WEST VIRGINIA
SECRETARY OF STATE
KEN HECHLER
ADMINISTRATIVE LAW DIVISION

Form #6

Do Not Mark In This Box

FILED

1989 JUN -7 2:37

OFFICE OF SECRETARY OF STATE

NOTICE OF FINAL FILING AND ADOPTION OF A LEGISLATIVE RULE AUTHORIZED BY THE WEST VIRGINIA LEGISLATURE.

AGENCY: West Virginia Department of Energy TITLE NUMBER: 38

AMENDMENT TO AN EXISTING RULE: YES X, NO ___

IF YES, SERIES NUMBER OF RULE BEING AMENDED: 2, 2A, and 2C

TITLE OF RULE BEING AMENDED: West Virginia Surface Mine Reclamation Regulations

IF NO, SERIES NUMBER OF NEW RULE BEING PROPOSED: N/A

TITLE OF RULE BEING PROPOSED: N/A

THE ABOVE RULE HAS BEEN AUTHORIZED BY THE WEST VIRGINIA LEGISLATURE.

AUTHORIZATION IS CITED IN (house or senate bill number) S. B. 341

SECTION WV Code 64-2-8, PASSED ON April 8, 1989.

THIS RULE IS FILED WITH THE SECRETARY OF STATE. THIS RULE BECOMES EFFECTIVE ON THE FOLLOWING DATE: September 5, 1989

Roger T. Hall
Director, Research, Special Projects and Regulatory Affairs

LEGISLATIVE HISTORY ABSTRACT

October 22, 1987

Rule filed as a Legislative rule with Secretary of State's Office with public hearing announcement.

November 25, 1987

Public hearing held.

December 9, 1987

Filed proposed legislative rule with the Legislative Rulemaking Review Committee.

January 12, 1988

The Legislative Rulemaking Review Committee held hearing on the proposed legislative rule, but took no action except to hold the rule over until the next committee meeting.

July 7, 1988

The Department of Energy withdrew the proposed Legislative rule due to the fact that the Legislative Rulemaking Review Committee had not recommended approval of the rule.

August 5, 1988

The Department of Energy filed a notice of public hearing on the proposed legislative regulation with the Secretary of State's Office.

September 9, 1988

Public Hearing held.

September 19, 1988

Agency-approved rule was filed with the Legislative Rulemaking Review Committee.

December 5, 1988

Rule was reviewed by Legislative Rulemaking Review Committee with no action taken.

January 9, 1989

Rule was reviewed by Legislative Rulemaking Review Committee with no action taken.

February 22, 1989

Rule was recommended for approval with no amendments. Sent to House Judiciary Committee and Senate Energy, Industry, and Mining Committee.

March 27, 1989

Rule was reviewed by subcommittee - Senate Energy, Industry, and Mining Committee. Approved.

April 6, 1989

Rule was reviewed by House Judiciary and approved with amendments.

April 7, 1989

Bill of authorization passed by House of Delegates.

April 8, 1989

Bill of authorization passed by the Senate.

LEGISLATIVE RULES
DEPARTMENT OF ENERGY
SERIES 2
WEST VIRGINIA SURFACE MINE
RECLAMATION REGULATIONS

INDEX

SECTION 10

SECTION 11

SECTION 12

SECTION 13

SECTION 14

SECTION 20

SECTION 21

SECTION 22

LEGISLATIVE RULES
DEPARTMENT OF ENERGY
SERIES 2
WEST VIRGINIA SURFACE MINING
RECLAMATION REGULATIONS

38-2-1 General.

1.1 Scope. These regulations establish general and specific rules for permit application requirements and contents; haulageways or access roads; drainage systems; blasting; postmining land use; fish and wildlife considerations; revegetation; prime farmlands; insurance and bonding; replacement, release, and forfeiture of bonds; requirements of a notice of intent to prospect; performance standards; performance standards applicable to underground mining operations; subsidence control; small operator assistance program; citizen's actions; designation of areas unsuitable for mining; inspection and enforcement; Reclamation Board of Review; and Coal Refuse.

1.2 Applicability

(a) These rules and regulations apply to all surface mining operations in the State of West Virginia, except as provided in Section 26, Article 3, Chapter 22A of the Act. However, where existing operations are being carried out under valid permits, no written revisions, amendments, or modifications of such permits shall be required as a result of promulgation of these regulations except as required by the Commissioner. The provisions of this paragraph do not constitute the issuance of a new permit for purposes of permit renewal or mid-term review of existing permits.

(b) For applications for new operations which have received an SMA number prior to the effective date of these regulations, the applicant shall acknowledge the applicability of these regulations to his proposed operation, in writing, to the Commissioner 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.

(c) Permits issued after the effective date of these regulations for existing or new operations not covered in (b) shall incorporate in the application all of the requirements of these regulations.

1.3 Authority These rules and regulations are promulgated under the authority of the West Virginia Energy Act as provided in Section 15, Article 1, Chapter 22 of the Code of West Virginia, 1931, as amended and West Virginia Surface Coal Mining and Reclamation Act as provided in Section 4, Article 3, Chapter 22A of the Code of West Virginia, 1931, as amended.

1.4 Filing Date. June 7, 1989

1.5 Effective Date. September 10, 1989

1.6 Repeal of Former Rule. This legislative rule repeals West Virginia Surface Mine Reclamation Regulations Title 38, Series 2, filed with the Secretary of State's Office June 13, 1985, Title 38, Series 2A Coal Refuse Disposal Regulations, filed with the Secretary of State's Office June 13, 1985, and Title 38, Series 2C, Underground Mine Subsidence Control Plan, filed with the Secretary of State's Office April 19, 1985.

38-2-2 Definitions: As used in these regulations, unless used in a context that clearly requires a different meaning, the term:

2.1 Abandoned Coal Waste Disposal Area 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 abandoned coal waste disposal area.

2.2 Acidity means the quantitative capacity of an aqueous medium to donate protons in a reaction with hydroxyl ions.

2.3 Acid Mine Drainage means water discharged from an active, inactive, or abandoned surface mine and from areas affected by surface mining with a pH of less than six (6.0) in which total acidity exceeds total alkalinity.

2.4 Acid-Producing Coal Seam means coal seams commonly associated with other minerals which create acid mine drainage. Coal seams commonly associated with such minerals 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. Site specific data may, on a case-by-case basis, be accepted as an affirmative demonstration that these seams are not acid producing.

2.5 Acid-Producing Overburden means overburden which upon appropriate analysis shows a potential for producing acid mine drainage.

2.6 Acid-Test Ratio means the relation of quick assets to current liabilities.

2.7 Act means the West Virginia Surface Coal Mining and Reclamation Act, Chapter 22A, Article 3 of the Code of West Virginia, 1931, as amended.

2.8 Active Surface Mining Operation means, except where inactive status has been granted in accordance with Subsection 14.11 of these regulations, an operation where a Phase I bond reduction has not been approved.

2.9 Administratively Complete Application means an application for permit approval or approval for prospecting, which the Commissioner determines to contain information addressing each application requirement of the regulatory program

and to contain all information necessary to initiate processing and public review.

2.10 Asset Ratio means the relation of total assets to total liabilities.

2.11 Auger Mining means a method of mining coal at the surface by drilling or cutting horizontally into an exposed coal seam.

2.12 Bearing Capacity means a measure, as determined by standard engineering evaluation, of the ability of a foundation material to carry loads imposed by an embankment or other structure.

2.13 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 rules and regulations; 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 Buffer Zone means an undisturbed border along or around an intermittent or perennial stream.

2.15 Capital Assets means those assets such as land, buildings and equipment held for use in the production or sale of other assets or services.

2.16 Cash 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.

2.17 Cemetery means any area of land where human bodies are interred.

2.18 Channel Protection means any measures taken to prevent or control erosion, scouring, or other deteriorating processes in channels such as diversion ditches and spillways.

2.19 Coal Preparation means chemical or physical processing and the cleaning, concentrating, or other processing or preparation of coal.

2.20 Coal Preparation Plant means a facility where coal is subjected to chemical or physical processing or cleaning, crushing (by any means) concentrating, screening or sizing, or other processing or preparation. It includes facilities associated with coal preparation activities, including, but 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; and coal processing and other waste disposal areas.

2.21 Coal Processing Waste means materials which are separated and wasted from the product coal during its physical or chemical processing, cleaning or concentrating.

2.22 Coal Refuse Disposal Area means a deposit of coal processing waste or underground development waste.

2.23 Coal Remining Operation means a coal mining operation which begins at a site where previous coal mining was conducted before the effective date (August 3, 1977) of the federal Surface Mining Control and Reclamation Act of 1977 (PL 95-87).

2.24 Coarse Coal Refuse means coal processing waste predominantly within a size range greater than the number twenty-eight (#28) sieve size.

2.25 Collateral Bond means an indemnity agreement in sum certain executed by the permittee and supported by one or more of the following:

(a) The deposit of cash in one or more federally insured accounts, payable only to the Commissioner upon demand;

(b) Negotiable bonds of the United States, a State, or a municipality, endorsed to the order of, and in the possession of, the Commissioner;

(c) Negotiable certificates of deposit, payable only to the Commissioner, and in his possession;

(d) 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 Commissioner;

(e) A perfected, first-lien security interest in real property, in favor of the Commissioner; or

(f) 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 Commissioner, excluding all issues of the type traded on a commodity exchange such as contracts for future delivery of goods.

2.26 Combined Coal Refuse means a mixture of coarse coal refuse and dewatered fine coal refuse.

2.27 Combustible Materials means organic materials that are capable of burning by fire or through oxidation, accompanied by the evolution of heat and a significant temperature rise.

2.28 Commissioner means the Commissioner of the Department of Energy or his authorized agent.

2.29 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 common size percentages whereby:

(a) the asset total is assigned a value of one hundred percent (100%);

(b) the total of liabilities and owner equity is also assigned a value of one hundred percent (100%); and

(c) each individual asset, liability, and owner equity item is shown as a fraction of one of the one hundred percent (100%) totals.

2.30 Common Size Comparative Income Statement means an operator's income statement amounts for a number of successive yearly periods arranged side by side in a single statement followed by common size percentages whereby net sales are assigned a one hundred percent (100%) value, and then each statement item is shown as a percentage of net sales.

2.31 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.

2.32 Compaction means the densification of a soil or soil-like material by means of mechanical manipulation.

2.33 Complete Application means an application which, immediately prior to issuance, contains all maps, plans, designs and other application materials required by the Act and those rules and regulations excluding bond.

2.34 Completion of Reclamation means that all terms and conditions of the permit have been satisfied, the final inspection report has been approved by the Commissioner, that all applicable effluent and applicable water quality standards are met, and the total bond has been released.

2.35 Construction Pore Pressures means water pressures generated in foundation soils or embankments due to compression by loads imposed by construction of an embankment or other structure.

2.36 Cumulative Impact means the hydrologic impact that results from the cumulation of flows from all coal mining sites to common channels or aquifers in a cumulative impact area. Individual mines within a given cumulative impact area may be in full compliance with effluent standards and all other regulatory requirements, but as a result of the co-mingling of their off-site flows, there is a cumulative impact. The Act does not prohibit cumulative impacts but does emphasize that they be minimized. When the magnitude of cumulative impact exceeds threshold limits or ranges as predetermined by the Department, they constitute material damage.

2.37 Cumulative Impact Area means the area, including the permit area, within which impacts resulting from the proposed operation may interact with the impacts of all anticipated mining on surface and groundwater systems. Anticipated mining shall include the entire projected lives through bond releases of:

(a) the proposed operation;

(b) all existing operations;

(c) any operation for which a permit application has been submitted to the Commissioner, and;

(d) all operations required to meet diligent development requirements for leased Federal coal for which there is actual mine development information available.

2.38 Current Ratio means the relation of current assets to current liabilities.

2.39 Density means the weight of soil or soil-like solids per unit of total volume of soil or similar mass.

2.40 Design Storm means predicted precipitation of given intensity, frequency and duration based on United States Weather Bureau data.

2.41 Downslope means the land surface between the projected outcrop of the lowest coal seam being mined or any mining related construction and the valley floor.

2.42 Embankment means a man made deposit of earth or waste materials, usually exhibiting at least one sloping face.

2.43 Embankment Stability means the degree of safety relative to a structural failure of the embankment.

2.44 Emergency Spillway means a hydraulic structure designed to pass water in excess of that which an impoundment is designed to store or which cannot be passed through a principal spillway.

2.45 Excess Spoil means overburden material disposed of in a location other than the pit.

2.46 Existing Coal Refuse Area means a refuse disposal area that is part of an active surface mining operation.

2.47 Existing Structure 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.

2.48 Face-Up means the result of an excavation where a vertical or near vertical highwall is created that exposes the overburden and the mineral face.

2.49 Fine Coal Refuse means coal processing waste which may be disposed of in a slurry form or in a dewatered or treated state.

2.50 Foundation means soil, bedrock, or other earth material on or against which an embankment or other structure is placed.

2.51 Fragile Lands means geographic areas containing natural, ecologic, scientific or aesthetic resources that could be significantly 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 aesthetic features, and areas of recreational value due to high environmental quality.

2.52 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.

2.53 Gravity Discharge 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.

2.54 Groundwater means subsurface water in the zone of saturation.

2.55 Growing Season means one (1) year.

2.56 Handbook means the Technical Handbook of Standards and Specifications for Mining Operations in West Virginia.

2.57 Haulageway or Access Road means a surface right-of-way for purposes of travel by land vehicles used in surface coal mining and reclamation operations or coal exploration. A road consists of the entire area within the right-of-way, including the roadbed, shoulders, parking and side areas, approaches, structures, ditches, and surface. The term includes access and haulroads constructed, used, reconstructed, improved, or maintained for use in surface coal mining and reclamation

operations or coal exploration, including use by coal hauling vehicles to and from transfer, processing, or storage areas. The term does not include ramps and routes of travel within the immediate mining area or within spoil or coal mine waste disposal areas.

2.58 Hazard Potential means a classification rating assigned to a structure based on engineering evaluations and judgment predicting the potential damage to human life, property and environment should a failure of the structure occur.

2.59 Highwall 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.

2.60 Historic Lands means historic, archaeological, cultural, and scientific areas. Examples of historic lands include archaeological sites, sites listed on or eligible for listing on a state or national register of historic places, national historic landmarks, sites having cultural significance to native Americans, or religious significance to religious groups, and sites for which historic designation is pending.

2.61 Hydrologic Balance means the relationship between the quality and quantity of water inflow to, water outflow from a hydrologic unit including water stored in the unit. It encompasses the dynamic relationships among precipitation, runoff, evaporation and changes in ground and surface water levels and storage capacity.

2.62 Hydrological Isolated Operations means a surface mining operation where hydrologic impacts are negligible or are dissipated before reaching points in the system where they are additive to hydrologic impacts of other surface mining operations.

2.63 Hydrologic Regime means the entire state of water movement in a given area.

2.64 Impoundment or Impounding Structure means a closed basin constructed for the retention of water, sediment, or waste, and which consists in part of an embankment, dike or other constructed barrier which is five (5) feet or greater in height as measured from the inside toe, and which results in a basin of ten (10) acre feet or more.

2.65 Inactive Surface Mining Operation means, with regard to inspection frequencies as provided in Subsection 20.1 of the

regulations, a surface mine as defined in Subsection (w) of Section (3) of the Act where a request for inactive status pursuant to Subsection 14.11 of these regulations has been approved or where Phase I bond release and the final planting report have been approved by the Commissioner.

2.66 Incidental Boundary Revision means:

(a) an extension of the permit area that is necessary for reasons unforeseen at the time the original permit application was prepared and which is necessary for the continuance of that permitted operation; or

(b) the deletion of bonded acreage which is double-bonded by a valid permit and for which full liability is assumed in writing by the successive permittee.

2.67 Infiltration means the flow or movement of water through the surface of soil or soil like material into the ground.

2.68 Inspection means a visual review of prospecting, surface or other mining operations to assure compliance with applicable laws, rules, regulations or permit conditions under jurisdiction of the Commissioner.

2.69 Intermittent Stream means:

(a) a stream or reach of a stream that drains a watershed of at least one square mile; or

(b) a stream or reach of a stream that is below the local water table for at least some part of the year, and obtains its flow from both surface runoff and ground water discharge.

2.70 Knowingly means that an individual knew or had reason to know in authorizing, ordering or carrying out an act or omission on the part of a corporate permittee that such act or omission constituted a violation, failure or refusal.

2.71 Leachate means a liquid that has percolated through soil, rock or waste and has extracted dissolved or suspended materials.

2.72 Lightly Buffered Stream means any stream or its tributaries that contains less than fifteen (15) PPM methyl orange alkalinity (to pH 4.5) and a conductivity of less than fifty (50) micro MHO.

2.73 Liquefaction means a phenomenon wherein a saturated granular soil or soil like material loses strength and flows in a manner resembling a liquid.

2.74 Liquidity Ratio means the relation of cash to current liabilities.

2.75 Mineral Face means the exposed vertical cross-section of the natural coal seam or mineral deposit.

2.76 Natural Drainway means any natural water course which may carry water to the tributaries and rivers of the watershed.

2.77 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.

2.78 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.

2.79 Occupied Dwelling means any building that is currently being used on a regular or temporary basis for human habitation.

2.80 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.

2.81 Overburden means consolidated or unconsolidated material of any nature which overlies a mineral deposit, excluding topsoil.

2.82 Owned or Controlled and Owns or Controls means any one or a combination of the relationships specified in paragraphs (a) and (b) of this definition:

(a)(1) Being a permittee of a surface coal mining operation; (2) Based on instrument of ownership or voting securities, owning of record in excess of fifty (50) percent of an entity; or (3) Having any other relationship which gives one person authority directly or indirectly to determine the manner in which an applicant, an operator, or other entity conducts surface coal mining operations.

(b) The following relationships are presumed to constitute ownership or control unless a person can demonstrate that the person subject to the presumption does not in fact have the authority directly or indirectly to determine the manner in which the relevant surface coal mining operation is conducted:

(1) Being an officer or director of an entity;

(2) Being the operator of a surface coal mining operation;

(3) Having the ability to commit the financial or real property assets or working resources of an entity;

(4) Being a general partner is a partnership;

(5) Based on the instruments of ownership or the voting securities of a corporate entity, owning of record ten (10) through fifty (50) percent of the entity; or

(6) Owning or controlling coal to be mined by another person under a lease, sublease or other contract and having the right to receive such coal after mining or having authority to determine the manner in which that person or another person conducts a surface coal mining operation.

2.83 Peak Runoff means the maximum flow in a specified geographic location resulting from a given design storm.

2.84 Perennial Stream means a stream or portion of a stream that flows continuously.

2.85 Person having an interest which is or may be adversely affected or person with a valid legal interest means any person:

(a) Who uses any resource of economic, recreational, aesthetic, or environmental value that may be adversely affected by prospecting or surface coal mining and reclamation operations or any related action of the Commissioner; or

(b) Whose property is or may be adversely affected by prospecting or surface coal mining and reclamation operations or any related action of the Commissioner.

2.86 Piping 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.

2.87 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.

2.88 Pre-Existing Discharge means any discharge at the time of permit application under this subsection.

2.89 Preplan means the total application submitted to the Commissioner 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.

2.90 Principal Shareholder means any person who is the record or beneficial owner of ten percent (10%) or more of any class of voting stock.

2.91 Principal Spillway means hydraulic structure which passes water at levels between normal pool and the emergency spillway invert elevations.

2.92 Probable Maximum Precipitation means the depth-duration-area rainfall for a particular area that represents the maximizing of meteorological conditions.

2.93 Prospecting means the field gathering of surface or subsurface geologic, physical, or chemical data trenching, drilling, geophysical, or other techniques necessary to determine the quality and quantity of overburden and coal of an area.

2.94 Protected Structures means for purposes of blasting, any structures the distance to which is used to calculate maximum weight of explosives to be used.

2.95 Public Building means any structure that is owned or leased by a public agency or used primarily for public business or meetings.

2.96 Quick Assets means cash and current assets that can be quickly turned into cash.

2.97 Reasonably Available Spoil means spoil and suitable coal mine waste material generated by the remining operation or other spoil or suitable coal mine waste material located in the permit area that is accessible and available for use and that when rehandled will not cause a hazard to public safety or significant damage to the environment.

2.98 Recharge Capacity means the ability of the soils and underlying materials to allow precipitation to infiltrate and reach the zone of saturation.

2.99 Remined Area means only that area of any coal remining operation on which coal mining was conducted before the effective date of the federal Surface Mining Control and Reclamation Act of 1977 (PL-95-87).

2.100 Renewable Resource Lands means geographical areas which contribute significantly to the long range productivity of a water supply, or food or fiber products.

2.101 Retained Earnings 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.

2.102 Return On Investment means the relation of net profit for the last yearly period to ending net worth.

2.103 Safety Factor means the ratio of the sum of the resisting forces to the sum of the loading forces in a constructed valley fill, backfill, dam, or refuse pile.

2.104 Sediment means solid material that is either in suspension, is being transported, or has been moved from its site of origin and has come to rest on the earth's surface.

2.105 Self-Bond means an indemnity agreement in a sum certain payable to the Commissioner, 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 Commissioner a security interest in real or personal property pledged to secure performance by the permittee.

2.106 Significant Aquifer means a stratum or group of strata that can store and transmit water in significant quantities for a specific use.

2.107 Slope Protection means measures taken to control erosion on slopes.

2.108 Slope Stability means the relative degree of safety from the development of a landslide in a slope, as defined by one or more standard engineering methods of analysis.

2.109 Spoil means overburden that has been removed during surface mining operations.

2.110 Stabilize means to control movement of soil, spoil piles or areas of disturbed earth.

2.111 Stoniness means a characterization of earth, overburden or spoil which describes the relative proportion of its content of boulders and stone and rock aggregate as compared to its sand, silt, clay or rock fragment content.

2.112 Strength Parameters mean those engineering values obtained from standard engineering shear strength tests of soil or soil like material.

2.113 Structure means any man-made structures within or in the proximity of surface mining permit areas which include, but is not limited to: houses, outbuildings, commercial buildings, gas lines, water lines, towers, airports, and dams. Structures built and/or utilized for the purpose of carrying out the surface mining operation are not included in this definition.

2.114 Sub-Drainage System means a designed and constructed system provided for the conveyance of subsurface water.

2.115 Subsidence means, as it relates to underground mining operations, a sinking, collapsing and cracking of a portion of the earth's surface caused by voids beneath the surface created by mining.

2.116 Substantial Legal and Financial Commitments in a Surface Coal Mining Operation 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.

2.117 Substantially Disturb means, for purposes of prospecting, to significantly impact land or water resources by blasting; by removal of vegetation, topsoil, or overburden; by construction of roads or other access routes; by placement of excavated earth or waste material on the natural land surface or by other such activities; or to remove more than 250 tons of coal.

2.118 Successor in Interest means any person who succeeds to rights granted under a permit by transfer, assignment or sale of those rights.

2.119 Surety Bond means an indemnity agreement in a sum certain payable to the Commissioner 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.

2.120 Surface Water means water on the surface of the earth.

2.121 Topsoil means the A-horizon soil layer of the three major soil horizons.

2.122 Toxic-Forming Materials 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.

2.123 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.

2.124 Transfer, Assignment or Sale of Rights means a change in ownership or other effective control over the right to conduct surface coal mining operations under a permit.

2.125 Underground Development Waste means waste rock mixtures of coal, shale, claystone, siltstone or other related materials that are brought to the surface for disposal.

2.126 Valid Existing Rights exists, except for haulroads, in each case in which a person demonstrates that the limitation provided for in 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 entity came into existence.

2.127 Valley or Head-of-Hollow Fill means a fill structure consisting of any material, other than organic material, placed in a valley where side slopes of the existing valley measured at the steepest point are greater than twenty (20) degrees 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 ten (10) degrees. In head-of-hollow fills the top surface of the fill, when completed, is at approximately the same elevation as the adjacent ridge line, and no significant area of natural drainage occurs above the fill draining into the fill area.

2.128 Violation, Failure or Refusal means a violation of a condition of a permit issued pursuant to the Act or these rules and regulations; or a failure or refusal to comply with any order issued under Sections 15, 16, or 17 of the Act, or any order incorporated in a final decision issued by the Commissioner under the Act, except an order incorporated in a decision issued under Section 17(d) of the Act.

2.129 Willfully means that an individual acted:

(a) Either intentionally, voluntarily or consciously; and

(b) With intentional disregard or plain indifference to legal requirements in authorizing, ordering or carrying out a corporate permittee's action or omission that constituted a violation, failure or refusal.

2.130 Woodlands means commercial woodlands where the post-mining land use would result in the development of a commercial product.

2.131 Working Capital means the excess of the operator's current assets over its current liabilities.

2.132 Zone of Saturation means the zone below the piezometric surface in which all voids are filled with groundwater.

38-2-3. Permit Application Requirements and Contents

3.1 Applicant Information. In addition to the requirements of Section 9 of the Act, each application for a permit shall contain the following provided that submittal of social security numbers is at the option of the applicant:

(a) A statement as to whether the applicant is a corporation, partnership, single proprietorship, association, or other business entity.

(b) Name, address, telephone number, and social security number or taxpayer identification number of the applicant, the operator (if different from the applicant), the applicant's resident agent who will accept service of process, the person who will pay the abandoned mine land reclamation fees, and any contractor who will conduct the surface coal mining and reclamation operations.

(c) Where applicable:

(1) Name, title, address and social security number or taxpayer identification number of every person who controls the applicant, including every officer, partner and director of the applicant and the operator, and the name of any other person who performs a function similar to a director of the applicant or the operator, the date of assuming that position, and when appropriate in the annual report required by paragraph (e) of Subsection 3.26 of this section, the date of leaving that position.

(2) Name, address, social security number or taxpayer identification number, and percent of ownership of each person who owns or controls an interest in the permit applicant, or an operator if other than an applicant, either directly or indirectly through one or more intermediary companies. If ownership is indirect, the relationship between intermediary companies must be furnished.

(3) Name, title, address and social security number or taxpayer identification number of each officer and director of any entity which owns or controls an interest in the permit applicant, or an owner if other than an applicant, either directly or indirectly through one or more intermediary companies, the date of assuming that position, and when appropriate in the annual report required by paragraph (d) of Subsection 3.26 of this section, the date of leaving that position.

(4) Name, address, social security number or taxpayer identification number and percentage of ownership of each subsidiary in which the applicant directly or indirectly owns a ten (10) percent or greater interest. If ownership is indirect, the relationship between intermediary companies must be furnished.

(5) Any name, including that of any subsidiary, and social security number or taxpayer identification number under which the applicant, partner or anyone who owns a ten (10) percent or greater interest in the applicant, either directly or indirectly through one or more intermediary companies, now operates or previously operated a surface coal mining and reclamation operation in the United States within the five (5) years preceding the date of application.

(d) A statement of any pending surface coal mining and reclamation operation permit applications in the United States, and of all current and previous coal mining permits in the United States held during the five (5) years preceding the date of the application by any person identified in part (5) of paragraph (c), Subsection 3.1 of this section. Such statement shall provide permit or application numbers or other identifiers and the identity of the State regulatory authority for each operation listed.

(e) The name and address of each legal or equitable owner of record of the surface and mineral property to be mined, each holder of record of any leasehold interest in the property to be mined, and any purchaser of record under a real estate contract for the property to be mined.

(f) The name and address of each owner of record of all property (surface and subsurface) contiguous to any part of the proposed permit area.

(g) The Mine Safety and Health Administration (MSHA) numbers for all mine-associated structures identified in the permit that require MSHA approval.

(h) A statement of all lands, interest in lands, options, or pending bids on interests held or made by the applicant for lands contiguous to the area described in the permit application. If requested by the applicant, any information required by this paragraph which is not on public file pursuant to the Act shall be held in confidence.

(i) When the taxpayer identification number required by paragraphs (b) and (c), Subsections 3.1 of this section is a social security number, the submission is not mandatory.

(j) A statement of whether the applicant or any subsidiary, affiliate, or persons controlled by or under common control with the applicant has:

(1) Had a Federal or State coal mining permit suspended or revoked in the five (5) years preceding the date of submission of the application; or

(2) Forfeited a performance bond or similar security deposited in lieu of bond.

(k) A brief explanation of the facts involved if any such suspension, revocation, or forfeiture referred to in parts (1) and (2) of paragraphs (j) of this subsection has occurred, including:

(1) Identification number and date of issuance of the permit, and the date and amount of bond or similar security;

(2) Identification of the authority that suspended or revoked the permit or forfeited the bond and the stated reasons for the action;

(3) The current status of the permit, bond, or similar security involved;

(4) The date, location, and type of any administrative or judicial proceedings initiated concerning the suspension, revocation, or forfeiture; and

(5) The current status of judicial proceedings.

(l) A list of all violation notices received by the applicant or any subsidiary, affiliate, or person controlled by or under common control with the applicant in connection with any surface coal mining operation during the three (3) year period preceding the application date, for a violation of any provision of the Act, or 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, water, or environmental protection. The application shall also contain the following information about each violation notice:

(1) The date of issuance, the name of the person to who the violation notice was issued, and the issuing regulatory authority, department or agency;

(2) A brief description of the violation alleged in the notice;

(3) The date, location, and type of any administrative or judicial proceedings initiated concerning the violation, including, but not limited to, proceedings initiated by any person to obtain administrative or judicial review of the violation;

(4) The current status of the proceedings and the violation notice; and

(5) The actions, if any, taken by any person to abate the violation.

(m) The sale or other conveyance of a surface coal mining and reclamation operation which has outstanding violation(s), outstanding civil penalties, or reclamation fees, or the sale or other conveyance of any interest in an entity with outstanding violations, penalties, or fees, or the sale or conveyance of an entity which owns or controls an entity, or is owned or controlled by an entity which owns or controls a surface coal mining and reclamation operation with an outstanding violation, penalties or fees shall not in any way affect the application of the permit block sanction set forth in these regulations.

(n) Any person who, through whatever means, assumes ownership or control directly or indirectly of a surface coal mining and reclamation operation shall become responsible for the correction of all outstanding violations and payment of all outstanding penalties and fees for the operation.

(o) The applicant for a permit or a revision of a permit shall have the burden of establishing that his application is in compliance with all the requirements of the Act and these rules and regulations.

(p) Each application for a permit shall contain a sworn statement as follows: "The information contained in this application is true and correct to the best of my knowledge and belief." Such statement shall be signed by an accountable official of the applicant and shall be notarized.

3.2 Advertisement.

(a) SMA File Number. Prior to the publication of an advertisement for a surface mining permit in accordance with paragraph (6), subsection (a), Section 9 of the Act, the applicant shall submit an administratively complete surface mining permit application and obtain a surface mining application (SMA) file number. Each SMA number shall be valid for one year.

(b) Advertisement Information. Each advertisement will contain at a minimum:

(1) The surface mining application (SMA) file number;

(2) A clear and accurate location map of a scale and detail found in the West Virginia General Highway Map. The map size will be at a minimum two inches (2") x two inches (2"). Longitude and latitude lines and north arrow will be indicated on the map and such lines will cross at or near the center of the proposed permit area;

(3) The names and business address of the applicant;

(4) A narrative description clearly describing the location of the proposed permit area;

(5) The name(s) of the coal seam(s) to be mined;

(6) The name(s) of the receiving stream(s) into which drainage from the permit area will be discharged;

(7) The location where a copy of the application is available for public review;

(8) The name and address of the Department of Energy Office where written comments or requests for informal conferences on the application may be submitted;

(9) The type of operation;

(10) Surface and mineral ownership of the tract(s) to be permitted;

(11) Where the permit application reflects that mining will occur within one-hundred feet (100') of the outside right-of-way of a public road, the applicant may choose one of the following procedures to satisfy the additional public notice requirement:

(A) Include in the advertisement required in this section a concise statement:

(i) Identifying the road to be affected;

(ii) Identifying the affected segment; and

(iii) Advising that a public hearing may be requested; or

(B) A separate public notice may be published, prior to issuance of a permit, which:

(i) Identifies the road to be affected;

(ii) Identifies the affected segment; and

(iii) Advising that a public hearing may be requested.

(12) Where the permit applicant proposes to relocate or close a public road, the advertisement shall include a concise statement which describes:

(A) The identification number and geographic location of the road;

(B) The particular segment to be relocated or closed;

(C) Where the relocated segment is to be sited;

(D) The duration of the relocation or closure; and

(E) Advises that a public hearing may be requested.

(13) Where an alternative land use is proposed, indicate the premining land use and the proposed postmining land use; and

(14) Where an experimental practice is proposed, the advertisement shall contain a statement indicating such and identifying applicable provisions for which a variance is requested.

(c) Availability of Comments: The Commissioner shall place on file at the regional office in which a permit, permit revision or renewal of a permit is filed, a copy of all public comments received as a result of the advertisement and shall provide the applicant with such comments. When a permit, permit revision or renewal of a permit is issued or approved, the Commissioner shall notify within ten (10) days each person who filed comments or objections to the application, each party to an informal conference, and the appropriate local governmental agencies including the clerk of the county commission. The Commissioner shall also cause to be published at least monthly a listing of all permits issued. The listing shall include a description of the location of the land to be affected.

(d) Readvertisement. After a Surface Mine Application (SMA) has been advertised once a week for four successive weeks, and is determined by the Commissioner to have had a limited number of minor changes which do not significantly affect the method of operation, the reclamation plan, and/or the original advertisement, he may require one (1) additional advertisement to be published with a ten (10) day public comment period. Permits which are being renewed or significantly revised and permit applications which are being significantly revised must be advertised in accordance with paragraph (b) of this subsection and paragraph (6), subsection (a), section 9 of the Act.

(e) Renotification. A renotification letter shall be sent to all commentors of a surface mine application (SMA) when a determination has been made by the Commissioner that readvertisement is required under paragraph (d) of this subsection.

(f) Certification of Publication. The advertisement and publication dates for all permit applications, permit renewal applications, applications for revision of a permit, and transfer assignment and sale of permits, shall be certified and notarized by the publishing newspaper. The certificate of publication shall be made a part of the approved application.

3.3. Occupied Dwellings.

(a) Valid Existing Rights. Where the proposed surface coal mining operations would be conducted within three hundred (300) feet, measured horizontally, of any occupied dwelling, the permit applicant shall submit with the application a written waiver by lease, deed, or other conveyance from the owner of the dwelling, clarifying that the owner and signator had the legal right to

deny mining and knowingly waived that right. The waiver shall act as consent to such operations within a closer distance of the dwelling as specified.

(b) Waiver. Where the applicant for a permit had obtained a valid waiver prior to August 3, 1977, from the owner of an occupied dwelling to mine within three hundred (300) feet of such dwelling, a new waiver shall not be required:

(1) Where the applicant for a permit had obtained a valid waiver from the owner of an occupied dwelling, that waiver shall remain effective against subsequent purchasers who had actual or constructive knowledge of the existing waiver at the time of purchase.

(2) A subsequent purchaser shall be deemed to have constructive knowledge if the waiver has been properly filed in public property records pursuant to State laws or if the mining has proceeded to within the three hundred (300) foot limit prior to the date of purchase.

3.4 Maps.

(a) Scale for Maps. Except as otherwise noted in these rules and regulations, the scale required for all maps shall be as follows:

(1) The preferred scale of maps prepared from United States Geological Survey topographic maps on 7.5 minute quadrangle shall be five hundred foot (500') to the inch;

(2) The preferred scale for maps associated with underground coal mining operations and facilities incidental to coal mining shall be two hundred foot (200') to the inch; and

(3) Other scales may be used where improved clarity and accuracy are achieved.

(b) 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.

(c) Color Code. A color code shall be used in preparing all maps to indicate critical features of the permit area as follows:

(1) Red shall indicate mineral to be removed;

(2) Blue shall indicate water and drainage patterns;

(3) Green shall indicate areas regraded;

(4) Yellow shall indicate all other areas within the permit boundary; and

(5) Purple shall be used to outline adjacent mining permits.

(d) Preplan. In addition to the requirements of Sections 9(a)(12)(13) and Section 10 of the Act, the preplan map shall include the following information:

(1) The location and current use of all structures within one thousand feet (1000') of the proposed permit area;

(2) All public roads located on or within one hundred feet (100') of the proposed permit area;

(3) The boundaries of any public park or historic lands within or adjacent to the permit area;

(4) All cemeteries located on or within one hundred feet (100') of the proposed permit area;

(5) 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 are located within or adjacent to the proposed permit area;

(6) The location of all existing structures to be used for surface mining operations which are to be exempt from design standards;

(7) The date the map was prepared, a north arrow, quadrangle name and location map;

(8) Where the natural slope of the land below the coal outcrop is less than twenty (20) degrees 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 cropline;

(9) The location of each facility to be used to protect or enhance fish and wildlife and related environmental values;

(10) Extent of proposed auger operations;

(11) Surface and mineral owners and property lines within and contiguous to the permit area;

(12) Location of water supply intakes for current users of surface water;

(13) Location and identification of sub areas if incremental bonding is to be used;

(14) Location and extent of subsurface water, if encountered, within the proposed permit or adjacent areas, including, but not limited to, areal and vertical distribution of aquifers, and portrayal of seasonal differences of head in different aquifers on cross sections and contour maps;

(15) The location of all oil and gas wells within the proposed permit area are to be shown;

(16) The location and extent of topsoil borrow areas;

(17) Air pollution monitoring and control facility and subsidence monitoring location;

(18) Any permanent facility to remain after mining; and

(19) All coal storage, cleaning, and loading areas.

(e) Drainage Map. Unless the information required by this paragraph can be shown on the preplan map in a clear and legible fashion, a separate drainage map of the same size scale and detail of the preplan map shall be made a part of the permit application and shall contain the following:

(1) The directional flow of water on and away from the permit area;

(2) Location of all monitoring sites used to develop surface and groundwater base line information;

(3) Location of all surface and ground water monitoring sites to be used for satisfying reporting requirements during the mining operation;

(4) Location of all erosion and sedimentation control structures;

(5) The extent and boundaries of each component drainage area.

(f) Supplemental maps for underground coal mining permit applications. In addition to other maps required in this Section, each permit application for underground mining operations shall include supplemental maps as follows:

(1) A U.S.G.S. topographic map of the area extending beyond the proposed mining limits and showing the following:

(A) Name and series of the sheet;

(B) Scale, latitude, and longitude;

(C) Limits of underground mining operation proposed;

(D) Surface area to be permitted;

(E) Cropline of the coal seam to be mined;

(F) Location and identification of all mine openings for the proposed mine including shafts, slopes, drifts, boreholes, etc; and

(G) Location of all surface structures not owned by the applicant over the area to be mined.

(2) A mine development map drawn to scale showing:

(A) Boundaries of underground mining operation and any adjacent active or abandoned mines in the same seam;

(B) All owners of property and all residents within the area above the proposed underground workings. The area above the underground works shall mean within the angle of critical deformation but at least 15o from any coal removal;

(C) Present extent of underground mining as well as projected headings;

(D) Date, scale, north arrow, dip, strike, and average dip of the coal seam to be mined;

(E) All gas wells, oil wells, water wells, and test drill holes;

(F) Location of all known faults;

(G) Area and extent of previous or proposed auger or strip mining in the same seam;

(H) Location and thickness of outcrop barriers; and

(I) Elevation of all entries, fanways and boreholes.

3.5 Cross Sections and Profiles. The application shall contain cross-sections and/or profiles which accurately depict:

(a) The existing premining surface configuration and the final surface configuration that will be achieved. Cross sections shall be developed from sufficient slope measurements to adequately represent the existing land surface configuration of the proposed permit area. Slope measurements shall take into account natural variations in slope, to provide accurate representation of the range of natural slopes and reflect geomorphic differences of the area to be disturbed. The Commissioner may require additional slope measurements at specified intervals and locations on a site-by-site basis;

(b) The vertical distribution of aquifers showing seasonal differences in head, if available, for the proposed permit area;

(c) Cross sectional area and profiles of excess spoil disposal areas with all appurtenances shown including rock cores, subsurface drains, surface drainage structures, foundations, etc;

(d) Cross sectional areas and profiles of all drainage and sediment control structures including ponds, impoundments, diversions, sumps, etc; and

(e) Cross sectional areas and profiles of all roads.

3.6 Operation Plans and Specifications. In addition to other plans required by the Act, the application shall contain plans and specifications describing:

(a) How the applicant will case, seal or otherwise manage augerholes, boreholes, shafts, wells and other openings;

(b) How the applicant will remove, store and redistribute topsoil, subsoil or topsoil substitutes, and other materials. When topsoil substitutes are proposed, the suitability

determination, analytical data, and laboratory certification required in paragraph (c), subsection 14.3, of these regulations shall be made a part of the permit application;

(c) Where topsoil borrow areas are proposed, the applicant shall submit a reclamation plan for such areas;

(d) How the applicant will handle acid forming and toxic forming materials and materials constituting a fire hazard;

(e) The design and construction of excess spoil disposal areas; and

(f) The design and construction of a drainage and sediment control system to include:

(1) A description, map, and cross section of the structure and its location;

(2) Preliminary hydrologic and geologic information required to assess the hydrologic impact of the structure;

(3) A survey describing the potential effect on the structure from subsidence of the subsurface strata resulting from past underground mining operation if underground mining has occurred;

(4) A certification statement which includes a schedule for the submitting of any detailed design plans for structures that are not submitted with the general plan. The Commissioner shall have approved, in writing, the detailed design plan for a structure before construction begins;

(5) Each structure design plan that is of such size or storage capacity that it is a dam as defined in Article 5D of Chapter 20, Code of West Virginia, shall be prepared by, or under direction of, and certified by a qualified registered professional engineer;

(6) The design shall include any geotechnical investigation and construction requirements for the structure;

(7) A description of the operation and maintenance requirements for each structure; and

(8) A timetable and plans to remove each structure, if appropriate.

(g) The design and construction of all roads; and

(h) A vegetation plan.

3.7 Existing Structures and Facilities:

(a) Each application shall contain a description of each existing structure proposed to be used in connection with or to facilitate the surface coal mining and reclamation operation. The description shall include:

(1) Location;

(2) Plans of the structure which describe its current condition;

(3) Approximate dates on which construction of the existing structure was begun and completed;

(4) A showing, including relevant monitoring data or other evidence, as to whether or not the structure meets the performance standards of the Act and these regulations; and

(5) A compliance plan for each existing structure proposed to be modified or reconstructed for use in connection with or to facilitate the surface coal mining and reclamation operation. The compliance plan shall include:

(A) Design specifications required for the modification or reconstruction of the structure to bring it into compliance with current design requirements and performance standards of the Act and these rules and regulations.

(B) A construction schedule which shows dates for beginning and completing interim steps and final construction.

(C) Provisions for monitoring the structure during and after modification or reconstruction to ensure that the performance standards of the Act and these regulations are met.

(D) A showing that the risk of harm to the environment or to public health or safety is not significant during the period of modification or reconstruction.

3.8 Operation(s) Near Public Road.

(a) Where the proposed mining operation is to be conducted within one hundred feet (100') (measured horizontally) of the

outside right-of-way of any public road (except where mine access roads or haulage roads join such right-of-way) or where the applicant proposes to relocate or close any public road, the Commissioner shall:

(1) Where the public road is to be closed or relocated, the applicant shall obtain necessary permission from the authority with jurisdiction over the public road.

(2) Provide an opportunity for a public hearing in the locality of the proposed mining operation for the purpose of determining that the interests of the public will be protected.

(3) Upon request for a public hearing by any person, require the applicant to hold a public hearing and give notice of the date, time, and place of the hearing in a newspaper of general circulation in the area of the proposed mining operation at least two (2) weeks in advance of the hearing date.

(4) Make a written finding within thirty (30) days following the hearing or after the close of the comment period as to whether or not the interests of the public will be protected.

3.9 Experimental Practices:

(a) Each permit application or permit revision shall contain plans and specifications of any proposed experimental practices to be employed as a part of the mining and reclamation operation. All experimental practices shall have prior approval of the Commissioner and the director of the federal Office of Surface Mining Reclamation and Enforcement before a permit or revision can be issued. An application for an experimental practice shall contain descriptions, maps, plans, and data which show:

(1) The nature of the experimental practice, including a description of any performance standards for which variances are requested, the duration of the experimental practice, and any special monitoring which will be conducted;

(2) How use of the experimental practice encourages advances in mining and reclamation technology or allows a postmining land use for industrial, commercial, residential, or public use (including recreation facilities) on an experimental basis;

(3) The experimental practice:

(A) Is potentially more, or at least as, environmentally protective, during and after mining operations, as would otherwise be required by the Act and these regulations.

(B) Will not reduce the protection afforded public health and safety below that provided by the requirements of the regulations.

(4) That the applicant will conduct monitoring of the effects of the experimental practice. The monitoring program shall ensure the collection, analysis, and reporting of reliable data that are sufficient to enable the Commissioner and the director of the federal Office of Surface Mining Reclamation and Enforcement to:

(A) Evaluate the effectiveness of the experimental practice; and

(B) Identify, at the earliest possible time, potential risk to the environment and public health and safety which may be caused by the experimental practice during and after mining.

(5) That the applications for experimental practice under this section will comply with the public notice requirements of the Act and these regulations.

(b) Each permit approved for experimental practices shall be reviewed by the Commissioner at least annually following date of issuance. The Commissioner may on the basis of this review, require modifications to the experimental practice.

3.10 Subsidence Control Plan.

(a) Each application for an underground coal mining permit shall contain a subsidence control plan which includes the following:

(1) A survey that identifies, on a topographic map of a scale of 1" = 1,000' or less, structures, perennial and intermittent streams or renewable resource lands and whether or not subsidence could cause material damage or diminution of value or use of such structures or renewable resource lands both on the permit area and adjacent areas within a critical angle of deformation of at least 15^{o}. Where the angle of critical deformation is less than 15^{o}, the applicant must provide supporting documentation establishing that such lesser angle provides equal protection;

(2) A general description of the technique of coal removal, such as longwall, room and pillar, pillar removal, hydraulic mining or other extraction methods and the size, sequence, and timing of underground development of the mine;

(3) A map showing surface contours and bottom of coal contours or an overburden isopach map and the location and extent of areas in which planned subsidence is projected, including anticipated effects, and those areas in which measures will be taken to prevent or minimize subsidence and related damage;

(4) A description of the physical conditions, such as depth of cover, seam thickness, strike and dip, lithology, and other geologic and hydrologic conditions, which affect the likelihood or extent of subsidence and subsidence-related damage;

(5) A description of the measures to be taken, in accordance with paragraphs (a) and (b) of subsection 16.2 of these regulations, to mitigate or remedy any material damage or diminution in value or foreseeable use that may occur to surface lands, structures, or facilities due to subsidence;

(6) An acknowledgement that if subsidence causes material damage or reduces the value or reasonably foreseeable use of the surface lands, then the operator shall restore the land to a condition capable of supporting uses it was capable of supporting before subsidence regardless of the right to subside;

(7) Except for those areas where planned subsidence is projected to be used, a detailed description of the subsidence control measures that will be taken to prevent or minimize subsidence and subsidence-related damage, including, but not limited to:

(A) Backstowing or backfilling of voids;

(B) Leaving support pillars of coal;

(C) Leaving areas in which no coal is removed, including a description of the overlying area to be protected by leaving the coal in place; and

(D) Taking measures on the surface to prevent material damage or lessening of the value or reasonably foreseeable use of the surface.

(8) A description of monitoring plans, if any, to determine the commencement and degree of subsidence so that other appropriate measures can be taken to prevent or reduce material damage.

(b) The Commissioner may waive the remainder of the requirements for a subsidence control plan if the survey required by paragraph (a)(1) of this subsection demonstrates, and the Commissioner determines, that no material damage or diminution of value or foreseeable use of the land or structures could be caused by subsidence.

(c) When an applicant feels it has the right to subside, it will provide adequate documentation of same.

(d) Where longwall mining or room and pillar mining with 80% recovery or greater is proposed, the following information shall be made a part of the plan:

(1) Typical predicted subsidence profile(s) for areas of planned subsidence. Specify from what source information was obtained to develop the predicted profile(s) including an explanation of the method and calculations used to develop prediction.

(2) For all areas identified by the survey, indicate what measures will be taken to minimize material damage or reduction in value or reasonably foreseeable use. Indicate those areas in which measures are to be taken (for structures this need not be addressed when the applicant demonstrates the right to subside without liability). Such measures may include, but not be limited to, relocating panels, mining without interruption, exposing gas lines, supporting foundations of structures, and insuring that any damage is repaired.

(3) Specify anticipated effects of planned subsidence.

(e) Where room and pillar mining with less than 80% coal extraction is proposed, the following information shall be made a part of the plan:

(1) On the development map, show all first mining and areas of planned pillar extraction.

(2) Describe anticipated secondary mining plans including percent extraction.

(3) Under all structures and renewable resource lands, demonstrate what methods will be used to protect that structure or lands (i. e., leaving solid coal or limited extraction). Under structures and perennial streams, the area addressed must extend to the angle of critical deformation, but not less than 15° unless otherwise approved. If mining is planned under or adjacent to a structure or perennial stream (for structures this need not be addressed when the applicant demonstrates the right to subside without liability), it must be demonstrated to the extent technologically and economically feasible that the pillar design will support the overburden. If it is not technologically and economically feasible, a detailed explanation must be included.

3.11 Underground Mine Abandonment Plan. Each application for an underground coal mine operation shall contain an abandonment plan which complies with the requirements of federal Mine Health Administration regulations at 30 CFR 75.1711. The abandonment plan shall also contain the following specifications:

(a) The width of outcrop barriers;

(b) The type and number of permanent seals proposed, their design details, and the proposed materials to be used for construction;

(c) The maximum head of water expected on the outcrop barriers and mine seals; and

(d) The type and design details of seals for boreholes.

3.12 Fish and Wildlife Resources Information.

(a) Each application shall include fish and wildlife resource information for the permit area and adjacent area.

(1) The scope and level of detail for such information shall be determined by the regulatory authority in consultation with State and Federal agencies with responsibilities for fish and wildlife and shall be sufficient to design the protection and enhancement plan required under paragraph (b) of this subsection.

(2) Site-specific resource information necessary to address the respective species or habitats shall be required when the permit area or adjacent area is likely to include:

(A) Listed or proposed endangered or threatened species of plants or animals or their critical habitats listed by

the Secretary under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.), or those species or habitats protected by similar state statutes;

(B) Habitats of unusually high value for fish and wildlife such as important streams, wetlands, riparian areas, cliffs supporting raptors, areas offering special shelter or protection, migration routes, or reproduction and wintering areas; or

(C) Other species or habitats identified through agency consultation as requiring special protection under State or Federal Law.

(b) Each application shall include a description of how, to the extent possible using the best technology currently available, the operator will minimize disturbances and adverse impacts on fish and wildlife and related environmental values, including compliance with the Endangered Species Act, during the surface coal mining and reclamation operations and how enhancement of these resources will be achieved where practicable. This description shall:

(1) Be consistent with the requirements of Section 8 of these regulations;

(2) Apply, at a minimum, to species and habitats identified under paragraph (a) of this subsection; and

(3) Include:

(A) Protective measures that will be used during the active mining phase of operation. Such measures may include the establishment of buffer zones, the selective location and special design of haul roads and power lines, and the monitoring of surface water quality and quantity; and

(B) Enhancement measures that will be used during the reclamation and postmining phase of operation to develop aquatic and terrestrial habitat. Such measures may include restoration of streams and other wetlands, retention of ponds and impoundments, establishment of vegetation for wildlife food and cover, and the replacement of perches and nest boxes. Where the plan does not include enhancement measures, a statement shall be given explaining why enhancement is not practicable.

(c) Upon request, the Commissioner shall provide the resource information required under paragraph (a) of this

subsection and the protection and enhancement plan required under paragraph (b) of this subsection to the appropriate State and/or Federal Fish and Wildlife agencies for their review. This information shall be provided within ten (10) days of receipt of the request from the Service.

3.13 Reprocessing or Removal of Abandoned Coal Refuse Disposal Piles.

Where the Commissioner determines that a higher or better land use will result, or where the safety and welfare of the public is improved or when the enhancement of the environment will result, he may issue a special permit for reprocessing or removal of an abandoned coal refuse disposal area. An application for a special permit for removal of an abandoned refuse disposal area shall be submitted to the Commissioner for review.

(a) The application shall include plans and specifications for reprocessing or removal of the coal refuse and reclamation restoration of the site which have been prepared by or under the direct supervision of an engineer including two sets of maps and plans on standard 24" by 36" size plan sheets and seven copies of a submittal containing a project narrative, reclamation plan, specifications, supporting data, reduced maps and plans. Details of the submittal are as follows:

(1) The project narrative shall include at a minimum a discussion of existing site conditions, how the operation will protect the public or environment or accomplish a more desirable land use, the design life of the operation, quantity and type of material to be removed, method of operation to include phases of removal, sequence of critical construction phases, and a description of the duties, responsibilities, and lines of communication of those persons responsible for management of the operation.

(2) The reclamation plan shall include as a minimum the location and capacity of the sediment control facilities, and reclamation procedures and specifications for the revegetation and grading of the site.

(3) Supporting data shall include as a minimum the assumptions and parameters used in the design of the operation, the calculations used in the operation design, and the results of any necessary design calculations for sediment control facilities, removal of materials, diversion ditches, spillways, stability analysis, fire control and revegetation.

(4) Maps and plans shall be provided to show the following information with the scale designated on the drawing:

(A) A location map showing the site in relation to major highways, nearest post office, and major drainage. County highway maps may be used for this purpose.

(B) A map showing the limits of the watershed with respect to the site. The minimum requirements shall be a U.S.G.S. 7 1/2 minute map with the site plotted on it.

(C) A plan view of the site showing contours, limits, and acreage of the permit area, location of cross sections, and other pertinent data for project control.

(D) Cross sections and profiles of drainage facilities, sediment control devices, and any stability analysis cross sections.

(E) A plot of inflow hydrographs and stage-storage curves as necessary for refuse impoundment and one hundred (100) year frequency, six (6) hour duration diversion design only.

(5) An emergency procedure as required in paragraph (h) of Subsection 22.5 of these regulations.

(b) Design Requirements:

(1) General Requirements - All reprocessing or removal operations must be designed to:

(A) Provide sediment control facilities in accordance with Subsections 5.4 of these regulations and the Handbook requirements. Variances may be granted where the operator can show that there is insufficient space for conventional structures and that existing or proposed sediment structures will meet effluent standards.

(B) Provide diversion or discharge facilities in accordance with the requirements of this section.

(C) Provide for removal of refuse in successive horizontal lifts with a maximum elevation difference between working benches of twelve (12) feet or removal down to a maximum 2H:1V slope from the top to the toe. No refuse may be removed from the toe of the original embankment until the final removal process.

(D) Provide a plan for fire control in present or unforeseen burning areas in accordance with paragraph (m), Subsection 22.5 of these regulations.

(E) Provide, wherever possible, a final graded refuse slope no steeper than 2H:1V and a twenty (20) foot wide bench for every fifty (50) feet of change in elevation at completion of the operation. Natural slopes shall be stabilized as necessary.

(F) Provide adequate revegetation of refuse and natural ground slopes in accordance with Section 9 of these regulations. All refuse materials disturbed by the operation shall be provided with a minimum of four feet of cover of non-toxic and non-combustible material sufficient to establish adequate vegetation except that a lesser cover may be used based on chemical and physical analysis in accordance with paragraph (k), subsection 9.2, of these regulations.

(2) Specific Requirements:

(A) Non-impounding Refuse Areas:

(i) Working surface ditches shall be designed, where necessary, based on the two (2) year, twenty-four (24) hour duration storm event as a minimum during the operation.

(ii) Removal operations shall not create any impoundment of water through the life of the project.

(iii) For partial removal within the permit area, a one hundred (100) year, twenty-four (24) hour duration diversion ditch shall be provided to direct water around that part of the pile where refuse will remain. A stability analysis shall be performed as deemed necessary by the Commissioner to demonstrate an adequate factor of safety in critical areas where refuse will remain.

(B) Impounding Refuse Areas:

(i) Sufficient storage and spillway capacity for a one hundred (100) year, twenty-four (24) hour design storm shall be provided through the removal operation.

(ii) A maximum five (5) foot elevation difference is permitted between the elevation of slurry and the breach invert elevation unless otherwise approved by the Commissioner.

(iii) Pumps, or pumps with ditches, must be provided to maintain the lowest possible water level in the impoundment.

(iv) For partial removal within the permit area, the site shall be converted to a non-impounding fill at completion of the operation. A stability analysis shall be performed if deemed necessary by the Commissioner to demonstrate an adequate factor of safety of 1.5 in critical areas for the remaining refuse embankment area. A one hundred (100) year, twenty-four (24) hour duration diversion ditch shall be constructed to divert water around the embankment.

(3) Disposal of Reprocessing Coal Refuse Materials. If reprocessing coal refuse materials are to be disposed of in the special permit area, the refuse disposal site must be constructed in accordance with Section 22 of these regulations.

3.14 Approved Persons.

(a) Any person approved by the Commissioner, unless otherwise provided in the Act and these regulations, may prepare, sign, or certify permit applications, maps, plans, and design specifications or other similar materials necessary to complete an application. Provided however, that for purposes of Sections 9(a)(13) and 12(b)(10) of the Act an approved person shall be a registered professional engineer or licensed land surveyor.

(b) The Commissioner's approval shall be in writing and shall be granted on the basis of the following:

(1) A resume of the persons prior experience and training relating to the preparation of permit application materials, provided, that registered professional engineers, registered mining or civil engineers and licensed land surveyors currently registered or licensed in the State of West Virginia shall submit a copy of their registration or license in lieu of a resume; and

(2) Any person seeking an approval must demonstrate that he possesses adequate knowledge of the Act and rules and regulations and possess such other skills and qualifications as may be necessary to prepare an application by successfully passing an examination administered by the Commissioner. Examinations will be given upon request.

(c) All technical data in the application shall bear the name of the person collecting and analyzing the data, dates of

collection and analysis, and description of the methodology used to collect and analyze the data. Any referenced materials not included in the application shall be made available to the Commissioner upon request.

(d) Technical analysis shall be planned by, or under the direction of, a professional person qualified in the subject to be analyzed.

3.15 General Environmental Resources Information.

(a) Parks and Historic Lands.

(1) The nature of cultural, historic and archaeological resources listed or eligible for listing on the National Register of Historic Places and known archaeological sites within the proposed permit and adjacent areas. The description shall be based on all available information, including, but not limited to, information from the State Historic Preservation Officer and from local archaeological, historical, and cultural preservation agencies.

(2) The Commissioner may require the applicant to identify and evaluate important historic and archaeological resources within the proposed permit and adjacent areas that may be eligible for listing on the National Register of Historic Places, through the collection of additional information by conducting field investigations or other appropriate analysis.

(3) Adverse impacts to any publicly owned park and any place listed on the National Register of Historic Places shall be prohibited unless the permit applicant has valid existing rights or unless joint agency approval is obtained in accordance with paragraph (e) of this subsection in which case adverse impacts must be minimized.

(4) The Commissioner may require the applicant to protect historic or archaeological properties listed on or eligible for listing on the National Register of Historic Places through appropriate mitigation and treatment measures. Appropriate mitigation and treatment measures may be required to be taken after permit issuance provided that the required measures are completed before the properties are affected by any mining operation.

(b) Endangered Species. When the proposed mining operation will affect threatened or endangered species of plants or animals or their critical habitats, the application shall describe

control measures, management techniques, and monitoring methods to be employed in order to protect or enhance such species and habitats. Endangered or threatened species are as listed by the Secretary of Interior under the Endangered Species Act of 1973 (16 U.S.C. 1521 et seq.).

(c) Prime Farmlands. Prior to issuing a permit which involves prime farmland, the Commissioner shall consult with the U.S. Soil Conservation Service. On the basis of this consultation and other information available to him, the Commissioner shall make a written finding that:

(1) The approved postmining land use will be cropland;

(2) The permit incorporates the prime farmland reconstruction plan as a permit condition;

(3) The applicant has the technological capability to restore the land within a reasonable time period to conditions capable of producing levels of yield equivalent to or higher than those of non-mined prime farmland in the surrounding area under equivalent levels of management; and

(4) Mining will be conducted in accordance with prime farmland performance standards.

(d) Designation of Lands Unsuitable. Upon receipt of a complete application for a surface mining permit, the Commissioner shall review the application to determine whether the surface coal mining operation is limited or prohibited under Section 22 of the Act.

(1) If the Commissioner is unable to determine whether the proposed operation is located within the boundaries of any of the lands described in Section 22(d)(1) of the Act, or closer than the limits provided in Section 22(d)(4) of the Act, the Commissioner 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. The agency shall make such determinations within thirty (30) days of receipt of the Commissioner's request. The Commissioner may extend the response period by thirty (30) days upon written request.

(2) When the Commissioner receives any request for determination of valid existing rights on lands within the area of jurisdiction of the National Park Service or the U. S. Fish and Wildlife Service, a notification shall be made to the

appropriate agency, and they shall have thirty (30) days in which to respond. The Commissioner may, upon written request, extend the response period by an additional thirty (30) days.

(3) Where the proposed operation would include federal lands within the boundaries of any national forest when the applicant seeks a determination that mining is permissible under Section 22(d)(5) of the Act, the applicant shall submit a permit application to the field office of the federal Office of Surface Mine Reclamation and Enforcement with a request that such determinations be made.

(e) Effect on Historic Places. Where the proposed surface coal mining operation will adversely affect any publicly owned park or any place listed on the national register of historic places, the Commissioner shall transmit to the Federal, State or local agencies with jurisdiction over the park or historic place the applicable parts of the permit application, together with a request for the agency's approval or disapproval of the operation. The agency shall have thirty (30) days from receipt of the request within which to respond unless an additional thirty (30) day extension is requested and granted by the Commissioner. A permit for such operation shall have joint approval of all affected agencies. Failure of the agency to respond to the Commissioner's request within the prescribed time period shall constitute approval.

3.16 Hydrologic Information.

(a) PHC. Each permit application shall contain a statement describing the probable hydrologic consequences (PHC) of the proposed mining operation, with respect to the hydrologic balance, on both the permit area and adjacent areas. The statement shall be based on base line information developed from sampling and analysis of surface and groundwater at monitoring sites established both on the permit area and adjacent areas. Sampling and analysis shall be performed in accordance with methods approved by the Office of Surface Mining Reclamation and Enforcement. The longitude, latitude and elevation shall be given for each of the monitoring sites. Mathematical modeling techniques may be used to aid in the development of the required information. The PHC determination shall include findings on: whether adverse impacts may occur to the hydrologic balance; whether acid-forming or toxic-forming materials are present that could result in the contamination of surface or ground-water supplies; whether the proposed operation may proximately result in contamination, diminution or interruption of an underground or surface source of water within the proposed permit or adjacent

areas which is used for domestic agricultural, industrial, or other legitimate purpose; and what impact the proposed operation will have on:

(1) Sediment yield from the disturbed area;

(2) Acidity, total suspended and dissolved solids, and other important water quality parameters;

(3) Flooding or streamflow alteration;

(4) Ground-water and surface-water availability; and

(5) Other characteristics as required by the Commissioner.

(b) Base Line Ground Water Information. Each application for a permit shall contain:

(1) The location, ownership, and use (if any) of known existing wells, springs, and other groundwater resources including discharges from other active or abandoned mines on the proposed permit area and adjacent areas in sufficient numbers to allow the applicant to make a reasonable approximation of the base line groundwater conditions and use;

(2) Water quality analysis including, at a minimum, total dissolved solids, alkalinity, acidity, sulfates, specific conductance, pH, total iron and total manganese. Correlation data from other monitoring sites within the general area of the proposed mining operations may be accepted; provided, that a limited number of validation samples from the permit area may be required provided further, That in areas where prior mining experience has shown acid production to be a possibility, or in acid producing seams in areas with no prior mining history, site specific data on water sampling and analysis shall be required;

(3) For significant aquifers, groundwater quantity descriptions including discharge rates or usage and depth to water under seasonal conditions in each water-bearing stratum above the coal seam and each potentially impacted stratum below the coal seam. Where deemed appropriate and feasible by the Commissioner the operator may calculate water usage for water status discharge determinations; and

(4) If the determination of the probable hydrologic consequences (PHC) indicates that a currently used or significant groundwater resources is likely to be contaminated, diminished,

or interrupted, additional information shall be provided as necessary to fully evaluate such probable hydrologic consequences as water availability and suitability for both the premining and postmining land use or to plan remedial and reclamation activities such as alternative water sources.

(c) Base Line Surface Water Information. Each application for a permit shall contain:

(1) The name, location, ownership, and description of all surface water bodies on the permit area and adjacent areas;

(2) Water quality descriptions including information on total suspended solids, total dissolved solids, specific conductance, pH, acidity, alkalinity, sulfates, total iron and total manganese sufficient to demonstrate seasonal variations; provided, that correlation data from other monitoring which does not include one or more of the above parameters may be accepted; provided further, that a limited number of validation samples may be required. In areas where prior mining experience has shown acid production to be a possibility, or in acid producing seams in areas with no prior mining history, site specific data on water sampling and analysis shall be required;

(3) Water quantity descriptions including information on seasonal flow rates, variation, and usage; and

(4) If the determination of the probable hydrologic consequences (PHC) indicates that a currently used or significant surface water resource (including all lightly buffered streams) is likely to be contaminated, diminished, or interrupted, additional information shall be provided on the flood flows, base flows, and other characteristics or information as necessary to fully evaluate such probable hydrologic consequences as water availability and suitability for both the premining and postmining land use or to plan remedial and reclamation activities such as alternative water sources.

(d) The applicant shall submit with the application all available data and analysis described in paragraphs (b)and (c) of this subsection for use in preparing the cumulative hydrologic impact assessment (CHIA).

(e) In some cases, the PHC may serve as the CHIA if there is no previously existing mining within the particular cumulative impact area. Otherwise, the Commissioner shall perform a separate CHIA for the cumulative impact area. This evaluation shall be sufficient to determine whether the proposed operation

has been designed to prevent material damage to the hydrologic balance outside the permit area.

(f) Each permit application shall contain a hydrologic reclamation plan. The plan shall be specific to the local hydrologic conditions. It shall contain in the form of maps and descriptions the steps to be taken during mining and reclamation through bond release to minimize disturbances to the hydrologic balance within the permit and adjacent areas; to prevent material damage outside the permit area; to meet applicable Federal and State water quality laws and regulations; and to protect the rights of present water users. The plan shall include the measures to be taken to:

(1) Avoid acid or toxic drainage;

(2) Prevent, to the extend possible using the best technology currently available, additional contributions of suspended solids to streamflow;

(3) Provide water treatment facilities when needed;

(4) Control drainage; and

(5) Restore protect or replace water supply of present water users in accordance with Section 24 of the Act. The plan shall specifically address the potential adverse hydrologic consequences identified in the PHC determination and shall include preventive and remedial measures.

(g) Each application for a permit shall contain a surface water monitoring plans based on the PHC determination and base line hydrologic and geologic information. These plans shall identify monitoring site locations, quantity and quality parameters, sampling frequency, and describe how the data will be used to determine the impact of the operation on the hydrologic balance both on the permit area and adjacent areas. Monitoring parameters shall include but are not limited to total dissolved solids or specific conductance corrected at 250C, total suspended solids, flow measurements, pH, acidity, alkalinity, total iron and total manganese. The selection of these parameters must be based on current and approved post mining land uses and all hydrologic balance protection objectives.

(h) Each application for a permit shall contain a ground water monitoring plan if adverse impacts to a significant groundwater resource are anticipated. The decision of need will be based on the PHC determination and base line hydrologic and

geologic information gathered both on and off the mine site. These plans shall identify monitoring site locations (latitude, longitude, and ground level elevations), quantity and quality parameters to be monitored, sampling frequency and duration, and describe how the data will be used to determine the impact of the operation on the hydrologic balance both on and off the mine site. Monitoring parameters shall include, but are not limited to, total dissolved solids or specific conductance corrected at 25°C, pH, acidity, alkalinity, total iron, total manganese, and water levels or discharge rates. The selection of these parameters must be based on current and approved post mining land uses and all hydrologic balance protection objectives.

3.17 Geology. Each application for a permit shall contain the following geologic and related information:

(a) Geologic cross sections, maps or plans of the proposed permit area and adjacent areas, prepared by or under the direction of and certified by a person approved by the Commissioner. When required by the Commissioner, test borings or core samplings shall be analyzed to determine the following information:

(1) The locations (latitude and longitude) and elevations of all bore holes;

(2) The nature and depth of the various strata or overburden including geologic formation names and/or geologic members;

(3) The elevation location of subsurface water, if encountered, and its quality;

(4) The nature and thickness of any coal or rider seams above the seam to be mined;

(5) The nature of the stratum immediately beneath the coal seam to be mined;

(6) All mineral crop lines and the strike and dip of the coal to be mined, within the area of land to be affected;

(7) Existing or previous surface mining limits; and

(8) The location and extent of known workings of any underground mines, including mine openings to the surface.

(b) Information concerning the areal and structural geology of both the proposed permit and adjacent areas, down to the deeper of either the stratum immediately below the lowest coal seam to be mined or any aquifer which may be adversely impacted below the lowest coal seam to be mined. Areal geology may include information such as mapped outcrop locations shown on a 7 1/2 minute United State Geological Survey (U.S.G.S.) topographic map, area photographs, and published geologic reports for the area of concern. Structural geology may include mapped lineament traces from area photography or topographic maps and any published structural geologic reports for the area of concern;

(c) Areal and vertical distribution of aquifers with seasonal differences in head and the name(s) of the stratum (or strata) in which the water is found;

(d) Location and depth of all oil and gas wells within the proposed permit area for both surface and underground mines;

(e) For underground mining operations, indicate whether or not there will be a gravity discharge; and

(f) A statement of the result of test borings or core samples from the permit and adjacent areas including:

(1) The results of test borings including the lithologic logs of the drill holes displaying the physical properties and thickness of each stratum encountered which the applicant has made at the area to be covered by the permit, or other equivalent information and data in a form satisfactory to the Commissioner including the structural geology, thickness of the coal seam to be mined, location of subsurface water, if encountered, and an analysis of the chemical and physical properties, including but not limited to the sulfur content of any coal seam, the chemical analysis of potentially acid or toxic-forming sections of the overburden, and the chemical analysis of the stratum lying immediately underneath the coal to be mined: Provided, that information which pertains only to the analysis of the chemical and physical properties of the coal, except information regarding such mineral or elemental contents which are potentially toxic in the environment, shall be kept confidential and not a matter of public record;

(2) Premining overburden sampling and analysis or previous experience and correlation data, shall be made a part of each permit application for all acid-producing seams. Overburden sampling and analysis is to be performed in accordance with standard procedures set forth in Environmental Protection Agency

Manual No. 600/2-78-054 (Field and Laboratory Methods Applicable to Overburdens and Minesoils) or other methods approved by the Commissioner;

(3) For standard room and pillar mining operations, the thickness and engineering properties of clays or soft rock such as clay shale, if any, in the stratum immediately above and below each coal seam to be mined;

(4) Cross sectional or areal maps illustrating faults, crop lines, dip/strike, synclines, anticlines and other known geologic structural features which have a bearing on the extraction of the coal and/or the hydrologic regime. The maps shall be accompanied by a detailed description of the illustrated data including a brief description of the degree of fracturing and weathering, noted during the exploration drilling if it is believed to have a potential influence on the extraction of the coal and/or the hydrologic regime;

(5) An explanation of the anticipated potential impacts of the proposed mining operation on the hydrology and geology of the area; and

(6) An applicant may be granted a waiver for the requirements of parts (1) and (3) of paragraph (f) of this subsection only after the Commissioner finds in writing that the collection and analysis of such data is unnecessary because other equivalent information exists and is available to the Commissioner, provided, That in areas where mining history has shown acid production to be a possibility, or in acid producing seams in areas with no prior mining history, site specific data on overburden sampling and analysis shall be required.

3.18 Protection of Adjacent Operations. Surface mining activities shall be designed to protect disturbed surface areas, including spoil disposal sites, so as not to endanger any present or future operations of either surface or underground mining activities.

3.19 Transfer, Assignment or Sale of Permit Rights and Obtaining Approval.

(a) The Commissioner may grant approval of the transfer, assignment or sale of a permit under the following terms and conditions:

(1) The applicant shall affirmatively demonstrate to the Commissioner 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.

(2) The application, for transfer assignment or sale, shall set forth on forms prescribed by the Commissioner, the information required in Sections 9(a)(1) through 9(a)(6) and Sections 9(a)(9), 9(d), 9(f), 10(a)(10), and 18(b)(5) of the Act and paragraph (c) of Subsection 3.1 of these regulations.

(3) The applicant for transfer, assignment or sale of a permit shall, upon filing of the application with the Commissioner, give notice of the filing in a newspaper of general circulation in the locality of the operation. The notice shall be in the form of a legal advertisement containing information as set forth on forms provided by the Commissioner and shall provide for a thirty (30) day comment period. Any person whose interests are or may be adversely affected, may submit written comments to the Commissioner within thirty (30) days of the date of publication.

(4) Approval of the application for transfer assignment or sale of a permit may be granted upon a written finding by the Commissioner that the applicant is eligible to receive a permit and will conduct mining operations in accordance with the purposes and intent of the Act, these rules and regulations and the terms and conditions of the permit. Such findings will be based on information set forth in the application for transfer assignment or sale and any other information made available to the Commissioner.

(5) The Commissioner shall notify the permittee, the successor, all commentors, and the Charleston field offices, Office of Surface Mining Reclamation and Enforcement of this findings.

(6) The successor shall immediately notify the Commissioner upon consummation of the transfer, assignment, or sale.

(7) Each application for a transfer, assignment or sale of a permit shall contain a sworn statement as follows: "The information contained in this application is true and correct to the best of my knowledge and belief." Such statement shall be signed by an accountable official of the applicant and shall be notarized.

3.20 Agreement. A permittee who wishes to assign the mining operation through an agreement, contract, job contract, etc., to

another person, but retain the permit, must request prior written approval of such assignment on forms prescribed by the Commissioner. 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.

3.21 Permit Renewals and Permit Extensions.

(a) All active surface mining operations shall be subject to the renewal requirements of Section 19 of the Act. Those operations which have been granted inactive status in accordance with Subsection 14.11 of these regulations, shall also be subject to the renewal requirements of Section 19 of the Act. Applications shall be filed on forms provided by the Commissioner and shall contain at a minimum the following information:

(1) 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;

(2) A statement that the terms and conditions of the preplan are being satisfactorily met;

(3) A statement that the operation is in compliance with the applicable environmental protection standards of the Act and these rules and regulations;

(4) A statement that the performance bond and insurance policy for the operation will continue in effect;

(5) A progress map of an approved size and scale as the proposal maps for all operations except those operations which have obtained a bond release or those operations with no disturbance and which have not started into operation;

(6) Each application for a permit renewal shall contain a sworn statement as follows: "The information contained in this application is true and correct to the best of my knowledge and belief." Such statement shall be signed by an accountable official of the applicant and shall be notarized; and

(7) A copy of the proposed newspaper advertisement in accordance with Section 20 of the Act and subsection 3.2 of these regulations.

(b) The Commissioner shall notify the appropriate agencies of the application for renewal as required in Section 20(a) of the Act.

(c) Time extension of sixty (60) days may be granted by the Commissioner for permit renewal which has been submitted but is logistically impractical to process before the expiration date.

(d) Extensions of time for a permit as provided in paragraph (c) of Section 8 of the Act shall be specifically set forth in a written approval and made part of the permit. Such extension shall be made public by the Commissioner.

(e) Extensions of the initial permit term in excess of five (5) years as provided in paragraph (c) of Section 8 of the Act shall be granted upon written request by the applicant. Such request shall be accompanied by a written verification.

3.22 Permit Revisions.

(a) Any revision to a permit will be subject to review and approval by the Commissioner and if deemed to be a significant revision must meet all applicable 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 permit.

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

(c) Each application for permit revision must be reviewed by the Commissioner to determine whether a new or updated PHC determination or cumulative hydrologic impact assessment (CHIA) should be prepared. Each application for a permit revision shall contain a sworn statement as follows: "The information contained in this application is true and correct to the best of my knowledge and belief." Such statement shall be signed by an accountable official of the applicant and shall be notarized.

3.23 Incidental Boundary Revisions (IBR).

(a) All incidental boundary revisions shall be granted in accordance with Section 19(a)(2) of the Act and shall be limited to additional areas of disturbance directly related to surface mining. Incidental boundary revisions shall not be granted for any Notice of Intent to Prospect.

(b) General. In addition to the information required by section 19(a)(2) of the Act the following requirements shall be met:

(1) The application shall be filed on forms provided by the Commissioner.

(2) For purposes of surface operations, the maximum total acreage to be permitted on one or more IBR's shall be no more than sixty (60) percent of the acreage of the original permit and not to exceed one hundred fifty (150) acres. No limitations shall be imposed on underground operations.

(3) Non-significant Incidental Boundary Revisions. Where the revision constitutes only minor changes in the permit boundaries, shifts of acreage from one area of the permit to another, extension of the permit area of five (5) acres or less, and where coal extraction is incident to or of only secondary consideration, the revisions shall be deemed to be a non-significant incidental boundary revision and not subject to public notice.

(4) If the IBR is not contiguous to the mining area, or is a significant IBR, a legal ad in accordance with paragraphs (a) and (b) of subsection 3.2 of these rules and regulations and paragraph (a)(6) of Section 9 of the Act will be required.

(5) All provisions of the IBR which differ from the original permit shall meet the requirements of the Act and regulations, except as provided in this subsection.

(c) An IBR will be deemed to be significant if it is determined that the environmental impact or welfare and safety of the public may be altered from that reflected in the approved permit.

(d) All IBR's for a permit will be subject to review and approval by the Commissioner.

(e) No IBR to a permit may be implemented by any operator until written approval of the Commissioner has been granted.

3.24 Variance.

(a) Approximate Original Contour. All permits approved with variances from approximate original counter shall be reviewed by the Commissioner two and one-half 2 1/2 years after issuance to determine whether or not the operation is proceeding in accordance with the terms of the variance.

(b) Contemporaneous Reclamation. The Commissioner shall review all permits for which a variance from contemporaneous reclamation is approved in accordance with paragraph (16), Subsection (b), Section 12 of the Act, no later than three (3) years after issuance of the permit and any renewal. Any person seeking a variance shall file with the Commissioner narratives, maps, and plans sufficient to provide a basis for the Commissioner to make the appropriate finding required to grant the variances. Any permit for which this variance applies must contain specific conditions delineating the particular surface areas for which the variance is authorized, identifying the applicable provisions of the Act and these regulations, and providing a detailed schedule for complying with the provisions of this subsection.

3.25 Federal or State Highway or Other Construction Exemption.

(a) To qualify as a federal or state highway or other construction project, the construction must be funded fifty percent (50%) or more by the federal or state government and once the exemption is granted, the person doing the construction must have on-site available for inspection, the following:

(1) Descriptions of the project to include, but not be limited to, the exact location of the limits of all of the area to be affected by the construction; and

(2) Authorization from the agency or agencies providing the funding and, if different, the agency or agencies responsible for the construction, giving permission to proceed and the amount of funding provided as a percent of the total project cost.

(b) The extraction of coal shall be limited to areas within the highway right-of-way or within the boundaries of the area directly affected by other construction activities.

3.26 Permit Conditions. Each permit shall be subject to the following conditions:

(a) The permittee shall conduct surface coal mining and reclamation operations only on those lands that are specifically designated as the permit area on the maps submitted with the application and authorized for the term of the permit and that are subject to the performance bond or other equivalent guarantee.

(b) Without advance notice, delay, or a search warrant, upon presentation of appropriate credentials, the permittee shall allow the authorized representative of the Commissioner to:

(1) Have the right to entry; and

(2) Be accompanied by private persons for the purpose of conducting an inspection when the inspection is in response to an alleged violation reported to the Commissioner by the private person.

(c) The permittee shall take all possible steps to minimize any adverse impact to the environment or public health and safety resulting from noncompliance with any term or condition or the permit, including, but not limited to:

(1) Any accelerated or additional monitoring necessary to determine the nature and extent of noncompliance and the results of the noncompliance;

(2) Immediate implementation of measures necessary to comply; and

(3) Warning, as soon as possible after learning of such noncompliance, any person whose health and safety is an imminent danger due to the noncompliance.

(d) The operator shall pay all reclamation fees for coal produced under the permit for sale, transfer, or use.

(e) The permittee shall update and furnish the Commissioner on an annual basis the information required by paragraphs (c)(1) and (3) of subsection 3.1 of this Section.

38-2-4. Haulageways or Access Roads.

4.1 Location. The center line of the proposed haulageways or access roads shall be visibly marked on the site at one hundred foot (100') intervals at the time of preinspection. Preexisting haulageways or access roads shall be exempt from this requirement.

4.2 Construction.

(a) Construction of haulageways or access roads shall be done in accordance with the following provisions:

(1) 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');

(3) The surface shall pitch toward the ditch line at the minimum slope of one-half inch (1/2") per foot of surface width or shall be crowned at the minimum slope of one-half inch (1/2) per foot of surface width as measured from the center line;

(4) The grade on switchback curves shall be reduced to less than the approach grade and should not be greater than ten percent (10%); and

(5) Cut slopes shall not be steeper than 1:1 in soils or 1/4:1 in rock.

(b) All grade measurements in this section shall be subject to a tolerance of two percent (2%). All linear measurements in this section shall be subject to a tolerance of ten percent (10%). All angles in this section shall be measured from the horizontal and shall be subject to a tolerance of five percent (5%).

4.3 Drainage Design.

(a) All drainage designs of haulageways or access roads shall be in accordance with the following:

(1) A ditch shall be provided on both sides of a throughcut and on the inside shoulder of a cut-fill section, with ditch relief culverts being spaced according to grade. Water shall be intercepted or directed around and away from a

switchback. All ditch lines shall be capable of passing the peak discharge of a one (1) year, twenty-four (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 ditch line may be located on the outside shoulder of cut fill section if the ditch line is designed so that it will remain stable and that drainage control is also provided for water on the outside of the curve.

(2) Ditch relief culverts shall be installed wherever necessary to insure proper drainage of runoff water beneath or through the haulageway or access road, according to the following specifications:

(A):

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

(B) The culvert shall cross the haulageway or access road at a thirty (30°) degree horizontal 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;

(C) The inlet end shall be protected by a headwall of durable material and the slope at the outlet end shall be protected with an apron of rock riprap, an energy dissipator or other similar structure;

(D) The culvert shall be covered by compacted fill to a depth of one foot (1') or half the culvert diameter, whichever is greater;

(E) Alternative design criteria for culverts may be proposed where the design criteria of this section is not practical or necessary; and

(F) The cross sectional area of all culverts installed on haulageways and access roads shall be adequate to pass the peak discharge storm runoff from a one (1) year twenty-four (24) hour precipitation event from the contributing watershed, but in no event shall the cross sectional area be less than one hundred square inches.

(3) Culverts, bridges or other structures shall be used to cross intermittent or perennial streams. During construction, consideration shall be given to such factors as weather conditions, season of the year, time period for construction, etc., in order to minimize adverse impacts on the water quality and to the 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. These structures shall be capable of passing the peak flow for a ten (10) year, twenty-four (24) hour precipitation event from the contributing watershed. Structures of a lesser design capacity may be approved by the Commissioner if the flow through capacity of the structure itself is at least equal to or greater than the flow capacity of the stream channel as measured immediately upstream and downstream of the crossing; provided that the structure shall pass the peak of a one (1) year, twenty-four (24) hour precipitation event.

4.4 Sediment Control. All sediment control structures shall have an adequate sediment storage volume and detention time. The optimum design factors for achieving this criteria is 0.125 acre/feet for each acre of disturbed area within the watershed of the structure; however, lesser storage values may be approved by the Commissioner. During construction of these structures, temporary sediment control measures, as described in the Handbook, shall be used.

4.5 Erosion Control. Except for road surfaces, all disturbed area including fill and cut slopes along haulageways and access roads, shall be seeded and mulched immediately after construction and a vegetative cover shall be maintained thereafter as necessary to control erosion.

4.6 Surfacing. Haulageways or access roads shall not be surfaced with any acid-producing or toxic forming material and the surface shall be maintained in a manner that will control or prevent erosion and siltation.

4.7 Dust Control. All reasonable means shall be employed to control dust from the surface of haulageways and access roads. The permit application shall include a plan for fugitive dust control practices. All exposed haulageway surface areas shall be protected and stabilized to effectively control erosion and air pollution attendant to erosion.

4.8 Removal of Drainage Structures. Bridges, culverts, stream crossings, etc., necessary to provide access to the operation, shall not be removed unless approved by the

Commissioner. The same precautions as to water quality are to be taken during removal of drainage structures as those taken during construction and use.

4.9 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 can otherwise be met, paragraphs (a), (1) and (2) of Subsection 4.2 and paragraphs (a), (2) (A) and (B) of Subsection 4.3 of this Section will not apply.

4.10 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 this section with the exception of Subsections 4.5 and 4.11.

4.11 Abandonment of Haulageways or Access Roads.

(a) Haulageways or access roads shall be abandoned in accordance with the following:

(1) Prior to abandonment of haulageways or access roads, efforts 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:

Percent Grade of Haulageway	Spacing of Water Bars in Lineal Feet
2	250
5	135
10	80
15	60
20	45
Above 20	25

(2) Upon abandonment, all areas of haulageways or access roads shall be immediately seeded and mulched.

4.12 Plans, Design Data and Construction Specifications.

(a) Each permit application for operations in which haulageways and/or access roads are proposed shall contain the following information:

(1) A plan view of the road drawn to scale showing:

(A) The station base line;

(B) Location of culverts;

(C) Flow directions;

(D) Location of intermittent or perennial streams; and

(E) Other pertinent data as required by the Commissioner.

(2) A surveyed profile drawn to scale showing:

(A) Profile of finished road surfaces;

(B) Location and size of culverts;

(C) Station elevations;

(D) Profile of original ground; and

(E) Percent grades.

(3) A typical cross-section of haulroad showing:

(A) Culvert placement;

(B) Slope of culvert;

(C) Fill material;

(D) Original ground;

(E) Ditches; and

(F) Sediment control devices.

(4) Each permit application for operations which propose intermittent or perennial stream crossings shall contain the following:

(A) Structure computation sheets; and

(B) Cross-sections.

(5) Construction specifications shall address:

(A) Excavation;

(B) Selection and placement of materials;

(C) Vegetative protection against erosion;

(D) Road surfacing; and

(E) Drainage and sediment control measures.

4.13 Other Transportation Facilities.

(a) 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:

(1) Control or prevent erosion, siltation and the air pollution attendant to erosion;

(2) Control or prevent damage to fish, wildlife or their habitat and related environmental values;

(3) Control or prevent additional contributions of suspended solids to stream flow or runoff outside the permit area;

(4) Neither cause nor contribute, directly or indirectly, to the violation of state or federal water quality standards applicable to receiving waters; and

(5) Prevent or control damage to public or private property. The Handbook contains design criteria generally appropriate for environmental protection and safety.

4.14 Certification. Upon completion of construction, all roads for which design criteria were approved as part of the permit shall be certified. Such certification shall affirm that construction was done in accordance with the approved criteria except as otherwise noted in the certification statement. The certification shall be on forms prescribed by the Commissioner and signed by an approved person. Where minor changes in design are implemented during construction, such changes shall be reflected in "as built" plans which accompany the certification.

38-2-5. Drainage and Sediment Control Systems

5.1 Natural Drainways. Natural drainways in the permit area shall be kept free of overburden except where overburden placement has been approved. Overburden placement and haulageways constructed across natural drainways shall not materially increase the sediment load, or materially affect stream quality.

5.2 Intermittent or Perennial Stream.

(a) No land within one hundred (100) feet of a perennial stream or an intermittent stream shall be disturbed by surface mining activities, unless the Commissioner specifically authorizes surface mining activities closer to, or through, such a stream. The Commissioner may authorize such activities only upon finding that:

(1) Surface mining activities will not cause or contribute to the violation of applicable State or Federal water quality standards, and will not adversely affect the water quantity and quality or other environmental resources of the stream; and

(2) If there will be a temporary or permanent stream-channel diversion, it will comply with Subsection 5.3 of these regulations.

5.3 Stream Channel Diversions and Diversion Ditches.

(a) All stream channel diversions and diversion ditches shall be designed for safety and stability, shall be constructed in such a manner so as to avoid additional contributions of suspended solids to streams, and shall provide protection against flooding and resulting damage to life and property. The design and construction shall be certified by a registered professional engineer.

(b) Stream Channel Diversions:

(1) Temporary and permanent stream channel diversions shall be designed so as to have at a minimum the capacity to carry the flow of the existing stream channel. The maximum flow carrying capacity of the existing stream channel shall be determined on the basis of cross-sectional area of the stream channel at points immediately upstream and downstream of the segment to be diverted. A combination of the cross-sectional area of the stream channel diversion, the stream bank, and the

flood-plain configuration shall be adequate to pass safely the peak runoff of a ten (10) year, twenty-four (24) hour precipitation event for a temporary stream channel diversion and a one hundred (100) year, twenty-four (24) hour precipitation event for a permanent stream channel diversion.

(2) The following information shall be made a part of the permit application when stream channel diversions are proposed:

(A) A "stream channel design computation sheet" for each proposed temporary or permanent stream channel diversion;

(B) Construction plans which contain:

(i) A plan view of the area showing center line profiles of the existing stream channel and proposed location of the temporary or permanent stream channel;

(ii) A profile along the center line of the existing stream channel showing gradient of the stream bottom and top of channel;

(iii) A profile along the center line of the proposed temporary or permanent stream channel diversion showing gradient of the stream bottom and top of channel;

(iv) A cross-section showing original ground limits, bottom width, side slopes, depth of flow, floodplain configuration; and

(v) A detailed description of the sequence of installation of temporary or permanent stream channel diversion.

(C) Construction specifications; and

(D) Maintenance schedule and procedures for maintenance.

(c) Diversion Ditches:

(1) Diversions shall have the capacity to pass safely the peak discharge from a ten (10) year, twenty-four (24) hour precipitation event.

(2) Plans, Design Data and Specifications. Where the permit application proposes the use of division ditches, the drainage plan shall contain the following:

(A) A "Diversion Design Computation Sheet" for each proposed diversion;

(B) Construction plans showing:

(i) A surveyed profile along the center line of the diversion showing the original ground line and proposed depth of the diversion;

(ii) A cross-section showing the original ground line, bottom width, side slopes, depth of flow, freeboard and other pertinent information;

(iii) The type of soil in which the diversion will be excavated. The soil shall be sampled and classified at five hundred feet (500') intervals along the center line of the diversion;

(iv) The type and design of the outlet proposed for each diversion;

(v) A maintenance schedule and procedures for maintenance;

(vi) Construction specifications; and

(vii) A vegetation plan.

5.4 Sediment Control.

(a) General.

Sediment control structures shall be constructed in appropriate locations for the purposes of controlling sedimentation. All runoff from the disturbed area shall pass through a sedimentation control system. All such systems and other water retaining structures used in association with the mining operation shall be designed, constructed, located, maintained, and used in accordance with the criteria set forth in the Handbook or other approved criteria and in such a manner as to minimize adverse hydrologic impacts in the permit and adjacent areas to prevent material damage outside the permit area and to assure safety to the public.

(b) Design and Construction Requirements.

(1) Each sediment control structure shall be constructed in accordance with the plans, design criteria, and specifications set forth in the preplan. Any deviations from the approved preplan which result from unforeseen site specific circumstances arising during construction, shall be reflected in as-built plans submitted by the operator and approved by the Commissioner immediately following construction. The as-built plans shall indicate the original design, the extent of changes, and reference points. Each sediment control structure shall be certified in accordance with the requirement of paragraph (c) of this subsection.

(2) All structures shall be located as near as possible to the disturbed area.

(3) Sediment control structures shall not be constructed in perennial streams unless approved by the Commissioner.

(4) All sediment control structures shall be designed, constructed, and maintained to adequately control runoff and sediment yields from their component disturbed area and the contributing watershed such that the discharge from the structures will meet all State and Federal effluent limitations.

(5) The optimum design criterion for total storage capacity of sediment control structures is 0.125 acre feet of water storage for each acre of component drainage area disturbed. This design criteria includes adequate sediment storage volume and adequate detention time necessary to meet the requirements of subparagraph (4) of this paragraph. Consideration will be given for alternative design criteria to include increasing or reducing the sediment storage volume and/or the detention time based on climate and terrain or where the preplan and specific site conditions reflect controlled placement of spoil, concurrent reclamation practices, and on-site sediment control structures. Approval for such alternative criteria may be granted by the Commissioner based on a demonstration by the operator that the requirement of subparagraph (4) of this paragraph will be met.

The disturbed area for which the structure is to be designed will include all land affected by previous surface mining operations that are not presently stabilized and all land within the component drainage area which will be disturbed during the life of the permit.

(6) All structures shall be equipped with a nonclogging dewatering device of an adequate design and size to maintain the storage and detention time required in subparagraph (5) of this paragraph.

(7) All structures shall be designed, constructed and maintained to prevent short-circuiting.

(8) All structures shall be cleaned out when the sediment accumulation reaches sixty percent (60%) of this design capacity. Clean-out elevation shall be indicated on plans submitted for each structure. Sediment removal and disposal shall be done in a manner and at a frequency that minimizes adverse impacts on surface and groundwater quality.

(9) Where sediment control structures such as excavated ponds or bench control structures are utilized, these structures must be designed to safely pass a twenty-five (25) year, twenty-four (24) hour precipitation event. The principal and/or emergency spillway of the structures shall be designed to safely pass the peak discharge of a twenty-five (25) year, twenty-four (24) hour precipitation event, provided, That excavated sediment control structures which are at ground level and which have an open exit channel constructed of non-erodible material may be designed to pass the peak discharge of a 10 year 24 hour precipitation event.

(10) All embankment-type structures shall be designed, constructed and maintained to meet the following safety standards:

(A) Embankment structures shall be designed with principal and/or emergency spillways that will safely pass a twenty-five (25) year, twenty-four (24) hour precipitation event. The principal spillway requirements may be waived if the emergency spillway is an open channel constructed of nonerodable material, is capable of maintaining sustained flows, and is designed to safely pass the peak discharge of a twenty-five (25) year, twenty-four (24) hour precipitation event;

(B) All embankment-type structures shall provide a minimum difference in elevation between principal spillway and emergency spillway of 1.5 feet and a minimum difference in elevation between the maximum design flow elevation in the emergency spillway and/or exit channel and top of settled embankment of 1.0 foot;

(C) All embankment-type structures shall provide proper stabilization and revegetation of the embankment and surrounding areas;

(D) All structures shall provide adequate freeboard to resist overtopping by waves or sudden increases in volume and adequate slope protection against surface erosion and sudden drawdown;

(E) In constructing the embankment, the operator shall remove all organic matter from the foundation, provide for proper compaction and ensure against excessive settlement by excluding sod, roots, frozen soil or coal processing wastes from the embankment;

(F) If an inspection discloses that a potential hazard exists, the person who examined the impoundment shall promptly inform the Department of Energy of the findings and of the emergency procedures formulated for public protection and remedial action. If adequate procedures cannot be formulated or implemented, the Department of Energy shall be notified immediately and then notify the appropriate agencies that other emergency procedures are required to protect the public;

(G) Embankment-type sediment control structures which impound water at an elevation of five feet (5') or more above the upstream toe of the structure and can have a storage volume of twenty (20) acre-feet or more; or which impound water at an elevation of twenty feet (20') or more above the upstream toe of the structure, shall be designed, constructed, inspected, and abandoned in accordance with federal regulations set forth in 30 CFR 77.216. All design, plans, and specifications shall be made a part of the permit application. In addition to these requirements, the following minimum standards shall be met:

(i) An appropriate combination of principal and emergency spillways shall be provided to pass safely the runoff resulting from a one hundred (100) year, twenty-four (24) hour precipitation event, or a larger event as specified by the Commissioner;

(ii) The embankment shall be designed and constructed with a static safety factor of at least 1.5 or a specified higher safety factor as required to ensure long-term stability; and

(iii) Appropriate barriers to control seepage shall be installed along the conduits that extend through the embankments.

(11) All engineering inspection reports and approvals shall be submitted to the Commissioner with copies maintained at, or in the vicinity of, the mine site; and

(12) Discharge Structures. Discharge from sediment control structures, diversions, stream channel diversions, etc., shall be controlled by use of energy dissipators, riprap channels or other devices to reduce erosion, to prevent deepening or enlargement of stream channels and to minimize disturbance of the hydrologic balance. Discharge structures shall be designed using standard engineering procedures.

(c) Certification.

(1) Prior to any surface mining activities in the component drainage area of a permit controlled by a sediment control structure; that specific structure shall be certified to be constructed in accordance with the plans, designs, and specifications set forth in the preplan, or in accordance with as-built plans. Such certification shall be submitted on forms prescribed by the Commissioner. Where on-site, i. e., bench control sediment control, is the primary system for the operation, such systems shall be constructed and certified in sections of one thousand (1,000) linear feet or less as measured from the active pit. This certification shall include a map showing the exact location of the section being certified.

(2) Certification of non-impounding sediment control structures may be performed by a registered professional engineer or a licensed land surveyor.

(3) Certification of impounding sediment control structures may be performed only by a registered professional engineer or licensed land surveyor experienced in construction of impoundments.

(4) Certification of impoundments meeting or exceeding the size requirements of federal MSHA regulations at 30 CFR 77.216 (a) may be performed only by a registered professional engineer.

(d) Inspections.

Inspection by the operator of sediment control structures shall be in accordance with the following:

(1) Non-impounding structures are exempt from required inspections; however, should be examined and/or inspected periodically.

(2) A qualified registered professional engineer or other qualified professional specialist, under the direction of the professional engineer, shall inspect each impoundment. The professional engineer or specialist shall be experienced in the construction of impoundments.

(A) Inspections shall be made regularly during construction, upon completion of construction, and at least yearly until removal of the structure or release of the performance bond.

(B) The qualified registered professional engineer shall promptly, after each inspection, provide to the Commissioner a certified report that the impoundment has been constructed and maintained as designed and in accordance with the approved preplan. The report shall include discussion of any appearances of instability, structural weakness or other hazardous conditions, depth and elevation of any impounded waters, existing storage capacity, any existing or required monitoring procedures and instrumentation and any other aspects of the structure affecting stability.

(C) A copy of the report shall be retained at or near the mine site.

(e) Examinations. Impoundments subject to federal MSHA regulations at 30 CFR 77.216 must be examined in accordance with 77.216-3 of said regulations. Other impoundments shall be examined at least quarterly by a qualified person designated by the operator for appearance of structural weakness and other hazardous conditions.

(f) Maintenance.

Prior to Phase 1 bond release, all sediment control structures shall be cleaned out so as to meet design storage capacity in all areas not revegetated and stabilized.

(g) Abandonment Procedures.

Abandonment and/or removal of sediment control structures shall not occur until two (2) years after the last augmented seeding. Minimum requirements for abandoning sediment control structures prior to full bond release are as follows:

(1) Unless otherwise approved in the reclamation plan, dugout-type sediment control structures, bench control sediment control structures, diversion ditches, and other non-impounding sediment control structures shall be removed and the land upon which they are situated shall be regraded and revegetated in accordance with the reclamation plan. Sediment control structures approved by the Commissioner as permanent structures are exempt from these requirements.

(2) Embankment type sediment dams, embankment type excavated sediment dams and crib and gabion dams, and all accumulated sediment behind the dam shall be removed from the natural drainway. The natural drainway shall be returned as nearly as practicable to its original profile and cross-section with the channel sides and bottom rock ripraped up to the top of the channels banks. The riprap requirement may be waived where the bottom and sides of the channel consist of bedrock.

(3) Those structures to be left in place after final bond release shall be considered permanent and shall be left in accordance with the following requirements:

(A) A request to leave the structure will be made on forms prescribed by the Commissioner;

(B) The request will contain a statement as to the present conditions of the impoundment;

(C) The request will contain a statement signed by the landowner and the operator asserting that the landowner assumes all liability for the structure and will inspect it periodically and maintain it in a safe condition; and

(D) Any impounding structure shall have been designed and constructed in accordance with subsection 5.5 of this section.

(4) All areas disturbed during abandonment of a sediment control structure shall be seeded and mulched immediately to stabilize the area.

(5) Waste material shall be spread over an area within the permit boundaries in accordance with the following specifications:

(A) Provisions shall be made for the diversion or safe passage of surface water concentrating on the land side of the waste bank.

(B) The waste shall be placed so as not to endanger the stability of the stream bank and shall not exceed three feet (3') in height above the natural ground surface, except by special design. Special designs shall be submitted with the drainage plan. The finished surface shall slope away from the edge of the stream or drainway insofar as feasible.

(C) Surface of waste shall not be steeper than two (2) horizontal to one (1) vertical. If the waste is spread to the edge of the stream bank, the stream side slope of the waste shall be shaped to join the side slope of the stream bank.

5.5 Permanent Impoundments. A permanent impoundment of water may be created, if authorized by the Commissioner, in the approved permit based upon the following demonstration:

(a) The size and configuration of such impoundment will be adequate for its intended purposes.

(b) The quality of impoundment water will be suitable on a permanent basis for its intended use and, after reclamation, will meet applicable State and Federal water quality standards, and discharges from the impoundment will meet applicable effluent limitations and will not degrade the quality of receiving water below applicable State and Federal water quality standards.

(c) The water level will be sufficiently stable and be capable of supporting the intended use.

(d) Final grading will provide for adequate safety and access for proposed water users.

(e) The impoundment will not result in the diminution of the quality and quantity of water utilized by adjacent or surrounding landowners or agricultural, industrial, recreational, or domestic use.

(f) The impoundment will be suitable for the approved postmining land use.

(g) The design precipitation event for the spillways for a permanent impoundment will be a fifty-year, twenty-four (24) hour precipitation event, or such larger event as the Commissioner may require.

38-2-6 Blasting.

6.1 General Requirements. Each operator shall comply with all applicable state and federal laws in the use of explosives. A blaster certified by the Department of Energy shall be responsible for all blasting operations including the transportation, storage and use of explosives within the permit area in accordance with the blasting plan.

6.2 Blasting Plan. Each application for a permit, where blasting is anticipated, shall include a blasting plan. Certified blasters shall be familiar with the blasting plan and all site-specific performance standards for the operation at which they are working. The blasting plan shall explain how the applicant will comply with the blasting requirements of the Act, these regulations, and the terms and conditions of the permit.

6.3 Public Notice of Blasting Operations.

(a) At least ten (10) days, but not more than thirty (30) days, prior to any blasting operations which detonate five (5) pounds or more of explosives at any given time, the operator shall publish, a blasting schedule in a newspaper of general circulation in the county of the proposed permit area. Copies of the schedule shall be distributed by certified mail to local governments, public utilities and each resident within one-half (1/2) mile of the permit area. Unless blasting will occur on drainage structures and roads, such structures will be exempt from the one-half (1/2) mile notification area. The operator shall republish and redistribute the schedule at least every twelve (12) months and revise and republish the schedule at least ten (10) days, but not more than thirty (30) days, prior to blasting whenever the area covered by the schedule changes or actual time periods for blasting significantly differ from that set forth in the prior schedule. The schedule shall contain at a minimum:

(1) Name, address and telephone number of the operator;

(2) Identification of the specific areas in which blasting will take place;

(3) Dates and times when explosives are to be detonated;

(4) Methods to be used to control access to the blasting area; and

(5) Types of audible warning and all clear signals to be used before and after blasting.

(b) Surface blasting activities incident to underground coal mining are not subject to the requirements of paragraph (a) of this subsection so long as all local governments and residents or owners of dwellings or structures located within one- half (1/2) mile of the blasting area are notified by the operator approximately twenty-four (24) hours prior to any surface blast.

6.4 Blast Record.

(a) A blasting log book formatted in a manner prescribed by the Commissioner shall be kept current daily and made available for inspection at the site by the Commissioner and upon written request by the public.

(b) The blasting log shall be retained by the operator for three (3) years.

(c) The blasting log shall, at a minimum, contain the following information:

(1) Name of permittee, operator or other person conducting the blast;

(2) Location, date and time of blast;

(3) Name, signature and certification number of blaster-in-charge;

(4) Identification of nearest structure not owned or leased by the operator and direction and distance, in feet, to such structure;

(5) Weather conditions;

(6) Type of material blasted;

(7) Number of holes, burden and spacing;

(8) Diameter and depth of holes;

(9) Types of explosives used;

(10) Weight of explosives used per hole;

(11) Total weight of explosives used;

(12) Maximum weight of explosives detonated within any eight (8) millisecond period;

(13) Method of firing and type of circuit;

(14) Type and length of stemming;

(15) If mats or other protections were used;

(16) Type of delay detonator used and delay periods used;

(17) Seismograph records and air blast records shall include but not be limited to:

(A) Seismograph and air blast reading, including exact location, date, and time of reading and its distance from the blast;

(B) Name of person taking the readings;

(C) Name of person and firm analyzing the record, where analysis is necessary;

(D) Type of instrument, sensitivity and calibration signal or certification of annual calibration;

(18) Shot location;

(19) Sketch of delay pattern to include the entire blast pattern and all decks; and

(20) Reasons and conditions for unscheduled blasts.

6.5 Blasting Procedures.

(a) All blasting shall be conducted during daytime hours, between sunrise and sunset; provided, that the Commissioner may specify more restrictive time periods based on public requests or other consideration, including the proximity to residential areas. No blasting shall be conducted on Sunday. Blasting shall not be conducted at times different from those announced in the blasting schedule except in emergency situations where rain, lightning or other atmospheric conditions, or operator or public safety requires unscheduled detonations.

(b) Safety precautions:

(1) Three (3) minutes prior to blasting, a warning signal audible to a range of one-half (1/2) mile from the blast site will be given. This preblast warning shall consist of three (3) short warning signals of five (5) seconds duration with five (5) seconds between each signal. One (1) long warning signal of twenty (20) seconds duration shall be the "all clear" signal;

(2) All approaches to the blast area shall be guarded against unauthorized entry prior to and immediately after blasting;

(3) All charged holes shall be guarded and posted against unauthorized entry; and

(4) The certified blaster shall be accompanied by at least one other person at the time of firing of the blast.

(c) Airblast Limits:

(1) Airblast shall not exceed the maximum limits listed below at the location of any dwelling, public buildings, school, church, or community or institutional building outside the permit area, except operational facilities of the mine.

Lower frequency limit of measuring system in Hz (±3 dB)	maximum level, in db
0.1 Hz or lower --flat response [1]	134 peak.
2 Hz or lower -- flat response	133 peak.
6 Hz or lower -- flat response	129 peak.
C-weighted--slow response	105 peak dBC.

[1] Only when approved by the Commissioner

(2) If necessary to prevent damage, the Commissioner may specify lower maximum allowable airblast levels for use in the vicinity of a specific blasting operation.

(3) Monitoring. The operator shall conduct periodic monitoring to ensure compliance with the airblast standards. The Commissioner may require airblast measurement of any or all blasts and may specify the locations at which such measurements are taken.

(d) Flyrock, including blasted material, shall not be cast from the blasting site more than half way to the nearest dwelling or other occupied structure and in no case beyond the bounds of the permit area.

(e) Access to the blast area shall be controlled against the entrance of livestock or unauthorized personnel during blasting and for a period thereafter until an authorized person has reasonably determined:

(1) That no unusual circumstances exist such as imminent slides or undetonated charges, etc.; and

(2) That access to and travel in or through the area can be safely resumed.

(f) At the request of the Commissioner, the operator shall monitor air blast levels using an instrument with a linear frequency response range of 6Hz to 200 Hz or greater.

(g) Blast design.

(1) An anticipated blast design shall be submitted if blasting operations will be conducted within:

(A) 1,000 feet of any building used as a dwelling, public building, school, church, or community or institutional building outside the permit area; or

(B) 500 feet of an active or abandoned underground mine.

(2) The blast design may be presented as part of a permit application or at a time, before the blast as approved by the Commissioner.

(3) The blast design shall contain sketches of the drill patterns, delay periods, and decking and shall indicate the type and amount of explosives to be used, critical dimensions, and the location and general description of structures to be protected, as well as a discussion of design factors to be used, which protect the public and meet the applicable airblast, flyrock, and ground-vibration standards.

(4) The blast design shall be prepared and signed by a certified blaster.

(5) The Commissioner may require changes to the design submitted.

(h) No blasting within five hundred (500) feet of an underground mine not totally abandoned shall be permitted except with the concurrence of the Department of Energy, the operator of the underground mine and MSHA. The Commissioner may prohibit blasting on specific areas where it is deemed necessary for the protection of public or private property or the general welfare and safety of the public.

(i) The operator may use the following scaled distance formulas to determine the allowable maximum weight of explosives to be detonated in any eight millisecond period without seismic monitoring:

Formula	Distance in Feet from the Blasting Site to the Nearest Protected Structure
$W = (D/50)^2$	0 - 300 feet
$W = (D/55)^2$	300 - 5,000 feet
$W = (D/65)^2$	5,000 feet or greater

W = Weight of explosives
D = Distance to the nearest structure

(j) The scaled distance formulas need not be used if a seismograph measurement at the nearest protected structure is recorded and maintained for every blast. The peak particle velocity in inches per second in any one of the three mutually perpendicular directions shall not exceed the following values at any protected structure:

Seismograph Measurement	Distance to the Nearest Structure
1.25	0 - 300 feet
1.0	300 - 5,000 feet
0.75	5,000 feet or greater

(k) The Commissioner may require a seismograph recording of any or all blasts based on the physical conditions of the site in order to prevent injury to persons or damage to property.

(l) The maximum allowable ground vibration shall be reduced by the Commissioner beyond the limits otherwise provided by this section, if determined necessary to provide damage protection.

6.6 Waivers

(a) The Commissioner may grant a variance from paragraphs (i) and (j) of Subsection 6.5 of this Section for gas or oil wells, liquid or gas transmission lines, and other utility transmission structures provided all of the following criteria are met:

(1) The Permittee obtains a waiver from the owner and when appropriate the operator of said structure.

(2) The Permittee submits a blasting plan detailing the protective measures to be taken for those structures with supporting documentation.

(3) Permittee shall obtain the approval of the protective measures by the owner of the structure.

(4) Obtain approval of the Commissioner for the use of such protective measures.

(b) Protective measures taken under this subsection shall not reduce the level of protection for other structures otherwise provided for in these regulations.

6.7 Certified Blasting Personnel. Each person responsible for blasting operations shall be certified. Each certified blaster shall have proof of certification either on his person or on file at the permit area during blasting operations.

6.8 Preblast Survey.

(a) At least thirty (30) days prior to beginning of blasting operations, the operator shall inform in writing all residents or owners of manmade dwellings or structures located within one-half (1/2) mile of the proposed permit area or permit area on how to request a preblast survey. For purposes of this section, drainage structures, haulroads and access roads are not considered part of the permit area unless blasting is necessary for construction. Requirements for a preblasting survey shall be the following:

(1) Upon a written request to the Commissioner by a resident or owner of a manmade dwelling or structure that is located within one-half (1/2) mile of the permit area, the operator shall conduct a preblast survey of the dwelling or structure and submit a report of the survey to the Commissioner. If a structure is added to or renovated subsequent to a preblast

survey, a survey of such additions and/or renovation shall be performed upon request of the resident or owner.

(2) The operator shall conduct the preblast survey in such a manner which will determine the condition of the dwelling or structure, and to document any preblasting damage and to document other physical factors that could reasonably be affected by the blasting. Assessments of the preblasting condition of structures such as pipes, cables, transmission lines, wells and water systems shall be based on the exterior or ground surface conditions and other readily available data. Special attention shall be given to the preblasting condition of wells and other water systems.

(3) A written report of the survey shall be prepared and signed by the person or persons approved by the Commissioner who conducted the survey. Copies of the report shall be provided to the person requesting the survey and to the Commissioner.

(4) Surveys requested more than ten (10) days before the planned initiation of blasting shall be completed before blasting operations begin.

(5) Any person who requests a survey who disagrees with the results of the survey may submit a detailed description of the specific areas of disagreement.

38-2-7. Postmining Land Use.

7.1 General. In addition to the requirements of Section 10 of the Act, the following requirements for postmining land use shall be applicable:

(a) All areas disturbed by surface mining operations shall be restored in a timely manner to conditions that are capable of supporting those land uses which they were capable of supporting prior any mining.

(b) The premining uses of land to which the postmining land use is to be compared shall be those uses which the land previously supported where the land has not been previously mined and has been properly managed.

(c) The appropriate postmining land use for land that has been previously mined and not reclaimed shall be determined on the basis of the land use that existed prior to any mining. If the land cannot be reclaimed to the land use that existed prior to any mining, the appropriate postmining land use shall be determined on the basis of the highest and best use that can be achieved and which is compatible with surrounding undisturbed areas.

(d) The postmining land use for land that has received improper management shall be determined on the basis of the premining use of surrounding lands that have received proper management. If the premining use of the land was changed within five (5) years of the beginning of mining, the comparison of postmining use to premining use shall include a comparison with the historic use of the land as well as its use immediately preceding mining.

(e) An application for a permit shall contain a narrative description of land capability and productivity which analyzes the premining land-use description required in 22A-3-10(a)(2) of the Act.

7.2 Land Use Categories. Land use is categorized in the following groups:

(a) Heavy Industry. Manufacturing facilities, power plants, airports or similar facilities;

(b) Light Industry and Commercial Services. Office buildings, stores, parking facilities, apartment houses, motels, hotels or similar facilities;

(c) Public Services. Schools, hospitals, churches, libraries, water treatment facilities, solid waste disposal facilities, public parks and recreation facilities, major transmission lines, major pipelines, highways, underground and surface utilities and other servicing structures and appurtenances;

(d) Residential. Single and multiple-family housing (other than apartment houses) with necessary support facilities. Support facilities may include commercial services incorporated in and comprising less than five percent (5%) of the total land area of housing capacity, associated open space and minor vehicle parking and recreation facilities supporting the housing;

(e) Cropland. Land used primarily for the production of cultivated and close-growing crops for harvest alone or in association with sod crops. Land used for facilities in support of farming operations are included;

(f) Rangeland. Includes rangelands and forestlands which support a cover of herbaceous or scrubby vegetation suitable for grazing or browsing use;

(g) Hayland or pasture. Land used primarily for the long-term production of adapted, domesticated forage plants to be grazed by livestock or cut and cured for livestock feed;

(h) Forestland. Land with at least a twenty-five percent (25%) tree canopy or land at least ten percent (10%) stocked by forest trees of any size, including land formerly having had such tree cover and that will be naturally or artificially reforested;

(i) Commercial Woodland. Where forest cover is managed for commercial production of timber products;

(j) Impoundments of water. Land used for storing water for beneficial uses such as stock ponds, irrigation, fire protection, recreation or water supply;

(k) Fish and wildlife habitat and recreation lands. Wetlands, fish and wildlife habitat, and areas managed primarily for fish and wildlife or recreation; or

(l) Combined uses. Any appropriate combination of land uses where one land use is designated as the primary land use and one or more other land uses are designated as secondary land uses.

7.3 Criteria for Approving Alternative Postmining Use of Land.

(a) Changing from one land use category before mining to another category after mining constitutes an alternative postmining land use. An alternative postmining land use may be approved by the Commissioner after consultation with the landowner or the land management agency having jurisdiction over state or federal lands if the following criteria are met:

(1) There is a reasonable likelihood for achievement of the proposed use;

(2) The use does not present any actual or probable hazard to the public health or safety or threat of water diminution or pollution; and

(3) The proposed postmining use is not:

(A) Impractical or unreasonable;

(B) Inconsistent with applicable land use policies or plans;

(C) Going to involve unreasonable delays in implementation; or

(D) In violation of any applicable law.

38-2-8. Fish and Wildlife Considerations.

8.1 Protection of Fish, Wildlife and Related Environmental Values.

(a) The operator shall, to the extent possible using the best technology currently available, minimize disturbances and adverse impacts on fish, wildlife, and related environmental values and shall achieve enhancement of such resources where practicable.

(b) No surface mining activity shall be conducted which are likely to jeopardize the continued existence of endangered or threatened species or which are likely to result in the destruction or adverse modification of designated critical habitats of such species in violation of the Endangered Species Act (16 U.S.C. 1531 et seq.). The operator shall promptly report to the Commissioner any endangered or threatened species within the permit area of which the operator becomes aware. Upon notification, the Commissioner shall consult with appropriate State and Federal fish and wildlife agencies and, after consultation, shall identify whether, and under what conditions, the operator may proceed.

(c) No surface mining activity shall be conducted in a manner which would result in the unlawful taking of a bald or golden eagle, its nest, or any of its eggs. The operator shall promptly report to the Commissioner any golden or bald eagle nest within the permit area of which the operator becomes aware. Upon notification, the Commissioner shall consult with the U. S. Fish and Wildlife Service and also, where appropriate, the State fish and wildlife agency and, after consultation, shall identify whether, and under what conditions the operator may proceed.

(d) Nothing in this chapter shall authorize the taking of an endangered or threatened species or a bald or golden eagle, its nest, or any of its eggs in violation, of the Endangered Species Act of 1973, as amended, 16 U.S.C. 1531 et seq., or the Bald Eagle Protection Act, as amended, 16 U.S.C. 668 et seq.

(e) Each operator shall, to the extent possible using the best technology currently available:

(1) Ensure that electric powerlines and other transmission facilities used for, or incidental to, surface mining activities on the permit area are designed and constructed to minimize electrocution hazards to raptors;

(2) Locate and operate haul and access roads so as to avoid or minimize impacts on important fish and wildlife species protected by State or Federal law; and

(3) Design fences, overland conveyors, and other potential barriers to permit passage for large mammals.

8.2 Habitat Development:

(a) The operator shall avoid disturbances to, enhance where practicable, restore, or replace, wetlands, and riparian vegetation along rivers and streams and bordering ponds and lakes. Surface mining activities shall avoid disturbances to, enhance where practicable, or restore, habitats of unusually high value for fish and wildlife.

(b) Where fish and wildlife habitat is to be a postmining land use, the plant species to be used on reclaimed areas shall be selected on the basis of the following criteria:

(1) Their proven nutritional value for fish or wildlife.

(2) Their use as cover for fish or wildlife.

(3) Their ability to support and enhance fish or wildlife habitat after the release of performance bonds. The selected plants shall be grouped and distributed in a manner which optimizes edge effect, cover, and other benefits to fish and wildlife.

(c) Where cropland is to be the postmining land use, and where appropriate for wildlife and corp-management practices, the operator shall intersperse the fields with trees, hedges, or fence rows throughout the harvested area to break up large blocks of monoculture and to diversify habitat types for birds and other animals.

(d) Where residential, public service, or industrial uses are to be the postmining land use, and where consistent with the approved postmining land use, the operator shall intersperse reclaimed lands with greenbelts utilizing species of grass, shrubs, and trees useful as food and cover for wildlife.

38-2-9. Revegetation.

9.1 General Requirements.

(a) Each surface mine operator shall establish on all regraded areas and all other disturbed areas a diverse, effective and permanent vegetative cover of the same seasonal variety native to the area of disturbed land, or introduced species that are compatible with the approved postmining land use.

(b) The established vegetative cover shall be capable of stabilizing the soil from erosion.

(c) The established vegetative cover shall be capable of regeneration and plant succession.

(d) Revegetation efforts will be kept concurrent with the mining operation as mining and backfilling progresses and shall be carried out in a manner that encourages a prompt vegetative cover and rapid recovery of productivity levels compatible with the approved postmining land use.

(e) A temporary vegetative cover shall be established as contemporaneously as practicable with backfilling and grading until a permanent vegetative cover can be established. At a minimum, a temporary or permanent vegetative cover shall be established by the end of the first growing season and a permanent vegetative cover shall be established by the end of the second growing season.

9.2. Revegetation Plan. A complete revegetation plan shall be made a part of each permit application. The revegetation plan shall be developed in a manner which is compatible with the following requirements:

(a) Plant species and seed mixtures that will give a quick, permanent vegetative cover and enrich the soil will be given priority. Plant species and seed mixtures shall be considered of the same seasonal variety when they consist of a mixture of species of equal or superior utility as compared with the seasonal utility of naturally-occurring vegetation. All revegetation mixtures must include at least one herbaceous legume species.

(b) All species shall be compatible with the plant and animal species of the region and the approved post mining land use.

(c) All species shall comply with state and federal seed, poisonous and noxious plant, and introduced species, laws and rules and regulations.

(d) If both the premining and postmining land uses are cropland, planting of the crops normally grown will meet the requirements of paragraph (a) of this subsection.

(e) The revegetation plan shall contain a statement asserting that rills and gullies which form in areas that have been regraded and topsoiled and which disrupt the approved postmining land use, interfere with the reestablishment of the vegetation cover, or interference with, cause or contribute to a violation of applicable water quality standards will be filled, regraded, stabilized, topsoiled, and reseeded or replanted.

(f) The revegetation plan shall specify that the operator will rapidly establish temporary vegetation cover on disturbed and regraded areas around sediment control structures, haulage ways, stockpiles, storage areas, and other areas where excessive erosion is likely to occur. Immediate seeding of approved annuals and biennials on such areas shall be considered as a means for achieving temporary vegetative cover only.

(g) A planting plan shall be made a part of the revegetation plan and shall contain the following:

(1) A prediction of the minesoil character based on overburden analysis, soil analysis, and other available information;

(2) The proposed treatment to neutralize acidity;

(3) The method of mechanical seed bed preparation;

(4) The application rates and analysis of fertilization;

(5) The application rates and types of mulch;

(6) The application rates and species of perennial vegetation including herbaceous and woody plants in accordance with the Handbook or other appropriate sources;

(7) The areas to be planted or seeded to trees and shrubs;

(8) The land use objective; and

(9) A maintenance schedule.

(h) Alternative species of trees, shrubs, grasses, legumes, or vines may be substituted for native species if approved by the Commissioner. Use of substitute species may be approved on the basis of the following:

(1) The species are compatible with the plant and animal species of the region and are necessary to and compatible with achieving the approved postmining land use; and

(2) The species meet the requirements of applicable state and federal seed, poisonous and noxious plant, or introduced species laws and regulations.

(i) The vegetation plan shall contain a plan for soil treatment and amendments which meet the following minimum standards:

(1) 600 lbs/ac of 10-20-10 or 10-20-20 fertilizer. Alternative rates and fertilizer analysis based on soil analysis performed by a qualified soils laboratory may be substituted.

(2) Lime shall be required where soil pH is less than 5.5. Lime rates shall be such that a uniform soil pH of 6.0 will be achieved.

(3) Mulch Specifications: Mulch shall be used on all disturbed areas. Approved materials and minimum rates to be applied are as follows:

Material	Rate/Acre
Straw or hay	1 1/2-2 tons materials may be anchored with asphalt emulsion or other techniques approved by the Commissioner.
Wood Fiber or Wood Cellulose	1,000 lbs.
Shredded Bark	50 cubic yards

Adhesives or tackifiers may be used with wood fiber or wood cellulose at the rates indicated in the following table:

Minimum Rate/Acre for Wood Fiber or Wood Cellulose

Material	Rate/Acre	
Genaqua 743	25 gallons	500 lbs.
Curasol AK or HA	25 gallons	500 lbs.
Aerospray 70	25 gallons	500 lbs.

(j) In implementing the revegetation plan, the operator shall take into consideration the character of the minesoil. Factors to be considered are the following:

(1) Fertility

(2) Stoniness

(3) Texture

(4) Steepness of slope

(5) Standard field and laboratory overburden analysis

(6) Premining overburden analysis

(k) Minesoils which have a demonstrated history of acidity or other chemical parameters which may limit vegetative success shall be analyzed by a qualified soils laboratory. The results of such analysis shall be made a part of the final planting plan.

9.3. Standards for Evaluating Vegetative Cover.

(a) The planting plan may be amended or modified prior to implementation to reflect the results of analyses of mine soils and to make minor adjustments to application rates and species composition. Any amendments or modifications which reflect major changes in seeding or planting rates and species composition shall be submitted as a permit revision.

(b) Final Planting Report. A final planting plan report shall be submitted to the Commissioner within sixty (60) days after Phase 1 bond reductions. The report shall contain the actual acreage planted, application rates of soil amendments, seed and seedlings mixtures and rates.

(c) Time for Inspection. Prior to the recognized spring and fall planting seasons, the operator shall review all areas which were seeded and/or planted during previous planting seasons. The operator shall then cause those areas deficient in

vegetative cover to be retreated (graded, seeded, planted, mulched, limed, etc.) to establish the required level of vegetation success.

(d) Not less than two (2) years following the last date of augmented seeding, the Commissioner shall conduct a vegetative inspection to determine that applicable standards for vegetative success have been met. In evaluating vegetative success, the Commissioner shall use a statistically valid sampling technique with a ninety (90) percent statistical confidence interval from the Handbook. An inspection report shall be filed for each inspection and when the standard is met, the Commissioner shall execute a Phase II bond release.

(e) After five (5) growing seasons following the last augmented seeding, planting, fertilization, revegetation, or other work, the operator may request a final inspection and final bond release. Upon receipt of such request, the Commissioner shall conduct a final vegetative evaluation using approved, statistically valid sampling techniques. A final report shall be filed and if the applicable standards have been met, the Commissioner shall release the remainder of the bond.

(f) Where the post mining land use requires legumes and perennial grasses, the operator shall achieve at least a ninety (90) percent ground cover and a productivity level as approved by the Commissioner. Substandard areas shall not exceed one-fourth (1/4) acre in size nor total more than ten (10) percent of the area seeded. Exceptions to this standard may be authorized by the Commissioner based on the following:

(1) For areas to be developed for industrial or residential use less than two (2) years after regrading is completed, the ground cover of living plants shall not be less than required to control erosion.

(2) For areas to be used for cropland, the success of crop production from the mined area shall be equal to or greater than that of the approved standard for the crop being grown over last two (2) consecutive growing seasons of the five growing season liability period. The applicable five growing season period of responsibility for revegetation shall commence at the date of initial planting of the crop being grown.

(g) On areas to be developed for forestland and/or wildlife use, success of vegetation shall be determined on the basis of tree and shrub survival and ground cover. Minimum standards for woody plants shall be seventy percent (70%) ground cover of

legumes and perennial grasses, and four hundred fifty (450) trees (including volunteer tree species) and/or planted shrubs per acre.

Other standards more appropriate for site specific conditions and land use which require an equal or better ground cover may be approved by the Commissioner based on consideration with appropriate state agencies.

Substandard areas shall not exceed one-fourth (1/4) acre in size nor total more than twenty percent (20%) of the area seeded or planted. Provided, that where a wildlife planting plan has been approved by a professional wildlife biologist and proposes a stocking rate of less than four hundred fifty (450) trees or shrubs per acre the standard for grasses and legumes shall meet those standards contained in paragraph (f) of Subsection 9.3 of this section.

(h) Forest resource conservation standards for commercial reforestation operations are as follows:

(1) The area shall have a minimum stocking of six hundred (600) trees per acre;

(2) A minimum of seventy-five percent (75%) of countable trees shall be commercial tree species as reflected in the approved planting plan; and

(3) A request for bond release shall be approved by the Commissioner if the tree survival is equal to or greater than four hundred fifty (450) trees per acre and there is seventy percent (70%) herbaceous cover.

38-2-10 Prime Farmlands.

10.1. Identification of Prime Farmlands.

(a) All or any part of a proposed permit area may be designated by the Commissioner as prime farmland on the basis of soil surveys and other required information submitted as part of a permit application. For the purposes of this section, said surveys shall mean surveys developed in accordance with standards of the National Cooperative Soil Survey which includes the procedures set forth in the U. S. Department of Agriculture Handbook 436 (Soil Taxonomy) and 18 (Soil Survey).

(b) The requirements for said surveys may be waived by the Commissioner if the applicant can demonstrate that a basis exists for making a negative determination of prime farmland.

10.2. Negative Determination of Prime Farmland.

(a) Land within the proposed permit area shall not be considered as prime farmland where the applicant can demonstrate one or more of the following situations:

(1) No land within the proposed permit boundaries have been historically used for cropland. For purposes of prime farmland determinations, historically used for cropland means:

(A) Lands that have been used for cropland for any five (5) years or more out of the ten (10) years immediately preceding the acquisition, including purchase, lease, or option, of the land for the purpose of conducting or allowing through resale, lease or option the conduct of surface coal mining and reclamation operations;

(B) Lands that the Commissioner determines, on the basis of additional cropland history of the surrounding lands and the lands under consideration, that the permit area is clearly cropland but falls outside the specific five (5) years in ten (10) criterion, in which case the regulations for prime farmland may be applied to include more years to cropland history only to increase the prime farmland acreage to be preserved; or

(C) Lands that would likely have been used as cropland for any five (5) out of the last ten (10) years, immediately preceding such acquisition but for the same fact of ownership or control of the land unrelated to the productivity of the land.

(2) The slope of a land within the permit area is ten percent (10%) or greater;

(3) Other factors exist, such as a very rocky surface, or the land is frequently flooded during the spring or fall season more often than once in two (2) years, which clearly places all land within the area outside the purview of prime farmland; or

(4) A written determination based on soil surveys and other scientific findings made by a qualified person other than the applicant that land within the proposed mining area does not meet the requirements for prime farmlands. The soil survey shall be of the detail used by the U. S. Soil Conservation Service for operational conservation planning and shall contain at a minimum a description of soil mapping units, pH, and soil densities.

10.3. Plan for Restoration of Prime Farmland.

(a) The applicant shall propose a plan for the mining and restoration of any prime farmland within the proposed permit area. This plan shall be made a part of the permit application and shall be the basis for determining the technological capability of the applicant to restore prime farmlands. The plan shall include:

(1) A soil survey of the original undisturbed soil profile showing the depth and thickness of each of the soil horizons that collectively constitute the root zone. The soil survey shall be of the detail used by the U. S. Soil Conservation Service for operational conservation planning and shall contain, at a minimum, a description of soil mapping units, pH, soil density, and the depth and thickness of each soil horizon;

(2) The proposed types of equipment and methodology to be used for removal, storage, and replacement of the soil in accordance with Subsection 10.4 of this section;

(3) The location of areas to be used for the separate stockpiling of the soil horizons and plans for soil stabilization before redistribution;

(4) The use of topsoil substitutes may be approved by the Commissioner on the basis of scientific information provided by the applicant that the substitute material is suitable for the proposed postmining land use. Such information shall be made a part of the permit application;

(5) Plans for seeding and/or planting the regraded area and the conservation practices proposed to control erosion and sedimentation during the first twelve (12) months after regrading is completed; and

(6) Scientific data from comparable areas that demonstrate that the applicant will achieve, within a reasonable period of time, equivalent or higher levels of yield after mining as existed before mining.

10.4. Special Requirements.

(a) For all proposed mining operations on prime farmlands, the applicant shall meet the following special requirements:

(1) All soil horizons to be used in the reconstruction of the soil shall be removed and stockpiled before drilling, blasting, or mining. Where removal of soil horizons result in erosion that may cause air and water pollution, the application shall specify methods or treatment to control erosion of exposed overburden. The application shall describe procedures to be used to:

(A) Remove separately the entire A horizon or other suitable soil materials which will be used to create a final soil having a greater productive capacity than that which existed prior to mining. Such operations will be carried out in a manner that prevents mixing or contamination with other material before replacement;

(B) Remove separately the B horizon of the natural soil or a combination of B horizon and underlying C horizon or other suitable soil material that will create a reconstructed root zone of greater productive capacity than that which existed prior to mining. Such operations shall be carried out in a manner that prevents mixing or contamination with other material; and

(C) Remove separately the underlying C horizons or other strata, or a combination of such horizons or other strata to be used instead of the B horizon that are of greater thickness and that can be shown to be more favorable for plant growth than the B horizon, and that when replaced will create in the reconstructed soil a final root zone of greater depth and quality to that which existed in the natural soil.

(b) If stockpiling of soil horizons is necessary, the A horizon and B horizon shall be stored separately from each other.

The stockpiles shall be sited within the permit area at a suitable location where they will not be disturbed or exposed to excessive erosion by water or wind before the stockpiled horizons can be redistributed on the regraded surface. Stockpiles in place for more than thirty (30) days shall be protected from erosion.

(c) Soil Replacement.

(1) Soil reconstruction specifications established by the U. S. Soil Conservation Service shall be based upon the standards of the National Cooperative Soil Survey and shall include, as a minimum, physical and chemical characteristics of reconstructed soils and soil descriptions containing soil-horizon depths, soil densities, soil pH, and other specifications such that constructed soils will have the capability of achieving levels of yield equal to, or higher than, those of nonmined prime farmland in the surrounding area.

(2) The minimum depth of soil and substitute soil material to be reconstructed shall be forty-eight (48) inches, or a lesser depth equal to the depth to a subsurface horizon in the natural soil that inhibits or prevents root penetration , or a greater depth if determined necessary to restore the original soil productivity capacity. Soil horizons shall be considered as inhibiting or preventing root penetration if their physical or chemical properties or water-supplying capacities cause them to restrict or prevent penetration by roots of plants common to the vicinity of the permit area and if these properties or capacities have little or no beneficial effect on soil productive capacity.

(3) The operator shall replace and regrade the soil horizons or other root-zone material with proper compaction and uniform depth.

(4) The operator shall replace the B horizon, C horizon, or other approved substitute material to the thickness needed to meet the requirements of paragraph (b) (2) of this subsection.

(5) The operator shall replace the topsoil or other approved substitute materials as the final surface soil layer. This surface soil layer shall equal or exceed the thickness of the original surface soil layer, as determined by the soil survey.

(d) Apply nutrients and soil amendments as needed to establish quick vegetative growth.

10.5. Revegetation. Each person who conducts surface coal mining and reclamation operations on prime farmland shall meet the following revegetation requirements during reclamation:

(a) Following soil replacement, the operator shall establish a vegetative cover of the type and in the manner set forth in the approved permit. Seeding and/or planting shall be accomplished during the next period for favorable planting conditions. Suitable mulch and other soil stabilizing practices shall be used on all areas; and

(b) Within the time period specified in the permit, but not more than ten (10) years after completion of backfilling and rough grading, any portion of the permit area which is prime farmland must be used for crops. The crops may be grown in rotation with hay or pasture crops. The Commissioner may approve the use of perennial plants for hay where this is a common long term use of prime farmland soils in the surrounding area.

10.6 Revegetation and Restoration of Soil Productivity.

(a) Following prime farmland soil replacement, the soil surface shall be stabilized with a vegetative cover or other means that effectively controls soil loss by wind and water erosion.

(b) Prime farmland soil productivity shall be restored in accordance with the following provisions:

(1) Measurement of soil productivity shall be initiated within ten (10) years after completion of soil replacement.

(2) Soil productivity shall be measured on a representative sample or on all of the mined and reclaimed prime farmland area using the reference crop determined under paragraph (b)(6) of this subsection. A statistically valid sampling technique at a ninety (90) percent or greater statistical confidence level shall be used as set forth in the Handbook and in consultation with the U. S. Soil Conservation Service.

(3) The measurement period for determining average annual crop production (yield) shall be a minimum of three (3) crop years prior to release of the performance bond.

(4) The level of management applied during the measurement period shall be the same as the level of management used on nonmined prime farmland in the surrounding area.

(5) Restoration of soil productivity shall be considered achieved when the average yield during the measurement period equals or exceeds the average yield of the reference crop established for the same period for nonmined soils of the same or similar texture or slope phase of the soil series in the surrounding area under equivalent management practices.

(6) The reference crop on which restoration of soil productivity is proven shall be selected from the crops most commonly produced on the surrounding prime farmland. Where row crops are the dominant crops grown on prime farmland in the area, the row crop requiring the greatest rooting depth shall be chosen as one of the reference crops.

(7) Reference crop yields for a given crop season are to be determined from:

(A) The current yield records of representative local farms in the surrounding area, with concurrence by the U. S. Soil Conservation Service; or

(B) The average county yields recognized by the U. S. Department of Agriculture, which have been adjusted by the U. S. Soil Conservation Service for local yield variation within the county that is associated with differences between nonmined prime farmland soil and all other soils that produce the reference crop.

(8) Under either procedure in paragraph (b)(7) of this subsection, the average reference crop yield may be adjusted, with the concurrence of the U. S. Soil Conservation Service, for:

(A) Disease, pest, and weather-induced seasonal variations; or

(B) Differences in specific management practices where the overall management practices of the crops being compared are equivalent.

38-2-11 Insurance and Bonding.

11.1 Insurance.

(a) The applicant shall provide liability insurance for active surface mining operations in the following minimum amounts:

(1) For bodily injury $300,000 for each occurrence and $500,000 aggregate.

(2) For property damage $300,000 for each occurrence and $500,000 aggregate with no exclusions for landslides or water loss.

(b) A statement shall be affixed to each certificate of insurance affirming that the insurer will promptly notify the Commissioner of any substantive change in policy including cancellations, termination, or failure to renew.

(c) Insurance coverage for blasting damage may be terminated prior to final bond release but not before blasting activities have ceased.

11.2 Bonding. Prior to issuance of a permit and prior to initiation of surface mining operations, the operator shall provide a performance bond in accordance with Section 11 of the Act and in accordance with these rules and regulations.

11.3 Surety and Operator Liability - Loss of Bond.

(a) The surety shall be subject to the following conditions:

(1) The surety will give prompt notice to the permittee and the Commissioner of any notice received or action filed alleging the insolvency or bankruptcy of the surety, or alleging any violations of regulatory requirements which could result in suspension or revocation of the surety's license to do business;

(2) In the event the surety becomes unable to fulfill its obligations under the bond for any reason, notice shall be given immediately to the permittee and the Commissioner; and

(3) Upon the incapacity of a surety by reason of bankruptcy, insolvency or suspension or revocation of its

license, the permittee shall be deemed to be without bond coverage.

(b) The Commissioner shall issue a notice of violation against any operator who is without bond coverage. The notice shall specify a reasonable period to replace bond coverage not to exceed ninety (90) days. During this period the Commissioner shall conduct weekly inspections to ensure continuing compliance with permit requirements, the regulations and the Act. Such notice of violation, if abated within the period allowed, shall not be counted as a notice of violation for purposes of civil or criminal penalties determining a "pattern of willful violations" and need not be reported as a past violation in permit applications. If such a notice of violation is not abated in accordance with the schedule, a cessation order shall be issued, at which time the operator shall initiate and complete as contemporaneously as possible total reclamation of the area.

11.4 Collateral bonds.

(a) Except for letters of credit, collateral bonds shall be subject to the following conditions:

(1) The Commissioner shall obtain possession of and keep in custody all collateral deposited by the applicant, until authorized for release or replacement;

(2) The Commissioner shall value collateral at their current market value, not face value;

(3) The Commissioner shall require that certificates of deposit be assigned to the Department of Energy, in writing, and reflect this assignment upon the books of the bank issuing such certificates;

(4) The Commissioner shall not accept an individual certificate for a denomination in excess of maximum insurable amount as determined by F.D.I.C. and F.S.L.I.C.;

(5) The Commissioner shall require the banks issuing these certificates to waive all rights of setoff or liens which it has or might have against those certificates;

(6) The Commissioner shall only accept certificates of deposit in a bank in this state;

(7) The Commissioner shall require the applicant to deposit sufficient amounts of certificates of deposit, to assure

that he will be able to liquidate those certificates prior to maturity, upon forfeiture, for the amount of the bond required;

(8) Real property posted as a collateral bond shall meet the following conditions:

(A) The applicant shall grant the Department of Energy a first mortgage, first deed of trust, or perfected first-lien security interest in real property with a right to sell or otherwise dispose of the property in the event of forfeiture.

(B) In order for the Commissioner to evaluate the adequacy of the real property offered to satisfy collateral requirements, the applicant shall submit a schedule of the real property which shall be mortgaged or pledged to secure the obligations under the indemnity agreement. The list shall include:

(i) A description of the property;

(ii) The fair market value as determined by an independent appraisal conducted by a certified appraiser; and

(iii) Proof of possession and title to the real property.

(C) The property may include land which is part of the permit area; however, land pledged as collateral for a bond under this section shall not be disturbed under any permit while it is serving as security.

(9) Persons with an interest in collateral posted as a bond, and who desire notification of actions pursuant to the bond, shall request the notification in writing to the Commissioner at the time collateral is offered.

(b) Letters of credit shall be subject to the following conditions:

(1) The letter may only be issued by a bank organized or authorized to do business in the State of West Virginia;

(2) Letters of credit shall be irrevocable during their terms. The Commissioner may approve the use of letters of credit as security in accordance with a schedule approved with the permit. Any bank issuing a letter of credit for the purposes of this paragraph shall notify the Commissioner in writing at least ninety (90) days prior to the maturity date of such letter

of credit or the expiration of the letter of credit agreement. Letters of credit utilized as securities in areas requiring continuous bond coverage shall be forfeited and collected by the Office of Attorney General, if not replaced by other suitable evidence of financial responsibility at least thirty (30) days before the expiration date of the letter of credit agreement;

(3) The letter must be payable to the Department of Energy in part or in full upon demand and receipt from the Commissioner of a notice of forfeiture;

(4) The Commissioner shall not accept a letter of credit in excess of ten percent (10%) of the bank's capital surplus account as shown on a balance sheet certified by a Certified Public Accountant;

(5) The Commissioner shall not accept letters of credit from a bank for any person, on all permits held by that person, in excess of three times the company's maximum single obligation as provided by State law;

(6) The Commissioner shall provide in the indemnity agreement that the amount shall be confessed to judgment upon forfeiture; and

(7) The bond shall provide that:

(A) The bank will give prompt notice to the permittee and the Commissioner of any notice received or action filed alleging the insolvency or bankruptcy of the bank, or alleging any violations of regulatory requirements which could result in suspension or revocation of the bank's charter of license to do business;

(B) In the event the bank becomes unable to fulfill its obligations under the letter of credit for any reason, notice shall be given immediately to the permittee and the Commissioner; and

(C) Upon the incapacity of a bank by reason of bankruptcy, insolvency or suspension or revocation of its charter or license, the permittee shall be deemed to be without bond coverage in violation of section 11 of the Act. The Commissioner shall issue a notice of violation against any operator who is without bond coverage. The notice shall specify a reasonable period to replace bond coverage, not to exceed ninety (90) days. During this period the Commissioner shall conduct weekly inspections to ensure continuing compliance with other permit

requirements, the regulatory program and the Code of West Virginia. Such notice of violation, if abated within the period allowed, shall not be counted as a notice of violation for purposes of determining a "pattern of willful violations" and need not be reported as a past violation in permit applications. If such a notice of violation is not abated in accordance with the schedule, a cessation order shall be issued, at which time the operator shall begin and complete, as contemporaneously as possible, total reclamation of the area.

(c) The estimated bond value of all collateral posted as bond assurance under paragraph (a), (b), and (c) of this subsection shall be subject to a margin bond value to market value ratio as determined by the Commissioner. This margin shall reflect legal and liquidation fees, as well as value depreciation, marketability and fluctuations which might affect the net cash available to the Commissioner in performing reclamation. The bond value of collateral may be evaluated at any time, but shall be evaluated as part of permit renewal. In no case shall the bond value exceed the market value.

11.5 Escrow Bonding.

(a) The Commissioner may authorize the operator to supplement a bonding program through the establishment of an escrow account deposited in one or more federally insured accounts payable on demand only to the Commissioner or deposited with the Commissioner directly. Contributions to the account may be based on acres affected or tons of coal produced or any other rate approved by the Commissioner. In all cases, the total bond including the escrow amount, as determined by the Commissioner in the bonding schedule, shall not be less than the amount required under Section 11 of the Act.

(b) Escrow funds deposited in federally insured accounts shall not exceed the maximum insured amount under applicable Federal insurance programs such as by F.D.I.C. or F.S.L.I.C.

(c) Interest paid on an escrow account shall be retained in the escrow account and applied to the bond value of the escrow account unless the Commissioner has approved that the interest be paid to the operator. In order to qualify for interest payment, the operator shall request such action in writing during the permit application process.

(d) Certificates of deposit may be substituted for escrow accounts upon approval of the Commissioner.

11.6 Self-Bonding.

(a) Definitions. For the purposes of this subsection only:

(1) Current assets means cash or other assets or resources which are reasonably expected to be converted to cash or sold or consumed within one (1) year or within the normal operating cycle of the business.

(2) Current liabilities means obligations which are reasonably expected to be paid or liquidated within one (1) year or within the normal operating cycle of the business.

(3) Fixed assets means plants and equipment, but does not include land or coal in place.

(4) Liabilities means obligations to transfer assets or provide services to other entities in the future as a result of past transactions.

(5) Net worth means total assets minus total liabilities and is equivalent to owners equity.

(6) Parent corporation means corporation which owns or controls the applicant.

(7) Tangible net worth means net worth minus intangibles such as goodwill and rights to patents or royalties.

(b) The Commissioner may accept a self-bond from an applicant for a permit if all of the following conditions are met by the applicant or its parent corporation guarantor:

(1) The applicant designates a suitable agent to receive service of process in the State where the proposed surface coal mining operation is to be conducted.

(2) The applicant has been in continuous operation as a business entity for a period of not less than five (5) years. Continuous operation shall mean that business was conducted over a period of five (5) years immediately preceding the time of application.

(A) The Commissioner may allow a joint venture or syndicate with less than five years of continuous operation to qualify under this requirement, if each member of the joint venture or syndicate has been in continuous operation for at

least five (5) years immediately preceding the time of application.

(B) When calculating the period of continuous operation, the Commissioner may exclude past periods of interruption to the operation of the business entity that were beyond the applicant's control and that do not affect the applicant's likelihood or remaining in business during the proposed surface coal mining and reclamation operations.

(3) The applicant submits financial information in sufficient detail to show that the applicant meets one of the following criteria:

(A) The applicant has a current rating for its most recent bond issuance of "A" or higher as issued by either Moody's Investor Service or Standard and Poor's Corporation;

(B) The applicant has a tangible net worth of at least ten (10) million dollars, a ratio of total liabilities to net worth of 2.5 times or less, and a ratio of current assets to current liabilities of 1.2 times or greater; or

(C) The applicant's fixed assets in the United State total at least twenty (20) million dollars, and the applicant has a ratio of total liabilities to net worth of 2.5 times or less, and a ratio of current assets to current liabilities of 1.2 times or greater.

(4) The applicant submits:

(A) Financial statements for the most recently completed fiscal year accompanied by a report prepared by an independent certified public accountant in conformity with generally accepted accounting principles and containing the accountant's audit opinion or review opinion of the financial statements with no adverse opinion;

(B) Unaudited financial statements for completed quarters in the current fiscal year; and

(C) Additional unaudited information as requested by the Commissioner.

(c) The Commissioner may accept a written guarantee for an applicant's self-bond from a parent corporation guarantor, if the guarantor meets the conditions of paragraphs (b)(1) through (b)(4) of this subsection as if it were the applicant. Such a

written guarantee shall be referred to as a "corporate guarantee". The terms of the corporate guarantee shall provide for the following:

(1) If the applicant fails to complete the reclamation plan, the guarantor shall do so or the guarantor shall be liable under the indemnity agreement to provide funds to the Commissioner sufficient to complete the reclamation plan, but not to exceed the bond amount.

(2) The corporate guarantee shall remain in force unless the guarantor sends notice of cancellation by certified mail to the applicant and to the Commissioner at least ninety (90) days in advance of the cancellation date, and the Commissioner accepts the cancellation.

(3) The cancellation may be accepted by the Commissioner if the applicant obtains suitable replacement bond before the cancellation date or if the lands for which the self-bond, or portion thereof, was accepted have not been disturbed.

(d) For the Commissioner to accept an applicant's self-bond, the total amount of the outstanding and proposed self-bonds of the applicant for surface coal mining and reclamation operations shall not exceed twenty-five (25) percent of the applicant's tangible net worth in the United States. For the Commissioner to accept a corporate guarantee, the total amount of the parent corporation guarantor's present and proposed self-bonds and guaranteed self-bonds for surface coal mining and reclamation operations shall not exceed twenty-five (25) percent of the guarantor's tangible net worth in the United States.

(e) If the Commissioner accepts an applicant's self-bond, an indemnity agreement shall be submitted subject to the following requirements:

(1) The indemnity agreement shall be executed by all persons and parties who are to be bound by it, including the parent corporation guarantor, and shall bind each jointly and severally.

(2) The indemnity agreement shall be accompanied by an affidavit certifying that the agreement is valid under all applicable State and Federal laws.

(3) Corporations applying for a self-bond or parent corporations guaranteeing a subsidiary's self-bond shall submit an indemnity agreement signed by two (2) corporate officers who

are authorized to bind the corporation. A copy of such authorization shall be provided to the Commissioner. The guarantor shall provide a copy of the corporate authorization demonstrating that the corporation may guarantee the self-bond and execute the indemnity agreement.

(4) If the applicant is a partnership, joint venture or syndicate, the agreement shall bind each partner or party who has a beneficial interest, directly or indirectly, in the applicant.

(5) Pursuant to Section 17(b) of the Act, the applicant or parent corporation guarantor shall be required to complete the approved reclamation plan for the lands in default or to pay to the Commissioner an amount necessary to complete the approved reclamation plan, not to exceed the bond amount. If permitted under State law, the indemnity agreement when under forfeiture shall operate as a judgment against those parties liable under the indemnity agreement.

(f) The Commissioner may require self-bonded applicants and parent guarantors to submit an update of the information required under paragraphs (b)(3) and (b)(4) of this subsection within ninety (90) days after the close of each fiscal year following the issuance of the self-bond or corporate guarantee.

(g) If at any time during the period when a self-bond is posted, the financial conditions of the applicant or the parent corporation guarantor change so that the criteria of paragraphs (b)(3) and (d) of this subsection are not satisfied, the permittee shall notify the Commissioner immediately and shall within ninety (90) days post an alternate form of bond in the same amount as the self-bond.

(h) The Commissioner shall issue a notice of violation against any operator who is without bond coverage. The notice shall specify a reasonable period to replace bond coverage not to exceed ninety (90) days. During this period the Commissioner shall conduct weekly inspections to ensure continuing compliance with permit requirements, the regulations, and the Act. Such notice of violation, if abated within the period allowed, shall not be counted as a notice of violation for purposes of civil or criminal penalties determining a "pattern of willful violations" and need not be reported as a past violation in permit applications. If such a notice of violation is not abated in accordance with the schedule, a cessation order shall be issued, at which time the operator shall initiate and complete as contemporaneously as possible total reclamation of the area.

11.7 Combined Surety/Escrow Bonding.

(a) The Commissioner may accept a combined surety/escrow bonding schedule provided that:

(1) A surety bond payable to the Commissioner is posted in the amount determined under Section 11 of the Act for reclamation of each successive increment; and

(2) An interest-bearing escrow account, payable to the Commissioner with a predetermined deposit amount and frequency, is established.

(b) Conditions of the combined surety/escrow bonding method shall be as follows:

(1) Surety bond:

(A) The term of the surety bond shall be not less than two (2) years.

(B) The amount of the surety bond shall always be sufficient to cover the difference between the escrow balance and the total reclamation cost.

(C) The surety bond may be reduced in amount, but the liability remaining shall depend on the escrow-deposit rate which shall be subject to the requirements of Subsections 11.4 and 11.5 of this section.

(D) The surety bond shall be noncancelable by the surety during the bond term.

(E) Surety bond coverage may be released by the Commissioner without applying the bond-release criteria of the Act and ection 12 of these regulations, at any time during the bond term, provided provisions of paragraph (b)(2)(E) of this subsection are met or are in accordance with the provisions of bond replacement under Subsection 11.4 of this section.

(F) The surety bond is subject to the conditions of bond forfeiture including noncompliance with the escrow-account provisions of paragraph (b)(2) of this subsection.

(2) Escrow account:

(A) The terms and conditions of the escrow account shall be developed jointly by the operator, surety and

Commissioner. For the purposes of this section, the development of the escrow account shall be based on a production basis in an amount not less than that required to make the escrow account equal to or greater than the bond requirement within the term of the surety bond as agreed on jointly by the operator, the surety and the Commissioner. Deposits to the escrow account by the operator shall be made monthly and so reported to the Commissioner. Failure to make deposits on schedule shall be just cause for action by the Commissioner.

(B) A certified escrow-account balance statement shall be provided quarterly to the surety and the Commissioner.

(C) Provisions of the escrow account shall be in accordance with Subsection 11.4 of this section.

(D) The escrow account shall be subject to bond-forfeiture.

(E) The escrow-account balance shall equal the initial bond amount, plus any adjustments required by paragraph (b)(2)(A), of this subsection one hundred twenty (120) days prior to surety-bond termination, unless the total bond amount required has been previously reduced through the bond-release procedures.

(c) Provisions of the Act and Section 12 of these regulations may be applied to both surety and escrow-bond coverage during the bond term.

(d) The surety-escrow combination may be repeated successively or amended during the term by replacing the escrow account with a surety bond, and reestablishing the escrow terms and deposit rate, subject to Commissioner approval.

11.8 Incremental Bonding.

(a) When the applicant elects to bond in increments as specified in subsection (a), Section 11, of the Act, the following conditions shall apply:

(1) A cumulative bond schedule listing the areas covered by the bond and the sequence for release of acreage as it progresses through varying reclamation phases and for the addition of other acreage as it is affected. The amount of bond required to obtain a permit shall include the full reclamation cost of the initial area being affected;

(2) When the applicant elects to "increment" the amount of the performance bond during the term of the permit, he shall identify the initial and successive incremental disturbed areas which shall be indicated on the proposal map and made part of the permit application and shall specify the proportion of the total bond amount required for the term of the permit which will be filed prior to commencing operations on each incremental area. The scheduled amount of each performance bond increment shall be filed in the sequence approved in the permit, and shall be filed with the Commissioner at least thirty (30) days prior to the commencement of surface coal mining and reclamation operations in the next incremental area; and

(3) The amount, duration, form, conditions and terms of the performance bond shall conform to Subsections 11.3 and 11.4 of this section.

11.9 Period of Liability. The Commissioner may approve selective husbandry practices, excluding augmented seeding, fertilization or irrigation, without extending the period of bond liability if the permittee can demonstrate that discontinuance of such measures after the liability period expires will not reduce the probability of permanent revegetation success.

Approved practices may include pest and vermin control, pruning and any reseeding and/or transplanting specifically necessitated by such actions, but shall be normal conservation practices within the region for unmined lands having land uses similar to the approved postmining land use of the area covered by the bond.

38-2-12. Replacement, Release, and Forfeiture of Bonds.

12.1 Replacement of Bonds.

(a) The Commissioner may approve the replacement of existing bonds with other equivalent bonds.

(b) Existing performance bonds shall not be released until the permittee has submitted, and the Commissioner has approved, acceptable replacement performance bonds. Replacement of a performance bond pursuant to this section shall not constitute a release of bond.

12.2 Requirement to Release Performance Bonds.

(a) In addition to the requirements of Section 23 of the Act, the following bond release procedures shall be observed:

(1) The permittee may file an application with the Commissioner for the release of all or part of a performance bond. Applications may be filed only at times or during seasons established by the Commissioner which allow proper evaluation of the completed reclamation operations.

(2) A certification of publication of the advertisement shall be made a part of any bond release application file. In addition to the requirement of Section 23 of the Act, the advertisement shall indicate the name of the permittee, the type of bond filed, the address of the nearest regional office of the Department of Energy to which written comments or requests for public hearings and informal conferences on the specific bond release may be submitted, and the closing date for receipt of comments or requests. In addition, as part of any bond release application, the applicant shall submit copies of letters which have been sent to adjoining property owners, local governmental bodies, planning agencies, sewage and water treatment authorities, and water companies in the locality in which the surface coal mining and reclamation operation took place, notifying them of the intention to seek release from the bond.

(b) Inspection by regulatory authority.

(1) Upon receipt of the bond release application, the Commissioner shall, within thirty (30) days, or as soon thereafter as weather conditions permit, conduct an inspection and evaluation of the reclamation work involved. The surface

owner, agent, or lessee shall be given notice of such inspection and may participate in making the bond release inspection.

(2) Within sixty (60) days from the filing of the bond release application, if no public hearing is held, or within thirty (30) days after a public hearing or informal conference has been held, the Commissioner shall notify in writing the permittee, the surety or other persons with an interest in bond collateral who have requested notification, and the persons who either filed objections in writing or objectors who were a party to the hearing proceedings, if any, of his decision to release or not to release all or part of the performance bond.

(c) The Commissioner may release all or part of the bond if reclamation covered by the bond or portion thereof has been accomplished in accordance with the following schedules:

(1) After the operator completes the back-filling, regrading (which may include the replacement of topsoil) and drainage control of a bonded area in accordance with the Act, these rules and regulations, and the terms and conditions of the permit to include the provisions of subsection 14.5, Phase I reclamation shall be considered complete, and sixty (60) percent of the bond or collateral for the applicable area may be released.

(2) After revegetation has been established on the regraded mined lands in accordance with the approved reclamation plan to include the provisions of paragraph (d) of subsection 14.7 as it relates to chemical treatment, Phase II reclamation shall be considered complete and an additional twenty-five (25) percent of the original bond amount may be released, provided that:

(A) Not less than two years after the last augmented seeding, standards for revegetation success have been met.

(B) The lands are not contributing suspended solids to stream flow or runoff outside the permit area in excess of the requirements of the Act, these rules and regulations, and the terms and conditions of the permit.

(C) With respect to prime farmland, soil productivity has been returned to the level of yield as required by the Act, these rules and regulations, and the terms and conditions of the permit.

(D) The provisions of a plan approved by the Commissioner for the sound future management of any permanent impoundment by the permittee or landowner have been implemented.

(E) The amount of the remaining bond shall be sufficient to cover the estimated cost of reestablishing vegetation and drainage control structures.

(3) Upon successful completion of the reclamation requirements of the Act, these rules and regulations, and the terms and conditions of the permit, Phase III reclamation shall be considered completed and the Commissioner may release the remainder of the bond.

(d) If the Commissioner disapproves the application for release of the bond or portion thereof, he shall notify the permittee, the surety, and any person with an interest in collateral, in writing, stating the reasons for disapproval and recommending corrective actions necessary to secure the release and allowing an opportunity for a public hearing.

(e) Any person with a valid legal interest which might be adversely affected by release of the bond, or the responsible officer or head of any Federal, State, or local governmental agency which has jurisdiction by law or special expertise with respect to any environmental, social, or economic impact involved in the operation or which is authorized to develop and enforce environmental standards with respect to such operations, shall have the right to file written objections to the proposed release of bond with the Commission within thirty (30) days after the last publication of the notice required by paragraph (a) (2), subsection 12.2 of this section. If written objections are filed and a hearing is requested, the Commissioner shall inform all the interested parties of the time and place of the hearing, and shall hold a public hearing, or informal conference, within thirty (30) days after receipt of the request for the hearing. The date, time, and location of the public hearing, or informal conference, shall be advertised by the Commissioner in a newspaper of general circulation in the locality for two (2) consecutive weeks. The public hearing, or informal conference, shall be held in the locality of the surface coal mining operation from which bond release is sought.

(f) Without prejudice to the right of an objector or the applicant, and when all parties agree, the Commissioner may hold an informal conference in lieu of a public hearing to resolve such written objections. Unless waived by all parties, the Commissioner shall make a record of the informal conference which

shall be accessible to all parties. The Commissioner shall also furnish all parties of the informal conference with written findings based on the informal conference, and the reasons for said findings.

12.3 Forfeiture of Bonds.

(a) If an operator refuses or is unable to conduct reclamation of an unabated violation, if the terms of the permit are not met, or if the operator defaults on the conditions under which the bond was accepted, the Commissioner shall take the following action to forfeit the bond:

(1) Send written notification by certified mail, return receipt requested, to the permittee and the surety on the bond, if any, informing them of the decision to forfeit all or part of the bond, including the reasons for the forfeiture and the amount to be forfeited. The amount shall be based on the estimated total cost of achieving the reclamation plan requirements; however, bond liability shall extend to the entire permit area.

(2) Advise the permittee and surety, if applicable, of the conditions under which forfeiture may be avoided. Such conditions may include, but are not limited to:

(A) Agreement by the permittee or another party to perform reclamation operations in accordance with a compliance schedule which meets the conditions of the permit, the reclamation plan, and the regulatory program and a demonstration that such party has the ability to satisfy the conditions; or

(B) The Commissioner may allow a surety to complete the reclamation plan, or the portion of the reclamation plan applicable to the bonded phase or increment, if the surety can demonstrate an ability to complete the reclamation in accordance with the approved reclamation plan. No surety liability shall be released until successful completion of all reclamation under the terms of the permit including the applicable period of liability.

(b) In the event forfeiture of the bond is required by this section, the Commissioner shall proceed to collect the forfeiture amount as provided for in Section 17(b) of the Act.

(c) Where the bond is forfeited, the proceeds shall be used by the Commissioner to accomplish the completion of reclamation,

including the requirements of Section 23 of the Act and Subsection 14.5 of these regulations governing water quality.

(d) Where the proceeds of bond forfeiture used by the Commissioner to complete reclamation are less than the actual cost of reclamation, the Commissioner shall in a timely manner utilize the monies in the Special Reclamation Fund created by Subsection (g), Section 11 of the Act, to accomplish the completion of reclamation, including the requirements of Section 23 of the Act and Subsection 14.5 of these regulations governing water quality.

(e) Notwithstanding any other provisions of the Act and these regulations, the effective date of paragraphs (c) and (d) of this subsection shall be December 15, 1989.

38-2-13. Requirements of a Notice of Intent to Prospect.

13.1. Notice of Intent to Prospect - Less than two hundred fifty (250) tons.

(a) Application. The Notice of Intent shall be filed in triplicate, in clasp-type binders, on forms prescribed by the Commissioner, and shall contain the following information:

(1) The name, address, and telephone number of the operator;

(2) Indicate if the operator is a corporation, partnership, or individual;

(3) The name, address, and telephone number of the person who will have responsibility for conducting prospecting;

(4) The name and address of all owners of surface land and mineral rights;

(5) The location of the operation (county, magisterial district and nearest post office);

(6) The anticipated date of commencement and completion of operations;

(7) Indicate whether or not the operator or any person, partnership, or corporation associated with the operator has on file, or has ever had on file, in the State of West Virginia a prospect permit and bond or an intent to prospect. If so, list all prospect permits and Notices of Intent to Prospect, together with an indication of their current reclamation status;

(8) The operator's source of legal right to enter and conduct operations;

(9) The notarized signature of a principal officer of the operator affixed to a statement declaring that the information contained in the Notice is true and correct to the best of his knowledge;

(10) The name, address, and telephone number of the applicant's representative who will have on-site responsibility for conducting the operation;

(11) An estimated timetable for conducting and completing each phase of the operation to include reclamation;

(12) A description of how the applicant will conduct prospecting operations so as to protect habitats of unique or unusually high value for fish, wildlife, and other related environmental values and critical habitats of threatened or endangered species identified pursuant to the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq); and

(13) A description of cultural or historical resources listed or known to be eligible for listing on the National Register of historic places and all known archaeological sites located within the proposed prospecting area.

(b) Reclamation Plan. A reclamation plan which includes the following:

(1) The method of prospecting;

(2) The method for controlling runoff and sedimentation;

(3) The method of regrading;

(4) A plan for revegetation;

(5) The method for sealing, casing or otherwise managing prospecting holes, bore holes, wells or other exposed underground openings created during the prospecting; and

(6) The method of constructing and/or utilizing roads.

(c) Maps. A map equivalent to a United State geological survey topographic quadrangle map (scale 1" = 2,000') showing the following information:

(1) The surface and mineral owners of the tract(s) and property lines within the area to be prospected;

(2) The quadrangle title with a north arrow;

(3) Clearly indicate the name(s) of the receiving stream(s);

(4) Show by proper markings the approximate location of the cropline(s) and name of the seam(s); and

(5) Show the number of acres to be disturbed and their approximate location.

13.2. Notice of Intent to Prospect - Greater than two hundred fifty (250) Tons. If prospecting will remove more than 250 tons of coal, the Notice of Intent to Prospect shall include, in addition to the requirements of Subsection 13.1 of this Section, the following:

(a) The applicant shall prepare a narrative discussion of a feasibility study for the site, including the specific reasons for extraction of the amount of tonnage for which permission is requested. The narrative shall be of sufficient detail to enable the Commissioner to make a determination that the proposed extraction and sale of the coal is incidental to testing of the coal to determine if it is of a mineable and merchandiseable quality, so as to make it possible to conduct surface mining and reclamation operations on the site for which a permit application can be submitted at a later date. The narrative shall explain in detail why other means of prospecting/exploration, such as core drilling, involving extraction of less than 250 tons of coal, are not adequate to determine the quality of the coal and the feasibility of future surface mining and reclamation operations on the site. Form, generic or general statements by the applicant of a need for quality testing of more than 250 tons shall not be adequate grounds for the Commissioner's approval of removal of greater than 250 tons. The narrative shall contain at a minimum:

(1) A demonstration that the amount of coal to be removed under the notice of intent to prospect application is not the total reserve of coal but is a random sampling of a larger reserve.

(2) A demonstration that the application is for prospecting and is not surface mining or an "early start-up" for a surface mining operation.

(3) A statement that reclamation will be completed within three (3) months of initial disturbance of each site to be disturbed under the notice of intent to prospect.

(4) The location of any endangered or threatened species identified within the prospecting area.

(5) The location of cultural or historical resources listed or known to be eligible for listing on the National Register of historic places and all known archaeological sites located within the proposed prospecting area.

(6) Any other information required by the Commissioner regarding known or unknown historic or archaeological resources.

(b) The name of the company that will receive the tonnage for test burning or other testing purposes, and further identify with specificity the precise tests that will be conducted on the coal. Furthermore, the applicant shall state that the testing proposed in the application has already been agreed to by the applicant and the company that will receive the coal.

(c) A map in accordance with Section 3.4 of these regulations which contains all information required in Subsection 13.1 of this section.

(d) A copy of a legal notice to be published in a newspaper of general circulation in the county where prospecting will occur. The ad shall contain the following:

(1) The name and business address of the operator;

(2) The date of publication and the date of close of a public comment period which date shall not be less than fifteen (15) days after the date of publication;

(3) The address of the office of the Department of Energy where any person whose interest is or may be adversely affected may submit written comments;

(4) A description of the general area where prospecting will occur;

(5) A statement that an excess of two hundred fifty (250) tons of coal will be removed;

(6) The purpose for removing more than two hundred fifty (250) tons; and

(7) An estimate of the total tonnage to be removed.

13.3. Approval of Notice of Intent to Prospect - Greater than two hundred fifty (250) Tons.

(a) The Commissioner shall act upon an administratively complete application for a prospecting approval and any written comments within a reasonable period of time, but in no event shall action be taken prior to the close of the public comment period.

(b) The Commissioner shall approve a complete and accurate application for a prospecting approval filed in accordance with this section if he finds, in writing, that the applicant has demonstrated that the prospecting and reclamation operation described in the application will:

(1) Be conducted in accordance with this section, and other applicable provisions of these regulations, the Act, and the application;

(2) Not jeopardize the continued existence of an endangered or threatened species listed pursuant to Section 4 of the Endangered Species Act of 1973 (16 U.S.C. 1533) or result in the destruction or adverse modification of critical habitat of those species; and

(3) Not adversely affect any cultural or historical resources listed on the National Register of Historic Places, pursuant to the National Historic Preservation Act, as amended (16 U.S.C. Sec. 470 et seq., 1976, Supp V), unless the proposed prospecting has been approved by both the Commissioner and the agency with jurisdiction over such matters.

(c) Terms of approval issued by the Commissioner shall contain conditions necessary to ensure that the prospecting and reclamation operations will be conducted in compliance with these regulations, the Act and the application.

(d) The Commissioner shall notify the applicant, the appropriate local government officials, and other commentors on the application, in writing, of his decision on the application. If the application is disapproved, the notice to the applicant shall include a statement of the reason for disapproval. Public notice of the decision on each application shall be posted by the Commissioner at the nearest Department of Energy office in the vicinity of the proposed prospecting operations.

(e) Any person having an interest which is or may be adversely affected by a decision of the Commissioner pursuant to paragraph (d) of this subsection shall have the opportunity for administrative and judicial review.

(f) The Commissioner shall not approve the extraction of more than 250 tons for any reason other than that the coal will be tested for quality and combustibility.

(g) The Commissioner shall monitor the operation of each and every prospecting approval granted for total compliance with the provisions of the Act, these rules and regulations, and the terms and conditions of the approval application.

(h) The operator shall submit a sworn statement to the local surface mining reclamation inspector prior to the completion of coal removal which will verify that the coal was used for the purpose for which the notice of intent to prospect was originally granted.

(i) If the Commissioner determines that, or suspects on the basis of information made available to him that, a prospecting operation is not being conducted in the precise manner set forth in the notice of intent to prospect and/or the accompanying narrative, the Commissioner shall take immediate steps to compel compliance or to establish that violations have occurred. Such steps may include, but would not be limited to, checking weight tickets and the inspection of end-user records.

13.4. Performance Standards.

(a) This subsection establishes minimum performance standards applicable to prospecting operations provided that upon an affirmative demonstration that drilling operations that do not substantially disturb the land and are to be conducted solely for establishing property values for purposes of taxation or highway construction purposes, such drilling shall be exempted from this section.

(b) Prospecting Roads.

(1) All roads shall be utilized or constructed in a manner that will control or prevent erosion and siltation or damage to fish or wildlife or their habitat or public or private property.

(2) All roads must be reclaimed or rehabilitated to a condition equal to or better than their preprospecting condition. Where a road will permanently remain after prospecting activities, the construction, maintenance and stabilization shall be governed by Section 4 of these rules and regulations.

(3) Vehicular travel on other than established graded and surfaced roads shall be limited by the person who conducts prospecting to that absolutely necessary to conduct the

prospecting. Travel shall be confined to graded and surfaced roads during periods when excessive erosion, damage to vegetation or rutting of the land surface could result.

(c) Blasting. Blasting is prohibited on prospecting operations unless otherwise approved by the Commissioner. Any blasting approved must be conducted in accordance with Section 6 of these regulations.

(d) Drainage. All disturbances created by prospecting operations shall be conducted in such a manner as to prevent or control erosion, siltation, pollution of water, and to minimize disturbance to the prevailing hydrologic balance. Such operations shall be exempt from specific design and construction criteria for sediment control structures only if stabilization to control erosion is achieved through alternative measures. Any operation which will substantially disturb the natural land surface shall be required by the Commissioner to install drainage control structures in accordance with Section 5 of these regulations.

(e) All prospecting operations carried out in steep slope conditions shall be conducted in a manner consistent with the steep slope requirements provided for in subsection (d) of Section 12 of the Act and subsection 14.8 of these regulations.

(f) The Commissioner may limit prospecting operations from encroaching nearer than one hundred feet (100') of a perennial or intermittent stream, provided that roads or access ways may be located within one hundred feet (100') of an intermittent or perennial stream. Roads shall not be constructed up a stream bed or drainage channel or in close proximity to such channel so as to significantly alter the normal flow of water.

(g) Each prospecting hole, borehole, well or other exposed underground opening created during prospecting shall be cased, sealed, or otherwise managed to prevent acid or toxic drainage from entering ground or surface water, or substantial degradation of ground water quality or quantity.

(h) All toxic or acid-forming materials encountered while prospecting shall be handled in accordance with the requirements of Subsections 14.5 and 14.6 of these regulations.

(i) All facilities and equipment shall be removed from the prospecting area when they are no longer needed.

(j) Topsoil shall be removed, stored and redistributed on disturbed areas as necessary to assure successful revegetation.

(k) All areas disturbed during prospecting operations shall be regraded to approximate original contour within three months of initial disturbance unless reclamation has been waived pursuant to receipt of an appropriate surface mine application number (SMA); provided, that reclamation cannot be delayed more than one (1) year from receipt of a surface mine application number.

(l) All disturbed areas must be revegetated in a manner consistent with Section 9 of these regulations.

(m) The operation shall be conducted so as to provide protection of endangered and threatened species and their critical habitats as determined by the Endangered Species Act of 1973 (16 U.S.C. 1531, et seq.) or habitats of unique or unusual high value for fish or wildlife.

13.5. Bond Release. The performance bond or other securities accompanying a notice of intent shall be released upon satisfactory regrading and establishment of a permanent vegetative cover. All applications for bond release shall be accompanied by a final map showing the total disturbed area of the prospecting operation.

13.6. Notice on Site. All operators conducting prospecting activities shall, while in the prospecting areas, have in their possession, a copy of the written approval of notice of intent for such activities issued by or submitted to the Commissioner.

13.7. Public Records. All information submitted to the Department of Energy as a part of the notice of intent to prospect, as required in the Act and this section, shall be made available for public inspection and copying at the nearest Department of Energy office; provided, that information submitted to the Commissioner pursuant to this subsection which contains trade secrets or privileged commercial or financial information which relates to the competitive rights of the person filing such information or other persons who may be affected, is certified information and shall not be available for public examination.

13.8 Lands Unsuitable Designation. If prospecting operations are to be conducted on lands which have been designated as unsuitable for surface mining, a notice of intent prepared and filed in accordance with Subsection 13.2 of this Section, shall be required. Approval of the notice of intent shall be in accordance with Subsection 13.3 of this Section.

38-2-14. Performance Standards. In addition to the requirements of the Act, the following performance standards shall be applicable to both surface and underground mining operations.

14.1 Signs and Markers.

(a) Permanent Monument. A permanent monument shall be posted at primary points of ingress and egress on the permit area from public roads and highways. The monument shall consist of a sign constructed of wood, metal or other suitable material measuring two feet by three feet (2' x 3') and mounted on a two-inch (2") diameter pipe driven three feet (3') into the ground with four feet (4') exposed. Any suitable substitute may be approved. The sign shall clearly indicate the company name, permit number, business address and telephone number.

(b) Perimeter Marker. A two-inch (2") diameter pipe or suitable substitute shall be driven into the earth with a minimum of three feet (3') exposed to permanently mark the beginning and ending points of the area under permit. It shall be identified by painting the exposed portion of the pipe red. The assigned permit number shall be affixed to the permanent perimeter marker. Other markers may be used to delineate the boundaries of the proposed permit area.

(c) Buffer Zone Markers. Appropriate markers will be established along a buffer zone. Markers shall consist of metal or wooden stakes or other suitable devices or methods.

(d) Topsoil Markers. When topsoil or topsoil substitute material is segregated and stockpiled, the stockpiled material shall be marked. Markers shall remain in place until the materials are removed.

(e) Blasting Signs. If blasting is necessary to conduct surface mining operations, the following signs and markers shall be required:

(1) Signs reading "Blasting Area" shall be conspicuously displayed at all approaches to the blasting site, along haulageways and access roads to the mining operation and at all entrances to the permit area. The sign shall be two feet by three feet (2' x 3') reading "Blasting Area" and explaining the blasting warning and the all clear signals; and

(2) Where blasting operations will be conducted within one hundred (100) feet of the outside right-of-way of a public road, signs reading "Blasting Area", shall be conspicuously placed along the perimeter of the blasting area.

14.2 Casing and Sealing of Holes. All boreholes, shafts, wells, auger holes, and other exposed underground openings shall be cased, sealed or otherwise managed to prevent pollution of surface or groundwater and to prevent mixing of groundwaters of significantly different quality in accordance with the approved preplan. All boreholes within the permit area which extend beneath the coal seam to be mined and into water bearing strata shall be permanently plugged unless the boreholes have been approved for monitoring. Prior to sealing, such holes shall be managed to insure the safety of people, livestock and wildlife; however, before final release of bond, exploratory or monitoring wells must either be sealed in a safe and environmentally sound manner or with the prior approval of the Commissioner, be transferred to another party for further use. The conditions of the transfer shall comply with State and local laws, regulations, and other requirements.

14.3 Topsoil.

(a) Removal. Prior to disturbance of an area, topsoil shall be removed from the area to be disturbed in a separate layer and if not immediately redistributed, it shall be segregated and stockpiled in a separate stable location as specified in the preplan. Stockpiled topsoil shall remain in place until used for redistribution unless otherwise approved by the Commissioner. Stockpiled topsoil shall be protected from excessive compaction. Where the removal of vegetative material, topsoil or other materials may result in erosion, the Commissioner may limit the size of the area from which these materials are removed at any one time.

(b) Redistribution. Prior to redistribution of topsoil, the regraded land shall be treated, if necessary, to reduce the potential for slippage of the redistributed material and/or to enhance root penetration. Topsoil and other materials shall be redistributed in a manner that achieves an approximate uniform, stable thickness, consistent with the approved postmining land uses, contours, soil density, and surface water drainage system.

(c) Top Soil Substitutes. Any substitute material used for topsoiling must be capable of supporting and maintaining the approved postmining land use. This determination of capability shall be based on the results of appropriate chemical and physical analysis of overburden and topsoil. These analyses shall include at a minimum depth, thickness, and areal extent of the substitute structure or soil horizon, pH, texture class, percent, coarse fragments and nutrient content. A certification of analysis shall be made by a qualified laboratory stating that:

(1) The proposed substitute material is equally

suitable for sustaining vegetation as the existing topsoil; and

(2) The analyses were conducted using standard testing procedures.

(d) Soil Amendments. Nutrients and soil amendments in the amounts determined by soil tests shall be applied to the redistributed surface soil layer so that it supports the approved postmining land use and meets the revegetation requirements of Section 9 of these regulations. These tests shall include nutrient analysis and lime requirement tests. Results of these tests shall be submitted to the Commissioner with the final planting report as required by these regulations.

14.4 Diversions.

(a) Stream Channel Diversions. Stream channel diversions and stream channels reclaimed after the removal of temporary diversions, shall be designed and constructed so as to restore or approximate the premining characteristics of the original stream channel, including the natural riparian vegetation, to promote recovery and enhancement of the aquatic habitat.

(b) Temporary Diversions. Temporary diversions shall be removed when they are no longer needed to achieve the purpose for which they were approved as long as downstream facilities which were being protected are modified or removed.

(c) Reclamation of Diversions. All temporary diversions shall be removed and reclaimed prior to permit abandonment and all permanent diversions shall comply with the approved reclamation plan and be renovated if necessary prior to abandonment.

14.5 Water Quality. Surface and groundwater quality and quantity and the hydrologic balance, outside the permit area, shall be protected from material damage by handling and managing earthen materials, groundwater discharges and surface runoff in such a manner that minimizes the formation of acid or toxic drainage or infiltration and restores the approximate premining water availability.

(a) Water Quality Control. All water accumulation into the pit shall be removed at least once in a twenty-four (24) hour period whenever water quality or spoil stability may be adversely affected.

(b) Effluent Limitations. Discharge from areas disturbed by surface mining shall not violate effluent limitations or cause a

violation of applicable water quality standards. The monitoring frequency and effluent limitations shall be governed by the standards set forth in the NPDES Program under the Federal Water Pollution Control Act as amended, 33 U.S.C. 1251 et. seq. and the rules and regulations promulgated thereunder. Effluent limitations are those contained in federal regulations at 40 CFR Part 434.

(c) Treatment Facilities. Adequate facilities shall be installed,operated and maintained using the best technology currently available in accordance with the approved preplan to treat any water discharged from the permit area so that it complies with all federal and state laws and regulations and the limitations of this section. Nonmechanical treatment systems may be utilized if flow is infrequent or small and timely and consistent treatment is assured.

(d) Breakthrough. Any surface breakthrough of water caused by the operator during the course of his operations shall be sampled immediately and analyzed for total iron, total suspended solids and pH and if requested by the Commissioner, any other parameter which is characteristics of the discharge. Such analysis shall be made by a competent water analyst or chemist. The original and at least one copy of such analysis shall be retained by the operator, and two (2) copies shall be submitted to the Commissioner. Should said analysis indicate the water quality to be less than the applicable effluent limitations, seals shall be immediately constructed. These seals shall:

(1) Prevent any air from entering the underground mine by way of the breakthrough;

(2) Prevent any air from entering the breakthrough while allowing the water to flow from the breakthrough;

(3) Seal the breakthrough of water so that it cannot flow. Such seals shall be constructed of stone, brick, block, earth or other impervious materials which are acid resistant; or

(4) Alternate methods of handling discharges from breakthroughs may be employed where it can be established that applicable effluent limitations can be met.

(e) Discharges Into Active Underground Workings. On active underground mining operations, all reasonable measures shall be taken to intercept all surface water by the use of diversions, culverts, drainage ditches or other approved methods to prevent water from entering the working area. All surface drainage from the disturbed area must pass through a sediment pond or series of

sediment ponds so that discharges from such areas will not cause a violation of water quality standards.

(f) Co-mingling of Waters. Unless otherwise approved by the Commissioner, water from underground works shall not be co-mingled with surface drainage. When separate treatment facilities are used for discharges from underground works, they shall be designed to adequately treat the anticipated quantity and quality of the raw discharge.

(g) Gravity Flows. No person shall locate openings for new drift mines working in acid or iron producing coal seams in such a manner that the mine will have a gravity discharge. If there will be a gravity discharge and the seam to be mined is listed in Subsection 2.4 of these regulations, site specific data must be submitted demonstrating that this seam is not an acid or iron producing seam at this location.

(h) Discharges Into Abandoned Underground Workings. Discharges into abandoned underground mine workings, are prohibited nor shall water be discharged from one underground working to another, unless the operator demonstrates to the Commissioner that such activities will:

(1) Abate water pollution or otherwise eliminate public hazards resulting from surface mining activities;

(2) Not cause, result in or contribute to a violation of water quality standards and effluent limitations both on or outside the permit area;

(3) Not be discharged without MSHA approval;

(4) Minimize disturbance to the hydrologic balance on the permit area and prevent material damage outside the permit area; or

(5) Be discharged at specified rates as a controlled flow meeting applicable effluent limitations for pH and total suspended solids, except that the pH and total suspended limitations may be exceeded if approved by the Commissioner, and is limited to:

(A) Coal processing waste;

(B) Fly ash from a coal-fired facility;

(C) Inert materials used for stabilizing underground mines;

(D) Underground mine development wastes;

(E) Sludge from an acid mine drainage treatment facility or flue-gas desulfurization; or

(F) Water.

14.6 Acid Producing and Toxic Materials.

(a) Acid and Toxic Soils. Drainage from acid-forming and toxic-forming materials into ground and surface water shall be avoided by identifying, burying, blending, segregating, and/or treating spoil or other materials that will be toxic to vegetation or that will adversely affect water quality. Such materials shall be handled and treated in accordance with methods set forth in the approved preplan within thirty (30) days after initial exposure or a lesser period if required by the Commissioner.

(b) Burying Acid and Toxic Materials. Acid-forming or toxic-forming material shall not be buried or stored in proximity to a drainage course or groundwater system.

(c) Treatment of Toxic Material. All exposed coal seams remaining after mining and any acid-forming, toxic-forming, or combustible materials or any other waste materials shall be covered with a minimum of four feet (4') of nontoxic and noncombustible material. Where necessary to protect against upward migration of salts, exposure by erosion, or to provide adequate depth for plant growth, the Commissioner shall specify thicker amounts of cover.

14.7 Monitoring Requirements.

(a) Surface Water. All surface water shall be sampled and analyzed and otherwise monitored in accordance with the approved surface water monitoring plan. All measurements shall be submitted to the Commissioner and all violations of applicable effluent limitations shall be reported to the Commissioner within five (5) days of receipt of analytical results. The operator shall immediately implement remedial measures described in the hydrologic reclamation plan. Monitoring shall continue until the operator demonstrates that continued monitoring is unnecessary to achieve the purpose of the monitoring plan.

(b) Groundwater. Where adverse impacts to a significant groundwater resource are identified as provided in paragraph (h) of Subsection 3.16 of these regulations, the groundwater resources shall be monitored in accordance with the groundwater

monitoring plan. All measurements shall be submitted to the Commissioner and all violations of standards established under Section 24 of the Act shall be reported to the Commissioner within five (5) days of receipt of analytical results. The operator shall immediately implement remedial measures described in the hydrologic reclamation plan. Monitoring shall continue until the operator demonstrates that continued monitoring is unnecessary to achieve the purposes of the monitoring plan.

(c) Ground Water Monitoring Waivers - If an applicant can demonstrate by the use of the PHC determination and other available base line hydrologic and geologic information that a particular water-bearing stratum in the proposed permit and adjacent area is not one which serves or may potentially serve as a significant aquifer or ensure the hydrologic balance within the cumulative impact area, monitoring of the stratum may be waived by the Commissioner. Waivers will be considered and granted separately and exclusively for each individual water-bearing stratum unless it is shown by the use of the PHC determination and base line hydrologic and geologic information that all individual water-bearing stratums of concern are hydraulically interconnected and can be waived as a complete unit.

(d) Water Treatment. Where any discharge from the permit area requires treatment during the mining operation in order to meet the applicable effluent limitations, water monitoring of such discharges shall continue following grading approval. If it is established on the basis of such monitoring that the hydrologic balance is being preserved without treatment, the treatment facilities may be removed. A one (1) year history of meeting the applicable effluent limitations shall be adequate to establish that the hydrologic balance is being preserved.

(e) Monitoring Equipment. Monitoring equipment located both at the permit area and at off-site areas shall be properly, installed, operated, and maintained during the required monitoring period and removed when no longer required.

14.8 Steep Slope Mining.

(a) Backfilling and Spoil Placement. In addition to other applicable performance standards set forth in the Act and these regulations, the following standards shall apply where the natural slope of the land within the permit area exceeds an average of twenty (20) degrees as measured perpendicular to the coal seam. These standards shall also apply to slopes of lesser steepness where the Commissioner has determined, on the basis of soils, climates, method of operation, geology, and other site-specific characteristics, that special measures are required to

protect the area below the mining operations from landslides or other hazards. The provisions of this section do not apply when mining is conducted on a flat or gently rolling terrain with an occasional steep slope through which the mining proceeds and leaves a plain or predominantly flat area.

(1) Spoil or debris shall not be placed on the downslope except in specified fill areas designed in the permit application for such placement. Nothing in this section shall prohibit the placement of materials in haulroad or access road files on slopes steeper than twenty (20) degrees so long as the fills are constructed in accordance with construction specifications set forth in Subsection 14.14 of this section.

(2) The highwall shall be eliminated and the disturbed area graded to the approximate original contour. Spoil material in excess of that required for the reconstruction of the approximate original contour shall be permanently stored in areas designated in the permit for such use and designed and constructed in accordance with Subsection 14.14 of this section.

(3) Land above the highwall shall not be disturbed unless the disturbance is necessary to facilitate compliance with the environmental protection standards of this section and Section 14 of the Act. Standards to be considered which justify such disturbance are the following:

(A) Achieve the approximate original contour;

(B) Control erosion, sedimentation, and water runoff;

(C) Provide access to the area above the highwall for revegetation purposes; or

(D) Comply with safety standards.

(4) The material used to backfill and eliminate the highwall shall be sufficiently compacted or otherwise mechanically stabilized so as to insure stability of the backfill with a static safety factor of 1.3. Woody materials shall be buried in such a manner that it will not deteriorate the stable condition of the backfilled area. The operator shall at a minimum retain all overburden and spoil on the solid portion of the existing or new benches and backfill and grade the area to the most moderate slope possible.

(5) When mining through natural watercourses or when water is to be directed across or through the backfill, a

drainage channel, flumes, or french drain shall be constructed across or through the backfill in order to insure stability and to prevent erosion. Such drainage channels, flumes or french drains shall be constructed of nontoxic durable rock, asphalt, concrete or other similar material. Channels, flumes, and drains shall be constructed in accordance with criteria set forth in the Handbook or other approved criteria.

14.9 Auger Operations.

(a) Prohibition and Variance. Augering shall be prohibited by the Commissioner if it is determined that such operations pose a potential hazard to the environment, to the public welfare and safety, to water quality, or to structures or buildings as a result of subsidence.

(b) Dry Seals. Auger holes shall be sealed with an impervious and noncombustible material, if the holes are discharging acid or toxic water. Sealing of each hole shall occur within seventy-two (72) hours following coal removal.

(c) Wet Seals. An auger hole shall not be sealed if impoundment of water resulting from sealing would create a hazard to the environment or public welfare and safety; provided, that any discharge from unsealed auger holes shall not cause a violation of applicable water quality standards. Adequate drainage through the backfill from any unsealed auger holes shall be constructed in accordance with specifications set forth in the permit application.

(d) Spacing. Auger mining operations shall be conducted in a manner which maximizes recoverability of mineral reserves remaining after augering. The operator shall, at a minimum, leave areas of undisturbed coal to provide access for future underground mining activities, unless it is established by the operator that the coal reserves have been depleted or are so limited in thickness or extent that it would not be practicable to attempt further recovery.

(e) Subsidence. Auger mining operations shall be conducted in such a manner so as to minimize subsidence damage and where material damage occurs the operator shall correct such damage in accordance with the requirements of Subsection 16.2 of these regulations.

(f) Previously Mined Areas. Where auger mining operations affect previously mined areas and the volume of all reasonably available spoil is demonstrated in writing to the Commissioner to be insufficient to completely backfill the highwall, the highwall

shall be eliminated to the maximum extent technically practical in accordance with the following criteria:

(1) The person who conducts the auger mining operation shall demonstrate to the Commissioner that the backfill, designed by a qualified registered professional engineer, has a minimum static safety factor for the stability of the backfill of at least 1.3.

(2) All spoil generated by the auger mining operation and any associated surface coal mining and reclamation operation, and any other reasonably available spoil, shall be used to backfill the area. Reasonably available spoil shall include spoil generated by the mining operation and other spoil located in the permit area that is accessible and available for use and that when rehandled will not cause a hazard to the public safety or significant damage to the environment. For this purpose, the permit area shall include spoil in the immediate vicinity of the auger mining operation.

(3) The coal seam mined shall be covered with a minimum of four (4) feet of nonacid, nontoxic-forming material and the backfill graded to a slope which is compatible with the approved postmining land use and which provides adequate drainage and long-term stability.

(4) Any remnant of the highwall shall be stable and not pose a hazard to the public health and safety or to the environment.

(5) Spoil placed on the outslope during previous mining operations shall not be disturbed if such disturbances will cause instability of the remaining spoil or otherwise increase the hazard to the public health and safety or to the environment.

14.10. Mountaintop Removal.

(a) Backfilling and Regrading. In addition to the other performance standards set forth in these regulations, the following performance standards will apply where the mountaintop removal method of mining is used:

(1) The final graded top plateau slopes on the mined area shall be less than five (5) horizontal to one (1) vertical so as to create a level plateau or gently rolling configuration. The outslopes of the plateau shall be no steeper than two (2) horizontal to one (1) vertical.

(2) The resulting level or gently rolling contour

shall be graded so that water will drain inward from the outslope except at specific points where it is released over the outslope in constructed channels. Such channels shall be protected from erosion and constructed in accordance with Section 5 of these regulations.

14.11 Procedures to Obtain Inactive Status.

(a) A permittee may not cease mining and reclamation operations for a period of thirty (30) days or more unless the Commissioner finds in writing that all the following requirements have been fully satisfied:

(1) The site is in full compliance with all standards of the program and permit, including but not limited to contemporaneous reclamation, no outstanding violations or penalties exist, and adequate pictorial evidence of site conditions has been placed in the file;

(2) Where the permit involves the extraction of coal, significant coal reserves for the mine remain;

(3) All disturbed acreage is bonded in accordance with Section 11 of the Act and Subsection 12 of these regulations;

(4) All required and necessary environmental monitoring and water treatment activities will continue on the mine site, and adequate provisions for other required and necessary maintenance work for the time period for which the application to cease operations has been made;

(5) A finding based on a detailed showing by the permittee that the cessation is necessary because of temporary market conditions which are likely to change in the period for which the temporarily inactive status is sought;

(6) A color coded mine/progress map accurately depicting the extent and location of all disturbed area, the remaining undisturbed area, and the remaining coal reserves, if any, on the permit at the time of the request. The mine/progress map shall contain a legend which lists the respective acreages and/or tonnages for each of the above-described categories; and

(7) Each request for inactive status shall be submitted on forms prescribed by the Commissioner and shall contain a sworn statement as follows: "The information contained in this application is true and correct to the best of my knowledge and belief." Such statement shall be signed by an accountable official of the applicant and shall be notarized.

(b) The Commissioner may grant inactive status for a period of up to one a (1) year if he determines that all requirements of paragraph (a) are met.

(c) The Commissioner shall within five (5) days of receipt of a request for inactive status, post the application and supporting documentation in an appropriate public office in the area of the permit, and shall notify any persons who have requested notification of a request for inactive status on the relevant permit, that a request has been received. The Commissioner shall provide for public comment and an opportunity for an informal conference. If a request for an informal conference is received within thirty (30) days of the Department's receipt of the request, the Commissioner shall schedule the conference in the area of the permit.

(d) Within thirty (30) days preceding the expiration of the initial time period granted for inactive status, the permittee may request an extension of the approved inactive period, and at that time must submit current information meeting the requirements of paragraph (a). The Commissioner shall make the same findings and provide for the same public review process before granting a request for extension. In no event may the total time granted for inactive status for any given surface coal extraction permit be in excess of three (3) years, provided, That further extensions may be granted on the basis of a showing by the permittee that such extension is necessary by reason of:

(1) Litigation precluding reactivation of the site;

(2) Labor strikes; or

(3) Substantial equipment necessary for extraction, e.g. draglines, shovels, etc., remain on the site and are being maintained in working order.

(e) The three (3) year limitation on inactive status for surface mines shall not apply to preparation plants or load-out facilities if associated with a surface coal extraction permit.

(f) The provisions set forth in this subsection shall be applicable to all surface mining and reclamation operations which currently have approved inactive status on the effective date of these regulations.

14.12 Variance From Approximate Original Contour Requirements.

(a) Procedures to Obtain a Variance. The Commissioner may

grant a variance from the requirements for restoring the mined land in steep slope areas to approximate original contour under the following terms and conditions:

(1) The permit area is located on steep slopes as defined in paragraph (a) of Subsection 14.8 of these regulations;

(2) The alternative postmining land use requirements of Subsection 7.3 of these regulations are met;

(3) All other applicable requirements of the Act and these regulations, except for those relating to approximate original contour, are met;

(4) All highwalls are completely backfilled in a manner which results in a static safety factor of 1.3;

(5) Only spoil not necessary to achieve the postmining land use may be removed from the mine bench;

(6) The watershed of the permit and adjacent area will be improved by:

(A) Reducing environmental impacts or flood hazards; and

(B) Controlling environmental impacts from increased seasonal flow volumes.

(7) Appropriate Federal, State and local government agencies have an opportunity to review and comment on the proposed postmining land use to determine that the potential use is shown to constitute an equal or better economic or public use;

(8) The proposed use is designed and certified by a qualified registered professional engineer in conformance with professional standards established to assure the stability, drainage, and configuration necessary for the intended use of the site; and

(9) The surface land owner(s) of the permit area has requested in writing that a variance be granted to achieve the approved alternative postmining land use.

14.13 MSHA Approval. No mining shall occur within five hundred (500) feet of an underground mine not totally abandoned without approval by the Federal Mine Safety and Health Administration.

14.14 Disposal of Excess Spoil.

(a) General. Spoil not required to achieve the approximate original contour shall be transported to and placed on designated disposal sites within the permit area. All excess spoil shall be placed in a controlled manner so as to minimize the adverse effects of leachate and surface water runoff from the fill on surface and groundwater. Coal processing wastes and underground development waste shall not be placed in such fills unless the waste is placed in accordance with Section 22 of these regulations and contains no acid producing or toxic forming materials. Any excess spoil disposal in an underground mine shall be done in accordance with a plan approved by the Mine Safety and Health Administration.

(b) Location. Excess spoil not required to achieve the approximate original contour on the permit areas may be deposited in fills outside the permit area if the following conditions are met:

(1) The fill is located on another permit area; or

(2) The fill is located on an abandoned mine land project conducted under the Abandoned Mine Land Program where:

(A) A reclamation contract is in effect;

(B) The fill will result in improved environmental, aesthetic, or safety conditions; and

(C) The fill is designed and constructed in accordance with the Act and these regulations.

(c) Certification - Inspections and Reporting. Certification of all excess spoil fills shall be required as follows:

(1) The fill and appurtenant structures shall be designed in accordance with the Handbook or other recognized professional design standards, which meet the requirements of this section, and certified by a registered professional engineer experienced in the design of earth and rock fill embankments;

(2) During construction, the fill shall be inspected quarterly for stability by a registered professional engineer experienced in the construction of earth or rock fills or other qualified professional specialist working under the direction of a professional engineer experienced in the construction of earth or rock fills. Regular inspections are also required during

placement and compaction of fill materials and during critical construction periods such as foundation preparation, underdrain placement, installation of surface drainage systems, and construction of rock toe buttresses. Within two (2) weeks following completing of the inspections, a report certified by the registered professional engineer shall be submitted to the Commissioner. The certified report shall contain a statement that the fill is being constructed and maintained as designed in accordance with the approval plan and these regulations. The report will also note any instances of apparent instability, structural weaknesses, and other hazards. The report on the drainage system and protective filters shall include color photographs taken during and after construction, but before the underdrains are covered with excess spoil. Color photographs shall be of sufficient size and number to provide a relative scale and to clearly identify the site. If the underdrains are constructed in phases, each phase must be certified separately. If excess durable rock spoil is placed such that the underdrain system is constructed simultaneously with excess spoil placement by the natural segregation of dumped materials, color photographs of the underdrains must be taken as they are formed. All color photographs shall be of adequate size and number to provide a relative scale and to clearly identify the site. A copy of the certified report shall be maintained at the mine site; and

(3) After total completion of the fill, a certification form shall be completed and submitted to the Commissioner by the registered professional engineer overseeing construction of the fill.

(d) Disposal of Excess Spoil on Existing Benches. Spoil material not required to return the area to the approximate original contour may be placed on an existing bench if the following conditions are met:

(1) Foundation investigations and laboratory analysis of foundation materials which include the effects of underground workings below the solid bench, shall be performed where required by the Commissioner. Based on information obtained from such investigations and analysis, the Commissioner may require modification of design requirements from the spill. Fills which are proposed on pre-existing benches where the slope of the solid bench exceeds ten percent (10%) toward the outslope shall meet the design requirements of paragraph (f), Subsection 14.14, of this section.

(2) All vegetation and organic material shall be removed from the disposal area prior to placement of excess spoil. All topsoil shall be removed and redistributed or

stockpiled in accordance with Subsection 14.3 of this section. All excess spoil shall be transported and placed on the solid portion of the bench in a controlled manner in horizontal lifts not exceeding four (4) feet in thickness. The spoil must be compacted or otherwise mechanically stabilized to achieve a static safety factor of 1.3. The area shall be backfilled and graded to achieve the most moderate slope possible which does not exceed the angle of repose. The final graded configuration shall be such that the surface and subsurface drainage is compatible with the natural surroundings and the approved postmining land use. Terraces may be constructed on the outslope if required for stability, control of erosion, or to conserve soil moisture. The grade of the outslopes between terraces shall not be steeper than two (2) horizontal to one (1) vertical (50 percent).

Upon a demonstration by the operator and certification by a registered professional engineer that alternative designs will achieve equivalent stability and meet all applicable requirements of the Act, these regulations, and the terms and conditions of the permit, the Commissioner may approve such alternative designs.

(3) No permanent impoundments are allowed on the completed fill. Small depressions may be allowed if they are needed to retain moisture, minimize erosion, create and enhance wildlife habitat, or assist revegetation; and if they are not incompatible with the stability of the fill.

(4) Excess spoil that is acid- or toxic-forming or combustible shall be adequately covered with nonacid, nontoxic and noncombustible material, or treated, to control the impact on surface and ground water in accordance with Subsection 14.6 and 14.7 of this section, to prevent sustained combustion, and to minimize adverse effects on plant growth and the approved postmining land use.

(5) If the disposal area contains springs, natural or manmade water courses, or wet weather seeps, the fill design shall include diversions and underdrains as necessary to control erosion, prevent water infiltration into the fill, and ensure stability. Diversions shall comply with the requirements of Subsection 5.3 and Subsection 14.4 of these regulations.

(6) Underdrains shall consist of durable rock or pipe, be designed and constructed using current, prudent engineering practices and meet any design criteria established by the Act, these regulations, and the terms and conditions of the permit.

(7) Slope protection shall be provided to minimize

surface erosion at the site. All disturbed areas, including diversion channels that are not riprapped or otherwise protected, shall be revegetated upon completion of construction.

(8) The existing highwall shall be eliminated to the maximum extent technically practicable.

(9) Disposal of excess spoil from an upper actively mined bench to a lower pre-existing bench by means of gravity transport may be approved by the Commissioner provided that:

(A) The gravity transport courses are determined on a site-specific basis by the operator as part of the permit application and approved by the Commissioner to minimize hazards to health and safety and to ensure that damage will be minimized between the benches, outside the set course, and downslope of the lower bench should excess spoil accidentally move;

(B) All gravity transported excess spoil, including that excess spoil immediately below the gravity transport courses and any pre-existing spoil that is disturbed, is rehandled and placed in horizontal lifts in a controlled manner, concurrently compacted as necessary to ensure mass stability and to prevent mass movement, and graded to allow surface and subsurface drainage to be compatible with the natural surroundings and to ensure a minimum long-term static safety factor of 1.3. Excess spoil on the bench prior to the current mining operation that is not disturbed need not be rehandled except where necessary to ensure stability of the fill;

(C) A safety berm is constructed on the solid portion of the lower bench prior to gravity transport of the excess spoil. Where there is insufficient material on the lower bench to construct a safety berm, only that amount of excess spoil necessary for the construction of the berm may be gravity transported to the lower bench prior to construction of the berm; and

(D) Excess spoil shall not be allowed on the downslope below the upper bench except on designated gravity transport courses properly prepared in accordance with Subsection 14.3 of this section. Upon completion of the fill, no excess spoil shall be allowed to remain on the designated gravity transport course between the two benches and each transport course shall be reclaimed in accordance with the requirements of the Act, these regulations, and the approved permit.

(e) Valley Fills. Where the excess spoil disposal site is located in a valley, the following criteria shall be met:

(1) If the fill area contains springs, natural water courses, or wet weather seeps, lateral underdrains shall be constructed from the wet areas to the rock core in such a manner that infiltration and entrapment of water within the fill will be prevented. Underdrains shall consist of durable rock or pipe, be designed and constructed using current, prudent engineering practices and meet any design criteria established by the Commissioner. The underdrain system shall be designed to carry the anticipated seepage of water due to rainfall away from the excess spoil fill and from seeps and springs in the foundation of the disposal area and shall be protected from piping and contamination by an adequate filter. Rock underdrains shall be constructed of durable, nonacid, nontoxic-forming rock (e.g., natural sand and gravel, sandstone, limestone, or other durable rock) that does not slake in water or degrade to soil material, and which is free of coal, clay or other nondurable material. Perforated pipe underdrains shall be corrosion resistant and shall have characteristics consistent with the long-term life of the fill.

(2) The foundation of the fill shall be designed to assure a long-term static safety factor of 1.5 or greater.

(3) The outer slope or face of the valley fill shall be no steeper than two (2) horizontal to one (1) vertical with terraces constructed at a maximum of each fifty (50) feet vertical rise above the toe of the fill. The bench width of each terrace shall be no less than twenty (20) feet with a three (3) to five (5) percent slope toward the face and a one (1) percent slope toward the rock core located near the center of the valley fill.

(4) A rock core chimney drain may be utilized for fills that will come to the level of the ridge line with no natural drainage area above the fill. A rock core chimney drain may also be used for fills that do not come to the ridge line provided that the fill does not contain more than two hundred and fifty thousand (250,000) cubic yards of material unless located in an area where the valley floor is always above the local water table.

(5) Unless an alternative design is approved, each valley fill shall have a central rock core or "chimney drain" which lies in the apex of the valley and extends throughout the depth and length of the fill. The rock core shall be designed and constructed in accordance with the following criteria:

(A) The rock core shall consist of durable non-acid producing or toxic forming rock of a minimum average

diameter of twelve (12) inches with no more than ten (10) percent of the core material consisting of fines, and which is free of coal, clay or other non-durable material.

(B) The minimum width of the rock core shall be sixteen feet, and shall be protected by a filter system to ensure proper long-term functioning which is designed and constructed using current, prudent engineering practices. If no filter is designed for the underdrains, a rock core of sufficient capacity shall be provided to allow for partial plugging of the drain and/or rock core.

(C) The core shall be constructed progressively and concurrently with each lift of the valley fill.

(D) The finished surface of the rock core shall form a trapezoidal channel capable of permitting the peak runoff of a one-hundred (100) year twenty-four (24) hour precipitation event.

(6) Where valley fills are designed for construction without a rock core, an underdrain shall be used. The underdrain shall be designed and constructed in accordance with standards set forth in Subparagraph (1) of this paragraph. Surface runoff from the top of the fill shall be carried through a surface diversion system capable of handling the peak runoff from a one-hundred (100) year twenty-four (24) hour precipitation event.

(7) Foundation investigations and laboratory analysis of foundation materials which include the effects of underground workings, shall be performed in accordance with the plans, design specifications, and standards set forth in the approved permit as required by the Commissioner. Based on information obtained from such investigations and analysis, the Commissioner may require modification of the design requirements of the fill.

(8) Areas upon which a valley fill is to be constructed shall first be progressively cleared of all trees, brush, shrubs, and other organic material that may affect stability. This material shall be disposed of outside the fill area. No more than three (3) acres, excluding roadways, shall be cleared until the first lift of the valley fill is completed.

(9) The valley fill shall be constructed in lifts not exceeding four (4) feet in thickness beginning at the toe of the fill. Where fills are designed and constructed using lifts exceeding four (4) feet in thickness, the design plans and specifications shall specify the thickness of the lifts. The operator shall demonstrate how and the engineer shall certify

that such thickness will insure stability and meet all safety and environmental protection standards.

(10) During and after construction, the top of the fill shall be graded to drain to the head of the fill on a slope not greater than three (3) percent. A drainage pocket shall be maintained at the head of the fill at all times to intercept and direct surface runoff to the rock core. In no case shall this pocket have a potential for impounding more than ten thousand (10,000) cubic feet of water. No other impoundments may be constructed on the fill.

(11) Where the toe of the spoil rests on a downslope which is in excess of thirty-six (36) percent, keyway cuts or rock toe buttresses shall be constructed of sufficient size so as to ensure stability of the fill as determined by stability analysis.

(f) Side Hill Fills.

(1) Side hill fills shall be constructed on the most stable and moderate slopes available with the natural downslope at the toe of the fill not to exceed thirty-six (36) percent. Where possible, the toe of the fill shall rest on or above a natural terrace, bench or berm in a manner which will provide additional stability and prevent mass movement.

(2) Each design shall be based on the results of a geotechnical investigation of the construction site. The investigation shall include such factors as geologic conditions, soil characteristics, depth of bedrock, springs, seeps and groundwater flow, and a description of materials to be placed in the fill. The level of detail required for such geotechnical investigation shall be determined by a registered professional engineer.

(3) The design and construction of all side hill fills must be certified by a registered professional engineer.

(4) If the fill area contains springs, natural water courses or wet weather seeps, lateral drains shall be constructed from the wet areas in the same manner as set forth in paragraph (i) of Subsection 14.14 of this section.

(5) All areas upon which the fill is to be constructed shall be progressively cleared of all trees, brush, shrubs, and other organic material which may affect the stability. This material shall be disposed of outside the fill area.

(6) The fill shall be constructed in concurrently

compacted lifts not exceeding four (4) feet in thickness.

(7) The fill shall be designed and constructed to assure a static safety factor of at least 1.5.

(8) The outer slope or face of the fill shall be no steeper than two (2) horizontal to one (1) vertical. Terraces shall be constructed on the face of the fill at each fifty (50) feet vertical rise above the toe of the fill. The terraces shall be a minimum of twenty (20) feet wide and shall slope three (3) to five (5) percent toward the face with a lateral slope of one (1) percent to a discharge channel capable of passing a one hundred (100) year twenty-four (24) hour precipitation event.

(9) Surface water runoff from the fill and from surrounding areas shall be diverted away from the fill and into stabilized channels designed to pass safely the runoff from a one-hundred (100) year, twenty-four (24) hour precipitation event.

(10) No impoundments may be constructed on fill.

(g) Durable Rock Fills.

(1) The Commissioner may approve the design, construction, and use of a single lift fill consisting of at least eighty (80) percent durable rock if it can be determined, based on information provided by the operator, that the following conditions exist:

(A) Examination of core borings and the geologic column show that the overburden consists of durable sandstone, limestone, or other durable material in sufficient thickness and amounts to generate spoil material that is eighty (80) percent or greater durable rock. Where the fill will contain non-cemented clay shale, clay spoil, or other nondurable material, such material must be mixed with the durable rock in a controlled manner such that no more than twenty (20) percent of the fill volume is not durable rock. The Commissioner may at any time during construction, require approved tests performed by a Registered Professional Engineer to determine the ratio of durable versus nondurable material in the fill.

(B) The durable material shall not consist of acid-producing or toxic-forming material and will not slake in water.

(C) The toe of the fill will rest on natural slopes no steeper than twenty (20) percent.

(2) The fill shall be designed based on the results of a geotechnical investigation of the construction site. The investigation shall include such factors as geologic conditions, soil characteristics, depth to bedrock, location of springs, seeps and groundwater flow, potential effects of subsidence and a description of materials to be placed in rock cores and drains. The level of detail required for such geotechnical investigation shall be determined by a registered professional engineer.

(3) The design and construction of all durable rock fills must be certified by a registered professional engineer experienced in design and construction of earth and rock embankments.

(4) The foundation of the fill shall be designed to assure a long-term static safety factor of 1.5 or greater, and meet an earthquake safety factor of 1.1.

(5) The outer slope or face of the fill shall be no steeper than two (2) horizontal or one (1) vertical (2:1). Terraces shall be constructed on the fill at a maximum of every fifty (50) feet in vertical rise above the toe of the fill. The terraces shall be no less than twenty (20) feet in width and slope toward the fill at a three (3) to five (5) percent grade and slope laterally at one (1) percent grade to discharge channels capable of passing the peak runoff for a one-hundred (100) year twenty-four (24) hour precipitation event.

(6) All areas upon which the valley fill is to be placed shall first be progressively cleared of all trees, brush, shrubs and other organic material which may affect the stability. This material shall be disposed of outside the fill area.

(7) If the fill area contains springs, natural water courses or wet weather seeps, lateral drains shall be constructed in the same manner as set forth in paragraph (e) of Subsection 14.14 of this section.

(8) Drainage channels capable of passing the peak discharge from a one-hundred (100) year, twenty-four (24) hour, precipitation event shall be constructed to direct water around the fill in such a manner as to prevent zones of saturation within the fill. Drainage from above the fill shall not be directed through the fill.

(9) The grade of the top surface of the completed fill shall not exceed five (5) percent and shall slope toward the drainage channel.

14.15 Backfilling and Regrading.

(a) General. Spoil returned to the mined-out area shall be backfilled and graded to the approximate original contour with all highwalls eliminated. Coal processing waste shall not be placed in the backfill unless the design requirements of Section 22 of these regulations are met. The final graded slope shall not exceed either the angle or repose or such other lesser slope as is necessary to achieve a minimum long-term static safety factor of 1.3 and to prevent slides.

(b) Time Limits. Grading, backfilling, and water management practices shall be kept current as follows:

(1) Where the operation consists of contour mining only, (no augering) grading and backfilling shall follow the mineral removal by a period not to exceed sixty (60) days or a distance one thousand five hundred (1,500) linear feet.

(2) Where the operation consists of contour mining and augering, the augering shall follow the mining by a period not to exceed sixty (60) days, and the grading and backfilling shall follow the augering by a period not more than thirty (30) days or a distance of one thousand five hundred (1,500) linear feet, but in no event shall more than three thousand (3,000) linear feet of pit be exposed at any time.

(3) Where the operation consists of augering, only the grading and backfilling shall follow the augering by a period not to exceed thirty (30) days or a distance of one thousand (1,000) linear feet.

(4) Should the operation consist of area mining only, the backfilling and grading shall not be more than two spoil ridges behind the pit being worked. The maximum linear feet of open pit shall not exceed three thousand (3,000) feet at any time.

(5) When the operations remove the entire coal seams running through the upper fraction of a mountain, hill, or ridge, backfilling and regrading shall follow the same guidelines established for area and contour mining. The outer perimeter and drainage area shall be stabilized, regraded, seeded, and mulched immediately upon construction.

(c) Revegetation. Revegetation shall be kept current by establishing a temporary or permanent vegetative cover on regraded areas by the end of the first growing season and a permanent cover by the end of the second growing season.

(d) Extensions. The time period or the distance set forth in this subsection may be reasonably extended where the permittee affirmatively demonstrates that site conditions, including legitimate operational requirements, or weather changes make adherence to these guidelines impractical. A written waiver must be obtained from the Commissioner for such extension. The Commissioner will by directive establish standards for determining what site conditions or weather changes will justify an extension.

(e) Reclamation Equipment. Operable regrading equipment shall be kept on the permit area until satisfactory completion of grading unless otherwise approved.

(f) Exemptions. Backfilling and grading may be postponed on a permit where surface mining operations and underground mining operations are proposed on the same area; provided that all requirements set forth in Section 13 of the Act are met.

(g) Grading Outer Spoil. All outer spoil shall be graded so as to blend into the adjoining undisturbed lands.

(h) Erosion Control. All disturbed areas shall be regraded and stabilized in a manner which effectively controls erosion.

(i) Backfilling and Grading. Previously mined areas.

(1) Remining operations on previously mined areas that contain a pre-existing highwall shall comply with the performance standards of the Act and these regulations, except as provided in this paragraph.

(2) The requirement of highwall elimination shall not apply to remining operations where the operator can demonstrate in writing that the volume of all reasonably available spoil located in the vicinity of the remining operation is insufficient to completely backfill the reaffected or enlarged highwall. The highwall shall be reduced to the maximum extent technically practical. For purposes of this paragraph, the term reasonably available spoil means spoil and suitable coal mine waste material generated by the remining operation or other spoil or suitable coal mine waste material located in the permit area that is accessible and available for use and that when rehandled will not cause a hazard to public safety or significant damage to the environment.

(3) The backfill shall be graded to a slope which is compatible with the approved postmining land use and shall provide adequate drainage and long-term stability.

(4) Spoil placed on the outslope during previous mining operations shall not be disturbed if such disturbance will cause instability of the remining spoil or otherwise increase the hazard to the public health and safety or to the environment.

(5) Where the applicant proposes to use selected overburden materials as a supplement or substitute for topsoil, the application shall provide results of analyses, trials, and tests indicating a more suitable soil medium.

(6) Any highwall remnant left after remining must be demonstrated by the operator to be stable and not pose a hazard to the public health and safety or the environment.

(7) All revegetation shall be carried out in a manner that encourages a prompt vegetative cover which, at a minimum, shall be adequate to control erosion and is consistent with the reclamation plan. The requirements for revegetation set forth in Section 9 of these regulations may be modified on a case-by-case basis, by the Commissioner, except that at a minimum the vegetative ground cover shall be no less than that which existed before remining and shall be adequate to control erosion. Determination of premining ground cover success and productivity shall be made using sampling techniques described in the Handbook.

(8) A coal remining operation which began after February 4, 1987, may qualify for the water quality exemptions set forth in subsection (p), Section 301 of the federal Clean Water Act, as amended.

(9) The Commissioner may issue a permit pursuant to this paragraph if the applicant has demonstrated to the satisfaction of the Commissioner that the coal remining operation will result in the potential for improved water quality from the remining operation but in no event shall such a permit allow the pH level of any discharge, and in no event shall such a permit allow the discharges of iron and manganese, to exceed the levels being discharged from the remined area before the coal remining operation begins. During remining operations, no discharge from, or affected by, the operation shall exceed water quality standards in the receiving stream established under Section 303 of the federal Clean Water Act.

(j) Regraded Drainage Control. Drainage control on regraded areas shall prevent excessive erosion or additional

contributions of suspended solids to the receiving stream, ensure safety and conserve soil moisture. Drainage control measures may include, but are not limited to, constructed drainways, flumes and riprap channels, tracking in, small depressions or other devices.

38-2-15 Performance Standards Applicable to Underground Mining Operations

15.1 Site Development.

(a) Time Schedule for Site Excavation. The time schedule for site excavation shall be consistent with the approved preplan and shall provide for minimum exposure of disturbed area over a given time frame in a manner consistent with environmentally sound procedures. Regrading and stabilization of all areas disturbed in the development of the mine site shall proceed as contemporaneously as practicable. In any event, all required drainage system components and roads necessary for site construction shall be installed in accordance with the approved preplan prior to any disturbance for site development.

(b) Temporary Storage of Overburden to be Used for Backfilling and Regrading. All material to be used in final regrading must be placed within the permit area as specified in the approved plan in a manner which will insure mass stability in accordance with these regulations and revegetated to prevent erosion.

(c) Temporary Revegetation. All topsoil and spoil storage areas which will be in place for more than six (6) months but less than one (1) year shall at a minimum be seeded and mulched so as to establish a satisfactory stand of temporary vegetative cover. This seeding and mulching must be done during the next consecutive seeding season.

(d) Permanent Revegetation. All topsoil, spoil storage and other disturbed areas which will be in place for longer than one (1) year shall be seeded and/or planted and mulched during the first seeding season following disturbance so as to establish a satisfactory permanent vegetative cover. Trees shall be required only on those areas that:

(1) Will not be redisturbed by future reclamation activities; or

(2) Are necessary in order to meet the approved postmining land use.

(e) Mine Site Organization and Aesthetics. Indiscriminate dumping or discarding of materials, litter, junked equipment, containers, or other noncoal wastes shall be prohibited. These materials shall be properly placed in areas specifically

designated for their storage or disposal or removed from the area. Regarding and revegetation of the disposal areas shall be planned and carried out where possible in a manner which results in the covering or screening of offensive and unsightly areas.

15.2 Backfilling and Regrading.

(a) General. Spoil returned to the mined-out area shall be backfilled and graded to approximate original contour with all highwalls eliminated and a postmining slope that does not exceed either the angle or repose or such lesser slope as is necessary to achieve a minimum long-term static safety factor of 1.3 and prevent slides.

(b) Time Schedule for Regrading and Backfilling. Regrading and backfilling will be completed as contemporaneously as practicable with mining operations and as reflected on the approved mining and reclamation plan; provided, however, that final backfilling and regrading shall be initiated within one hundred eighty (180) days of completion of underground operations. Should particular site conditions or weather make adherence to these guidelines impractical, the period of time required to be current may be reasonably extended.

(c) Revegetation. Revegetation shall be kept current by establishing a temporary or permanent vegetative cover on regraded areas by the end of the first growing season and a permanent vegetative cover by the end of the second growing season. Standards and procedures for establishing a satisfactory vegetative cover and guidelines for species selection land application rates are found in Section 9 of these regulations.

(d) Variances From Highwall Elimination. All underground mining operations which were in existence and which created highwalls prior to August 3, 1977, and which highwalls were not reaffected, may not be required to eliminate the highwall if the operator can demonstrate that it is technologically infeasible, by virtue of the fact that there is an insufficient amount of spoil material within the proximity of the mine site. The operator shall utilize all available material to eliminate as much of the highwall as possible or to achieve highwall elimination. At a minimum, the operator shall be required to seal all underground openings and to cover the exposed coal seam with a minimum of four (4) feet of nonacid producing materials. This paragraph does not constitute a variance from the requirement for highwall elimination except on previously mined

areas (prior to May 3, 1978) which would involve exposing one area of highwall completely eliminated during the installation of the deep mine in order to eliminate another area of highwall.

(e) All underground mining operations which were in existence and which created a highwall prior to August 3, 1977, and which were reaffected by those operations during the remaining lives of their operations shall comply with the provisions of paragraph (i), Subsection 14.15 of these regulations.

(f) Rehandling of Excess Spoil Piles. Rehandling of settled and revegetated fills to achieve approximate original contour at the conclusion of underground mining activities shall not be required if the following conditions are met:

(1) The fill is not located so as to be detrimental to the environment or to the health and safety of the public and is compatible with the approved post mining land use;

(2) Stability of the fill shall be demonstrated through standard geotechnical analysis to be consistent with the backfilling and grading requirements; and maintain a static safety factor of 1.3 on solid benches and 1.5 on slopes;

(3) Surface runoff around, through, and from the fill is controlled by drainage structures (diversions, rock cores, etc.), which are designed and constructed in accordance with the approved plans and design specifications;

(4) Any underground development wastes used in the fill are non-toxic and non-acid producing; and

(5) The surface of the fill has been vegetated in accordance with Section 9 of these regulations.

15.3 In situ processing: Performance standards.

(a) General. Any person who conducts in situ processing activities shall comply with the applicable performance standards of the Act, these rules and regulations, and the terms and conditions of a permit.

(b) Protection of Hydrologic Balance. In situ processing activities shall be planned and conducted to minimize disturbance to the prevailing hydrologic balance by:

(1) Avoiding discharge of fluids into holes or wells, other than as approved by the Commissioner;

(2) Injecting process recovery fluids only into geologic zones or intervals approved as production zones by the Commissioner;

(3) Avoiding annular injection between the wall of the drill hole and the casing; and

(4) Preventing discharge of process fluid into surface waters.

(c) Control of Toxics. Each person who conducts in situ processing activities shall submit for approval as part of the application for a permit a plan that ensures that all acid-forming, toxic-forming, or radioactive gases, solids, or liquids constituting a fire, health, safety, or environmental hazard and caused by the mining and recovery process are promptly treated, confined, or disposed of, in a manner that prevents contamination of ground and surface waters, damage to fish, wildlife and related environmental values, and threats to the public health and safety.

(d) Process Recovery Fluids. Each person who conducts in situ processing activities shall prevent flow of the process recovery fluid:

(1) Horizontally beyond the affected area identified in the permit; and

(2) Vertically into overlying or underlying aquifers.

(e) Restoration of Groundwater Quality. Each person who conducts in situ processing activities shall restore the quality of affected ground water in the permit area and adjacent area, including ground water above and below the production zone, to the approximate premining levels or better, to ensure that the potential for use of the ground water is not diminished.

15.4 In situ processing: Monitoring.

(a) Monitoring Requirements. Each person who conducts in situ processing activities shall monitor the quality and quantity of surface and ground water and the subsurface flow and storage characteristics, in a manner approved by the Commissioner, to

measure changes in the quantity and quality of water in surface and ground water systems in the permit area and in adjacent areas.

(b) Water Quality Standards. Air and water quality monitoring shall be conducted in accordance with monitoring programs approved by the Commissioner as necessary according to appropriate Federal and State air and water quality standards.

38-2-16. Subsidence Control.

16.1 Public Notice.

(a) Notification Requirements. A notification shall be distributed by mail to all owners of property and residents within the area above the underground workings. Each such person shall be notified by certified mail (return receipt requested) at least six (6) months prior to mining, or other time period if approved by the Commissioner, beneath his or her property or residence. The return receipt shall be kept at the mine office. The notification shall contain, at a minimum:

(1) Company name, permit number and address;

(2) Identification of specific areas in which mining will take place; and

(3) Dates of mining activities that could cause subsidence and affect specific structures.

16.2 Surface Owner Protection.

(a) General. Each person who conducts underground mining activities shall either adopt measures consistent with known technology which prevent subsidence from causing material damage to the extent technologically and economically feasible, maximize mine stability, and maintain the value and reasonably foreseeable use of surface lands; or adopt mining technology which provides for planned subsidence in a predictable and controlled manner. Nothing in this part shall be construed to prohibit the standard method of room-and-pillar mining.

(b) Plan Requirements. The operator shall comply with all provisions of the approved subsidence control plan prepared pursuant to Subsection 3.10 of these regulations.

(c) Performance Standards. The operator shall:

(1) Correct any material damage resulting from subsidence caused to surface lands, to the extent technologically and economically feasible, by restoring the land to a condition capable of maintaining the value and reasonably foreseeable uses which it was capable of supporting before subsidence; and

(2) To the extent required under applicable provisions of State law, either correct material damage resulting from subsidence caused to any structures or facilities by repairing

the damage or compensate the owner of such structures or facilities in the full amount of the diminution in value resulting from the subsidence. Repair of damage includes rehabilitation, restoration, or replacement of damaged structures or facilities. Compensation may be accomplished by the purchase prior to mining of a non-cancelable premium-prepaid insurance policy.

(d) Protection of Public Buildings and Dams. Underground mining activities shall not be conducted beneath or adjacent to public buildings and facilities, churches, schools, hospitals, or impoundments with a storage capacity of, or bodies of water containing, twenty (20) acre-feet or more, unless the Commissioner finds that mining will not cause material damage or reduce the foreseeable use. The Commissioner may, if necessary to minimize the potential for damage, limit the percent of coal extraction underneath or adjacent to such features or facilities. If subsidence causes material damage to such features or facilities, the Commissioner may suspend mining under or adjacent to such features or facilities until the subsidence control plan is modified.

(e) Progress Maps. Updated maps of underground workings as required in Section 1, Article 2, Chapter 22A of the Act shall be made available to the Commissioner for determining compliance with the subsidence control plans required in Subsection 3.10 of these regulations, and projected location of potential subsidence.

38-2-17. Small Operator Assistance Program.

17.1 General. This section comprises the Small Operator Assistance Program and governs the procedures for providing assistance to qualified small operators for the determination of the probable hydrologic consequences of mining and reclamation and the statement of physical and chemical analyses of test borings or core samples.

Data collected under this program shall be made available to all interested persons, except information related to the chemical and physical properties of coal; provided, that information which pertains only to the analysis of the chemical and physical properties of coal, except information regarding such mineral or elemental content which is potentially toxic to the environment, shall be kept confidential.

17.2 Program Services. Where a qualified small operator requests assistance, the Department of Energy shall select and pay a qualified laboratory to determine the probable hydrologic consequences of mining and reclamation operations in the permit area and potentially impacted offsite areas. The probable hydrologic consequences shall be in accordance with Section 9(a), (7), (8), (10), (11), (12), (13), and (15) through (19) of the Act.

17.3 Eligibility for Assistance. Applicants are eligible for assistance if they:

(a) Intend to apply for a permit pursuant to the Act; and

(b) Establish that their probable total actual and attributed coal production from all locations during any consecutive twelve (12) month period either during the term of the permit or during the first five (5) years after issuance of the permit, whichever period is shorter, will not exceed one hundred thousand (100,000) tons. Production from the following operations shall be attributed to the applicant:

(1) The pro rata share, based upon percentage of ownership of applicant, of coal produced by operations in which the applicant owns more than a five percent (5%) interest;

(2) The pro rata share, based upon percentage of ownership of applicant, of coal produced in other operations by persons who own more than five percent (5%) of the applicant's operation;

(3) The pro rata share, based upon percentage of ownership by the applicant, of coal produced by operations which are owned by members of the applicant's family and relatives unless there is no direct or indirect business relationship between or among them; and

(4) All coal produced by operations owned by persons who directly or indirectly control the applicant by reason by direction of the management.

(c) Persons who are prohibited from receiving a permit for any reason, and persons who organize or reorganize a company for the sole purpose of obtaining assistance from SOAP, shall be deemed ineligible.

17.4 Request for Assistance. Each applicant requesting assistance shall complete an application on forms prescribed by the Commissioner. The application shall include the following items:

(a) A statement of intent to file a permit application;

(b) The names, addresses, and phone numbers of the applicant and the operator, if different from this applicant;

(c) Location of the operation (County, Magisterial District and Nearest Post Office);

(d) Name of Tract;

(e) The method of surface coal mining operations proposed;

(f) The geological title, depth, and thickness of coal seam to be mined and a general statement as to the calculated coal reserves in the proposed permit area, and the method for calculating such reserves;

(g) An indication of whether or not the operator or any person, partnership, or corporation associated with the operator has ever been denied assistance. If yes, attach a full explanation of the circumstances and reasons for denial;

(h) A schedule of the estimated total production of coal from the proposed permit area and all other locations from which production is attributed to the applicant under subsection 17.3 of this section. The schedule shall include the following:

(1) Name of company;

(2) What state this permit was issued in and the permit number;

(3) Mining Enforcement and Safety Administration Identification Number;

(4) Actual production of coal from the preceding year; and

(5) Estimated future yearly production.

(i) The names and addresses of owners of record of the property, surface and mineral, to be mined, and owners of record of the property contiguous to the proposed permit area;

(j) Copies of documents showing that the applicant has a legal right to enter and conduct operations on lands to be covered by this permit;

(k) The number of acres of land to be affected;

(l) The anticipated starting and termination dates of mining operations;

(m) The name, title and address of every officer, partner, resident agent, director or person performing a function similar to a director, together with the names and addresses of any persons owning of record ten percent (10%) or more of any class of voting stock of the applicant;

(n) A U.S. Geological Survey topographic map preparedd in accordance with Subsection 3.4 of these regulations and Section 9, (a)(12), 13 (E), 13 (F), and 13 (J) of the Act; and

(o) A notarized signature of a principal officer of the applicant indicating that the information contained in the application is true and correct to the best of his knowledge.

17.5 Application Approval and Notice.

(a) The applicant shall be notified if the application requesting assistance has been approved or denied, and if denied, the reasons shall be attached.

(b) If application requesting assistance has been approved, then one or more qualified laboratory will be selected to perform this work. A copy of the contract or other appropriate work order and the final report shall be provided to the applicant.

(c) The applicant shall arrange for any necessary right-of-entry for the selected laboratory's personnel to gain access to data collection and monitoring sites and shall provide written agreements of such upon request by the Commissioner.

17.6 Qualified Laboratories.

(a) General. A qualified laboratory means a designated public agency, private consulting firm or analytical laboratory approved by the Department of Energy.

(b) Basic Qualifications. To qualify for designation, the laboratory must demonstrate that it:

(1) Is staffed with experienced, professional personnel in the field of hydrology, mining engineering, aquatic biology, geology, or chemistry applicable to the work to be performed;

(2) Is capable of collecting necessary field data and samples;

(3) Has adequate space for material preparation, cleaning and sterilizing necessary equipment, stationary equipment, storage, and space to accommodate periods of peak work loads;

(4) Meets the requirements of the Occupational Safety and Health Act or the equivalent state safety and health program;

(5) Has the financial capability and business organization necessary to perform the work required;

(6) Has analytical, monitoring and measuring equipment capable of meeting the applicable standards and methods contained in the most current edition of the Standard Methods for the Examination of Water and Waste Water; Methods for Chemical Analysis of Water and Wastes; and EPA Manual 600/2-78-054 Field and Laboratory Methods Applicable to Overburden Minesoils; and

(7) Has the capability of making hydrologic field measurements and analytical laboratory determinations by acceptable hydrologic engineering or analytical methods.

(c) The qualified laboratory shall be capable of performing the determination and statement. Subcontractors may be used to provide the services required provided their use is defined in

the application for designation and approval is granted by the Department of Energy.

17.7 Liability of Operators.

(a) The applicant shall reimburse the Department of Energy for the cost of the program services performed if the applicant:

(1) Submits false information on the application;

(2) Fails to submit a surface mining permit application within one (1) year from the date of receipt of the approved probable hydrologic consequences report;

(3) Fails to mine after obtaining a surface mining permit;

(4) Has an actual and attributed annual production of coal for all locations exceeding one hundred thousand (100,000) tons during any consecutive twelve (12) month period either during the term of the permit for which assistance is provided or during the first five (5) years after issuance of the permit whichever is shorter; or

(5) Sells, transfers, or assigns the permit to another person and the transferee's total actual and attributed production exceeds the 100,000 ton annual production limit during any consecutive twelve (12) month period of the remaining term of the permit. Under this paragraph, the applicant and its successor are jointly and severally obligated to reimburse the Commissioner.

(b) The Department can waive the reimbursement obligation if it finds that the applicant at all times acted in good faith.

38-2-18. Citizen's Actions.

18.1 Notice of Citizen's Suits. A person who intends to initiate a civil action on his own behalf under section 25 of the Act shall give notice of intent in accordance with the following:

(a) Notice shall, in all cases, be given by certified mail to the Commissioner. A copy of the notice shall also be sent by first class mail to the Office of Surface Mining Field Office Director;

(b) In legal actions brought against any person, the State of West Virginia or any other governmental instrumentality, agency or agent thereof, notice shall be given by certified mail to the alleged violator, if the complaint alleges a violation of the Act or any regulation, order or permit issued under the Act;

(c) Service of notice under this section is complete upon mailing to the last known address of the person being notified;

(d) A person giving notice regarding an alleged violation shall state to the extent known:

(1) Sufficient information to identify the provision of the Act, regulation or permit allegedly violated;

(2) The act or omission alleged to constitute a violation;

(3) The name, address and telephone numbers of the person or persons responsible for the alleged violation;

(4) The date, time and location of the alleged violation(s);

(5) The name, address and telephone number of the person giving notice; and

(6) The name, address and telephone number of legal counsel, if any.

(e) A person giving notice of an alleged failure by the Commissioner, reclamation board of review, or appropriate department employee, to perform a mandatory act or duty under the Act, shall state to the extent known:

(1) The provision of the Act containing the mandatory act or duty allegedly not performed;

(2) Sufficient information to identify the omission alleged to constitute the failure to perform a mandatory act or duty under the Act;

(3) The name, address and telephone number of the person giving notice; and

(4) The name, address and telephone number of legal counsel, if any, of the person giving notice.

18.2 Citizen's Request for State Inspections.

(a) Any person may request a State inspection by furnishing to the Commissioner a signed, written statement (or an oral report followed by a signed, written statement) giving the Commissioner reason to believe that a violation exists and a phone number and address where the person can be contacted.

(b) The identity of any person supplying information to the Commissioner relating to a possible violation or imminent danger or harm shall remain confidential, if requested by that person, unless that person elects to accompany the inspector on the inspection.

(c) If an inspection is conducted as a result of information provided to the Commissioner by a person as described in paragraph (a) of Subsection 18.2. of this section, the person shall be notified as far in advance as practicable when the inspection is to occur and shall be allowed to accompany the State inspector during the inspection. Such person has a right of entry to, upon and through the coal exploration or surface coal mining and reclamation operation about which he or she supplied information, but only if he or she is in the presence of and is under the control, direction and supervision of a State inspector while on the mine property. Such right of entry does not include a right to enter buildings without consent of the person in control of the buildings or without a search warrant.

(d) Within ten (10) days of the inspection or, if there is no inspection within fifteen (15) days of receipt of the person's written statement, the Commissioner shall respond in writing as follows:

(1) If an inspection was made, a description of the enforcement action taken, which may consist of copies of the State inspection report and all notices of violation and cessation orders;

(2) If no State inspection was conducted, an explanation of the reason why;

(3) An explanation of the person's right to informal review of the action or inaction of the Commissioner; and

(4) Copies of all materials in subparts (1) and (2) of this paragraph within the time limits specified to the person alleged to be in violation, except that the name of the person shall be removed unless disclosure of the person's identity is permitted under paragraph (b) of Subsection 18.2 of this section.

(e) Any person who is or may be adversely affected by a surface coal mining operation may notify the Commissioner in writing of any alleged failure to make adequate and complete inspections as required by law and regulation. The notification shall include sufficient information to create a reasonable belief that the law and regulations regarding inspections are not being complied with and to demonstrate how the person is or may be adversely affected. The Commissioner shall, within fifteen (15) days of receipt of the notice, determine whether or not the statutes or regulations concerning inspections are being complied with and if not, shall order an inspection. The Commissioner shall furnish the complainant with a written decision of the reasons for his determination and actions, if any, he has taken.

18.3 Review of Decision Not to Inspect or Enforce.

(a) Any person who is or may be adversely affected by a surface coal mining operator may ask the Commissioner to informally review an authorized representative's decision not to inspect or take appropriate enforcement action with respect to any violation alleged by that person in a request for inspection under section 15 of the Act. The request for review shall be in writing and shall include a statement of how the person is or may be adversely affected and why the decision merits review. The Commissioner shall conduct the review within thirty (30) days of his receipt of the request and inform the person of the results.

(b) Informal review under this section shall not affect any right to formal review or to a citizen's suit.

18.4 Public Record:

(a) Availability of public records shall be in accordance with 29B-1-1 et. seq. of the Code of West Virginia. Copies of all records, reports, inspection materials or information obtained under the Act, except information in paragraph (b),

Subsection 18.2 of this section, and paragraph (c) of this subsection, shall be made available to the public at regional, field offices in the area of mining so that they are conveniently available.

(b) All records will be maintained and preserved for a period of not less than five (5) years. Relative to surface mining permits, the five year period applies after bond release.

(c) Information as to coal seams, test borings, core samplings or soil samples pertaining to the analysis of the chemical and physical properties of the coal, except information regarding mineral or element content which is potentially toxic to the environment, shall be kept confidential and shall not be made a matter of public record.

(d) Information on the nature and location of archaeological resources shall be kept confidential to the extent required by the Archaeological Resources Protection Act of 1979.

(e) Permit applications and other related materials requiring public notices shall be made immediately available in the county courthouse or other available public office approved by the Commissioner, in the county in which the proposed mining operation is located.

38-2-19 Designation of Areas Unsuitable for Mining.

19.1 Right to Petition.

(a) Any person having an interest which is or may be adversely affected, or the Commissioner, has the right to petition the to have an area designated as unsuitable for surface coal mining operations, or to have an existing designation terminated.

(b) Designation. The petitioner shall provide the following information:

(1) A U.S.G.S. topographic map on which is noted the location and size of the area covered by the petition;

(2) Allegations of facts and supporting evidence which would tend to establish that the area is unsuitable for all or certain types of surface coal mining operations;

(3) A description of how mining of the area has affected or may adversely affect people, land, air, water or other resources;

(4) The petitioner's name, notarized signature, address and telephone number; and

(5) Identification of the petitioner's interest which is or may be adversely affected.

(c) Termination of the Designation. A petitioner requesting to terminate a designation shall provide the following information:

(1). A U.S.G.S. topographic map on which is noted the location and size of the area covered by the petition;

(2) Allegations of facts with supporting evidence not contained in the record of the proceeding in which the area was designated unsuitable, which would tend to establish the statements or allegations, and which statements or allegations indicate that the designation should be terminated based on:

(A) The nature or abundance of the protected resource or condition or other basis of the designation if the designation was based on criteria found in paragraph (b), Subsection 19.7 of this section;

(B) Reclamation now being technologically and economically feasible, if the designation was based on the criteria found in paragraph (a), Subsection 19.7 of this section; or

(C) The resources or condition not being affected by surface coal mining operations, or in the case of land use plans, not being incompatible with surface coal mining operations during and after mining, if the designation was based on the criteria found in paragraph (b), Subsection 19.7 of this section.

(3) The petitioner's name, notarized signature, address and telephone number; and

(4) Identification of the petitioner's interest which is or may be adversely affected by the continuation of the designation.

19.2 Initial Processing, Record-keeping, and Notification Requirements.

(a) Within thirty (30) days of receipt of a petition, the Commissioner shall notify the petitioner by certified mail whether or not the petition is complete in accordance with paragraph (b) or (c), Subsection 19.1 of this section.

(b) The Commissioner shall determine whether any identified coal resources exist in the area covered by the petition, without requiring any showing from the petitioner. If the Commissioner finds there are not any identified coal resources in that area, it shall return the petition to the petitioner with a statement of the findings.

(c) The Commissioner may reject petitions for designations or terminations of designations which are frivolous. Each petitioner must, at a minimum, satisfy the requirements of paragraph (b) or (c), Subsection 19.1, of this section. No party shall bear any burden of proof, and each accepted petition shall be considered and acted upon by the Commissioner pursuant to the procedures of this Section.

(d) When considering a petition for an area which was previously and unsuccessfully proposed for designation, the Commissioner shall determine if the new petition presents new allegations of facts. If the petition does not contain new allegations of facts, the Commissioner shall not consider the petition and shall return the petition to the petitioner, with a

statement of its findings and a reference to the record of the previous designation proceedings where the facts were considered.

(e) If the Commissioner determines that the petition is incomplete or frivolous, he shall return the petition to the petitioner, with a written statement of the reasons for the determination and the categories of information needed to make the petition complete.

(f) The Commissioner shall notify the person who submits a petition of any application for a permit received which proposes to include any area covered by the petition.

(g) Any petitions received after the first advertisement has been published on a permit application relating to the same mine plan area shall not prevent the Commissioner from issuing a decision on that permit application. The Commissioner may return any petition received thereafter to the petitioner with a statement why the petition cannot be considered. For the purposes of this section, close of the public comment period shall mean at the close of any informal conference or if no conference is requested, at the close of the period for filing written comments and objections.

(h) Within three (3) weeks after the determination that a petition is complete, the Commissioner shall circulate copies of the petition to, and request submissions of relevant information from, other interested governmental agencies, the petitioner, interveners, persons with an ownership interest of record in the property and other persons known to the Commissioner to have an interest in the property.

(i) Within three (3) weeks after the determination that a petition is complete, the Commissioner shall make copies of the petition available to the public and other agencies and shall notify the general public of the receipt of the petition and request submissions of relevant information by a newspaper advertisement placed once a week for two (2) consecutive weeks in the locale of the area covered by the petition in the newspaper of largest circulation in the state and in any Official State register of public notices.

(j) Until three (3) days before the Commissioner holds a hearing under Subsection 19.3 of this section, any person may intervene in the proceeding by filing allegations of facts, supporting evidence, a short statement identifying the petition to which the allegations pertain and the intervenor's name, address, and telephone number.

(k) Beginning immediately after a petition is filed, the Commissioner shall compile and maintain a record consisting of all documents relating to the petition filed with or prepared by the Department of Energy. The Commissioner shall make the record available for public inspection, free of charge, and copying, at reasonable cost, during all normal business hours at a central location of the county or multi-county area in which the land petitioned is located, and at the main office of the Department of Energy.

19.3 Hearing Requirements.

(a) Within ten (10) months after receipt of a complete petition, the Commissioner shall hold a public hearing in the locality of the area covered by the petition. If all petitioners and interveners agree, the hearing need not be held. The Commissioner shall make a verbatim transcript of the hearing.

(b) Not less than thirty (30) days prior to a hearing, the Commissioner shall give notice by certified mail of the date, time, and location of the hearing to:

(1) Local, State, and Federal agencies which may have an interest in the decision on the petition;

(2) The petitioner and the interveners; and

(3) Any person with an ownership or other interest known to the Commissioner in the area covered by the petition.

(c) The Commissioner shall notify the general public of the date, time and location of the hearing by placing a newspaper advertisement once a week for two (2) consecutive weeks in the locale of the area covered by the petition and once during the week prior to the scheduled date of the public hearing. The consecutive weekly advertisement must begin between four (4) and five (5) weeks before the scheduled date of the public hearing.

(d) The Commissioner may consolidate in a single hearing the hearings required for each of several petitions which relate to areas in the same locale.

(e) Prior to designating any land areas as unsuitable for surface coal mining operations, the Commissioner shall prepare a detailed statement, using existing and available information on the potential coal resources of the area, the demand for coal resources and the impact of such designation on the environment, the economy and the supply of coal.

(f) In the event that all petitioners and interveners stipulate agreement prior to the hearing, the petition may be withdrawn from consideration.

19.4 Decision.

(a) In reaching its decision, the Commissioner shall use:

(1) The information contained in the data base and inventory system;

(2) Information provided by other governmental agencies;

(3) The detailed statement prepared under paragraph (e), Subsection 19.3, of this section; and

(4) Any other relevant information submitted during the comment period.

(b) A final written decision shall be issued by the Commissioner including a statement of reasons, within sixty (60) days of completion of the public hearing, or if no public hearing is held, then within twelve (12) months after receipt of the complete petition. The Commissioner shall simultaneously send the decision by certified mail to the petitioner, every other party to the proceeding, and to the Field Office Director of the Office of Surface Mining.

(c) The decision of the Commissioner with respect to a petition, or the Commissioner's failure to act within the time limits set forth herein shall be subject to judicial review by a court of competent jurisdiction in accordance with State law.

19.5 Data Base and Inventory System Requirements.

(a) The Commissioner shall develop a data base and inventory system which will permit evaluation of whether reclamation is feasible in areas covered by petitions.

(b) The Commissioner shall include in the system information relevant to the criteria in paragraph (b), Subsection 19.7, of this section, including but not limited to, information received from the United States Fish and Wildlife Service, the State Historic Preservation Officer and the Air Pollution Control Commission.

(c) The Commissioner shall add to the data base and inventory system information:

(1) On potential coal resources of the state, demand for those resources, the environment, the economy and the supply of coal, sufficient to enable the Commissioner to prepare the statements required by paragraph (e), Subsection 19.3, of this section; and

(2) That which becomes available from petitions, publications, experiments, permit applications, mining and reclamation operations and other sources.

19.6 Public Information. The Commissioner shall:

(a) Make the information and data base system developed available to the public for inspection free of charge and for copying at a reasonable cost except that areas proposed for or included in the National Register of Historic Places may not be disclosed if the Commissioner determines that such disclosure might risk destruction or harm to these resources.

(b) Provide information to the public on the petition procedures necessary to have an area designated as unsuitable for all or certain types of surface coal mining operations or to have designations terminated and describe how the inventory and data base system can be used.

19.7 Criteria for Designating Lands as Unsuitable.

(a) Upon petition, an area shall be designated as unsuitable for all or certain types of surface mining operations, if the Commissioner determines that reclamation is not technologically or economically feasible under the Act and these rules and regulations.

(b) Upon petition, an area may be (but is not required to be) designated as unsuitable for all or certain types of surface mining operations, if the operations will:

(1) Be incompatible with existing State or local land use plans or programs;

(2) Affect fragile or historic lands in which the operations could result in significant damage to important historic, cultural, scientific or aesthetic values or natural systems;

(3) Affect renewable resource lands in which the operations could result in a substantial loss or reduction of long range productivity of water supply or of food or fiber products; or

(4) Affect natural hazard lands in which the operations could substantially endanger life and property. Such lands include areas subject to frequent flooding and areas of unstable geology.

19.8 Commissioner's Responsibility for Implementation.

(a) The Commissioner shall not issue permits which are inconsistent with designations made pursuant to Section 22 of the Act.

(b) The Commissioner shall maintain a cumulative map of areas designated as unsuitable for all or certain types of surface coal mining operations.

(c) The Commissioner shall make available to any person any information within his control regarding designations, including mineral or elemental content which is potentially toxic in the environment but excepting proprietary information on the chemical and physical properties of the coal.

19.9 Land Exempt From Designation as Unsuitable for Surface Coal Mining Operations.

(a) The requirements of this section do not apply to:

(1) Lands on which surface coal mining operations were being conducted prior to August 3, 1977;

(2) Lands covered by a permit issued after August 3, 1977; and

(3) Lands where substantial legal and financial commitments in surface coal mining operations were in existence prior to January 4, 1977.

38-2-20 Inspection and Enforcement. In addition to the requirements set forth in Section 15, 16, and 17 of the Act, the following requirements shall be met.

20.1 Inspection Frequencies.

(a) Scheduling. Each surface mine reclamation inspector, (SMRI) shall conduct:

(1) An average of at least one partial inspection per month of each active surface mining operation.

(2) One complete inspection per calendar quarter of each active and inactive surface mining operation. An inactive operation is one which has requested and received approval to temporarily cease operations, or one that has been granted Phase I bond release, and has an approved final planting report.

(3) Prospecting operations shall be inspected as necessary to assure compliance with the Act and these rules and regulations unless a more frequent interval is required by the Commissioner.

(4) At least one partial inspection monthly and one complete inspection quarterly for each prospecting operation for which approval has been granted for coal removal in excess of 250 tons.

(b) Partial Inspection. For purposes of this section, a partial inspection is an on-site or aerial review of a person's compliance with some of the permit conditions, and requirements imposed by these regulations and the Act.

(c) Complete Inspection. For purposes of this section, a complete inspection is an on-site review of a person's compliance with all terms and conditions of the permit, and the requirements of these regulations and the Act, within the entire area disturbed or affected by the surface coal mining and reclamation operations.

(d) Aerial Inspection. Aerial inspections shall be conducted in a manner which reasonably insures the identification and documentation of conditions at each surface coal mining and reclamation site inspected.

Any potential violation observed during an aerial inspection shall be investigated on site within three days: provided, that any indication of a condition, practice or

violation constituting cause for the issuance of a cessation order shall be investigated on site immediately. An on-site investigation of a potential violation observed during an aerial inspection shall not be considered to be an additional partial or complete inspection for the purposes of paragraph (a) of this subsection.

20.2 Notice of Violations.

(a) General. Each Surface Mine reclamation inspector shall issue a notice of violation which meets the requirements set forth in Section 521(a)(3) of the Surface Mining Control and Reclamation Act for all violations he or she observes; provided, however, that if the Notice of Violation is fully abated within twenty-four (24) hours of initial issuance, and involves no off-site impact, the Commissioner may, in his discretion, not count the violation when considering whether a pattern of violations exists.

(b) Notice Procedures. A notice of violation shall be in writing signed by the surface mine reclamation inspector or other authorized representative of the Commissioner who issues it, and shall set forth with reasonable specificity:

(1) The nature of the violation;

(2) The remedial action required, which may include interim steps;

(3) A reasonable time for abatement, which may include time for accomplishment of interim steps, but in no case shall the initial abatement period be in excess of fifteen (15) days; and

(4) A reasonable description of the portion of the coal exploration or surface coal mining and reclamation operation to which it applies.

(c) Abatement. An authorized representative of the Commissioner shall extend the time set for abatement or for accomplishment of an interim step, if the failure to meet the time previously set was not caused by lack of diligence on the part of the permittee. The total time for abatement under a notice of violation, including all extensions, shall not exceed 90 days from the date of issuance, except upon showing by the permittee that it is not feasible to abate the violation within 90 calendar days due to one or more of the circumstances in paragraph (f) of this subsection. An extended abatement date

pursuant to this subsection shall not be granted when the permittee's failure to abate within 90 days has been caused by a lack of diligence or intentional delay by the permittee in completing the remedial action required.

(d) Cessation Order:

(1) If the permittee fails to meet the time set for abatement, the Commissioner shall issue a cessation order; or

(2) If the permittee fails to meet the time set for accomplishment of any interim step, the Commissioner may issue a cessation order.

(f) Extensions of Abatement Period - Criteria. Circumstances which may qualify a surface coal mining operation for an abatement period of more than 90 days are:

(1) Where the operator of an ongoing permitted operation has made timely application for and diligently pursued a permit renewal or other necessary approval of designs or plans but such permit or approval has not been or will not be issued within 90 days after a valid permit expires or is required, for reasons not within the control of the permittee;

(2) Where there is a valid judicial order precluding abatement within 90 days as to which the permittee has diligently pursued all rights of appeal and as to which he has no other effective legal remedy;

(3) Where the permittee cannot abate within 90 days due to a labor strike;

(4) Where climatic conditions preclude abatement within 90 days, or where, due to climatic conditions, abatement within 90 days clearly would cause more environmental harm than it would prevent; or

(5) Where abatement within 90 days requires action that would violate safety standards established by statute or regulation under the Mine Health and Safety Act of 1977.

(g) Interim Procedures. Whenever an abatement time in excess of 90 days is permitted, interim abatement measures shall be imposed to the extent necessary to minimize harm to the public or the environment.

(h) Grant of Extension. If any of the conditions in paragraph (f) of this subsection exist, the permittee may request that the authorized representative of the Commissioner who issued the notice of violation, grant an abatement period exceeding 90 days. The authorized representative of the Commissioner shall grant the extension, only with the concurrence of his immediate supervisor. The abatement period granted shall not exceed the shortest possible time necessary to abate the violation. The permittee shall have the burden of establishing by clear and convincing proof that he is entitled to an extension. The authorized representative of the Commissioner who grants or denies the extension shall promptly and fully document in the file his reasons for granting or denying the request. The immediate supervisor shall review this document before concurring in or disapproving the extended abatement date and shall promptly and fully document the reasons for his concurrence of disapproval in the file.

(i) Appeals. Any determination made under paragraph (h) of this subsection shall contain a right of appeal.

(j) Extension Period. No extension granted under paragraph (h) of this subsection may exceed 90 days in length. Where the condition or circumstance which prevented abatement within 90 days exists at the expiration of any such extension, the permittee may request a further extension.

(k) Failure to Abate. Whenever a permittee fails to abate a violation contained in a notice of violation or cessation order within the abatement period set in the notice or order or as subsequently extended, the Commissioner shall review the permittee's history of violations to determine whether a pattern of violations exists and may issue an order to show cause where appropriate.

20.3 Cessation Orders.

(a) Criteria for Issuance. When any authorized representative of the Commissioner finds that a surface mine operation creates an imminent danger to the health or safety of the public or is causing or can reasonably be expected to cause significant, imminent environmental harm to land, air, or water resources, he shall forthwith issue a cessation order.

(b) Vacation and Termination. Any cessation order issued under the provisions of paragraph (a) of Section 16 of the Act, shall remain in effect until the violation has been abated or

until modified, vacated, or terminated by the Commissioner or the Reclamation Board of Review or by a court.

(c) Remedial Measures. In any cessation order issued, the authorized representative of the Commissioner shall determine the appropriate remedial measures to be taken to abate the violation in the most expeditious manner possible and shall set forth these measures in the order.

(d) Unpermitted Operations. Surface mining operations conducted by any person without a valid surface mining permit, or approval for prospecting, constitute a condition or practice which causes or can reasonably be expected to cause significant, imminent environmental harm to land, air, or water resources, unless such operations are an integral, uninterrupted extension of previously permitted operations, and the person conducting such operations has filed a timely and complete application for a permit to conduct such operations.

20.4 Pattern of Violations.

(a) General. Where the Commissioner determines that a pattern of violations exists or has existed, and that the violations were caused willfully or through an unwarranted failure to comply, the Commissioner shall issue an order requiring the permittee to show cause why his permit and right to mine under the Act should not be suspended or revoked. For purposes of this section a willfully caused violation is a violation resulting from an intentional act or omission, and an unwarranted failure to comply means the failure of the permittee to prevent the occurrence of any violation of the permit or any requirement of the Act due to indifference, lack of diligence or lack of reasonable care.

(b) Permitting Responsibility. Violations by any persons conducting surface coal mining operations on behalf of the permittee shall be attributed to the permittee, unless the permittee establishes that they were acts of deliberate sabotage.

(c) Criteria for Establishing a Pattern of Violations. The Commissioner may determine that a pattern of violations exists or has existed, based on two or more inspections of the permit area within any twelve (12) month period. In making such a determination, the Commissioner shall take into consideration the following circumstances:

(1) The number of previous violations cited on more than one occasion of the same or related requirements of the Act,

these rules and regulations, or the terms and conditions of the permit;

(2) The number of previous violations, cited on more than one occasion, of different requirements of the Act, these regulations or the terms and conditions of the permit; and

(3) The extent to which the violations were isolated departures from lawful conduct.

(d) Duplicate or Similar Violations. The Commissioner shall promptly review the history of violations of any permittee who has been cited for violations of the same or related requirements of the Act, these regulations or the terms and conditions of the permit during three (3) or more inspections of the permit area within any twelve (12) month period. After such review, the Commissioner shall determine whether or not a pattern of violations exists.

(e) Hearings and Appeals. If the permittee files an answer to the show cause order and requests a hearing, a public hearing shall be held. The Commissioner shall give thirty (30) days advance written notice to the permittee and any intervener of the date, time, and place of the hearing. The Commissioner shall publish the notice if practicable, in a newspaper of general circulation in the area of the operations, and shall also post the notice in the regional office of the Department of Energy nearest the operation.

(f) Hearing Record and Decisions. Within sixty (60) days following the hearing, the Commissioner shall issue a written determination as to whether a pattern of violations exists, and issue an appropriate order.

(g) Revocation and Suspension. If the Commissioner revokes or suspends the permit and the permittees right to mine under the Act, the permittee shall immediately cease surface coal mining operations in the area of the permit, and initiate the appropriate remedial action as follows:

(1) If the permit and the right to mine under the Act are revoked, the operator shall complete reclamation within the time specified in the revocation order; or

(2) If the permit and right to mine under the Act are suspended, the operator shall abate all conditions, practices, or violations, as specified in the suspension order.

20.5 Civil Penalties.

(a) General. The Commissioner shall review each notice of violation in order to determine:

(1) Whether a civil penalty will be assessed;

(2) The amount of the penalty;

(3) Whether each day of a continuing violation will be deemed a separate violation; and

(4) The total penalty assessment.

(b) Exemption. For Notices of Violations, the Commissioner may not assess a civil penalty if the amount is less than one thousand dollars ($1,000).

(c) Mandatory Assessment. The Commissioner shall assess, for each cessation order, a mandatory civil penalty in accordance with paragraph (a), Section 17, of the Act for each day of continuing violation.

(d) Assessment Officer - Duties. For the purposes of this section, the assessment officer shall not determine the proposed penalty assessment until such time as the Commissioner has caused an inspection of the violation to be conducted. The Commissioner must conduct the inspection of the violation within the first fifteen (15) days after the notice or order was served.

(e) Notice of Violation Assessments. The Commissioner for each notice of violation, may assess a separate civil penalty for each day of the violation, beginning with the date of issuance of a notice of violation to the date of abatement of the violation. In determining whether or not to assess a separate daily civil penalty and determine the amount of the civil penalty, the Commissioner shall consider those factors specified in paragraph (c), Section 17, of the Act, and subsection 20.7 of this section, and may consider the extent to which the operator may have gained any economic benefit as a result of a failure to comply. Any notice of violation which continued unabated for two or more days after the initial abatement period, and received a civil penalty assessment of $3,500 or more, shall be assessed the penalty amount for a minimum of two separate days.

(f) Cessation Order Assessments. The Commissioner shall, for each cessation order, assess a civil penalty in accordance with paragraph (a), Section 17, of the Act for each day of

continuing violation, except that such penalty shall not be assessed for more than thirty (30) days. If the cessation order has not been abated or modified within the thirty (30) day period, the Commissioner shall initiate action pursuant to paragraphs (b), (f), or (h), Section 17, of the Act as appropriate.

20.6 Procedure for Assessing Civil Penalties.

(a) General. Civil penalty amounts for notices of violation shall be determined in accordance with the factors specified in paragraph (c), Section 17, of the Act and the numerical point system in Subsection 20.7 of this section.

(b) Inability to Comply. Show cause orders, cessation orders, or notices of violation may not be vacated because of inability of the operator to comply.

(c) Mitigation. Unless caused by lack of diligence, inability to comply may be considered in mitigation of the amount of civil penalty and in establishing a time period of the suspension of a permit.

(d) Notice of Assessment. The Commissioner shall provide a copy of the proposed assessment and the accompanying worksheet to the operator by certified mail, within the time limits established by paragraph (d) (1), Section 17, of the Act. The Commissioner shall also give notice, in person or by certified mail, to the operator of any penalty adjustment as a result of an informal conference within the time limits specified above. The reasons for reassessment shall be documented in the file by the assessment officer.

(e) Dismissal. Failure to serve a proposed assessment or hold an informal conference in the time limits specified in paragraph (d) (1), Section 17, of the Act, will not be considered as grounds for dismissal of the assessment, unless the operator proves actual prejudice and makes timely objection to the delay.

(f) Informal Conference. An informal conference must be scheduled within 60 days of the receipt of a request, pursuant to paragraph (d)(1), Section 17, of the Act.

(g) Notice of Informal Assessment Conference. The time and place of an informal assessment conference shall be posted at the regional office closest to the operation, at least five days prior to the conference date. Any person shall have the right to attend and participate in the conference.

(h) Notice of Informal Conference. Notices of informal conferences held as a result of the provisions of Section 17 of the Act shall be posted at the nearest regional office and sent by mail or communicated verbally, whichever is more practicable, to any person who filed a report which led to a notice or order resulting in an informal conference.

(i) Rules of Evidence. At formal review proceedings pursuant to sections 2 and 17 of the Act, no evidence as to statement made or evidence produced by one party at a conference shall be introduced as evidence by another party, or may be used to impeach a witness.

(j) Fact of Violation. The fact of violation may not be contested in a civil penalty review proceeding, if it has already been decided in a formal review proceeding under paragraphs (d)(3) or (d)(4) section 17 of the Act.

(k) Penalty Adjustment. When an administrative or judicial review of a civil penalty order results in an order increasing the penalty, the person to whom the notice or order was issued shall pay the amount of the increase within thirty (30) days after the order is mailed to each person.

20.7 Assessment Rates.

(a) History of Violations. History of previous violations is an accounting of all Notices of Violation and Cessation Orders that were written on the subject operation in the previous twelve (12) months. Notices of Violation and Cessation Orders which were withdrawn or vacated shall not be included in the accounting.

(1)

Previous violation	Rate Per Violation
1 - 2	None
3 - 5	$20.00
6 - 10	$40.00
over 10	$60.00

Number of Violations x Rate = Amount

(b) Seriousness of the violation.

1-2 Violation is of an administrative nature resulting in no harm or danger to the environment or public: or the standard is violated to such a minor degree that environmental harm or public danger will not result.

3-4 Violation results in potential or actual harm or danger remaining in the permit area; or in the case where the impact extends beyond the permit area; can be demonstrated that potential danger or harm or will not result.

5-6 Violation extends beyond the permit area and results in a minor degree of potential or actual harm or impact on the public.

7-8 Violation extends beyond the permit area and results in a significant degree of environmental harm or danger to the public.

9-10 Violation is or can be reasonably be expected to result in significant imminent environmental harm or create an imminent danger to the health or safety of the public.

Seriousness Rating	0	1	2	3	4	5	6	7	8	9	10
Amount	-	100	230	396	608	875	1206	1617	2120	2745	3500

(c) Operator Negligence.

0 This violation is considered beyond the control of the operator or his employees an no negligence can be attributed to this violation.

1-2 This violation was a result of an oversight on the part of the operator and may have been avoided if more conscientious effort or reasonable care were given.

3-4 This violation was obvious and no action was taken by the operator correct the problem.

5-6 The operator failed to adequately respond to previous enforcement action.

7-8 The operator had been officially notified of this problem and did not make any effort at correcting the problem.

Civil Penalty Rate Schedule - Operator Negligence

Negligence Rating	0	1	2	3	4	5	6	7	8
Amount	0	25	62	120	200	315	474	693	1000

(d) Operator's Good Faith

0 Operator failed to take appropriate action.

1-2 Operator took prompt but minimal action to correct the violation. Violation was abated before required date.

3-4 Operator started promptly on remedial measures and worked diligently to correct the violation. Violation was abated before required date.

5-6 Operator started immediately and expended all reasonable efforts to correct the violation.

7-8 Operator was already working on remedial measures and expended extreme effort in correcting the violation. Violation was abated in less time than the required date.

GOOD FAITH RATING SCHEDULE

Good Faith Rating	Seriousness Rating 1	2	3	4	5	6	7	8	9	10
0	0	0	0	0	0	0	0	0	0	0
1	4	8	11	17	26	39	58	88	133	200
2	8	20	28	42	64	94	138	206	312	448
3	15	33	51	78	117	171	249	363	546	750
4	24	56	84	128	192	276	396	564	852	1120
5	35	80	130	200	295	420	590	825	1250	1565
6	54	120	192	300	432	612	846	1158	1752	2100
7	70	161	280	427	623	868	1183	1582	2107	2737
8	96	224	392	608	872	1200	1616	2120	2744	3496

(e) Determination of Penalty Amount

No. Previous Violations _____

Seriousness of Violations _____

Operator Negligence _____

Subtotal _____

Less Good Faith _____

Total _____

20.8 When an Individual Civil Penalty May be Assessed:

(a) Except as provided in paragraph (b) of this subsection, the Commissioner may assess an individual civil penalty against any corporate director, officer or agent of a corporate permittee who knowingly and willfully authorized, ordered, or carried out a violation, failure or refusal.

(b) The Commissioner shall not assess an individual civil penalty in situations resulting from a permit violation by a corporate permittee until a cessation order has been issued by the Commissioner to the corporate permittee for the violation and the cessation order has remained unabated for thirty (30) days.

20.9 Amount of Individual Civil Penalty.

(a) In determining the amount of an individual civil penalty assessed under subsection 20.8, the Commissioner shall consider the criteria specified in subsection (c) of Section 17.

(b) The penalty shall not exceed $5,000 for each violation. Each day of a continuing violation may be deemed a separate violation and the Commissioner may assess a separate individual civil penalty for each day the violation, failure or refusal continues, from the date of service of the underlying notice of violation, cessation order or other order incorporated in a final decision issued by the Commissioner until abatement or compliance is achieved.

20.10 Procedure for Assessment for Individual Civil Penalty.

(a) The Commissioner shall serve on each individual to be assessed an individual civil penalty a notice of proposed

individual civil penalty assessment, including a narrative explanation of the reasons for the penalty, the amount to be assessed, and a copy of an underlying notice of violation and cessation order.

(b) The notice of proposed individual civil penalty assessment shall become a final order of the Commissioner thirty (30) days after service upon the individual unless:

(1) The individual files within thirty (30) days of service of the notice of proposed individual civil penalty assessment a petition for review with the Reclamation Board of Review.

(2) The Commissioner and the individual or responsible corporate permittee agree within thirty (30) days of service of the notice of proposed individual civil penalty assessment to a schedule or plan for the abatement or correction of the violation, failure, or refusal.

(c) For purposes of this subsection, service is sufficient if it would satisfy Rule 4 of the Federal Rules of Civil Procedure for service of a summons and complaint.

20.11 Payment of Penalty

(a) If a notice of proposed individual civil penalty assessment becomes a final order in the absence of a petition for review or abatement agreement, the penalty shall be due upon issuance of the final order.

(b) If an individual named in a notice of proposed individual civil penalty assessment files a petition for review in accordance with subparagraph (1), paragraph (b), subsection 20.10 of this section, the penalty shall be due upon issuance of a final administrative order affirming, increasing, or decreasing the proposed penalty.

(c) Where the Commissioner and the corporate permittee or individual have agreed in writing on a plan for the abatement of or compliance with the unabated order, an individual named in a notice of proposed individual civil penalty assessment may postpone payment until receiving either a final order from the Commissioner stating that the penalty is due on the date of such final order, or written notice that abatement or compliance is satisfactory and the penalty has been withdrawn.

20.12 Fees and Costs of Administrative Proceedings.

(a) Request for Fees. Any person may on request be awarded by the appropriate board or court a sum equal to costs and expenses including attorneys' fees and expert witness fees as determined to have been reasonably incurred. Such request must be filed within forty-five (45) days of date of entry of judgment.

The request shall include an affidavit setting forth costs and expenses and an itemized statement of attorneys' fees. The request shall be served upon all parties who shall have thirty (30) days to answer the request. Cost and expenses including attorneys' fees may be awarded to:

(1) Any participating party against the violator upon a finding that there is a violation of the Act, the regulations or the permit has occurred, and there is a determination that the party made a significant contribution to the full and fair determination of the issues;

(2) To any participating party other than the violator or his representative from the Department of Energy upon a determination that the party made a significant contribution to a full and fair determination of the issues;

(3) To a violator from the Department of Energy when the violator demonstrates that the Department of Energy issues cessation order, a show cause order or notice of violation in bad faith and for the purpose of harassing or embarrassing the violator, provided that no award shall be made under this subsection if the Department of Energy prevails upon the issue of a violation;

(4) To a violator from any participating party other than the Department of Energy where such participating parties initiated or participated in the magistrate proceeding in bad faith and for the purpose of harassing or embarrassing the violator; and

(5) To the Department of Energy from any participating party where the Department of Energy demonstrates that any such party participating in such proceeding in bad faith and for the purpose of harassing or embarrassing the Department of Energy. An award may also include attorneys' fees and expert witness fees expended in obtaining an award of costs,expenses and attorneys' fees. Decisions on such awards may be appealed as other cases under the Act.

38-2-21 Reclamation Board of Review.

21.1 Open Meetings.

(a) General. All meetings of the Reclamation Board of Review, pursuant to the provisions of the Act shall be open to the public.

(b) Public Notice. The time, and place of all regularly scheduled meetings and the time, place and purpose of all special meetings shall be made available to the public and the news media by publishing a notice containing at least the above information in a newspaper of general circulation in the county where the site or environmental concern exists, or if the matter under consideration is of general interest to the people of the State in a newspaper of general circulation in the State.

(c) Emergency Meetings. In the event of any emergency requiring immediate official action such efforts to notify the public shall be taken as circumstances allow.

21.2 Appeals to the Reclamation Board of Review.

(a) Site Visits. The board may visit the site of the activity or proposed activity which is the subject of the hearing and take such additional evidence as it deems necessary provided that all parties and interveners be given notice of the visit and are given an opportunity to accompany the Board.

(b) Final Orders. On all appeals to the Board, the Board shall issue a final decision thirty (30) days after the hearing or within thirty (30) days after the testimony presented at the hearing has been transcribed and checked for accuracy.

(c) Burden of Proof. The burden of proof shall be on the party seeking to reverse the decision of the Commissioner.

21.3 Ex parte Communication.

(a) Prohibition. Ex parte contacts between representatives of the parties appearing before the Board and members or representatives of the Board shall be prohibited.

38-2-22 Coal Refuse

22.1 Applicability - Any surface coal mining operation which involves the construction, operation, enlargement, modification, removal and/or abandonment of a coal refuse site shall be subject to the special provisions of this section in addition to other applicable permitting requirements, performance standards, and enforcement provisions of these regulations, the Act, and other state and federal laws and regulations.

22.2 Certification - For purposes of permitting, the applicant shall submit a separate set of maps, plans, design data, and specifications for the refuse disposal facility, in addition to those contained in the permit application.

The disposal facility shall be designed using current, prudent engineering practices. A qualified registered professional engineer, experienced in the design of similar earth and refuse structures, shall certify the design of the disposal facility. The disposal facility shall be designed to attain a minimum long-term static safety factor of 1.5. The stability of all foundations and abutments must be maintained during all phases of construction.

22.3 Permit Requirements - General - In addition to the other permitting requirements of the Act and these regulations, each permit application which involves a coal refuse site shall contain the following materials:

(a) Narrative. A general narrative and discussion of the project to include at a minimum a discussion of existing site conditions, the design life of the facility, quantity and type of coal refuse to be placed on the site, subsidence potential method of operation to include clearing and grubbing, topsoil stockpiling, construction of surface and subsurface drainage facilities, phases of construction, method and location of coal refuse placement or removal, coal refuse placement during inclement weather, routine inspection and maintenance, procedure to be followed in the event the site is abandoned prior to the planned design life, and a sequence for construction of drainage facilities, critical construction phases, reclamation and final abandonment procedures. In addition, include a description of the duties, responsibilities and lines of communication of those persons responsible for the design and construction of the coal refuse disposal area. All data, graphs, curves, etc., which provide the basis for hydrologic and hydraulic design of coal refuse embankments and impoundments shall accompany other design data, plans, and specifications, submitted as part of the permit application.

(b) Plan View. A plan view of the site showing detailed contours, limits of the coal refuse disposal area, all drainage facilities, location of springs, seeps, mine drainage and/or openings, location of the subdrain system, project stationing, location of cross sections, location of borings, test pits and instrumentation and other pertinent data required for project control.

(c) Cross Sections. Cross sections of the coal refuse disposal area transversely and longitudinally showing original ground, finished elevations, final configuration of refuse material, subdrains, diversion details, spillways, and other pertinent features of the site. Cross section shall be of sufficient accuracy and detail so as to provide a basis for stability computations at critical locations.

(d) Sediment Control Plan. A sediment control plan designed in accordance with Subsection 5.4 of these regulations.

(e) Diversions. Unless otherwise approved by the Commissioner, each application shall contain plans and specifications for a diversion channel above the coal refuse facility to direct excess surface water runoff from the contributing watershed around the facility. Such diversion channel shall be designed as follows:

(1) Design storm. All diversion ditches and stream channel diversions shall be designed to carry the peak runoff from a one-hundred (100) year frequency, twenty-four (24) hour duration rainfall.

(2) Freeboard. A freeboard equal to or greater than $1+.025vd^{1/3}$ shall be added to the design flow depth to obtain the total depth of the diversion ditch.

(3) Additional Requirements. All diversion channels must comply with the Handbook and the following additional requirements:

(A) Each diversion ditch must be designed to carry the peak flow with freeboard from the contributing watershed area.

(B) Diversions shall be designed, constructed, and maintained in a manner which prevents additional contributions of suspended solids to streamflow and to runoff outside the permit area to the fullest extent possible.

(C) Excess excavated material not required for construction or maintenance of the diversion ditch must be properly disposed of in the permit area unless otherwise approved by the Commissioner.

(D) Topsoil removed from the channel excavation shall either be redistributed on another part of the permit area or stockpiled for a later use.

(E) All diversion systems shall exit safely beyond the toe of the embankment in a natural drainway capable of carrying the design flow without excessive erosion.

(F) All stream channel diversions must be designed to carry the design flow around the disturbed area. The diversions must outlet into the original channel or a natural channel of equal cross section.

(G) Diversions in refuse must be lined with soil or a suitable substitute unless other erosion protection is provided.

(H) Permanent diversion systems designed to convey water under a coal refuse embankment by means of a pipe or conduit are unacceptable. However, diversion by means of a pipe or conduit may be permitted during active operation, provided that (1) height or storage limits for impoundments are not exceeded, (2) the pipe or conduit is used in conjunction with surface ditches to meet applicable design storm requirements, and (3) the design of the pipe or conduit accounts for durability and design life, load limits, joint sealing, trash rack protection, and maintenance requirements throughout the operational life of the structure.

(f) Design and Specifications for Hydraulic Structures. Such structures shall be designed to safely control excessive erosion by using energy dissipators and/or channel protection, as necessary, based upon design flow velocity. Seepage control devices shall be used to prevent undercutting of nonflexible linings. The potential for landslides or slope failures shall be considered in the location of all hydraulic structures. Channels shall not be located on or near an existing landslide unless approved by the Commissioner. No surface runoff or slurry may be diverted into underground mines unless approved by the Commissioner.

(g) Compulations. The application shall include all design data and calculation results. If a computer analysis is used, only the input data and results used specifically in the design

need be submitted. If graphical flood routing techniques are used, all charts and graphs shall be included. Adequate cross sections and profiles shall be given for all hydraulic structures.

(h) Water Stability Analysis. All coal refuse impoundments must be analyzed and/or designed in accordance with this subsection. Non-impounding coal refuse embankments must be designed in accordance with this subsection unless any proposed modifications to the design standards of this subsection are justified through appropriate stability analysis. Where obvious site conditions indicate that failure will not occur, the Commissioner may waive the requirement for a stability analysis on non-impounding structures so long as all other applicable design requirements are met. The following structural analysis and/or design data of coal refuse embankments and impoundments shall be presented in graphical or tabular form:

(1) A subsurface investigation shall be performed unless obvious site conditions preclude the necessity of this requirement. The number, location, and depth of borings, test pits, and/or trenches shall be reasonable for the size, purpose, soils present, and foundation type of the structure. The investigation shall consider depth of soil to bedrock, field classification of soils, character of bedrock, in situ testing, soil sampling, determination of groundwater location, and a soil profile for critical locations in the structure, hydraulic structures and other pertinent locations which may affect the safety of the structure. A geologic study shall also be conducted for impounding structures to evaluate landslides into the impoundment, bedrock discontinuities such a soft seams, joints, joint systems, bedding planes, and fault zones which may adversely affect the structure's performance. Past and future mining to include height of seam, depth and cover rock of the seam, and previous subsidence problems shall be considered where subsidence may affect the safety of the structure.

(2) Laboratory tests shall be conducted on all foundation and embankment materials to include soil classification through hydrometer analysis, density, water content, compaction tests, shear strength, consolidation, and permeability unless the scope, characteristics, or design concept of the site make one or more of these requirements unnecessary.

(i) Safety Factors. A description including plans, design data, specifications, and computations of how safety conditions will be achieved.

(j) Liquefaction. Describe the potential for liquefaction

and provide safeguards against the development of this condition.

(k) Instrumentation. A description of installation of instrumentation such as piezometers, settlement markers, slope indicators, and similar monitoring devices shall be included in the plan to monitor present hazardous conditions, construction conditions, and to verify design assumptions. A plan for monitoring these devices shall also be provided.

(l) Stability Analysis. All stability analyses shall be done using standard engineering techniques. The submittal shall include cross sections at critical locations in the facility showing the materials profile, location of critical potential failure surfaces and their factors of safety, estimated or measured phreatic surfaces for construction and/or long term seepage conditions, and a tabulated listing of strength parameters used. If a computer analysis is used, only the input data and results used specifically in the design shall be submitted.

(m) Underdrains. If the disposal area contains springs, natural or manmade water courses, or wet weather seeps, the application shall include diversions and underdrains as necessary to control erosion, prevent water infiltration into the disposal facility and ensure stability. Diversions and underdrains shall be designed as follows:

(1) Runoff from the areas above the refuse pile and runoff from the surface of the refuse pile shall be diverted into stabilized diversion channels designed in accordance with paragraph (e) of Subsection 22.3 and Subsection 5.3 of these regulations to safely pass the runoff from a one hundred (100) year, twenty-four (24) hour precipitation event. Runoff diverted from undisturbed areas need not be commingled with runoff from the surface of the refuse pile. Uncontrolled surface drainage may not be diverted over the outslope of the refuse piles.

(2) Underdrains shall consist of durable rock or pipe, and be designed and constructed using current, prudent engineering practices. The underdrain system shall be designed to carry the anticipated seepage of water due to rainfall and from seeps and springs in the foundation of the disposal area away from the site, and shall be protected from piping and contamination by an adequate filter. Rock underdrains shall be constructed of durable, nonacid, nontoxic-forming rock (e.g., natural sand and gravel, sandstone, limestone, or other durable rock) that does not slake in water or degrade to soil material, and which is free of coal, clay or other nondurable material. Perforated pipe underdrains shall be corrosion resistant and

shall have characteristics consistent with the long-term life of the fill.

(n) Site Preparation. Procedures for clearing and grubbing to the extent required.

(o) Excess Material. Procedures for disposal of excess material resulting from clearing, grubbing, and other site preparation activities.

(p) Compaction Requirements. Procedures for spreading and compaction of refuse material during placement. The material shall be compacted in layers not exceeding two (2) feet in thickness and shall not have any slope exceeding two horizontal to one vertical, except that the Commissioner may approve construction using layers exceeding two (2) feet in thickness and slopes exceeding two horizontal to one vertical, where engineering data substantiates that a minimum safety factor of 1.5 will be attained and a minimum seismic safety factor of 1.2 will be attained.

(q) Sealing Abandoned Openings. Plans for sealing abandoned openings and covering the seal with four feet of an impermeable non-toxic material. Such plans shall consider prevention of water buildup behind the seals, toxicity of the refuse and mine strata, gradient of the opening, hydrologic balance and passage of any acid water to a treatment facility. If a mine seal is in the impoundment area of an impounding coal refuse disposal area, the seal shall be designed to safely withstand full hydrostatic head with a factor of safety of at least 1.5 against blowout. Higher factors of safety may be required where dictated by the consequences of failure. Calculations and cross sections used in the analyses shall be submitted.

(r) Extinguishment of Burning Areas. Plans for the extinguishment of burning areas which contain, at a minimum, method of extinguishment, safety measures for equipment operators and persons working or living in the vicinity of the site, and a provision that only those persons authorized by the operator, shall be involved in the extinguishing operation.

(s) Underground Disposal. Plans for underground refuse disposal shall be submitted to and approved by the Commissioner and the Mine Safety and Health Administration. All plans must include:

(1) Method of disposal including a description of the source of the transport medium;

(2) Maps of mines where coal refuse materials are to be disposed with a description of the percent of mine void to be filled;

(3) Description of location of active workings including plans, specifications, and methods of constructing underground retaining walls;

(4) Potential areas of breakout in active mine workings and on the surface of the ground;

(5) Effects of subsidence on the plan;

(6) The effects on groundwater including a permanent monitoring well or station to be located in the lowest practical elevation of the backfill area;

(7) Gradient of the mine from the backfill area;

(8) Description of stratum underlying the mined coal, source and potential acid or toxic-forming quality of the refuse, and the treatment of water if released to surface streams;

(9) A contingency plan formulated to alleviate or correct any hazardous conditions which may result from a blowout; and

(10) A description of the surface area to be supported by the refuse backfill, the anticipated surface effects following backfilling, and the method for dewatering the backfill.

(t) Abandonment Plan. An abandonment plan which addresses the following requirements and include a schedule for their implementation:

(1) No refuse embankment or impoundment may be abandoned until approved by the Commissioner.

(2) The final top elevation of the refuse embankment must be higher than, and sloped into, the diversion ditch. Maximum slope of the top of the embankment to the diversion ditch shall be five (5) percent unless otherwise approved by the Commissioner.

(3) All pipes under refuse areas left as non-impounding fills shall be sealed with concrete at the upstream end prior to abandonment.

(4) At abandonment all fine refuse in the impoundment pool shall be covered with a minimum three foot layer of coarse refuse or other fill material prior to topsoiling unless otherwise approved by the Commissioner.

(5) At abandonment all coal refuse shall be covered with a minimum of four (4) feet of the best available non-toxic and non-combustible material in a manner that does not impede flow from sub-drainage systems. The Commissioner may allow less than four (4) feet of cover material where it can be demonstrated that the vegetation requirements of Section 9 of the Surface Mining Regulations shall be met.

(6) A certificate of approval for completion of construction shall be issued upon completion of the above requirements.

22.4 Permit Requirements - Impounding Structures In addition to the requests of the Act and these regulations, coal refuse disposal sites which have the capability of impounding water shall be subject to the special requirements of this subsection and may be subject to other state and federal laws and rules and regulations, depending on their embankment size and holding capacity.

(a) Dam Control Act. A coal refuse site which is constructed in such a manner that it: (1) Rises twenty-five (25) feet or more above the natural bed of a stream or watercourse as measured from the downsteam toe of the embankment and which does or can impound fifteen (15) acre-feet or more of water, or; (2) Rises six (6) feet or more above the natural bed of a stream or watercourse as measured from the downstream toe of the embankment and which does or can impound fifty (50) acre-feet or more of water is by definition a dam and is thereby subject to the provisions of the West Virginia Dam Control Act set forth in Chapter 20, Article 5D of the Code of West Virginia.

(b) Mine Safety and Health Impoundments. A coal refuse site which is constructed in such a manner that it can impound water, sediment, or slurry to an elevation of: (1) Five (5) feet or more above the upstream toe of the structure and can have a storage volume of twenty (20) acres/feet or more, or; (2) Twenty (20) feet or more above the upstream toe of the structure, or; (3) Presents a hazard to coal miners as determined by the District Manager of the Federal Mine Safety and Health Administration, shall be subject to the requirements of 30 CFR 77.215 and 77.216 of the Federal Mine Safety and Health Administration Regulations.

(c) Small Impoundments. Coal refuse sites which result in impoundments which are not subject to the Dam Control Act or the Federal Mine Health and Safety Act shall be designed, constructed, and maintained subject to the requirements of this section and Subsection 5.4 of these rules and regulations.

(d) Hazard Potential. The hazard potential of coal refuse sites which have the capability of impounding water shall be determined by the applicant based on the potential loss of life that would result due to a failure and the classification determined on the basis of the following criteria:

(1) Class A. Impoundments located in rural or agricultural areas where failure may damage farm buildings, agricultural land, or secondary highways. Failure of the structure would cause only loss of the structure and loss of property use such as related roads, but with little additional damage to adjacent property. Any impoundment exceeding twenty-five (25) feet in height measured at the downstream toe or two-hundred (200) acre-feet storage volume or having a watershed exceeding five hundred (500) acres shall not be a Class A structure.

(2) Class B. Impoundments located in predominantly rural agricultural areas where failure may damage isolated homes, primary highways or minor railroads or cause interruption of relatively important public utilities. Failure of the structure may cause great damage to property and project operations.

(3) Class C. Impoundments located where failure may cause loss of life, serious damage to homes, industrial and commercial buildings, important public utilities, primary highways, or main railroads. This classification must be used if failure would cause possible loss of human life.

(e) Emergency Planning. For a Class C structure or if a dangerous condition exists, notification and action procedures shall be formulated by the operator or owner, for public protection and remedial action in the event of an emergency. All emergency procedures must be submitted and become part of the approved plan. If adequate emergency procedures cannot, for whatever reason, be formulated by the owner or operator, then he must so notify the Commissioner in writing. The Commissioner may then notify the Office of Emergency Services and request that emergency procedures be developed for the coal refuse site.

(f) Design Storm Specifications. All refuse impoundments and dams shall be designed to meet the following design storm criteria based upon hazard classification.

(1) Class A impoundments shall be designed for a minimum of P_{100}+0.12 (PMP-P_{100}) inches of rainfall in six (6) hours plus three feet of freeboard. If the storage times effective height is less than 3,000 (acre-feet)(feet), Soil Conservation Service Pond Standard 378 may be substituted.

(2) Class B impoundments shall be designed for a minimum of P_{100}+0.40 (PMP-P_{100}) inches of rainfall in six (6) hours plus three (3) feet of freeboard.

(3) Class C impoundments shall be designed for the probable maximum precipitation of the appropriate duration.

(g) Primary and Emergency Spillway Design. All impoundments must be capable of passing through a spillway or outlet works or a combination thereof, that portion of the design storm that cannot be safely stored in the impoundment and to draw down the stored portion of the design storm within the specified terms in accordance with the following:

(1) Class A impoundments must be designed with an open channel spillway unless otherwise approved by the Commissioner, Ninety (90) percent of the stored portion of the design storm must be discharged or removed within ten (10) days after the storm event.

(2) Class B impoundments shall be designed with either an open channel spillway only, or with an emergency spillway and a principal spillway together. Ninety (90) percent of the stored portion of the design storm shall be discharged or removed within ten days after the storm event.

(3) Class C dams may be designed in one of three ways:

(A) An impoundment designed without discharge structures shall be capable of storing a minimum of two (2) six (6) hour duration probable maximum storms. Water shall be removed from the impoundment to its lowest practical level by pumping or by other means if storm water reduces the storage capacity to one probable maximum storm or less.

(B) An impoundment designed with a decant or principal spillway only shall be capable of storing at least one (1) six (6) hour duration probable maximum storm. Ninety (90) percent of the stored portion of the storm shall be discharged or removed within ten (10) days after the storm event.

(C) An impoundment designed with either an open

channel spillway only, or with an emergency spillway and principal spillway together shall be capable of discharging that portion of the six (6) hour duration probable maximum storm that cannot be safely stored in the impoundment. Ninety (90) percent of the stored portion of the storm shall be discharged or removed within ten (10) days after the storm event.

(h) Open Channel Spillways. All open channel spillways must comply with this section, the Handbook, and the following additional requirements:

(1) Any open channel spillway designed for less than one hundred (100) percent probable maximum precipitation shall be provided with freeboard above the maximum water surface as determined by the equation $1+.025vd^{1/3}$.

(2) Excess excavated material not needed to construct and maintain the spillway channel must be properly disposed of in the permit area unless otherwise approved by the Commissioner.

(3) Topsoil removed from channel excavation shall either be redistributed on another part of the permit area or stockpiled for future use.

(i) Pipe Spillways. All pipe spillways must comply with the requirements of this section and the following additional requirements:

(1) The pipe spillway inlet must be protected by a designed trash rack.

(2) All riser-type spillways must be designed to prevent vortexing.

(3) A skimming device is required where floating pollutants exist or are anticipated.

(4) An adequate foundation and bedding shall be designed for all pipes and risers.

(5) All pipe spillways shall be designed to provide seepage control along the conduit.

(6) The pipe spillway shall be of sufficient strength to withstand the maximum load of the fill above it.

(7) All pipe spillways shall be constructed of suitable material to resist deterioration for the design life of the facility.

(8) The outlet of all pipes, where blockage by animals can occur, must be protected by an animal guard.

(j) Emergency Drawdown Devices. All impoundments meeting the size requirements of paragraphs (a), (b), or (c) of Subsection 22.4, of these regulations, constructed after the effective date of the Act must be designed with a gated drainpipe or principal spillway gate for draining the impoundment. All drain pipes must meet the requirements for pipe spillways.

22.5 Performance Standards. The following performance standards shall be met for all coal refuse disposal facilities.

(a) Controlled Placement. All coal refuse disposal facilities shall be placed in new or existing disposal areas within a permit area designated for this purpose. Coal mine refuse shall be placed in a controlled manner to:

(1) Minimize adverse effects of leachate and surface-water runoff on surface and ground water quality and quantity;

(2) Ensure mass stability and prevent mass movement during and after construction;

(3) Ensure that the final disposal facility is suitable for reclamation and revegetation compatible with the natural surroundings and the approved postmining land use;

(4) Not create a public hazard; and

(5) Prevent combustion.

(b) Extraneous Refuse. Coal mine refuse material from activities located outside a permit area may be disposed of in the permit area only if approved by the Commissioner. Approval shall be based upon a showing that such disposal will be in accordance with the standards of this section.

(c) Slope Protection. Slope protection shall be provided to minimize surface erosion at the site. All disturbed areas, including diversion channels that are not riprapped or otherwise protected, shall be revegetated upon completion of construction.

(d) Site Development. Cleaning and grubbing shall be performed in the foundation, borrow, and soil stockpile areas unless otherwise approved. Topsoil shall be removed, segregated, and stored or redistributed in accordance with Subsection 14.3 of these regulations. If approved by the regulatory authority,

organic material may be used as mulch, or may be included in the topsoil to control erosion, promote growth of vegetation, or increase the moisture retention of the soil.

(e) Final Configuration. The final configuration of the refuse pile shall be suitable for the approved postmining land use. Terraces may be constructed on the outslope of the refuse pile if required for stability, control or erosion, conservation of soil moisture, or facilitation of the approved postmining land use. The grade of the outslope between terrace benches shall not be steeper than 2h:1v (50 percent).

(f) Impoundment Within Fill Areas. No permanent impoundments shall be allowed on the completed refuse pile. Small depressions may be allowed if they are needed to retain moisture, minimize erosion, create and enhance wildlife habitat, or assist revegetation, and if they are not incompatible with stability of the refuse pile.

(g) Topsoiling. Following final grading of the refuse pile, the coal mine refuse shall be covered with a minimum of four (4) feet of the best available, nontoxic and noncombustible material, in a manner that does not impede drainage from the underdrains. The Commissioner may allow less than four (4) feet of cover material based on physical and chemical analyses which show that the revegetation requirements of Section 9 of these regulations will be met.

(h) Notification of Hazardous Conditions. If any examination or inspection discloses that a potential hazard exists, the Commissioner shall be informed promptly of the finding and of the emergency procedures formulated for public protection and remedial action. If adequate procedures cannot be formulated or implemented, the Commissioner shall be notified immediately. The Commissioner shall then notify the appropriate agencies that other emergency procedures are required to protect the public.

(i) Disposal of Underground Workings. Coal mine refuse may be disposed of in underground mine workings, but only in accordance with a plan approved by the Commissioner and MSHA.

(j) Construction Specifications. New and existing impounding structures constructed of coal mine refuse or intended to impound coal mine refuse shall meet the following requirements:

(1) Coal mine refuse shall not be used for construction of impounding structures unless it has been

demonstrated to the Commissioner that the stability of such a structure conforms to the requirements of this section and the use of coal mine refuse will not have a detrimental effect on downstream water quality or the environment due to acid seepage through the impounding structure. The stability of the structure and the potential impact of acid mine seepage through the impounding structure shall be discussed in detail in the design plan.

(2) If an impounding structure constructed of coal mine refuse or intended to impound coal mine refuse meets the criteria of paragraph (c) of Subsection 22.4 of this section, the combination of principal and emergency spillways shall be designed and constructed in accordance with paragraphs (g) and (h) of Subsection 22.4 of these regulations.

(3) Spillways and outlet works shall be designed to provide adequate protection against erosion and corrosion. Inlets shall be protected against blockage.

(4) Runoff from areas above the disposal facility or runoff from surface of the facility that may cause instability or erosion of the impounding structure shall be diverted into stabilized diversion channels designed to safely pass the runoff from a one hundred (100) year, twenty-four (24) hour precipitation event.

(5) Impounding structures constructed of or impounding coal mine refuse shall be designed so that at least ninety (90) percent of the water stored during the design precipitation event can be removed within a ten (10) day period.

(k) Drainage and Sediment Control. Drainage control measures shall meet the requirements of Section 5 of these regulations. After grade release, discharges from the permit area shall not lower the water quality of receiving streams.

(1) Reprocessing of Coal Refuse. Where coal refuse is to be removed from an existing facility for reprocessing or reconstruction, the following standards shall be met:

(1) Removal of refuse shall be accomplished in successive horizontal lifts with a maximum elevation difference between working benches of twelve (12) feet or may be removed down a slope from the top to the toe provided that the slope is no steeper than 2H:1V. No refuse may be removed from the toe of the original embankment until the final removal process.

(2) At all times during removal operations, care shall

be exercised to protect the operating personnel, the public, and to insure long-term stability in accordance with the approved plan.

(3) Where possible, the final graded slopes shall be no steeper than 2H:1V and at least one bench for every fifty (50) feet of change in elevation shall be provided.

(4) Should burning areas be encountered, the fires shall be extinguished in accordance with paragraph (m) of this subsection, and removal of refuse shall be done in a safe manner.

(5) The total disturbed area shall be regraded in such a manner as to be compatible with the natural surroundings and shall be revegetated in accordance with Section 9 of these regulations. Such regrading and revegetation shall occur as contemporaneously as practicable with removal operations as reflected in the reclamation plan.

(6) Regarding drainage control shall be provided in accordance with the approved reclamation plan.

(m) Burning Refuse Piles. Where burning or burned refuse is encountered in the reconstruction or removal of an existing structure, the following standards shall be met:

(1) Coal mine refuse fires shall be extinguished by the person who conducts the surface mining activities, in accordance with a plan approved by the Mine Safety and Health Administration. The plan shall contain, at a minimum, provisions to ensure that only those persons authorized by the operator, and who have an understanding of the procedures to be used, shall be involved in the extinguishing operations.

(2) No burning or burned coal mine refuse shall be removed from a permitted disposal area without a removal plan approved by the Commission. Consideration shall be given to potential hazards to persons working or living in the vicinity of the structure.

22.6 Inspections. A qualified registered professional engineer, or other qualified professional specialist under the direction of the professional engineer, shall inspect the refuse pile during construction. The professional engineer or specialist shall be experienced in the construction of similar earth and refuse structures.

(a) Non-impounding Structures. Inspections of non-impounding refuse piles shall be made at least quarterly

throughout construction and during critical construction periods, which shall include at a minimum:

(1) Foundation preparation including the removal of all organic material and topsoil;

(2) Placement of underdrains and protective filter systems;

(3) Installation of final surface drainage systems; and

(4) The final graded and revegetated facility.

(b) Unscheduled Inspections. Regular inspections by the engineer or specialist shall also be conducted during placement and compaction of coal mine refuse materials. More frequent inspections shall be conducted if a potential danger or harm exists to the public health and safety or the environment. Inspections shall continue until the refuse pile has been finally graded and revegetated or until a later time if required by the Commissioner.

(c) Reporting Requirements. The following reporting requirements shall be met:

(1) The qualified registered professional engineer shall provide a certified report to the Commissioner promptly after each inspection, that the refuse pile has been constructed and maintained as designed and in accordance with the approved plan, the Act, and these regulations. The report shall include appearance of instability, structural weakness, and other hazardous conditions; and

(2) The certified report on the drainage system and protective filters shall include color photographs taken during and after construction, but before underdrains are covered with coal mine refuse. If the underdrain system is constructed in phases, each phase shall be certified separately. The photographs accompanying each certified report shall be taken in adequate size and number with enough terrain or other physical features of the site shown to provide a relative scale to the photographs and to specifically and clearly identify the site.

22.27 Impounding Structures. Inspection of impounding refuse piles shall be made by a qualified registered engineer or other qualified professional specialist under the direction of the professional engineer. The professional engineer or specialist shall be experienced in the construction of

impoundments.

(a) Inspection Frequencies. Inspection shall be made regularly during construction, upon completion of construction, and at least yearly until removal of the structure or release of the performance bond. All impoundments shall be examined at least quarterly by a qualified person designated by the operator for appearances of structural weaknesses or other hazardous conditions.

(b) Reporting Requirements. The qualified professional registered engineer shall promptly, after each inspection, provide to the Commissioner a certified report that the impoundment has been constructed and maintained as designed and in accordance with the approved plan and these regulations. The report shall include discussions of any appearances of any instability, structural weakness, or other hazardous condition, depth and elevation of any impounded waters existing storage capacity, and existing or required monitoring procedures and instrumentation, and any aspects of the structure affecting stability.

(c) Examinations. Examination of impoundments meeting or exceeding the size specification set forth in the federal Mine Safety and Health Administration regulations at 30 CFR 77.216 shall, in addition to meeting the inspection requirements of paragraphs (a) and (b) of this section, comply with the MSHA requirements of 30 CFR 77.216-3.

Other impoundments shall be examined quarterly by a person designated by the operator for appearances of structural weaknesses and other hazardous conditions.

(d) Filing of Reports. A copy of each inspection report shall be retained at or near the mine site.