

STATE OF WEST VIRGINIA DEPARTMENT OF NATURAL RESOURCES CHARLESTON 25305

JOHN D. ROCKEFELLER IV Governor

August 27, 1984

WILLIS H. HERTIG, JR.
Director

RONALD R. POTESTA Deputy Director

The Honorable A. James Manchin Secretary of State Capitol Complex Charleston, West Virginia 25305

Dear Secretary Manchin:

FILED IN THE OFFICE OF
A. JAMES MANCHIN
SECRETARY OF STATE
THIS DATE AUG 27/924
Administrative Law Division

The following is submitted to you pursuant to the requirements of Chapter 29A, Article 3, Section 15 of the Code of West Virginia, as amended.

Declaration of Emergency

The Reclamation Commission hereby makes the following statement of facts and circumstances constituting the emergency which requires the promulgation of these regulations pursuant to West Virginia Code 29A-3-15(a). The Commission affirmatively states that an emergency exists because, in accordance with Code 29A-3-15(a), these rules are (1) necessary for the immediate preservation of the public peace, health, safety or welfare; (2) necessary to comply with federal law and regulations; and (3) necessary to prevent substantial harm to the public interest.

The Federal Surface Mining Control and Reclamation Act of 1977, P.L. 95-87, and specifically Section 503, 30 U.S.C. § 1253, requires that a state have laws and regulations in effect which are consistent with their counterparts before a state can be delegated primacy over regulating its mining industry. Regulations were initially put into effect as emergency regulations on January 19, 1981, June 16, 1982, and again on January 7, 1983. Those regulations have now expired. The state received primacy on January 21, 1981 on the condition that certain elements of its program be modified. These regulations have been substantially modified and revised to address those conditions as well as changes that were made in the West Virginia Code 20-6 effective March 11, 1983. These regulations were filed as emergency regulations on July 15, 1983 and again on January 10, 1984. They are being filed this date as emergency rules so regulations will be in effect while the Legislature rules on our proposed regulations. The rules will be sent to the Legislature by the Review Committee. If these regulations are not put into effect, the Secretary of the Department of the Interior is required to revoke West Virginia's primacy and substitute a federal program. See, 33 U.S.C. § 1254. To allow federal takeover simultaneously prohibits the state from issuing new permits (33 U.S.C. § 1256) which in turn will substantially harm the public interest.



OFFICE OF THE SECRETARY OF STATE CHARLESTON 25305

A. JAMES MANCHIN SECRETARY OF STATE

STATE REGISTER FILING

	I, Willis H. Hertig, Jr. Chairman
	Title or Position
	Reclamation Commission , hereby submit to record in
	Department or Division
the	State Register on 8 1/2 x 11" paper two (2) copies of
()	proposed rules and regulations concerning topics of material not covered by existing rules and regulations;
()	proposed rules and regulations superseding rules and regulations already on file;
()	notice of hearing;
()	findings and determinations;
()	rules and regulations; or
(X)	other - specify (Emergency A. JAMES MANCHIN)
	This filing pertains to SECRETARY OF STATE
	ter 20 -Administrative Law Division
	C136
	es VII ion 4 - 14 inclusive
Page	No. 4-15 - 14-7
(X)	proposed rules and regulations are required to go to Legislative Rule Making Committee;
()	proposed rules and regulations are excluded from Legislative Rule Making Committee;

Signature of Person Athorizing
This Filing

August 27, 1984

Date Submitted

Willish. Hertig, Jr., prector Department of Watural Resources

Walter N. Miller, Director Department Of Mines Willis M. Hertag, Ir., Chairman, Rectamation commission

Walter N. Miller, Member Reclamation Commission

David Robinson, Member Reclamation Commission

James E. Pitsenbarger, Member Reclamation Commission

नेका, सिल्पिया ने हैं है। जोकी कार्यक्रिकी शहरी The stage of the last जिल्ला है, मिर्जिस्टार्गण है। ऐस्ट्रीनस्ट्रिक्ट्

WEST VIRGINIA SURFACE MINING RECLAMATION REGULATIONS

DEPARTMENT OF NATURAL RESOURCES

CHAPTER 20-6

SERIES VII (1983) FILED IN THE OFFICE OF

A. JAMES MANCHIN
SECRETARY OF STATE

THIS DATE 8-27-84

Administrative Law Division

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WEST VIRGINIA SURFACE MINING RECLAMATION REGULATIONS

Department of Natural Resources

Chapter 20-6 Series VII (1982)

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Subject: Rules and regulations pertaining to definitions, general permit requirements, transportation facilities, drainage systems, blasting, post mining land use, fish and wildlife considerations, revegetation, prime farmlands, bonding, prospecting, additional permit requirements and performance standards for surface effects of underground mining operations, subsidence control, additional permit requirements and performance standards for facilities incidental to coal mining, additional permit requirements and performance standards for coal removal incidental to development, exemptions, additional permit requirements and small operators assistance program, notice of citizens' suits, citizens' inspections, designation of areas unsuitable for coal mining, inspections, enforcement, open meetings and Reclamation Board of Review appeals.

SECTION 1. GENERAL

1.01 These regulations establish general and specific rules for general permit requirements, transportation facilities, drainage systems, blasting, post mining land use, fish and wildlife considerations, revegetation, prime farmlands, bonding, prospecting, additional permit requirements and performance standards for surface mining operations, additional permit requirements and performance standards for surface effects of underground mining operations, subsidence control, additional permit requirements and performance standards for facilities incidental to coal mining, additional permit requirements and performance standards for coal removal incidental to development, exemptions, additional permit requirements and small operators assistance program, notice of citizen's suits, citizens' inspections, designation of areas unsuitable for coal mining, inspections, enforcement, open meetings and Reclamation Board of Review appeals.

- Applicability These rules and regulations shall apply to all surface coal mining and reclamation operations in this state as specified in accordance with Chapter 20, Article 6.
 - (a) For all existing operations which have submitted permanent program modifications and/or addenda for existing permits or applications for permanent program permits, these regulations shall apply upon notification from the director of their applicability. Such notification shall occur within forty-five (45) 45 days of the effective date of these regulations. Within thirty (30) days of the receipt of that notification, the permittee shall acknowledge, in writing, to the director the applicability of these regulations to his operation.

 Such acknowledgement shall be deemed sufficient to make the permit or application complete for any new permit requirements contained
 - (b) These regulations apply immediately to all existing operations not covered in (a).

in these regulations and shall become a part of the permit.

- (c) For applications for new operations which have received an SMA number within thirty (30) days of the effective date of these regulations, the applicant shall acknowledge the applicability of these regulations to his proposed operation, in writing, to the director prior to issuance of the permit. Such acknowledgement shall be deemed sufficient to make the application complete for any new permit requirements contained in these regulations and shall become a part of the permit.
- (d) Permits issued after the effective date of these regulations for existing or new operations not covered in (a) or (c) shall incorporate all of the requirements of these regulations. These requirements shall be addressed in the application.

- (e) All existing and new operations shall comply with the notice requirements of 4C.07 and 7C.01 within seventy-five (75) days of the applicability of these regulations as specified in (a), or (b) of this subsection. Such notice shall be deemed sufficient to allow continued operation during the period specified in these regulations for pre-notification (thirty (30) days for right to a pre-blast survey and six (6) months for the extension of underground workings). Operations continuing beyond those time periods must be in full compliance with these regulations.
- 1.03 <u>Authority</u> These regulations are issued under the authority of Article 6, Chapter 20, Code of West Virginia, as amended.
- 1.04 <u>Effective Date</u> These regulations become effective on the 27th day of August, 1984.
- 1.05 Filing Date These regulations were filed in the Office of the Secretary of State on the 16th day of December, 1982, as proposed regulations, were refiled on the 3rd day of February, 1983, taking into account public comment, and refiled on the 15th day of July, 1983, as emergency regulations, taking into account concerns of the Federal Office of Surface Mining. These regulations were refiled on the 8th day of December, 1983 and after review and authorization by the legislature in Senate Bill 425 and were refiled on the 30th day of March, 1984 and are being refiled on the 27th day of August, 1984. These regulations become effective on the 27th day of August, 1984.

- DEFINITIONS: UNLESS THE CONTEXT IN WHICH USED CLEARLY REQUIRES A DIFFERENT MEANING, AS USED IN THESE REGULATIONS OR AS REFERRED TO IN ARTICLE 6,

 CHAPTER 20, CODE OF WEST VIRGINIA, AS AMENDED:
- 2.01 <u>Abandoned Coal Waste Disposal Area</u> means any coal refuse disposal area which is not part of an active surface mining operation. This definition does not relieve any operator from his reclamation responsibility for the coal refuse disposal area.
- 2.02 <u>Acidity</u> means the quantitative capacity of an aqueous medium to donate protons in a reaction with hydroxyl ions.
- 2.03 Acid Mine Drainage means water discharged from an active, inactive, or abandoned mine and from areas affected by surface mining with a ph of less than 6.0 in which total acidity exceeds total alkalinity.
- Acid-Producing Coal Seam means seams commonly associated with sulfides or other minerals which create acid mine drainage. Seams commonly associated with such material may include, but are not limited to Waynesburg, Washington, Freeport, Sewickley, Redstone, Pittsburgh, Kittanning, Elk Lick, Peerless, No. 2 Gas, Upper Eagle, No. 5 Block and Stockton Lewiston. However, specific onsite data may, on a case by case basis, demonstrate that these seams are not acid producing in specific areas.
- 2.05 <u>Acid-Producing Overburden</u> means material which upon appropriate analysis shows the potential for producing acid mine drainage.
- 2.06 Acid-Test Ratio means the relation of quick assets to current liabilities.
- 2.07 Act means West Virginia Code, Chapter 20, Article 6.
- 2.08 Active Surface Mining Operation means an operation where land is being disturbed or mineral is being removed and where a Phase I Bond Reduction has not been approved unless inactive status has been granted.
- 2.09 Asset Ratio means the relation of total assets to total liabilities.

- 2.10 <u>Auger Mining</u> means a method of mining coal at a cliff or highwall by drilling or cutting holes into an exposed coal seam.
- 2.11 <u>Buffer Zone</u> means an undisturbed border along or around an intermittent or perennial stream.
- 2.12 <u>Bearing Capacity</u> means a measure of the ability of a foundation material to carry loads imposed by an embankment or other structure as determined by standard engineering evaluations.
- Best Technology Currently Available means equipment, devices, systems, methods or techniques which will (a) prevent, to the extent possible, additional contributions of suspended solids to stream flow or runoff outside the permit area, but in no event result in contributions of suspended solids in excess of requirements set by applicable State or Federal laws; and (b) minimize, to the extent possible, disturbances and adverse impacts on fish, wildlife and related environmental values and achieve enhancement of those resources where practicable.
- 2.14 <u>Capital Assets</u> means those assets such as land, buildings and equipment held for use in the production or sale of other assets or services.
- 2.15 <u>Cash</u> means (a) all cash items except cash (1) restricted by an agreement, or (2) described as earmarked for a particular purpose; and (b) short-term investment such as stocks, bonds, notes, and certificates of deposit, where the intent and ability to sell them in the near future is established by the operator.
- 2.16 Cemetery means any area of land where human bodies are interred.
- 2.17 <u>Channel Protection</u> means any measures taken to prevent or control erosion, scour, or other destructive processes in channels such as diversion ditches and spillways.

- 2.18 Coal Processing Plant means a collection of facilities where run-of-the-mine coal is subjected to cleaning, concentrating or other processing or preparation in order to separate coal from its impurities. The processing plant may consist of, but is not limited to, the following: loading facilities; storage and stockpile facilities; sheds, shops and other buildings; water treatment and water storage facilities; settling basins and impoundments; coal processing and other waste disposal areas; roads, railroads and other transportation facilities.
- 2.19 <u>Coal Refuse Disposal Area</u> means a deposit of coal processing waste or underground development waste.
- Coal Processing Waste means materials which are separated and wasted from the product coal during the physical or chemical processing, cleaning or concentrating.
 - 2.21 <u>Coarse Coal Refuse</u> means coal processing waste predominately within a size range greater than the #28 sieve size.
 - 2.22 <u>Collateral Bond means an indemnity agreement in sum certain deposited</u> with the director executed by the permittee and supported by one or more of the following:
 - (1) The deposit of cash in one or more federally insured accounts, payable only to the director upon demand;
 - (2) Negotiable bonds of the United States, a State, or a municipality, endorsed to the order of, and in the possession of, the director;
 - (3) Negotiable certificates of deposit, payable only to the director, and in his possession;
 - (4) An irrevocable letter of credit of any bank organized or authorized to transact business in the State of West Virginia, payable only upon presentation by the director;

- (5) A perfected, first-lien security interest in real or personal property, in favor of the director; or
- (6) Investment-grade rated securities, having the highest rating issued by a nationally recognized securities rating service, endorsed to the order of, and in the possession of, the director, excluding all issues of the type traded on a commodity exchange such as contracts for future delivery of goods.
- 2.23 <u>Combined Coal Refuse means a mixture of coarse coal refuse and dewatered</u> fine coal refuse.
- 2.24 <u>Combustible Materials</u> means organic materials that are capable of burning by fire or through oxidation, accompanied by the evolution of heat and a significant temperature rise.
- 2.25 Common-size Comparative Balance Sheet means item amounts from a number of the permittee's or applicant's successive yearly balance sheets arranged side by side in a single statement followed by commonsize percentages whereby: (1) the asset total is assigned a value of 100 percent; (2) the total of liabilities and owner equity is also assigned a value of 100 percent; and (3) each individual asset, liability, and owner equity item is shown as a fraction of one of the 100 percent totals.
- 2.26 <u>Common-size Comparative Income Statement</u> means an operator's income statement amounts for a number of successive yearly periods arranged side by side in a single statement followed by commonsize percentages whereby net sales are assigned a 100 percent value, and then each statement item is shown as a percentage of net sales.

- 2.27 Community or Institutional Building means any structure, other than a public building or an occupied dwelling, which is used primarily for meetings, gatherings or functions of local civic organizations or other community groups; functions as an educational, cultural, historic, religious, scientific, correctional, mental-health or physical health care facility; or is used for public services, including, but not limited to, water supply, power generation or sewage treatment.
- 2.28 <u>Compaction</u> means the densification of a soil or soil-like material by means of mechanical manipulation.
- 2.29 <u>Complete Application</u> means an application which contains all required maps, plans, designs and other application materials excluding bond.
- 2.30 <u>Completion of Reclamation</u> means that the total bond has been released after approval of the final inspection report provided for in these regulations.
- 2.31 <u>Construction Pore Pressures</u> means water pressures generated in foundation soils or embankments due to compression by loads imposed by construction of an embankment or other structure.
- 2.32 <u>Current Assets means cash and assets that are reasonably expected to be realized in cash or sold or consumed within one year.</u>
- 2.33 <u>Current Liabilities</u> means debts or other obligations that must be paid or liquidated within a short period of time, usually a year. This shall also include dividends payable on preferred stock within one year.
- 2.34 <u>Current Ratio</u> means the relation of current assets to current liabilities.
- 2.35 <u>Density</u> means the weight of soil or soil-like solids per unit of total volume of soil or similar mass.
- 2.36 <u>Design Storm</u> means predicted precipitation of given intensity, frequency and duration based on United States Weather Bureau data.

- 2.37 <u>Director and/or His Authorized Agent means the director of the department of natural resources</u>, deputy directors, the chief of the division of reclamation, the assistant chiefs of the division of reclamation, all duly authorized surface mining reclamation supervisors, inspectors and inspectors-in-training.
- 2.38 <u>Downslope</u> means the land surface between the projected outcrop of the lowest coal seam being mined or any mining related construction and the valley floor.
- 2.39 <u>Embankment</u> means a man-made deposit of earth or waste materials, usually exhibiting at least one sloping face.
- 2.40 <u>Embankment Stability</u> means the degree of safety relative to a structural failure of the embankment.
- 2.41 <u>Emergency Spillway</u> means a hydraulic structure designed to discharge water in excess of that which an impoundment is designed to store or which cannot be passed through a principal spillway.
- 2.42 Excess Spoil means spoil material disposed of in a location other than the mined-out area.
- 2.43 <u>Existing Coal Refuse Area</u> means a refuse disposal area that is part of an active surface mining operation.
- 2.44 <u>Existing Structure</u> means a structure or facility used with or to facilitate surface coal mining and reclamation operations for which construction began prior to January 18, 1981.
- 2.45 <u>Face-Up</u> means the result of an excavation where a vertical or near vertical highwall is created that exposes the overburden and/or the mineral face.
- 2.46 <u>Fine Coal Refuse</u> means coal processing waste predominately within a size range less than the #28 sieve which may be disposed of in a slurry form or in a dewatered or treated state.

- 2.47 <u>Foundation</u> means soil, bedrock, or other earth material on or against which an embankment or other structure is placed.
- Fragile lands means geographic areas containing natural, ecologic, scientific or esthetic resources that could be irreparably damaged or destroyed by surface coal mining operations. Examples of fragile lands include valuable habitats for fish or wildlife, critical habitats for endangered or threatened species of animals or plants, uncommon geologic formations, national natural landmark sites, areas where mining may result in flooding, environmental corridors containing a concentration of ecologic and esthetic features, areas of recreational value due to high environmental quality, and buffer zones adjacent to the boundaries of areas where surface coal mining operations are prohibited under Section 22(d) of the Act and Section 13 of these regulations.
- 2.49 Freeboard means (a) the vertical distance between the lowest point of the crest of the embankment and the reservoir water surface or (b) the vertical distance between the top of a ditch or channel and the water surface during the design flow.
- 2.50 <u>Gravity Discharge</u> means, with respect to underground mining activities, mine drainage that flows freely down gradient in an open channel. Mine drainage that occurs as a result of flooding a mine to the level of the discharge is not gravity discharge.
- 2.51 <u>Growing Season</u> means one (1) year.
- 2.52 Ground water means subsurface water in the zone of saturation.
- 2.53 <u>Haulageway or Access Road means any road constructed, improved, maintained</u> or used by the operator with the exception of state maintained roads.
- 2.54 <u>Hazard Potential</u> means a classification rating assigned to a structure based on engineering evaluations and judgement predicting the damage to human life, property and environment should a failure of the structure occur.

- 2.55 <u>Highwall</u> means the face of exposed overburden or coal in an open cut of a surface mining operation or for entry to an underground mining operation.
- 2.56 <u>Historic Lands</u> means important historical, cultural and scientific areas that could be irreparably damaged or destroyed by surface mining operations. Examples of historic lands include sites that have been listed on the national register of historic places, national historic landmarks and sites for which historic designation is pending.
- 2.57 <u>Handbook</u> means the Technical Handbook of Standards and Specifications for Mining Operations in West Virginia prepared by the director of the West Virginia Department of Natural Resources.
- 2.58 Hydrologic Regime means the entire state of water movement in a given area.
- 2.59 <u>Impoundment</u> means a closed basin constructed for the retention of water, sediment or waste.
- 2.60 <u>Infiltration</u> means the flow or movement of water through the surface of soil or soil like material into the ground.
- 2.61 <u>Intermittent Stream</u> means a stream or portion of a stream that flows continuously for at least one month of the calendar year as a result of ground water discharge or surface runoff.
- 2.62 <u>Inspection</u> shall mean a visual review of prospecting, surface or other mining operations to insure complete compliance with any applicable law, rule, regulation or permit conditions under jurisdiction of the director.
- 2.63 <u>Irreparable Damage to the Environment means any damage to the environment</u> that cannot be corrected by actions of the operator.
- 2.64 <u>Leachate</u> means a liquid that has percolated through soil, rock or waste and has extracted dissolved or suspended materials.
- 2.65 <u>Lightly Buffered Stream</u> means any stream or its tributaries that contains less than 15 PPM methyl orange alkalinity (to pH4.5) and a conductivity of less than 50 micro MHO.

- 2.66 <u>Liquefaction</u> means a phenomenon wherein a saturated granular soil or soil like material loses strength and flows in a manner resembling a liquid.
- 2.67 Liquidity Ratio means the relation of cash to current liabilities.
- 2.68 Mine means the shaft, slopes, drifts or inclines connected with excavations penetrating coal seams or strata and the surface structures or equipment connected therewith which contributes directly or indirectly to the mining, preparation or handling of coal.
- 2.69 <u>Mineral Face</u> means the exposed vertical cross-section of the natural coal seam or mineral deposit.
- 2.70 <u>Natural Drainway</u> means any natural water course which may carry water to the tributaries and rivers of the watershed.
 - 2.71 Natural Hazard Lands means geographic areas in which natural conditions exist which pose or, as a result of surface coal mining operations, may pose a threat to the health, safety or welfare of people, property or the environment, including areas subject to landslides, cave-ins, severe wind or soil erosion, frequent flooding and areas of unstable geology.
 - 2.72 Net profit means the bottom line of the income statement after taxes, including taxes based on income, adjustments, all extraordinary income and expense, but before preferred and common stock dividends.
 - 2.73 <u>Net worth</u> means preferred and common stock, all surplus accounts, and retained earnings.
 - 2.74 <u>Occupied Dwelling</u> means any building that is currently being used on a regular or temporary basis for human habitation.
 - 2.75 Outer Spoil or Outer Slope means a disturbed area extending from the outer point of the bench to the extreme lower limit of the disturbed land.

- 2.76 <u>Overburden</u> means material of any nature, consolidated or unconsolidated, that overlies a mineral deposit, excluding topsoil.
- 2.77 <u>Peak Runoff</u> means the maximum flow at a specified location resulting from a design storm.
- 2.78 Perennial Stream means a stream or portion of a stream that flows continuously.
- 2.79 <u>Principal Shareholder</u> means any person who is the record or beneficial owner of 10 percent or more of any class of voting stock.
- 2.80 <u>Piping</u> means a process of internal erosion which occurs when water transports soil or soil like materials through unprotected exits, developing unseen channels or pipes through an embankment or its foundation.
- 2.81 Pit means that part of the surface mining operation from which the mineral is being actively removed or where the mineral has been removed and the area_has not been backfilled.
 - 2.82 <u>Potential Hazard</u> means the existence of any condition or practice or any violation of a permit or other requirements of the Act in an operating or an abandoned refuse area which might reasonably be expected to cause physical harm to persons, property, or the environment inside or outside the permit area.
 - 2.83 <u>Pre-Inspection</u> means a preliminary survey and a field review by the director or his authorized agent of a pre plan and the proposed area to be disturbed.
 - 2.84 <u>Preplan</u> means the total application submitted to the director including the application forms, mining and reclamation plan, drainage plan, blasting plan, planting plan, maps, drawings, data, cross-sections, bonds and other information as may be required to obtain a permit.
 - 2.85 <u>Principal Spillway</u> means the hydraulic structure designed to discharge water stored between normal pool and the emergency spillway invert elevations.

- 2.86 <u>Probable Maximum Precipitation</u> means the depth-duration-area rainfall for a particular area that represents the maximizing of the most critical meteorological conditions that are considered possible.
- 2.87 <u>Public Building</u> means any structure that is owned by a public agency or used primarily for public business or meetings.
- 2.88 Quick Assets means cash and current assets that can be quickly turned into cash.
- 2.89 <u>Recharge Capacity</u> means the ability of the soils and underlying materials to allow precipitation to infiltrate and reach the zone of saturation.
- 2.90 Reclamation means the process of converting disturbed land to a stable form for productive use.
- 2.91 Renewable Resource Lands means geographical areas which contribute significantly to the long range productivity of a water supply, or food or fiber products.
- 2.92 <u>Retained Earnings</u> means stockholder's equity that has arisen from retained assets from earnings in the business. This shall include only earnings from normal operations and not gains from such transactions as the sale of plant assets or investments.
- 2.93 <u>Return On Investment</u> means the relation of net profit for the last yearly period to ending net worth.
- 2.94 <u>Safety Factor</u> means the ratio of the available shear strength to the developed shear stress, or the ratio of the sum of the resisting forces to the sum of the loading or driving forces, as determined by accepted engineering practices.
- 2.95 Sediment means solid material, both mineral and organic, that is in suspension, is being transported or has been moved from its site of origin by air, water gravity or ice and has come to rest on the earth's surface.

- 2.96 <u>Sediment Control Structure</u> means a structure designed, constructed and maintained in accordance with Section 48.05 of these regulations.
- 2.97 <u>Self-Bond</u> means an indemnity agreement in a sum certain payable to the director, executed by the permittee and by each individual and business organization capable of influencing or controlling the investment or financial practices of the permittee by virtue of his authority as an officer or ownership of all or a significant part of the permittee, and supported by agreements granting the director a security interest in real or personal property pledged to secure performance by the permittee.
- 2.98 <u>Significant Aquifer</u> means a zone, stratum or group of strata that can store and transmit water in sufficient quantities.
- 2.99 Slope Protection means any measures taken to control erosion on slopes.
- 2.100 <u>Slope Stability</u> means the degree of safety relative to the development of a landslide in the slope, as defined by one or more standard engineering methods of analysis.
- 2.101 <u>Spoil</u> means overburden that has been removed during surface coal mining operations.
- 2.102 <u>Stabilize</u> means to control movement of soil, spoil piles or areas of disturbed earth by modifying physical or chemical properties.
- 2.103 <u>Standard Engineering</u> means sound engineering practice based upon the technology currently available to the engineering profession.
- 2.104 <u>Stoniness</u> means a characteristic of earth, overburden or spoil reflecting its relative proportion of sizeable aggregate content as opposed to its sand, silt, clay or rock fragment content.
- 2.105 <u>Structure</u> means, but is not limited to, gas lines, water lines, towers, airports and dams. This shall not include operational facilities of the surface mining operation for purposes of Section 40.05(f).

- 2.106 <u>Strength Parameters</u> mean those engineering values obtained from standard engineering shear strength tests of soil or soil like material.
- 2.107 <u>Sub-Drainage System</u> means a designed and constructed system provided for the conveyance of subsurface water.
- 2.108 <u>Subsidence</u> means a sinking, collapsing or cracking of a portion of the earth's surface caused by voids beneath the surface created by mining.
- 2.109 <u>Substantial Legal and Financial Commitments in a Surface Coal Mining Operation</u> means that significant investments and legal commitments have been made in activities and facilities such as power plants, railroads, coal handling, preparation, extraction or storage facilities and other capital-intensive activities on the basis of a long term coal contract.
- 2.110 <u>Substantially Disturb</u> means, for purposes of prospecting, to impact significantly upon land, air or water resources by such activities as blasting, mechanical excavation, drilling or augering coal or water exploratory holes or wells, construction of roads and other access routes, and the placement of structures, excavated earth or other debris on the surface of land.
- 2.111 <u>Successor in Interest</u> means any person who succeeds to rights granted under a permit by transfer, assignment or sale of those rights.
- 2.112 Surety Bond means an indemnity agreement in a sum certain payable to the director executed by the permittee which is supported by the performance guarantee of a corporation licensed to do business as a surety in the State of West Virginia.
- 2.113 Surface Water means water on the surface of the earth.
- 2.114 Topsoil means the A-horizon soil layer of the three major soil horizons.
- 2.115 <u>Toxic-Forming Materials</u> means earth materials or wastes which, if acted upon by air, water, weathering or microbiological processes, are likely to produce chemical or physical conditions in soils, air or water that are detrimental to the environment.

- 2.116 <u>Transfer, Assignment or Sale of Rights</u> means a change in ownership or other effective control over the right to conduct surface coal mining operations under a permit issued by the director.
- 2.117 Toxic Mine Drainage means water that is discharged from active or abandoned mines or other areas affected by surface mining or prospecting operations which contains a substance which through chemical action or physical effects, is likely to kill, injure or impair biota commonly present in the area that might be exposed to it.
- 2.118 <u>Underground Development Waste</u> means waste rock mixtures of coal, shale, claystone, siltstone or other related materials that are brought to the surface for disposal.
- 2.119 <u>Valid Existing Rights</u> exists, except for haulroads, in each case in which a person demonstrates that the limitation provided for in Section 22 (d) of the Act would result in the unconstitutional taking of that person's rights. For haulroads, valid existing rights means a road or recorded right-of-way or easement for a road which was in existence prior to August 3, 1977. A person possesses valid existing rights if he can demonstrate that the coal is immediately adjacent to an ongoing mining operation which existed on August 3, 1977 and is needed to make the operation as a whole economically viable. Valid existing rights shall also be found for an area where a person can demonstrate that an SMA number had been issued prior to the time when the structure, road, cemetery or other activity listed in Section 22(d) of the Act came into existence.
- 2.120 <u>Valley or Head-of-Hollow Fill means</u> a fill structure consisting of any material, other than organic material, placed in a valley where side slopes of the existing hollow measured at the steepest point are greater than 20° or the average slope of the profile of the hollow from the toe

- of the fill to the top of the fill is greater than 10°.
- 2.121 <u>Woodlands</u> means commercial woodlands where the post-mining land use would be a commercial product where flat or gently rolling land is essential for operation and mechanical harvesting.
- 2.122 <u>Working Capital</u> means the excess of the operator's current assets over its current liabilities.
- Zone of Saturation means the zone below the piezometric surface in which all voids are filled with groundwater. Piezometric surface means the surface to which the water from a given aquifer will rise under its full head.

3A. PERMIT APPLICATION

- 3A.01 <u>General Requirements for Format and Contents</u> Applications for permits to conduct surface mining operations shall be filed in the format required by the director.
 - (a) All technical data submitted in the application shall be accompanied by the names of persons or organizations that collected and analyzed the data, dates of the collection and analysis of the data and description of the methodology used to collect and analyze the data. Any referenced materials not included in the application shall be readily available to the director.
 - (b) If the application is for a period in excess of the normal five
 (5) years, the application shall:
 - 1. Be complete for the specified longer term;
 - 2. Show that the specified longer term is reasonably needed to allow the applicant to obtain necessary financing of equipment and the opening of the operation and that the need is confirmed in writing by the applicant's proposed source of financing; and
 - 3. Such permits shall be reviewed by mid-term or every five (5) years, whichever is more frequent.
 - (c) The application shall contain the telephone numbers of the applicant, operator or applicants resident agent.

3B. ADVERTISEMENT

- Surface Mine Application Number Prior to the publication of the advertisement for a surface mining permit, the applicant shall submit a complete surface mining permit application and obtain a surface mining application (SMA) file number. Each such SMA number shall be valid for 360 days.
- 38.02 Contents of Advertisements

- (a) The surface mining application (SMA) file number shall be made a part of the advertisement.
- (b) A clear and accurate location map shall be made a part of the advertisement. A map of a scale and detail found in the West Virginia General Highway Map will be the minimum standard for acceptance. The map size will be at a minimum two inches (2") X two inches (2"). Longitude and latitude lines and north arrow shall be indicated on the map and such lines will cross at or near the center of the proposed permit area.
- (c) At a minimum, the advertisement shall contain:
 - 1. The name and business address of the applicant;
 - 2. A narrative description which clearly describes the location of the proposed permit area to include the name of the coal seam to be mined and the receiving stream;
 - The location where a copy of the application is available for public review;
 - 4. The name and address of the regulatory authority where written comments or requests for informal conferences on the application may be submitted;
 - 5. The type of operation; and
 - 6. Surface and mineral ownership of the tract to be permitted.
- (d) The advertisement and publication dates shall be certified and notarized by the publishing newspaper. The certificate of publication shall be made a part of the permit application.
- (e) If an applicant seeks a permit to mine within one hundred feet

 (100') of the outside right-of-way of a state maintained road or

 to relocate a state maintained road, the advertisement may include

a concise statement describing the road and, if applicable, the particular part to be relocated, where the relocation is to occur, the duration of the relocation and that a public hearing can be requested. If mining within one hundred feet (100') of a public road is proposed and not addressed in this advertisement, a separate public notice, with an opportunity for a public hearing, must be provided for prior to permit issuance.

- (f) If an alternative land use is proposed, an indication of the premining land use and the proposed postmining land use.
- (g) If an experimental practice is proposed, a statement indicating such and identifying regulatory provisions for which a variance is requested.
- 3B.03 <u>Availability of comments</u> The director shall file a copy of comments for public review at the same office where the permit is filed.

3C. MAPS

- 3C.01 <u>Scale for Maps</u> Except as otherwise noted in these rules and regulations, the scale required for all maps shall be as follows:
 - (a) The preferred scale of maps proposed from U.S. Geological Survey topographic maps on 7.5-minute quadrangle shall be enlarged to five hundred foot (500') to the inch;
 - (b) The preferred scale for maps associated with facilities subject to Sections 7 and 8 of these regulations shall be two hundred foot (200') to the inch; and
 - (c) Lesser scales may be used where improved clarity and accuracy are necessary.
- 3C.02 Map Size All maps and plans shall be submitted on print paper, thirty inches (30") by forty-two inches (42") or less. If supplementary maps or plans are attached, match lines shall be used.

- 3C.03 <u>Color Code</u> A color code shall be used in preparing all maps to indicate critical features of the permit area as follows:
 - (a) Red shall indicate mineral to be removed;
 - (b) Blue shall indicate water and drainage patterns;
 - (c) Green shall indicate areas regraded;
 - (d) Yellow shall indicate all other areas within the permit boundary; and
 - (e) Purple shall be used to outline adjacent mining permits.

3D. INSURANCE

The minimum amount of insurance coverage for bodily injury shall be \$300,000 for each occurrence and \$500,000 aggregate; and minimum insurance for property damage shall be \$300,000 for each occurrence and \$500,000 aggregate with no exclusion for landslides and water loss; Provided, that blasting insurance will continue as long as blasting activities occur. Provided further, that the policy shall include a rider requiring the insurer notify the director whenever substantive changes are made in the policy including any termination or failure to renew.

3E. APPROVED PERSONS

- Function Any person may upon approval by the director, unless otherwise provided in the Act and these regulations, prepare, sign or certify all permit applications, maps, plans and design specifications or other similar materials necessary to complete an application and preplan.

 Provided however, that for purposes of Sections 10(a)(13) & 13(b)(10) of the Act an approved person shall be a registered professional engineer or licensed land surveyor who may be assisted by experts in related fields such as geology, land surveying and landscape architecture.
- 3E.02 <u>Qualifications</u> The director's approval shall be in writing and shall be based on the following:

- (a) A resume of the persons prior experience and training relating to the preparation of permit application materials, <u>Provided</u>, that registered professional engineers, registered mining or civil engineers and licensed land surveyors currently registered or licensed in the State of West Virginia shall in lieu of a resume submit a copy of their registration; and
- (b) Any person seeking an approval must demonstrate that he possesses adequate knowledge of the Act and rules and regulations promulgated thereunder and possess such other skills and qualifications as may be necessary to complete an application and preplan by successfully passing an examination administered by the director. Those persons who have been approved to date need not make said demonstration. Such examinations will be given upon request by the person seeking approval.

3F. COMPLIANCE INFORMATION

- Past Violations In addition to the compliance and permit information required by the Act, each application shall contain a listing of any current or previous permits or pending applications in the United States and a listing of each violation notice received by the applicant in connection with any surface coal mining operation during the three (3) year period before the application date for violations of any environmental law, rule or regulation of any state and of regulation enacted pursuant to federal law pertaining to air or water environmental protection.
- Determination by the director If the director determines, from either the schedule submitted as part of the application or from other available information, that any surface mining operation owned or controlled by the applicant is currently in violation of any law, rule or regulation of the United States, or of any state law, rule or regulation enacted

pursuant to federal law, rule or regulation pertaining to air or water environmental protection, or of any provision of the Act, the director shall require the applicant, before the issuance of the permit, to either:

- (a) Submit to the director proof which is satisfactory to the regulatory authority, department or agency which has jurisdiction over such violation, that the violation:
 - 1. Has been corrected; or
 - 2. Is in the process of being corrected.
- (b) Establish to the director reviewing such application that the applicant has filed and is presently pursuing, in good faith, a direct administrative or judicial appeal to contest the validity of that violation. If the administrative or judicial hearing authority either denies a stay applied for in the appeal or affirms the violation, then any surface coal mining operations being conducted under a permit issued according to this paragraph shall be immediately terminated, unless and until the provisions of the above paragraph are satisfied.
- 3F.03 <u>Identification Number</u> The name of the proposed mine and the Mine Safety and Health Administration identification number for the surface or underground mine, if issued, shall be included in the application.
- 3F.04 <u>Federal Fees</u> The applicant shall submit proof that all Federal Reclamation fees are paid.
- 3G. OPERATION PLANS, MAPS AND CROSS-SECTIONS
- 3G.01 Operation Plans In addition to other plans required by the Act, the application shall contain plans describing:

- (a) How the applicant will case, seal or otherwise manage augerholes, boreholes, shafts, wells and open holes;
- (b) How the applicant will remove, store and redistribute topsoil, subsoil and other materials or topsoil substitutes as provided for in the Topsoil Performance Standards of Sections 6, 7 and 8; and
- (c) How the applicant will handle acid forming and toxic forming materials and materials constituting a fire hazard.
- Maps The preplan map shall be developed in accordance with the requirements of Sections 20-6-10(a)(12) and (13) and 20-6-11 of the Act and Subsection 3C of these regulations and shall include the following:
 - (a) The location and current use of all structures within one thousand feet (1000') of the proposed permit area;
 - (b) Each state maintained road located in or within one hundred feet (100') of the proposed permit area;
 - (c) The boundaries of any public park and locations of historic lands within or adjacent to the permit area;
 - (d) Each cemetery located in or within one hundred feet (100') of the proposed permit area;
 - (e) Any portion of a unit of the National System of Trails or the Wild and Scenic River System, including study rivers designated under Section 5(a) of the Wild and Scenic Rivers Act which is located within or adjacent to the proposed permit area;
 - (f) The location of all existing structures to be used for surface mining operations which are to be exempt from design standards:
 - (g) The date on which the map was prepared, a north arrow, quadrangle name and location map;

- (h) Where the natural slope of the land below the coal outcrop is less than twenty degrees (20°) and downslope placement of overburden or spoil is proposed, the map shall indicate percent slope of the land at two hundred foot (200')intervals along the crop line;
- (i) The location of sampling points for the collection of baseline data and monitoring sites to be used during operation;
- (j) The location of each facility to be used to protect or enhance fish and wildlife and related environmental values;
- (k) Extent of proposed auger operations;
- (1) Surface and mineral owners and property lines within and contiguous to the permit area;
- (m) Location of water supply intakes for current users of surface water; and
- (n) Location and identification of sub areas if incremental bonding is to be used.
- 2G.03 Cross-Sections The application shall contain cross-sections which accurately depict the existing premining surface configuration and the final surface configuration that will be achieved as proposed in the reclamation plan and/or as required by these regulations.

3H. GENERAL ENVIRONMENTAL RESOURCES INFORMATION

- 3H.01 The application shall contain a description of any historic lands shown on the preplan map within or adjacent to the proposed permit area. A statement as to the timing and sequence of mining and a description of the measures to be used to minimize or prevent adverse impacts in relation to such historical lands shall be included in the application.
- 3H.02 <u>Existing Structures and Facilities</u> The applicant shall submit necessary plans and specifications for the modification of any existing

structures or facilities which do not meet the performance standards contained in these regulations.

3H.03 Experimental Practices - All experimental practices shall have the prior approval of the director of OSM before the beginning of operation and permits including such shall be reviewed at least every 2 1/2 years from date of issuance.

31. ENDANGERED SPECIES

The applicant shall describe all control measures, management techniques and monitoring methods to be used to protect or enhance threatened or endangered species of plants or animals listed by the Secretary of the Interior under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) and their critical habitats if they are to be affected by the proposed activities.

3J. OCCUPIED DWELLINGS

Where the proposed surface coal mining operation would be conducted within three hundred feet (300') [measured horizontally] of any occupied dwelling, the applicant shall submit with the application a written waiver from the owner of the dwelling or a demonstration of valid existing rights; Provided, that if a waiver was obtained prior to August 3, 1977, a new waiver need not be obtained; Provided further, that valid waivers shall remain in any subsequent transfer, sale or reassignment of the permit.

3K. VERIFICATION OF APPLICATION

An application for a permit shall contain a notarized signature by a principal officer verifying that the information contained in the application is true and correct to the best of the official's information and belief.

- 3L. TRANSFER, ASSIGNMENT OR SALE OF PERMIT RIGHTS AND OBTAINING APPROVAL
- 3L.01 Requirements The director shall not grant approval of the transfer,

- assignment or sale of the rights granted under any permit unless and until the following conditions are met: (a) It shall be affirmatively demonstrated to the director that a bond in the full amount of that required for the permit will be kept in full force and effect before, during and after the transfer, assignment or sale of the permit rights; and
- (b) The application shall set forth on forms prescribed by the director and verified in accordance with 3K, the information required in the following sections of the Act: 10(a)(1) through 10(a)(6) and 10(a)(9), 10(d), 10(f), 11(a)(10), and 18(b)(5).
- 3L.02 Findings If the director finds, based on the information set forth in 3L.01 and other information made available to him, that the person to whom the permit rights are being assigned, transferred or sold will conduct mining operations in accordance with the purpose and intent of the Act, these regulations and the terms and conditions of the permit, the approval of the assignment, transfer or sale of the permit rights may be granted.
- Agreement A permittee who wishes to assign the mining operation through an agreement, contract, job contract, etc., to another party but retain the permit must request prior written approval on forms prescribed by the director. Under this arrangement, the permittee remains subject to all provisions of the Act, these rules and regulations and the terms and conditions of the permit.
- Successor by Transfer, Assignment or Sale Any person seeking to succeed by transfer, assignment or sale to the rights granted by a permit issued under the Act shall, prior to the date of such transfer, assignment or sale, comply with the following:

- (a) Obtain the performance bond coverage of the original permittee by:
 - 1. Transfer or replacement of the original bond;
 - 2. A written agreement with the original permittee and all subsequent successors in interest (if any) that the bond posted by the original permittee and all successors shall continue in force on all areas affected by the original permittee and all successors and supplementing such previous bonding with such additional bond as may be required by the regulatory authority. If such an agreement is reached, the director may authorize for each previous successor and the original permittee the release of any remaining amount of bond in excess of that required by the agreement; and
 - 3. Providing sufficient bond to cover the original permit in its entirety from inception to completion of reclamation operations or by such other methods as would provide that reclamation of all areas affected by the original permittee is assured under bonding coverage at least equal to that of the original permittee.
- (b) Provide the director with an application for approval of such proposed transfer, assignment or sale, including:
 - 1. Name and address of the existing permittee and permit number; and
 - Name and address of the person proposing to succeed by such transfer, assignment or sale and the name and address of that person's resident agent.

3L.05 Advertisement

(a) The person applying for approval of such transfer, assignment or

sale of rights granted by a permit shall advertise the filing of the application in a newspaper of general circulation in the locality of the operations involved, indicating the name and address of the applicant, the original permittee, the number and particular geographic location of the permit and the address to which written comments may be sent under this paragraph.

- (b) Any person whose interest are or may be adversely affected, including but not limited to, the head of any local, state or federal government agency, may submit written comments on the application for approval to the director within thirty (30) days of the day of publication.
- Approval The director may, upon the basis of the applicant's compliance with the requirements of Paragraphs (01) and (02) of this Subsection, grant written approval for the transfer, sale or assignment of rights "under a permit, if he first finds that:
 - (a) The person seeking approval will conduct the operations covered by the permit in accordance with the requirements of law;
 - (b) The applicant has submitted a performance bond or other guarantee at least equivalent to the bond or other guarantee of the original permittee; and
 - (c) The applicant will continue to conduct the operations involved in full compliance with the terms and conditions of the original permit, unless and until a new permit is obtained.

3M RENEWALS

- 3M.01 <u>Application</u> Application for renewal shall be on forms prescribed by the director, shall be filed in accordance with 20-6-10(c) of the Act, and shall contain the following:
 - (a) The name and address of the permittee, location of the permit area

- including the county, the magisterial district, the nearest post office and the permit number;
- (b) A statement that the terms and conditions of the preplan are being satisfactorily met;
- (c) A statement that the operation is in compliance with the applicable environmental protection standards of the Act and these rules and regulations;
- (d) A statement that the performance bond and insurance policy for the operation will continue in effect;
- (e) A progress map of the same size and scale as the proposal map;
- (f) A statement that the information set forth in the form and progress map is true and accurate;
- (g) A notarized signature of the principal officer of the permittee in accordance with section 3K; and
- (h) A copy of a public notice of permit renewal and proof of publication in accordance with Section 20 of the Act and Section 3B.02 of these regulations.
- 3M.02 <u>Notification</u> The director shall notify appropriate agencies in accordance with 20-6-20(a) of the Act.
- 3M.03 Response Informal conferences shall be available in accordance with section 20-6-20(b) of the Act and the director shall send copies of his decision to the applicant, any persons who filed objections or comments to the renewal and to any persons who were parties to any informal conference held on the permit renewal.

3N. REVISIONS

3N.01 General

(a) Any revision to a permit will be subject to review and approval by

the director and if deemed to be a significant revision must meet all requirements of the Act and these rules and regulations. A revision will not be deemed to be significant unless it is determined that the environmental impact or the welfare and safety of the public may be altered from that reflected in the approved preplan.

(b) No significant revision to a permit may be implemented by any operator until the written approval of the director has been granted.

30. FINDINGS

- 30.01 Effect on Public Places Where the proposed surface coal mining operation will adversely affect any public park or any publicly owned place listed on the national register of historic places, the director shall transmit to the Federal, State or local agencies with jurisdiction over the park or historic place a copy of the complete permit application and request that the agency approve or disapprove the operations.
- 30.02 <u>Written Determinations</u> Along with other written determinations required by the Act and these regulations, the director shall make a written determination that the proposed surface mining operation would not affect the continued existence of endangered or threatened species or result in destruction or adverse modification of their critical habitats, as determined under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)
- 30.03 Operation(s) Near State Road Where the proposed mining operation is to be conducted within one hundred feet (100') [measured horizontally] of the outside right-of-way line of any public road (except where mine access roads or haulage roads join such right-of-way line) or where the applicant proposes to relocate any public road, the director shall:
 - (a) Require the applicant to obtain necessary permission from the authority with jurisdiction over state maintained roads; page 3-14

- (b) Provide an opportunity for a public hearing at which any member of the public may participate in the locality of the proposed mining operations for the purpose of determining whether the interests of the public and affected landowners will be protected;
- (c) If a hearing is held, require the applicant to provide notice in a newspaper of general circulation in the affected locale of a public hearing at least two (2) weeks before the hearing; and
- (d) Make a written finding based upon information received at the public hearing within thirty (30) days after completion of the hearing as to whether the interests of the public and affected landowners will be protected from the proposed mining operations.
- Designation of Lands Unsuitable Upon receipt of a complete application for a surface mining permit, the director shall review the application to determine whether the surface coal mining operation is limited or prohibited under Section 22 of the Act on the lands which would be disturbed by the proposed operation.
 - (a) If the director is unable to determine whether the proposed operation is located within the boundaries of any of the lands in Section 22 (d)(1) of the Act, or closer than the limits provided in Section 22 (d)(4) of the Act, the director shall transmit a copy of the relevant portions of the permit application to the appropriate Federal, State or local government agency for a determination or clarification of the relevant boundaries or distances, with a notice to the appropriate agency that it must respond within thirty (30) days of receipt of the request.
 - (b) Where the proposed operation would include federal lands within the boundaries of any national forest and the applicant seeks a

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determination that mining is permissible under Section 22 (d)(5) of the Act, the applicant shall submit a permit application to the OSM State director.

Notification - When a permit is issued, the director shall notify each person who files comments or objections to the permit application, each party to the informal conference, and the appropriate local agencies including the clerk of the county commission in the area of the land to be affected. The director shall also cause to be published at least monthly a listing of all permits issued in the area.

- 4A. Haulageways or Access Roads
- 4A.01 <u>Location</u> The approximate centerline location of the proposed haulageways or access roads shall be identified on the site by visible markings at one hundred foot (100') intervals, which are in place at the time of pre-inspection, <u>Provided</u>, that pre-existing haulageways or access roads shall be exempt from this requirement.
- 4A.02 <u>Construction</u> All construction of haulageways or access roads shall be in accordance with the following provisions:
 - (a) The grading of the haulageway or access roads shall be such that:
 - The overall grade shall not exceed ten percent (10%);
 - 2. The maximum_pitch grade shall not exceed fifteen percent (15%) for three hundred feet (300') in each one thousand feet (1,000') of road construction; and
 - 3. The surface shall pitch toward the ditchline at the minimum rate of 1/2 inch per foot of surface width or crowned at the minimum rate of 1/2 inch per foot of surface width as measured from the centerline of the haulageway or access road.
 - (b) Curves The grade on switchback curves shall be reduced to less than the approach grade and should not be greater than ten percent (10%);
 - (c) Cut Slopes Cut slopes should not be steeper more than 1:1 in soils or 1/4:1 in rock.
 - (d) Tolerance All grades referred to in this section shall be subject to a tolerance of two percent (2%). All linear measurements referred to in this section shall be subject to a tolerance of ten percent (10%). All angles referred to in this section shall be measured from the horizontal and shall be subject to a tolerance of five percent (5%).

- 4A.03 <u>Drainage Design</u> All drainage designs of haulageways or access roads shall be in accordance with the following provisions:
 - (a) Ditches A ditch shall be provided on both sides of a throughout and on the inside shoulder of a cutfill section, with ditch relief culverts being spaced according to grade. Water shall be intercepted or directed around and away from a switchback. All ditchlines shall be capable of passing the peak discharge of a 1-year, 24-hour precipitation event. Where super elevation to the inside of a curve will improve the safety of a haulroad such as in the head of a hollow, a ditchline may be located on the outside shoulder of cut fill section; Provided, that the ditchline is designed so that it will remain stable and that drainage control in accordance with the Act is also provided for water on the outside of the curve.
 - (b) Culverts Ditch relief culverts shall be installed wherever necessary to insure proper drainage of surface water beneath or through the haulageway or access road, according to the following provisions:

1.	Road Grade in Percent	Spacing of Culverts in Feet
	0-5	300-800
	6-10	200-300
	11 - 15	100-200

2. The culvert shall cross the haulageway or access road at a thirty degree (30°) angle downgrade with a minimum grade of three percent (3%) from inlet to outlet, except in intermittent or perennial streams where the pipe shall be straight and coincide with the normal flow;

- 3. The inlet end shall be protected by a headwall of stable material as approved by the director and the slope at the outlet end shall be protected with an apron of rock riprap, energy dissipator or other material approved by the director;
- 4. The culvert shall be covered by compacted fill to a depth of one foot (1') or half the culvert diameter, whichever is greater; and
- Design of culverts may be submitted where the aforementioned design criteria is not practical or necessary.
- (c) Culvert Openings Culvert openings installed on haulageways or access roads shall not be less than one hundred (100") square inches in area, but, in any event, all culvert openings shall be adequate to carry storm runoff of a peak discharge capacity of a 1-year, 24-hour precipitation event from the contributing watershed and shall receive necessary maintenance to function properly at all times; and
- (d) Intermittent or Perennial Stream Crossing Culverts, bridges or other drainage structures shall be used to cross intermittent or perennial streams. Consideration shall be given to such factors as weather conditions, season of the year, time period for construction, etc., with regard to using measures to minimize adverse effects to the water quality and stream channel. In no event shall the sediment load of the stream be significantly increased or the water quality be significantly decreased during the construction period. Water control structures shall be designed with a discharge capacity capable of passing the runoff for a 10-year, 24-hour precipitation event from the contributing

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 watershed; Provided, if approved by the director, the capacity of

 the water control structure itself can be at least equal to or

 greater than stream channel discharge capacity immediately upstream

 and downstream of the crossing; Provided further, that the structure

 shall pass at least a 1-year, 24-hour storm.
- AA.04 Sediment Control A sediment storage volume must be provided equal to 0.125 acre/foot for each acre of disturbed area or a lesser value as approved by the director. Temporary erosion and sedimentation control measures such as outlined in Chapter 19 of the Handbook shall be implemented during construction until permanent control can be established.
- AA.05 <u>Seeding of Slopes</u> All disturbed area including fill and cut slopes, shall be seeded and mulched immediately after the construction of a haulageway or access road and maintained thereafter as necessary to control erosion.
- 4A.06 · <u>Surfacing</u> Haulageways or access roads shall not be surfaced with any acid-producing or toxic material and the surface shall be maintained to control or prevent erosion and siltation.
- 4A.07 <u>Dust Control</u> All reasonable means shall be employed to control dust from the surface of haulageways or access roads.
- AA.08 Removal of Drainage Structures Bridges, culverts, stream crossings, etc., necessary to provide access to the operation, shall not be removed until reclamation is completed and approved by the director. The same precautions as to water quality are to be taken during removal of drainage structures as those taken during construction and use.
- 4A.09 Existing Haulageways or Access Roads Where existing roads are to be used for access or haulage and it can be demonstrated that reconstruction to meet the above requirements would result in greater environmental harm and the drainage and sediment control requirements of this

- SECTION 4 GENERAL MINING AND RECLAMATION PLAN REQUIREMENTS AND BONDING (rev. 8/84) section can otherwise be met, 4A.02 (a)1 & 2; 4A.02 (c); 4A.02 (d) and 4A.03 (b) 1 & 2; will not apply.
- Infrequently Used Access Roads Access roads constructed for and used only to provide infrequent service to surface facilities such as ventilators, monitoring devices and fans may be exempt from the requirements of the above sections with the exception of 4A.05 and 4A.11.
- Abandonment of Haulageways or Access Roads Haulageways or access roads shall be abandoned in accordance with the rules and regulations in addition to the following requirements:
 - (a) Upon abandonment of haulageways or access roads, every effort shall be made to prevent erosion by the use of culverts, water bars or other devices. Water bars or earth berms shall be installed according to the following table of spacings in terms of percent of haulageway or access road grade, prior to the abandonment.

PERCENT	OF HAULAGEWAY	SPACING OF WATER BARS IN FEET
	2	250
	5	135
	10	80
	15	60
	20	45
Above	20	25

- (b) Upon abandonment of haulageways or access roads, they shall be seeded and mulched immediately in accordance with subsection 4F.
- 4A.12 Plans, Design Data and Construction Specifications
 - (a) A plan view drawn to scale showing haulroad station baseline, location of culverts, flow directions, intermittent or perennial streams, and other pertinent data.

- (b) A surveyed profile drawn to scale (scale should be no greater than 1" = 100' horizontal, 1" = 50' verticle) showing but not limited to road surface, location and size of culverts, station, elevations, original ground, and percent grades.
- (c) Typical cross-section of haulroad showing culvert, slope of culvert, fill material, original ground, ditches and sediment control devices, if applicable.
- (d) Intermittent or perennial stream crossings, submit the following:
 - 1. Structure computation sheet; and
 - 2. Cross-section showing all pertinent information.
- (e) Construction specifications should include excavation, selection and placement of materials, vegetative protection against erosion, road surfacing, drainage and sediment control.
- 4A.13 Other Transportation Facilities Railroad loops, spurs, sidings, surface conveyor systems, chutes, aerial tramways or other transportation facilities shall be designed, constructed, maintained and abandoned so as to comply with the following:
 - (a) Control or prevent erosion, siltation and the air pollution attendant to erosion;
 - (b) Control or prevent damage to fish, wildlife or their habitat and related environmental values;
 - (c) Control or prevent additional contributions of suspended solids to stream flow or runoff outside the permit area;
 - (d) Neither cause nor contribute, directly or indirectly, to the violation of state or federal water quality standards applicable to receiving waters; and
 - (e) Prevent or control damage to public or private property.

Section	Change
4B.05(c)	Change to "A qualified person at least quarterly. delete last sentence of old section.
4C.05(k)	New section
40.05(1)	New section
4F.08(g)	insert after "valid sampling techniques" <u>"found in the handbook"</u>
4G.03(a)	insert after "of the Act" "(pl 95-87)"
6B.02	delete old text from "provided" to end of paragragh. Insert "however, before final and other requirements."
6B.04(e)5	Delete old text. Insert "Not discharge without MSHA approval."
6B.07(f)	Delete old text following "underground mine" insert new text "not totally abandoned without approval by MSHA."
6B.09(d)2.E	change "distributed" to " <u>disturbed"</u>
7A.03(a)	change end of paragragh from "," to "."
7A.03(b)	change end of paragragh from "," to "."
7B.02	delete old text from "provided" to end of paragragh. Insert "however, before final and other requirements."
7B.04(f)5	Delete old text. Insert "Not discharge without MSHA approval."
7c.02(d)	Insert after "unless the director finds that" "mining will not cause material damage or reduce the forseeable use."
88.02	delete old text from "provided" to end of paragragh. Insert "however, before final and other requirements."
8B.04(d)5	Delete old text. Insert "Not discharge without MSHA approval."
14B.01(b)	change "the director shall" to "the director may"; change "one hundred dollars (\$100)" to "one thousand dollars (\$1000).
14B.02(c)1	Insert text "is an accounting in the previous 12 months."
	Previous Violations Rate Schedule. change "5 - 10" to "6 - 10"
	Good Faith Rating Schedule. change "110" (level 1:3) to "11"