permit Revocation

- (A) The Department may revoke, modify, or suspend, in whole or in part, for cause any permit issued under the Act and this Regulation, including without limitation:
 - (1) Violation of any condition of the permit or the bond; or
 - (2) Obtaining a permit by misrepresentation or failure to disclose fully all relevant facts.
- (B) No operator shall be eligible to receive a new, renewed, transferred, or modified permit who has had a permit revoked, bond forfeited, or who has outstanding substantial unmitigated violations of the Act or the Regulation, unless the Department finds, upon review, a demonstrable change of circumstances justifying an exception to these prohibitions.

Reg.15.313 General Permit

- (A) After notice and opportunity for a public hearing, the Department may issue general permits for categories of open-cut mining operations that:
 - (1) Are similar in nature;
 - (2) Will cause only minimal temporary adverse environmental effects if performed separately; and
 - (3) Will have only minimal cumulative adverse effects on the environment.
- (B) A general permit may be revoked or modified by the Department if after opportunity for a public hearing, the Department determines that the activities authorized by the general permit:
 - (1) May have an adverse impact on the environment; or
 - (2) Are more appropriately authorized by individual permits.
- (C) The Director, at his or her discretion, may require an applicant to seek coverage under an individual permit.

CHAPTER FOUR: PERFORMANCE STANDARDS

Reg.15.401 Performance Standards — General

- (A) Every operator to whom a permit is issued pursuant to the provisions of the Act and this Regulation may engage in open-cut mining during the permit term on the area described in the permit upon the performance of and subject to the listed requirements in Reg.15.402 with respect to the permitted area.
- (B) In-Stream Mining
 - (1) Removal of alluvial materials below the ordinary high water mark of a stream or other waterway shall be permitted only if an operator demonstrates to the satisfaction of the Department that activities associated with the removal, processing, or transport of said materials will not cause a violation of the State's water quality standards and will provide for preservation of bank stability and stream channel integrity, and maintain localized in-stream fish cover.
 - (2) In addition to compliance with the applicable requirements of the Act and other provisions of this Regulation, compliance with the performance standards listed in Reg.15.403 is required for in-stream mining operations.
- (C) Throughout the performance of any permitted mining activities, the operator must implement measures approved in the operator's mining and reclamation plan(s) to ensure that the affected area does not contribute sediment to the stream and restrict access to the site to enhance stream recovery.
- (D) Any permitted operator must notify the Department in the case of insolvency, bankruptcy, or receivership.

Reg.15.402 Open-Cut Mining Standards

- (A) The perimeter of the permit area must be clearly marked on the ground at all times using metal posts or stakes projecting thirty-six inches (36") above ground and painted Hunter Orange or like color. These markers must remain in place until the operator has reclaimed the site and obtained release from reclamation liability from the Department.
- (B) The operator shall protect the public from the dangers inherent in an open-cut mining operation by restricting access to the mine site and posting adequate warning signs.
- (C) The operator shall preserve any topsoil for redistribution during reclamation unless otherwise approved by the Director.
- (D) All affected land shall be graded to a rolling or terraced topography. No final slope shall

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be steeper than one (1) vertical to three (3) horizontal unless otherwise approved by the Department.

- (E) The operator may construct earth dams, where lakes or other impoundments may be formed, provided they are constructed and maintained in accordance with sound engineering practices and the provisions of this Regulation.
- (F) If a lake is to be left as a part of the reclamation plan, provisions must be made by the operator to assure that a pH factor of six (6) to nine (9) is maintained unless otherwise authorized by the Department.
- (G) If the permit area is near or includes a waterway, an undisturbed buffer zone must be maintained between the permit boundary and the ordinary high water mark.
 - (1) The ordinary high water mark elevation at the upstream and downstream limits of the permit area shall be determined numerically by the Department and included as a permit condition.
 - (2) If the applicant proposes a buffer zone of less than one hundred feet (100'), reasonable scientific and technical data based on the site specific conditions such as the geology, soil type, slope, or waterway use designation that shows the proposed buffer zone will protect stream channel integrity must be presented to and approved by the Director.
 - (3) If after review of the data submitted by the applicant, the Director determines that the proposed buffer zone is not adequate, then the buffer zone shall be established by the Department and not to exceed one hundred feet (100') measured horizontally from the ordinary high water mark.
- (H) Unless waived by the Department, all affected land that is reforested shall have reasonable fire lanes or access roads of at least ten feet (10') in width constructed through the land.
- (I) When the site slope is in condition for vegetation, a soil analysis shall be made as a basis for soil amendments.
- (J) The operator shall furnish copies of the soil sample report and recommendations to the Department.
- (K) In the event the permit area adjoins another land owner's property line or a right-of-way, open-cut mining operations must maintain an undisturbed buffer zone of fifty feet (50') from any adjacent property line or right-of-way until reclamation begins. For the department to approve a variance on the fifty-foot buffer zone:

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- (1) There must be an agreement between the affected property owner or right-of-way holder and the operator.
 - (2) The agreement must identify the land to be affected, describe what is to be done, how close the excavation will encroach on the property line or right-of-way, the plan and schedule of reclamation and be signed by all parties.
 - (3) This agreement must be submitted with the permit application.
 - (4) The operator may begin creating the final slope during reclamation at ten feet (10') from the adjacent property line or right-of-way.
- (L) Whenever the exposed face of mined seams that contain acid-forming materials is not covered by water or by permanent water impoundment, the operator shall cover the exposed face of the seams with earth or spoil material to a depth of not less than three feet (3') upon approval of the Department.
- (M) No later than June 1st of each year of the permit term, the operator shall submit to the Department, an annual report, in the form described in Chapter Six of this Regulation.
- (N) All mine spoil generated by the operator shall be disposed of in a manner approved by the Department.
- (O) For sand and gravel operations, the operator shall perform contemporaneous reclamation of the mine site in accordance with the operator's incremental mining plan approved by the Department.
- (P) Upon approval from the Department, stockpiles of processed materials may be left without being reclaimed if there is a likelihood that there will be a market for the material in the future and that there will be no form of pollution from the stockpiles remaining on or leaving the property.
- (Q) Mine and permit identification signs shall:
- (1) Be displayed at each point of access to the permit area from public roads;
 - (2) Show the current permit number and the name, business address, and telephone number of the operator; and
 - (3) Be retained and maintained until after the final release of the bond for the permit area.

Reg.15.403 Stream Bed Mining Standards

- (A) Material removal below the ordinary high water mark must not create a violation of any of the State's water quality standards established by the Commission.
- (B) At no time shall equipment such as trucks, loaders or dozers be allowed to operate in the water except as otherwise provided by the Act and this Regulation.
- (C) Material removal must not be conducted below an elevation of one foot (1') above the elevation of the surface of the water at the time of removal. If the stream is dry, material removal may proceed to a depth equivalent to one foot (1') above the lowest point of a cross section of the stream at that location.
- (D) At no time shall any material removal create a condition(s) that will cause the stream to change course or alter the location of the deepest part of the stream channel or cause bank or channel instability.
- (E) Any removal of material below the ordinary high water mark must be conducted in a manner that leaves an undisturbed slope next to the bank to prevent erosion.
- (F) An undisturbed buffer zone must be maintained from the ordinary high water mark landward for the length of the material removal site.
 - (1) If the applicant proposes a buffer zone of less than one hundred feet (100'), reasonable scientific and technical data based on the site specific conditions such as geology, soil type, slope, or waterway use designation that shows the proposed buffer zone will protect the water quality of the waterway must be presented to and approved by the Director.
 - (2) If, after review of the data submitted by the applicant, the director determines that the proposed buffer zone is not adequate, then the buffer zone shall be established by the Department not to exceed one hundred feet (100') measured horizontally from the ordinary high water mark.
 - (3) Disturbance in this buffer zone shall be limited to well-maintained access roads for ingress and egress only and when no other reasonable access is available.
 - (4) Upon temporary or permanent cessation of material removal at a site, steps shall be taken to minimize the amount of surface water and sediment that may enter the stream via an unvegetated access road.
- (G) If available, large oversized material shall be salvaged and placed back on the excavated area upon cessation of material removal to provide stability to the area. A description of such material must be included in the mining plan and replacement detailed in the reclamation plan.

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- (H) Mechanical material processing or storage:
 - (1) Mechanical material processing or storage shall not occur below the ordinary high water mark;
 - (2) Mechanical material processing or storage shall occur at a higher elevation than the ordinary high water mark and be outside the buffer zone; and
 - (3) An incidental pile of material used to facilitate loading below the ordinary high water mark will not be deemed as material storage providing that the pile is of a reasonable size that could practicably be removed that day.
- (I) Where conditions exist at specific sites that pose unique environmental threats to a stream, the Department may require additional steps to be taken to protect water quality and aquatic habitat.
- (J) If no other access to the material to be mined is available other than to cross a stream, thereby creating turbidity, the Department may approve a temporary crossing structure, provided the structure:
 - (1) Is designed to reduce or eliminate turbidity;
 - (2) Is placed perpendicular to the stream;
 - (3) Does not block or dam the stream; and
 - (4) Is removed immediately upon cessation of mining.
- (K) The mining plan must include, but is not limited to:
 - (1) A map or maps that depict the permit area, access to the site (from a state, county or municipal road);
 - (2) Identification of all land to be affected (i.e., process facility, product storage, location of material to be mined with respect to the stream, etc.);
 - (3) Provisions for storm water and process water containment;
 - (4) A cross section of the stream channel to be mined; and
 - (5) Any other site specific information the Department determines to be necessary to provide adequate information to determine if the goals of the Act and this Regulation will be achieved.

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- (L) There will be no reclamation requirements within the stream channel other than what is necessary to provide bank stability and prevent erosion as listed in paragraphs (E) and (G) above and all affected area outside the stream channel must be reclaimed in accordance with the grading and revegetation requirements of the open-cut provisions of the Act and this Regulation.
- (M) No material removal shall be conducted in streams designated as extraordinary resource waters except as provided in Reg.15.301(F) and (G).
- (N) Where a stream that is not designated as an extraordinary resource water converges with a stream that is designated as an extraordinary resource water, no mining shall be permitted in the non- extraordinary resource water from the point of confluence upstream for a distance equal to two times the stream channel width of the extraordinary resource water at the confluence or some other distance as agreed to by the Department and the applicant.
- (O) A permit obtained under the Act and this Regulation does not exempt the operator from the necessity of obtaining other state or federal permits or licenses nor does it authorize site activities to begin that require other permits or licenses.
- (P) Storage of such fluids as fuel, oil or hydraulic fluid and the respective wastes thereof must be such that they cannot enter the stream channel. However, should extraordinary events occur that result in waste water or one or more of these fluids entering the stream, the Department must be notified immediately.
- (Q) Landowners may sell or barter gravel or other material from stream beds as a part of an approved flood control project without obtaining a mining permit from the Department. A landowner may remove sufficient stream material from his or her own land for road maintenance, construction or other uses on said land without obtaining a mining permit. Except as provided above, material shall not be removed for the purpose of commercial sale without first obtaining a mining permit from the Department.
- (R) The Department may allow deviations from the provisions of paragraphs (B), (D), (E) and (H) above where in the Department's opinion proposed alternatives will achieve the same level of stream protection or rehabilitation.
- (S) No later than June 1st of each year of the permit term, the operator shall submit to the Department an annual report in the form described in Chapter Six of this Regulation.