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NOTICE OF AGENCY APPROVAL

LEGISLATIVE RULE: Surface Mining Reclamation Regulations

The attached legislative rule constitutes the official rule approved by the Department of Energy on 8th day of January, 1986 and filed pursuant to law with the West Virginia Secretary of State and the Legislative Rule-Making Review Committee.

(Signature of Commissioner)

APPENDIX B

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FISCAL NOTE FOR PROPOSED RULES

Rule Title: West Virginia Surface Mining Reclamation Regulations

Type of Rule: X Legislative _____ Interpretive _____ Procedural

Agency: WV Department of Energy Address: 1615 Washington Street, East Charleston, West Virginia 25311

1. Effect of Proposed Rule	ANNUAL Increase	ANNUAL Decrease	FISCAL YEAR Current	FISCAL YEAR Next	FISCAL YEAR Thereafter
Estimated Total Cost	$	$	$	$	$
Personal Services	0	0	0	0	0
Current Expense	0	0	5,000.	0	0
Repairs and Alterations	0	0	0	0	0
Equipment	0	0	0	0	0
Other	0	0	0	0	0

2. Explanation of above estimates:

Estimate is a one time cost for printing.

3. Objective of these rules:

Because of the passage of HB-1850 which creates the Department of Energy all references to the West Virginia Surface Mining Act which appear in the regulations must be changed. Also a number of amendments are required to obtain federal approval.

4. Explanation of Overall Economic Impact of Proposed Rule.

A. Economic Impact on State Government.

NONE

B. Economic Impact on Political Subdivision; Specific Industries; Specific groups of citizens.

NONE

C. Economic Impact on Citizens/Public at Large.

NONE

Date: January 8, 1986

Signature of Agency Head or Authorized Representative

DATE: January 8, 1986

TO: Legislative Rule-Making Review Committee

FROM: Kenneth R. Faerber

SUBJECT: Information to be supplied to the Committee

RULES: Surface Mining Reclamation Regulations

INFORMATION REQUIRED

1. Please give the citation of the statute which authorizes your promulgation of these rules:

   22A-3-4 (b) (1)

2. If the statute under which you promulgated the submitted rules requires certain findings and determinations to be made as a condition precedent to their promulgation:

   a. Give the date upon which you filed in the State Register a notice of the time and place of a hearing for the taking of evidence and a general description of the issues to be decided.

      November 25, 1985

      Amendments to existing regulations which reflect changes to the statute in HB 1850 and to satisfy conditions for program approval by OSM.

   b. Was the hearing held on the date scheduled and were all interested parties permitted to be heard?

      Yes

   c. On what date did you file in the State Register the findings and determinations required together with the reason therefor?

      January 8, 1986

d. Is the transcript of all evidence received preserved and available for public inspection and copying?

Yes

3. For all rules promulgated:

a. When did you file the rules in the State Register together with notice of a hearing time, date and location? (29A-3-5)

November 25, 1985

b. Did you give at least 30 days notice and no more than 60 days notice? (29A-3-7)

Yes

c. What other notice, including advertising, did you give of the hearing? (29A-3-5)

None

d. Was the hearing held on the scheduled date? If not, why not?

Yes

e. Was the opportunity given for all interested parties to submit data, objections, suggested amendments, views, evidence or arguments?

Yes

f. List all persons who appeared at the hearing and what type of comment they made about the proposed rules (for, against, suggested and amendments). Please attach a copy of the minutes of the hearing.

None

g. On what date did you file in the State Register notice of your action on the proposed rules together with the text of such rules?

January 8, 1986

Signature of department head, board chairman or executive secretary.

(Please attach additional sheets if necessary)

STATE OF WEST VIRGINIA
At a Circuit Court for Kanawha County held at the Court House thereof on the 17th day of May 19 86

IN THE CIRCUIT COURT OF KANAWHA COUNTY, WEST VIRGINIA

LEAGUE OF WOMEN VOTERS OF WEST VIRGINIA, INC.
WEST VIRGINIA HIGHLANDS CONSERVANCY, INC.,
WEST VIRGINIA CITIZEN ACTION GROUP, INC. ,

Plaintiffs,

v.

CA# 85-C-2900
(Judge Workman)

KENNETH FAERBER, Commissioner of the
West Virginia Department of Energy,

Defendants.

FINAL ORDER

This case involves a claim by plaintiffs that W. Va. Code §22A-3-9a, relating to surface mines of two-acres or less in size, as enacted by the Legislature of West Virginia in its 1985 Regular Session, is void and unenforceable because the purpose and object of this statute was not set forth in the title of the omnibus bill transferring general authority over surface mining operations from the Department of Natural Resources to the Department of Energy ("DOE") as required by W. Va. Constitution article 6, §30.

This case was filed July 11, 1985 and set for hearing July 12, 1985. Upon review of the verified complaint and exhibits, and after hearing the argument of counsel for the parties, the Court entered an order of that date enjoining and restraining defendant Kenneth Faerber, Commissioner of the West Virginia Department of Energy, "from administering or enforcing W. Va. Code §22A-3-9a, [and] from promulgating or announcing any rules, regulations, or policies to implement said §22A-3-9a".

On August 8, 1985 the Court entered an order, reflecting the agreement of the parties to an attached stipulation of the same date, dismissing the Attorney General as a party and releasing the plaintiffs' injunction bond. The parties further agreed that, pending an internal review by DOE of the two-acre provision, DOE would follow the terms and conditions of the injunction entered July 12, 1985.

The parties, by their undersigned counsel, have informed the Court that they have agreed to the entry of this final order.

It is, therefore, ORDERED:

1. That W. Va. Code §22A-3-9a be, and hereby is, DECLARED unconstitutional, void and unenforceable;

2. That section 9E (relating to two-acre permits) of the agency approved legislative rules filed with the Secretary of State by DOE on January 8, 1986 is DECLARED unconstitutional, void and unenforceable;

3. That defendant Kenneth Faerber, Commissioner of the West Virginia Department of Energy has agreed to refrain from administering, applying, utilizing or enforcing W. Va. Code §22A-3-9a, and from receiving, reviewing, processing or issuing any applications for permits thereunder, or from taking or doing any acts to apply, administer, implement or enforce said §22A-3-9a;

4. That the defendant Kenneth Faerber, Commissioner of the West Virginia Department of Energy, take the following steps to inform the interested public and government agencies of the entry and effect of this order:

(a) Within ten (10) working days after the date of entry of this order, by cover letter to the Secretary of State with a carbon copy to counsel for the plaintiffs, submit this order for publication in the State Register, in accord with W. Va. Code §29A-2-3, and file notice pursuant to W. Va. Code §29A-3-14 of DOE's withdrawal, in accord with this Order, of section 9E of the agency approved legislative rules as filed with the Secretary of State on January 8, 1986;

(b) Within ten (10) working days after the date of entry of this order, issue a memorandum for circulation or communication to all employees or agents of the DOE Division of Mines and Minerals, with a carbon copy mailed to counsel for the plaintiffs, informing them of the entry and effect of this order.

5. That this case be dismissed from the docket of this Court.

Enter: 5-27-86

Judge: Margaret Workman

Approved by:

John C. Purbaugh

JOHN C. PURBAUGH
Counsel for Plaintiffs
2502 Dudden Fork
Kenna, West Virginia 25248

Brenda Cole

BRENDA COLE
Deputy Attorney General
Counsel for Defendant
State Capitol
Charleston, West Virginia 25305

STATE OF WEST VIRGINIA

COUNTY OF KANAWHA, SS.

I, Phyllis J. Rutledge, Clerk of the Circuit Court of said Cou and in said State, do hereby certify that the foregoing is a copy from the records of said Court.

Given under my hand and seal of said Court

30th day of May 1986

Phyllis J. Rutledge, C

Circuit Court

KANAWHA COUNTY, WEST VIRGINIA

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF MINES AND MINERALS
1615 Washington Street, East
Charleston, West Virginia 25311
Telephone: 348-3500

ARCH A. MOORE, JR.
Governor

January 8, 1986

Honorable Ken Hechler
Secretary of State
State Capitol Building
Charleston, West Virginia 25305

Dear Mr. Secretary:

Please find enclosed one copy of proposed amendments to legislative rules for the West Virginia Department of Energy to be recorded and filed with your office. This submittal includes the West Virginia Surface Mining and Reclamation Regulations, the accompanying fiscal note, agency approval notice, notice of submittal to LRMRC, and the public hearing record.

I respectfully request that these materials be appropriately processed by your office. If you have questions regarding this matter, please feel free to contact Mr. Roger T. Hall at 348-3500.

Sincerely yours,

Kenneth R. Faerber
Acting Commissioner

KRF/rhb

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF MINES AND MINERALS
1615 Washington Street, East
Charleston, West Virginia 25311
Telephone: 348-3500

ARCH A. MOORE, JR.
Governor

January 8, 1985

A public hearing was announced on November 25, 1985, to be held January 3, 1986, in order to provide the public with an opportunity to comment on amendments to the Surface Mining Reclamation Regulations. These amendments were filed in compliance with approved administrative procedures. The hearing was set for 9:00 a.m.

My name is Roger T. Hall, and I have been appointed by the Commissioner to administer this public hearing.

Written comments were filed by Dennis Boyles of the Office of Surface Mining requesting a change in Section 2.19 amending the definition of Coal Preparation Plant.

By 9:30 a.m. no additional comments were received on the regulations; therefore, I declared this public hearing closed. Comments on these regulations will be received in the Department of Energy until 4:30 p.m. on this date.

Roger T. Hall
Administrator

STATE OF WEST VIRGINIA
DEPARTMENT OF ENERGY
DIVISION OF MINES AND MINERALS
1615 Washington Street, East
Charleston, West Virginia 25311
Telephone: 348-3500

ARCH A. MOORE, JR.
Governor

January 8, 1986

Mr. M. E. Mowery
Legislative Rule Making
Review Committee
Room E228
State Capitol Building
Charleston, West Virginia 25305

Dear Mr. Mowery:

Please find enclosed fifteen (15) copies of proposed legislative rules for the West Virginia Department of Energy. This enclosure constitutes amendments to the West Virginia Surface Mining and Reclamation Regulations. The proposed amendments are required as a result of the creation of this Department under the provisions of the West Virginia Energy Act (HB 1850). The changes reflect corrections to code citations, references to agencies and agency heads, and language changes required for state program approval by the Federal Office of Surface Mining.

The appropriate procedures have been taken to file these regulations with the Secretary of State's Office and a public hearing was held on January 3, 1985. Only one written comment was received, which resulted in a change in section 2.19 of the regulations.

Your continued cooperation in completing the legislative review during the current session is greatly appreciated. If you have any questions regarding this matter, please feel free to contact Roger T. Hall at 348-3500.

Sincerely yours,

Kenneth R. Faerber
Acting Commissioner

KRF/rhb

Department of Energy
Division of Mines and Minerals
Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 1.

FILED

1986 JAN -8 PM 1:28

WEST VIRGINIA SURFACE MINING RECLAMATION REGULATIONS

Department of ~~Natural Resources~~ Energy

Chapter ~~20-6~~ 22A-3
Series
(1985)

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

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1. GENERAL

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

1.02 Applicability - These rules and regulations shall apply to all surface coal mining and reclamation operations in this state as specified in accordance with Chapter ~~20~~ 22A, Article ~~6~~ 3.

Department of Energy
Division of Mines and Minerals
Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 1.02

(a) For all existing operations which have submitted permanent program modifications and/or addenda for existing permits or applications for permanent program permits, these regulations shall apply upon notification from the ~~director~~ Commissioner of their applicability. Such notification shall occur within forty-five (45) days of the effective date of these regulations. Within thirty (30) days of the receipt of that notification, the permittee shall acknowledge, in writing, to the ~~director~~ Commissioner the applicability of these regulations to his operation. ~~Such acknowledgement shall be deemed sufficient to make the permit or application complete for any new permit requirements contained in these regulations and shall become a part of the permit.~~ Provided however, that the Commissioner may from time to time require such additional information as he deems necessary for the proper and effective management and enforcement of this article.

(b) These regulations apply immediately to all existing operations not covered in (a).

(c) For applications for new operations which have received an SMA number within thirty (30) days of the effective date of these regulations, the applicant shall acknowledge the applicability of these regulations to his proposed operation, in writing, to the ~~director~~ Commissioner prior to issuance of the permit. ~~Such acknowledgement shall be deemed sufficient to make the permit or application complete for any new permit requirements contained in these regulations and shall become a part of the permit.~~ Provided however, that the Commissioner may from time to time require such additional information as he deems necessary for the proper and effective management and enforcement of this article.

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

(e) All existing and new operations shall comply with the notice requirements of 4C.07 and 7C.01 within seventy-five (75) days of the applicability of these regulations as specified in (a), or (b) of this subsection. Such notice shall be deemed sufficient to allow continued operation during the period specified in these regulations for pre-notification (thirty (30) days for right to a pre-blast survey and six (6) months for the extension of underground workings). Operations continuing beyond those time periods must be in full compliance with these regulations.

1.03 Authority - These regulations are issued under the authority of Article ~~6~~ 3, Chapter ~~20~~ 22A, Code of West Virginia, as amended.

1.04 Effective Date - These regulations become effective on the day of , 19 .

1.05 Filing Date - These regulations are being filed in the Office of the Secretary of State on the th day of , 19 , as regulations.

Department of Energy
Division of Mines and Minerals
Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 2.

2. DEFINITIONS: UNLESS THE CONTEXT IN WHICH USED CLEARLY REQUIRES A DIFFERENT MEANING, AS USED IN THESE REGULATIONS OR AS REFERRED TO IN ARTICLE ~~6~~ 3, CHAPTER ~~20~~ 22A, CODE OF WEST VIRGINIA, AS AMENDED:

2.01 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 coal refuse disposal area.

2.02 Accepted Engineering Methods - Means sound engineering practice based upon the technology currently applied by the engineering profession.

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

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

2.05 Acid-Producing Coal Seam means seams commonly associated with sulfides or other minerals which create acid mine drainage. Seams commonly associated with such material may include, but are not limited to Waynesburg, Washington, Freeport, Sewickley, Redstone, Pittsburgh, Kittanning, Elk Lick, Peerless, No. 2 Gas, Upper Eagle, No. 5 Block and Stockton Lewiston. However, specific onsite data may, on a case by case basis, demonstrate that these seams are not acid producing in specific areas.

2.06 Acid-Producing Overburden means material which upon appropriate analysis shows the potential for producing acid mine drainage.

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

2.08 Act means West Virginia Code, Chapter ~~20~~ 22A, Article ~~6~~ 3.

2.09 Active Surface Mining Operation means an operation where land is being disturbed or mineral is being removed and where a Phase I Bond Reduction has not been approved unless inactive status has been granted.

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

2.11 Auger Mining means a method of mining coal at a cliff or highwall by drilling or cutting holes into an exposed coal seam.

2.12 Buffer Zone means an undisturbed border along or around an intermittent or perennial stream.

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

2.14 Best Technology Currently Available means equipment, devices, systems, methods or techniques which will (a) prevent, to the extent possible, additional contributions of suspended solids to stream flow or runoff outside the permit area, but in no event result in contributions of suspended solids in excess of requirements set by applicable State or Federal laws; and (b) minimize, to the extent possible, disturbances and adverse impacts on fish, wildlife and related environmental values and achieve enhancement of those resources where practicable.

2.15 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, scour, or other destructive processes in channels such as diversion ditches and spillways.

2.19 Coal Processing Plant means a collection of facilities where run-of-the-mine coal is subjected to cleaning, concentrating or other processing or preparation ~~in order to separate coal from its impurities~~. The processing plant may consist of, but is not limited to, the following: loading facilities; storage and stockpile facilities; sheds, shops and other buildings; water treatment and water storage facilities; settling basins and impoundments; coal processing and other waste disposal areas; roads, railroads and other transportation facilities.

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

2.21 Coal Refuse - means any waste coal, rock, shale, slurry, culm, gob, bone, slate, clay, and related materials associated with or near a coal seam, which are either brought above ground or otherwise removed from a mine in the process of mining coal, or which are separated from coal during the cleaning or preparation operations.

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

2.23 Coarse Coal Refuse means coal processing waste predominately within a size range greater than the #28 sieve size.

2.24 Collateral Bond means an indemnity agreement in sum certain deposited with the ~~director~~ Commissioner executed by the permittee and supported by one or more of the following:

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

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

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

(4) An irrevocable letter of credit of any bank organized or authorized to transact business in the State of West Virginia, payable only upon presentation by the ~~director~~ Commissioner;

(5) A perfected, first-lien security interest in real or personal property, in favor of the ~~director~~ Commissioner; or

(6) Investment-grade rated securities, having the highest rating issued by a nationally recognized securities rating service, endorsed to the order of, and in the possession of, the ~~director~~ Commissioner, excluding all issues of the type traded on a commodity exchange such as contracts for future delivery of goods.

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

2.26 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.

2.27 Commissioner - means the Commissioner of the Department of Energy and/or his authorized agent.

2.28 Common-size Comparative Balance Sheet means item amounts from a number of the permittee's or applicant's successive yearly balance sheets arranged side by side in a single statement followed by commonsize percentages whereby: (1) the asset total is assigned a value of 100 percent; (2) the total of liabilities and owner equity is also assigned a value of 100 percent; and (3) each individual asset, liability, and owner equity item is shown as a fraction of one of the 100 percent totals.

2.29 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 commonsize percentages whereby net sales are assigned a 100 percent value, and then each statement item is shown as a percentage of net sales.

2.30 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.

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

2.32 Complete Application means an application which contains all required maps, plans, designs and other application materials excluding bond.

2.33 Completion of Reclamation means that the total bond has been released after approval of the final inspection report provided for in these regulations.

2.34 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.

2.35 Current Assets means cash and assets that are reasonably expected to be realized in cash or sold or consumed within one year.

2.36 Current Liabilities means debts or other obligations that must be paid or liquidated within a short period of time, usually a year. This shall also include dividends payable on preferred stock within one year.

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

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

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

~~2.37--Director-and/or-His-Authorized-Agent-means-the-director--of-the-department-of-natural-resources,-deputy-director,-the-chief-of-the division-of-reclamation,-the-assistant-chiefs-of-the-division-of-reclamation, all-duly-authorized-surface-mining-reclamation-supervisors,-inspectors-and inspectors-in-training.~~

2.40 Diversion Ditch - means a designed channel constructed for the purpose of collecting and transmitting surface runoff from the design storm.

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 Effective Height - means the difference in elevation in feet between the lowest open channel emergency spillway crest and the lowest point in the original cross section on the centerline of the dam.

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

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

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

2.46 Excess Spoil means spoil material disposed of in a location other than the mined-out area.

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

2.48 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.

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

2.50 Fine Coal Refuse means coal processing waste predominately within a size range less than the #28 sieve which may be disposed of in a slurry form or in a dewatered or treated state.

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

2.52 Fragile lands means geographic areas containing natural, ecologic, scientific or esthetic resources that could be irreparably damaged or destroyed by surface coal mining operations. Examples of fragile lands include valuable habitats for fish or wildlife, critical habitats for endangered or threatened species of animals or plants, uncommon geologic formations, national natural landmark sites, areas where mining may result

in flooding, environmental corridors containing a concentration of ecologic and esthetic features, areas of recreational value due to high environmental quality, and buffer zones adjacent to the boundaries of areas where surface coal mining operations are prohibited under Section 22(d) of the Act and Section 13 of these regulations.

2.53 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.

2.54 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.

2.55 Growing Season means one (1) year.

2.56 Ground water means subsurface water in the zone of saturation.

2.57 Haulageway or Access Road means any road constructed, improved, maintained or used by the operator with the exception of state maintained roads.

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

2.59 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 Highway, Primary - means those roadways which are designated as interstates, U.S. numbered highways or West Virginia numbered highways.

2.61 Highway, Secondary - means those roadways which are designated by the West Virginia Department of Highways as county numbered routes.

2.62 Historic Lands means important historical, cultural and scientific areas that could be irreparably damaged or destroyed by surface mining operations. Examples of historic lands include sites that have been listed on the national register of historic places, national historic landmarks and sites for which historic designation is pending.

2.63 Handbook means the Technical Handbook of Standards and Specifications for Mining Operations in West Virginia prepared by the ~~director~~ Commissioner of the West Virginia Department of ~~Natural Resources~~ Energy.

2.64 Hydrological Analysis - means a determination, using standard engineering methods, to establish water runoff for a specified design storm.

2.65 Hydrologicc Balance - means the relationship between the quality and quantity of water inflow to, water outflow from and water storage in a hydrologic unit such as a drainage basin, aquifer, soil zone, lake or reservoir. It encompasses the dynamic relationships among precipitation, runnoff, evaporation and changes in ground and surface water storage.

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

2.67 Impoundment means a closed basin constructed for the retention of water, sediment or waste.

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

2.69 Intermittent Stream means a stream or portion of a stream that flows continuously for at least one month of the calendar year as a result of ground water discharge or surface runoff.

2.70 Inspection shall mean a visual review of prospecting, surface or other mining operations to insure complete compliance with any applicable law, rule, regulation or permit conditions under jurisdiction of the ~~director~~ Commissioner.

2.71 Irreparable Damage to the Environment means any damage to the environment that cannot be corrected by actions of the operator.

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

2.73 Lightly Buffered Stream means any stream or its tributaries that contains less than 15 PPM methyl orange alkalinity (to pH4.5) and a conductivity of less than 50 micro MHO.

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

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

2.76 Mine means the shaft, slopes, drifts or inclines connected with excavations penetrating coal seams or strata and the surface structures or equipment connected therewith which contributes directly or indirectly to the mining, preparation or handling of coal.

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

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

2.79 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.

2.80 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.

2.81 Net worth means preferred and common stock, all surplus accounts, and retained earnings.

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

2.83 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.

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

2.85 Peak Runoff means the maximum flow at a specified location resulting from a design storm.

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

2.87 Phreatic Surface - means the upper surface of a zone of saturation where a body of groundwater is not confined by an overlying impermeable strata.

2.88 Piezometric Surface - means the surface to which the water from a given aquifer will rise under its pressure and elevation head.

2.89 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.

2.90 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.

2.91 Potential Hazard means the existence of any condition or practice or any violation of a permit or other requirements of the Act in an

operating or an abandoned refuse area which might reasonably be expected to cause physical harm to persons, property, or the environment inside or outside the permit area.

2.92 Pre-Inspection means a preliminary survey and a field review by the ~~director~~ Commissioner or his authorized agent of a pre plan and the proposed area to be disturbed.

2.93 Preplan means the total application submitted to the ~~director~~ 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.

2.94 Principal Shareholder means any person who is the record or beneficial owner of 10 percent or more of any class of voting stock.

2.95 Principal Spillway means the hydraulic structure designed to discharge water stored between normal pool and the emergency spillway invert elevations.

2.96 Probable Maximum Precipitation means the depth-duration-area rainfall for a particular area that represents the maximizing of the most critical meteorological conditions that are considered possible.

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

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

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

2.100 Reclamation means the process of converting disturbed land to a stable form for productive use.

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

2.102 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.

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

2.104 Safety Factor means the ratio of the available shear strength to the developed shear stress, or the ratio of the sum of the resisting forces to the sum of the loading or driving forces, as determined by accepted engineering practices.

2.105 Sediment means solid material, both mineral and organic, that is in suspension, is being transported or has been moved from its site of origin by air, water gravity or ice and has come to rest on the earth's surface.

2.106 Sediment Control Structure means a structure designed, constructed and maintained in accordance with Section 4B.05 of these regulations.

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

2.108 Significant Aquifer means a zone, stratum or group of strata that can store and transmit water in sufficient quantities.

2.109 Site - means in reference to coal refuse disposal area, diversion ditches, sediment control structures, roads and all other surface disturbance within the permit area.

2.109 Slope Protection means any measures taken to control erosion on slopes.

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

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

2.112 Stabilize means to control movement of soil, spoil piles or areas of disturbed earth by modifying physical or chemical properties.

2.113 Standard Engineering means sound engineering practice based upon the technology currently available to the engineering profession.

2.114 Stoniness means a characteristic of earth, overburden or spoil reflecting its relative proportion of sizeable aggregate content as opposed to its sand, silt, clay or rock fragment content.

2.127 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 issued by the ~~director~~ Commissioner.

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

2.129 Valid Existing Rights exists, except for haulroads, in each case in which a person demonstrates that the limitation provided for in Section 22 (d) of the Act would result in the unconstitutional taking of that person's rights. For haulroads, valid existing rights means a road or recorded right-of-way or easement for a road which was in existence prior to August 3, 1977. A person possesses valid existing rights if he can demonstrate that the coal is immediately adjacent to an ongoing mining operation which existed on August 3, 1977 and is needed to make the operation as a whole economically viable. Valid existing rights shall also be found for an area where a person can demonstrate that an SMA number had been issued prior to the time when the structure, road, cemetery or other activity listed in Section 22(d) of the Act came into existence.

2.130 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 hollow measured at the steepest point are greater than 20° or the average slope of the profile of the hollow from the toe of the fill to the top of the fill is greater than 10°.

2.131 Woodlands means commercial woodlands where the post-mining land use would be a commercial product where flat or gently rolling land is essential for operation and mechanical harvesting.

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

2.133 Zone of Saturation means the zone below the piezometric surface in which all voids are filled with groundwater. Piezometric surface means the surface to which the water from a given aquifer will rise under its full head.

3A. PERMIT APPLICATION

3A.01 General Requirements for Format and Contents - Applications for permits to conduct surface mining operations shall be filed in the format required by the ~~director~~ Commissioner.

(a) All technical data submitted in the application shall be accompanied by the names of persons or organizations that collected and analyzed the data, dates of the collection and analysis of the data and description of the methodology used to collect and analyze the data. Any referenced materials not included in the application shall be readily available to the ~~director~~ Commissioner.

(b) If the application is for a period in excess of the normal five (5) years, the application shall:

1. Be complete for the specified longer term;

2. Show that the specified longer term is reasonably needed to allow the applicant to obtain necessary financing of equipment and the opening of the operation and that the need is confirmed in writing by the applicant's proposed source of financing; and

3. Such permits shall be reviewed by mid-term or every five (5) years, whichever is more frequent.

(c) The application shall contain the telephone numbers of the applicant, operator or appl cants resident agent.

3B. ADVERTISEMENT

3B.01 Surface Mine Application Number - Prior to the publication of the advertisement for a surface mining permit, the applicant shall submit a complete surface mining permit application and obtain a surface mining application (SMA) file number. Each such SMA number shall be valid for 360 days.

3B.02 Contents of Advertisements

(a) The surface mining application (SMA) file number shall be made a part of the advertisement.

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

(c) At a minimum, the advertisement shall contain:

1. The name and business address of the applicant;

2. A narrative description which clearly describes the location of the proposed permit area to include the name of the coal seam to be mined and the receiving stream;

3. The location where a copy of the application is available for public review;

4. The name and address of the regulatory authority where written comments or requests for informal conferences on the application may be submitted;

5. The type of operation; and

6. Surface and mineral ownership of the tract to be permitted.

(d) The advertisement and publication dates shall be certified and notarized by the publishing newspaper. The certificate of publication shall be made a part of the permit application.

(e) If an applicant seeks a permit to mine within one hundred feet (100') of the outside right-of-way of a state maintained road or to relocate a state maintained road, the advertisement may include a concise statement describing the road and, if applicable, the particular part to be relocated, where the relocation is to occur, the duration of the relocation and that a public hearing can be requested. If mining within one hundred feet (100') of a public road is proposed and not addressed in this advertisement, a separate public notice, with an opportunity for a public hearing, must be provided for prior to permit issuance.

(f) If an alternative land use is proposed, an indication of the premining land use and the proposed postmining land use.

(g) If an experimental practice is proposed, a statement indicating such and identifying regulatory provisions for which a variance is requested.

3B.03 Availability of comments - The ~~director~~ Commissioner shall file a copy of comments for public review at the same office where the permit is filed.

3C. MAPS

3C.01 Scale for Maps - Except as otherwise noted in these rules and regulations, the scale required for all maps shall be as follows:

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Division of Mines and Minerals
Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 3C.01.

(a) The preferred scale of maps proposed from U.S. Geological Survey topographic maps on 7.5-minute quadrangle shall be enlarged to five hundred foot (500') to the inch;

(b) The preferred scale for maps associated with facilities subject to Sections 7 and 8 of these regulations shall be two hundred foot (200') to the inch; and

(c) Lesser scales may be used where improved clarity and accuracy are necessary.

3C.02 Map Size - All maps and plans shall be submitted on print paper, thirty inches (30") by forty-two inches (42") or less. If supplementary maps or plans are attached, match lines shall be used.

3C.03 Color Code - A color code shall be used in preparing all maps to indicate critical features of the permit area as follows:

(a) Red shall indicate mineral to be removed;

(b) Blue shall indicate water and drainage patterns;

(c) Green shall indicate areas regraded;

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

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

3D. INSURANCE - The minimum amount of insurance coverage for bodily injury shall be $300,000 for each occurrence and $500,000 aggregate; and minimum insurance for property damage shall be $300,000 for each occurrence and $500,000 aggregate with no exclusion for landslides and water loss; Provided, that blasting insurance will continue as long as blasting activities occur. Provided further, that the policy shall include a rider requiring the insurer notify the ~~director~~ Commissioner whenever substantive changes are made in the policy including any termination or failure to renew.

3E. APPROVED PERSONS

3E.01 Function - Any person may upon approval by the ~~director~~ Commissioner, unless otherwise provided in the Act and these regulations, prepare, sign or certify all permit applications, maps, plans and design specifications or other similar materials necessary to complete an application and preplan. Provided however, that for purposes of Section 22A-3-9(a)(13) ~~and 22A-3-12(b)(10)~~ of the Act an approved person shall be a registered professional engineer or licensed land surveyor who may be assisted by experts in related fields such as geology, land surveying and landscape architecture. Provided, further, that for purposes of Section 22A-3-12(b)(10) of the Act an approved person shall be a registered professional engineer.

3E.02 Qualifications - The ~~director~~ Commissioner's approval shall be in writing and shall be based on the following:

(a) A resume of the persons prior experience and training relating to the preparation of permit application materials, 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 in lieu of a resume submit a copy of their registration; and

(b) Any person seeking an approval must demonstrate that he possesses adequate knowledge of the Act and rules and regulations promulgated thereunder and possess such other skills and qualifications as may be necessary to complete an application and preplan by successfully passing an examination administered by the ~~director~~ Commissioner. Those persons who have been approved to date need not make said demonstration. Such examinations will be given upon request by the person seeking approval.

3F. COMPLIANCE INFORMATION

3F.01 Past Violations - In addition to the compliance and permit information required by the Act, each application shall contain a listing of any current or previous permits or pending applications in the United States and a listing of each violation notice received by the applicant, any subsidiary, affiliate or any person controlled by or under common control with the applicant in connection with any surface coal mining operation during the three (3) year period before the application date for violations of any environmental law, rule or regulation of any state and of regulation enacted pursuant to federal law pertaining to air or water environmental protection.

3F.02 Determination by the ~~director~~ Commissioner - If the ~~director~~ Commissioner determines, from either the schedule submitted as part of the application or from other available information, that any surface mining operation owned or controlled by the applicant is currently in violation of any law, rule or regulation of the United States, or of any state law, rule or regulation enacted pursuant to federal law, rule or regulation pertaining to air or water environmental protection, or of any provision of the Act, the ~~director~~ Commissioner shall require the applicant, before the issuance of the permit, to either:

(a) Submit to the ~~director~~ Commissioner proof which is satisfactory to the regulatory authority, department or agency which has jurisdiction over such violation, that the violation:

1. Has been corrected; or

2. Is in the process of being corrected.

(b) Establish to the ~~director~~ Commissioner reviewing such application that the applicant has filed and is presently pursuing, in good faith, a direct administrative or judicial appeal to contest the validity of that violation. If the administrative or judicial hearing authority either denies a stay applied for in the appeal or affirms the violation, then any surface coal mining operations being conducted under a permit issued according to this paragraph shall be immediately terminated, unless and until the provisions of the above paragraph are satisfied.

3F.03 Identification Number - The name of the proposed mine and the Mine Safety and Health Administration identification number for the surface or underground mine, if issued, shall be included in the application.

3F.04 Federal Fees - The applicant shall submit proof that all Federal Reclamation fees are paid.

3G. OPERATION PLANS, MAPS AND CROSS-SECTIONS

3G.01 Operation Plans - In addition to other plans required by the Act, the application shall contain plans describing:

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

(b) How the applicant will remove, store and redistribute topsoil, subsoil and other materials or topsoil substitutes as provided for in the Topsoil Performance Standards of Sections 6, 7 and 8; and

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

3G.02 Maps - The preplan map shall be developed in accordance with the requirements of Sections ~~20-6-10~~ 22A-3-9(a)(12) and (13) and ~~20-6-11~~ 22A-10 of the Act and Subsection 3C of these regulations and shall include the following:

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

(b) Each state maintained road located in or within one hundred feet (100') of the proposed permit area;

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

(d) Each cemetery located in or within one hundred feet (100') of the proposed permit area;

(e) Any portion of a unit of the National System of Trails or the Wild and Scenic River System, including study rivers designated under

Section 5(a) of the Wild and Scenic Rivers Act which is located within or adjacent to the proposed permit area;

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

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

(h) Where the natural slope of the land below the coal outcrop is less than twenty degrees (20°) and downslope placement of overburden or spoil is proposed, the map shall indicate percent slope of the land at two hundred foot (200')intervals along the crop line;

(i) The location of sampling points for the collection of baseline data and monitoring sites to be used during operation;

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

(k) Extent of proposed auger operations;

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

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

(n) Location and identification of sub areas if incremental bonding is to be used.

3G.03 Cross-Sections - The application shall contain cross-sections which accurately depict the existing premining surface configuration and the final surface configuration that will be achieved as proposed in the reclamation plan and/or as required by these regulations.

3H. GENERAL ENVIRONMENTAL RESOURCES INFORMATION

3H.01 The application shall contain a description of any historic lands shown on the preplan map within or adjacent to the proposed permit area. A statement as to the timing and sequence of mining and a description of the measures to be used to minimize or prevent adverse impacts in relation to such historical lands shall be included in the application.

3H.02 Existing Structures and Facilities - The applicant shall submit necessary plans and specifications for the modification of any existing structures or facilities which do not meet the performance standards contained in these regulations.

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

3I. ENDANGERED SPECIES - The applicant shall describe all control measures, management techniques and monitoring methods to be used to protect or enhance threatened or endangered species of plants or animals listed by the Secretary of the Interior under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 et seq.) and their critical habitats if they are to be affected by the proposed activities.

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

3K. VERIFICATION OF APPLICATION - An application for a permit shall contain a notarized signature by a principal officer verifying that the information contained in the application is true and correct to the best of the official's information and belief.

3L. TRANSFER, ASSIGNMENT OR SALE OF PERMIT RIGHTS AND OBTAINING APPROVAL

3L.01 Requirements - The ~~director~~ Commissioner shall not grant approval of the transfer, assignment or sale of the rights granted under any permit unless and until the following conditions are met:

(a) It shall be affirmatively demonstrated to the ~~director~~ 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 of the permit rights; and

(b) The application shall set forth on forms prescribed by the ~~director~~ Commissioner and verified in accordance with 3K, the information required in the following sections of the Act: ~~10~~9(a)(1) through ~~10~~9(a)(6) and ~~10~~9(a)(9), ~~10~~9(d), ~~10~~9(f), ~~11~~10(a)(10), and 18(b)(5).

3L.02 Findings - If the ~~director~~ Commissioner finds, based on the information set forth in 3L.01 and other information made available to him, that the person to whom the permit rights are being assigned, transferred or sold will conduct mining operations in accordance with the purpose and intent of the Act, these regulations and the terms and conditions of the permit, the approval of the assignment, transfer or sale of the permit rights may be granted.

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Division of Mines and Minerals
Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 3L.03.

3L.03 Agreement - A permittee who wishes to assign the mining operation through an agreement, contract, job contract, etc., to another party but retain the permit must request prior written approval on forms prescribed by the ~~director~~ 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.

3L.04 Successor by Transfer, Assignment or Sale - Any person seeking to succeed by transfer, assignment or sale to the rights granted by a permit issued under the Act shall, prior to the date of such transfer, assignment or sale, comply with the following:

(a) Obtain the performance bond coverage of the original permittee by:

1. Transfer or replacement of the original bond;

2. A written agreement with the original permittee and all subsequent successors in interest (if any) that the bond posted by the original permittee and all successors shall continue in force on all areas affected by the original permittee and all successors and supplementing such previous bonding with such additional bond as may be required by the regulatory authority. If such an agreement is reached, the ~~director~~ Commissioner may authorize for each previous successor and the original permittee the release of any remaining amount of bond in excess of that required by the agreement; and

3. Providing sufficient bond to cover the original permit in its entirety from inception to completion of reclamation operations or by such other methods as would provide that reclamation of all areas affected by the original permittee is assured under bonding coverage at least equal to that of the original permittee.

(b) Provide the ~~director~~ Commissioner with an application for approval of such proposed transfer, assignment or sale, including:

1. Name and address of the existing permittee and permit number; and

2. Name and address of the person proposing to succeed by such transfer, assignment or sale and the name and address of that person's resident agent.

3L.05 Advertisement

(a) The person applying for approval of such transfer, assignment or sale of rights granted by a permit shall advertise the filing of the application in a newspaper of general circulation in the locality of the operations involved, indicating the name and address of the applicant, the original permittee, the number and particular geographic location of the permit and the address to which written comments may be sent under this paragraph.

(b) Any person whose interest are or may be adversely affected, including but not limited to, the head of any local, state or federal government agency, may submit written comments on the application for approval to the ~~director~~ Commissioner within thirty (30) days of the day of publication.

3L.06 Approval - The ~~director~~ Commissioner may, upon the basis of the applicant's compliance with the requirements of Paragraphs (01) and (02) of this Subsection, grant written approval for the transfer, sale or assignment of rights under a permit, if he first finds that:

(a) The person seeking approval will conduct the operations covered by the permit in accordance with the requirements of law;

(b) The applicant has submitted a performance bond or other guarantee at least equivalent to the bond or other guarantee of the original permittee; and

(c) The applicant will continue to conduct the operations involved in full compliance with the terms and conditions of the original permit, unless and until a new permit is obtained.

3M RENEWALS

3M.01 Application - Application for renewal shall be on forms prescribed by the ~~director~~ Commissioner, shall be filed in accordance with ~~20-6-10~~22A-3-9(c) of the Act, and shall contain the following:

(a) The name and address of the permittee, location of the permit area including the county, the magisterial district, the nearest post office and the permit number;

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

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

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

(e) A progress map of the same size and scale as the proposal map;

(f) A statement that the information set forth in the form and progress map is true and accurate;

(g) A notarized signature of the principal officer of the permittee in accordance with section 3K; and

(h) A copy of a public notice of permit renewal and proof of publication in accordance with Section 20 of the Act and Section 3B.02 of these regulations.

3M.02 Notification - The ~~director~~ Commissioner shall notify appropriate agencies in accordance with ~~20-6~~22A-3-20(a) of the Act.

3M.03 Response - Informal conferences shall be available in accordance with ~~section 20-6~~22A-3-20(b) of the Act and the ~~director~~ Commissioner shall send copies of his decision to the applicant, any persons who filed objections or comments to the renewal and to any persons who were parties to any informal conference held on the permit renewal.

3N. REVISIONS

3N.01 General

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

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

30. FINDINGS

30.01 Effect on Public Places - Where the proposed surface coal mining operation will adversely affect any public park or any publicly owned place listed on the national register of historic places, the ~~director~~ Commissioner shall transmit to the Federal, State or local agencies with jurisdiction over the park or historic place a copy of the complete permit application and request that the agency approve or disapprove the operations.

30.02 Written Determinations - Along with other written determinations required by the Act and these regulations, the ~~director~~ Commissioner shall make a written determination that the proposed surface mining operation would not affect the continued existence of endangered or threatened species or result in destruction or adverse modification of their critical habitats, as determined under the Endangered Species Act of 1973 (16 U.S.C. 1531 et seq.)

30.03 Operation(s) Near State Road - Where the proposed mining operation is to be conducted within one hundred feet (100') [measured horizontally] of the outside right-of-way line of any public road (except where mine access roads or haulage roads join such right-of-way line) or where the applicant proposes to relocate any public road, the ~~director~~ Commissioner shall:

(a) Require the applicant to obtain necessary permission from the authority with jurisdiction over state maintained roads;

(b) Provide an opportunity for a public hearing at which any member of the public may participate in the locality of the proposed mining operations for the purpose of determining whether the interests of the public and affected landowners will be protected;

(c) If a hearing is held, require the applicant to provide notice in a newspaper of general circulation in the affected locale of a public hearing at least two (2) weeks before the hearing; and

(d) Make a written finding based upon information received at the public hearing within thirty (30) days after completion of the hearing as to whether the interests of the public and affected landowners will be protected from the proposed mining operations.

30.04 Designation of Lands Unsuitable - Upon receipt of a complete application for a surface mining permit, the ~~director~~ Commissioner shall review the application to determine whether the surface coal mining operation is limited or prohibited under Section 22 of the Act on the lands which would be disturbed by the proposed operation.

(a) If the ~~director~~ Commissioner is unable to determine whether the proposed operation is located within the boundaries of any of the lands in Section 22 (d)(1) of the Act, or closer than the limits provided in Section 22 (d)(4) of the Act, the ~~director~~ 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, with a notice to the appropriate agency that it must respond within thirty (30) days of receipt of the request.

(b) Where the proposed operation would include federal lands within the boundaries of any national forest and the applicant seeks a determination that mining is permissible under Section 22 (d)(5) of the Act, the applicant shall submit a permit application to the OSM State director.

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

SECTION 4 - GENERAL MINING AND RECLAMATION PLAN REQUIREMENTS AND BONDING

4A. Haulageways or Access Roads

4A.01 Location - The approximate centerline location of the proposed haulageways or access roads shall be identified on the site by visible markings at one hundred foot (100') intervals, which are in place at the time of pre-inspection, Provided, that pre-existing haulageways or access roads shall be exempt from this requirement.

4A.02 Construction - All construction of haulageways or access roads shall be in accordance with the following provisions:

(a) The grading of the haulageway or access roads shall be such that:

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') of road construction; and

3. The surface shall pitch toward the ditchline at the minimum rate of 1/2 inch per foot of surface width or crowned at the minimum rate of 1/2 inch per foot of surface width as measured from the centerline of the haulageway or access road.

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

(c) Cut Slopes - Cut slopes should not be steeper more than 1:1 in soils or 1/4:1 in rock.

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

4A.03 Drainage Design - All drainage designs of haulageways or access roads shall be in accordance with the following provisions:

(a) Ditches - A ditch shall be provided on both sides of a throughcut and on the inside shoulder of a cutfill section, with ditch relief culverts being spaced according to grade. Water shall be intercepted or directed around and away from a switchback. All ditchlines shall be capable of passing the peak discharge of a 1-year, 24-hour precipitation event. Where super elevation to the inside of a curve will improve the safety of a haulroad such as in the head of a hollow, a ditchline may be located on the

outside shoulder of cut fill section; Provided, that the ditchline is designed so that it will remain stable and that drainage control in accordance with the Act is also provided for water on the outside of the curve.

(b) Culverts - Ditch relief culverts shall be installed wherever necessary to insure proper drainage of surface water beneath or through the haulageway or access road, according to the following provisions:

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

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

3. The inlet end shall be protected by a headwall of stable material as approved by the ~~director~~ Commissioner and the slope at the outlet end shall be protected with an apron of rock riprap, energy dissipator or other material approved by the ~~director~~ Commissioner;

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

5. Design of culverts may be submitted where the aforementioned design criteria is not practical or necessary.

(c) Culvert Openings - Culvert openings installed on haulageways or access roads shall not be less than one hundred (100") square inches in area, but, in any event, all culvert openings shall be adequate to carry storm runoff of a peak discharge capacity of a 1-year, 24-hour precipitation event from the contributing watershed and shall receive necessary maintenance to function properly at all times; and

(d) Intermittent or Perennial Stream Crossing - Culverts, bridges or other drainage structures shall be used to cross intermittent or perennial streams. Consideration shall be given to such factors as weather conditions, season of the year, time period for construction, etc., with regard to using measures to minimize adverse effects to the water quality and stream channel. In no event shall the sediment load of the stream be significantly increased or the water quality be significantly decreased during the construction period. Water control structures shall be designed with a discharge capacity capable of passing the runoff for a 10-year, 24-hour precipitation event from the contributing watershed; Provided, if approved by the ~~director~~ Commissioner, the capacity of the water control structure itself can be at

least equal to or greater than stream channel discharge capacity immediately upstream and downstream of the crossing; Provided further, that the structure shall pass at least a 1-year, 24-hour storm.

4A.04 Sediment Control - A sediment storage volume must be provided equal to 0.125 acre/foot for each acre of disturbed area or a lesser value as approved by the ~~director~~ Commissioner. Temporary erosion and sedimentation control measures such as outlined in Chapter 19 of the Handbook shall be implemented during construction until permanent control can be established.

4A.05 Seeding of Slopes - All disturbed area including fill and cut slopes, shall be seeded and mulched immediately after the construction of a haulageway or access road and maintained thereafter as necessary to control erosion.

4A.06 Surfacing - Haulageways or access roads shall not be surfaced with any acid-producing or toxic material and the surface shall be maintained to control or prevent erosion and siltation.

4A.07 Dust Control - All reasonable means shall be employed to control dust from the surface of haulageways or access roads.

4A.08 Removal of Drainage Structures - Bridges, culverts, stream crossings, etc., necessary to provide access to the operation, shall not be removed until reclamation is completed and approved by the ~~director~~ Commissioner. The same precautions as to water quality are to be taken during removal of drainage structures as those taken during construction and use.

4A.09 Existing Haulageways or Access Roads - Where existing roads are to be used for access or haulage and it can be demonstrated that reconstruction to meet the above requirements would result in greater environmental harm and the drainage and sediment control requirements of this section can otherwise be met, 4A.02 (a)1 & 2; 4A.02 (c); 4A.02 (d) and 4A.03 (b) 1 & 2; will not apply.

4A.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 the above sections with the exception of 4A.05 and 4A.11.

4A.11 Abandonment of Haulageways or Access Roads - Haulageways or access roads shall be abandoned in accordance with the rules and regulations in addition to the following requirements:

(a) Upon abandonment of haulageways or access roads, every effort shall be made to prevent erosion by the use of culverts, water bars or other devices. Water bars or earth berms shall be installed according to the following table of spacings in terms of percent of haulageway or access road grade, prior to the abandonment.

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

(b) Upon abandonment of haulageways or access roads, they shall be seeded and mulched immediately in accordance with subsection 4F.

4A.12 Plans, Design Data and Construction Specifications

(a) A plan view drawn to scale showing haulroad station baseline, location of culverts, flow directions, intermittent or perennial streams, and other pertinent data.

(b) A surveyed profile drawn to scale (scale should be no greater than 1" = 100' horizontal, 1" = 50' verticle) showing but not limited to road surface, location and size of culverts, station, elevations, original ground, and percent grades.

(c) Typical cross-section of haulroad showing culvert, slope of culvert, fill material, original ground, ditches and sediment control devices, if applicable.

(d) Intermittent or perennial stream crossings, submit the following:

1. Structure computation sheet; and

2. Cross-section showing all pertinent information.

(e) Construction specifications should include excavation, selection and placement of materials, vegetative protection against erosion, road surfacing, drainage and sediment control.

4A.13 Other Transportation Facilities - Railroad loops, spurs, sidings, surface conveyor systems, chutes, aerial tramways or other transportation facilities shall be designed, constructed, maintained and abandoned so as to comply with the following:

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

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

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

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

(e) Prevent or control damage to public or private property.

The Handbook contains design criteria generally appropriate for environmental protection and safety.

4A.14 Certification - All roads and haulageways for which design criteria have been submitted for technical review and approval shall be certified that construction was in accordance with the approved plan except as noted in the certification after construction and/or installation is complete.

(a) A certification form shall be submitted to the Department of ~~Natural Resources~~ Energy, Division of ~~Reclamation~~ Mines and Minerals which has been signed by a person approved by the ~~director~~ Commissioner prior to coal haulage or general use of such road.

(b) Any minor changes implemented during construction which equals or exceeds the approved system shall be indicated on "As-built" plans showing approved design, amount of minor change, and included as a part of the certification.

4B. DRAINAGE SYSTEM

4B.01 Drainage Plan

(a) A drainage map shall be included in the application which shall indicate or contain the following:

1. The directional flow of water on and away from the land to be affected;

2. Location of all surface and ground water baseline test sites;

3. Location of all proposed surface and ground water monitoring sites;

4. Location of all erosion and sedimentation control structures;

5. Component drainage area together with a table showing total acreage and disturbed acreage within each component; and

6. A sediment structure table showing; type of sediment control structure, total contributing drainage area (acres), disturbed acreage controlled by total disturbance in drainage area (acres) and storage capacity (AC FT).

(b) The design shall be in accordance with the Handbook unless otherwise approved.

4B.02 Natural Drainways - Natural drainways in the area of land disturbed by surface mining and prospecting operations shall be kept free of overburden except where overburden placement has been approved. Overburden placement and haulageways across natural drainways shall be constructed so as not to affect the flow of the stream or materially increase the sediment load and concentrations of toxic materials in the stream.

4B.03 Intermittent or Perennial Stream - No land within one hundred feet (100') feet of an intermittent or perennial stream shall be disturbed by surface mining operations unless specifically authorized by the ~~director~~ Commissioner. The ~~director~~ Commissioner will authorize such operations only upon finding that surface mining activities will not adversely affect the normal flow or gradient of the stream, adversely affect fish migration or related environmental values or materially damage the water quantity or quality of the stream. The area not to be disturbed shall be designated a buffer zone and marked accordingly.

4B.04 Stream Channel Diversion and Diversions - All stream channel diversion and diversions within the permit area shall be designed to be stable, provide protection against flooding and resultant damage to life and property, prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow outside the permit area and comply with all local, State, and Federal laws and regulations.

(a) Stream Channel Diversions

1. Design Capacity

A. The design capacity of channels for temporary and permanent channel diversions shall be at least equal to the capacity of the unmodified stream channel immediately upstream and downstream for the diversion.

B. Temporary and permanent channel diversions designed so that the combination of channel, bank and flood-plain configuration is adequate to pass safely the peak runoff of a 10-year, 24-hour precipitation event for a temporary channel diversion and a 100-year, 24-hour precipitation event for a permanent channel diversion.

2. Removal of Temporary Diversions - Temporary channel 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.

3. Plans, Design Data and Specifications

A. A "stream channel design computation sheet" to be completed for each proposed temporary or permanent stream channel diversion.

B. Construction plans showing:

(1) A plan view of the area showing centerline profiles of existing stream channel and proposed location of the temporary or permanent stream channel (drawn to scale);

(2) Profiles along the centerline of the existing and temporary or permanent stream channel showing original ground, proposed and existing stream bottom (drawn to scale);

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

(4) Show detailed sequence of installation of temporary or permanent stream channel diversion.

C. Construction specifications.

D. Maintenance schedule and procedures for maintenance.

(b) Diversions

1. Design Capacity - Diversions shall have the capacity to pass safely the peak discharge from the contributing watershed from a 10-year, 24-hour precipitation event.

2. Plans, Design Data and Specifications - In addition to the "Proposed Drainage Plan", there shall also be submitted the following items concerning diversions:

A. A "Diversion Design Computation Sheet" to be completed for each proposed diversion;

B. Construction plans showing:

(1) A surveyed profile along the centerline of the diversion showing original ground line and proposed diversion bottom;

(2) Channel cross-section showing the original ground line, bottom width, side slopes, depth of flow, freeboard and other pertinent information drawn to scale;

(3) Type soil in which diversion will be excavated. The soil shall be sampled and classified at intervals 500 feet; and

(4) Type and design, if applicable, of the outlet proposed for each diversion.

C. Maintenance schedule and procedures for maintenance; and

D. Construction and vegetation specifications.

4B.05 Sediment Control - Sediment control structures shall be constructed in appropriate locations in order to control sedimentation. All runoff from the disturbed area shall pass through a sedimentation pond(s) such as, but not limited to, earth embankment, excavated ponds, gabions, cribs and bench control systems. In addition to the requirements of this subsection all such structures shall be designed, constructed and maintained in accordance with the Handbook unless otherwise approved.

(a) Design and Construction Requirements

1. All sediment control structures shall be constructed and certified before beginning of any surface mining activities as provided for in paragraph (b) of this subsection.

2. All structures shall be located as near as possible to the disturbed area and out of perennial streams unless the applicant demonstrates and the ~~director~~ Commissioner finds that there is no other suitable location for such structures.

3. All structures shall have the capacity to store 0.125 Acre/ft. of sediment for each acre of disturbed area in the structures watershed; Provided, that consideration may be given for reduced storage volume where the preplan and site conditions reflect controlled placement, concurrent reclamation practices, or use of on site sediment control measures. 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 that will be disturbed throughout the life of the permit.

4. All discharges from sediment control structures shall not cause a violation of state and federal water quality standards and shall meet effluent limitations.

5. All structures shall be designed, constructed and maintained to prevent short-circuiting.

6. 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 the structure. Sediment removal and disposal shall be done in a manner that minimizes adverse effects on surface and ground water quality.

7. All structures shall be designed, constructed and maintained to meet the following safety standards:

A. Provide a combination of principal and emergency spillways on embankment structures that will safely discharge a minimum 25-year, 24-hour precipitation event. The principal spillway requirements may be waived by the ~~director~~ Commissioner if the emergency spillway is designed at a minimum to safely by-pass the peak rate of discharge of a 25 year, 24-hour frequency storm in an open channel constructed of non-erodable material and capable of maintaining sustained flows. If alternate sediment control structures such as excavated ponds or bench control structures are utilized in place of embankment structures, these structures will safely discharge a 10-year, 24-hour precipitation event. The emergency spillway or exit channel shall at least handle a 10-year, 24-hour precipitation event;

B. 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. Provide proper stabalization and revegetation of the embankment; and

D. Avoid organic matter in the foundation and provide for proper compaction and ensure against excessive settlement by excluding sod, roots, frozen soil or coal processing wastes from the embankment .

8. Sediment control structures which impounds water to 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 impounds water to an elevation of twenty feet (20') or more above the upstream toe of the structure shall be constructed, inspected and abandoned in accordance to 30 CFR 77.216. In addition to those requirements, the following minimum standards shall be adhered to:

A. An appropriate combination of principal and emergency spillways shall be provided to discharge safely the runoff resulting from a 100-year, 6-hour precipitation event, or a large event specified by the Department of ~~Natural Resources~~ Energy;

B. The embankment shall be designed and constructed with a static safety factor of at least 1.5 or a higher safety factor as designated by the Department of ~~Natural Resources~~ Energy to ensure long-term stability;

C. Appropriate barriers shall be provided to control seepage along the conduits that extend through the embankment, and

D. All inspection reports and approvals shall be provided to the ~~Director~~ Commissioner of the Department of ~~Natural Resources~~ Energy.

9. Discharge Structures - Discharge from temporary or permanent sediment control structures, diversions, stream channel diversions, etc., shall be controlled by energy dissipators, riprap channels or other devices approved by the ~~director~~ Commissioner to reduce erosion, to prevent deepening or enlargement of stream channels and to minimize disturbance of the hydrologic balance. Discharge structures shall be designed according to standard engineering procedures.

(b) Certification - A certification form shall be submitted to the Department of ~~Natural Resources~~ Energy, Division of ~~Reclamation~~ Mines and Minerals, for each component drainage area system as it is completed and prior to any disturbance in that component drainage area; Provided, that if a bench control system is the primary sediment control structure for the operation and the system is constructed progressively with the mining operation, then the system shall be constructed and certified in sections of 1,000 linear feet (maximum) measured from the active mineral removal area. This certification must include a map showing exact location of certified section.

The certification form shall be certified by a person approved by the ~~director~~ Commissioner of the Department of ~~Natural Resources~~ Energy stating that the erosion and sediment control system(s) is (are) constructed and installed in accordance with the technical aspects of the approved preplan and any modifications thereto, as approved by the Department of ~~Natural Resources~~ Energy.

Any minor change which equals or exceeds the approved system occuring during construction shall be indicated on "As-built" plans showing approved design, amount of minor change and reference points are to be submitted along with the form.

(c) Inspection - A qualified person designated by the ~~director~~ Commissioner shall examine the impoundment at least quarterly.

(d) Prior to Phase I bond release, all sediment control structures shall be cleaned out so as to meet design storage capacity for all areas not revegetated and stabilized as approved by the ~~director~~ Commissioner.

(e) Abandonment Procedures - Minimum requirements for abandoning sediment control structures prior to total release of bond are as follows:

1. Excavated Sediment Pond, Dugout Type - There is no required abandonment procedure for excavated ponds unless they have an embankment. If they have an embankment, they shall follow the abandonment procedures outlined in subparagraph 2, below.

2. Embankment type sediment dams, embankment type excavated sediment dams and crib and gabion control structures - Sediment dams and all accumulated sediment above the dam shall be removed from the natural drainway

if they are built across it. Dams adjacent to natural drainways shall be abandoned by diverting the entrance channel to the natural drainways, thus preventing any future surface runoff from entering the impoundment.

When sediment dams are removed, the natural drainway shall be returned to its original profile and cross-section as near as practical. An original profile and cross-section view for the channel shall be submitted with the drainage plan. The channel sides and bottom shall be rock rip-rap. The rip-rap shall extend up to the top of the channel. The rip-rap requirement may be waived where the bottom and sides of the channel consist of bedrock. Those structures to be left in place after final release of surface mining shall be considered permanent impoundments and shall be left in accordance with the following requirements:

A. The request to leave the structure will be made on forms prescribed by the ~~director~~ Commissioner;

B. The request will contain a statement as to the conditions of the impoundment; and

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.

3. Bench Control Systems - There is no required abandonment procedure for bench control systems.

4. Revegetation of Disturbed Areas - All areas disturbed during abandonment of a sediment control structure shall be seeded and mulched immediately to stabilize the area.

5. Disposal of Waste Material - Waste material shall be spread over an area designated on the drainage plan in accordance with these specifications.

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

B. The spoil 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 spoil shall not be steeper than two (2) horizontal to one (1) vertical. If the spoil is spread to the edge of the stream bank, the stream side slope of the spoil shall be shaped to join the side slope of the stream bank so loose spoil will not slide or erode into the channel.

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Section 4C.

4C. BLASTING

4C.01 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 ~~Mines~~ Energy shall be responsible for all blasting operations including the transportion, storage and use of explosives within the permit area. Only blasts that use more than five (5) pounds of explosive or blasting agent shall be conducted in accordance with ~~this subsection~~ the blasting schedule required under section 4C.03.

4C.02 Blasting Plan - Each application for an operation subject to section 6 of these regulations shall include a blasting plan. The blasting plan shall explain how the applicant will comply with the requirements of this subsection.

4C.03 Public Notice of Blasting Operations - At least ten (10) days, but not more than thirty (30) days, prior to any blasting operations, the operator shall publish on a form prescribed by the ~~director~~ Commissioner, 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 mile of the permit area, excluding drainage structures, haulroads and access roads unless there will be blasting on or near such structures or roads. 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 the prior announcement. The schedule shall contain at a minimum:

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

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

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

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

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

Surface blasting activities incident to underground coal mining are not subject to the requirements of this paragraph so long as all residents or owners of dwellings or structures located within one-half mile of the blasting area is notified by the operator approximately 24 hours prior to any surface blast.

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4C.04 Blast Record - The format for the arrangement and the recording of items in the blasting log book is to be on forms approved by the ~~director~~ Commissioner. A blasting log book shall be kept current daily and is to be made available at the operation for inspection by the ~~director~~ Commissioner and upon written request by the public. The blasting log shall include any seismograph reports and shall be retained for three (3) years and shall include at a minimum the following data:

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

(b) Location, date and time of blast;

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

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

(e) Weather conditions;

(f) Type of material blasted;

(g) Number of holes, burden and spacing;

(h) Diameter and depth of holes;

(i) Types of explosives used;

(j) Total weight of explosives used;

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

(l) Method of firing and type of circuit;

(m) Type and length of stemming;

(n) If mats or other protections were used;

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

(p) Seismograph records shall include but not be limited to:

1. Seismograph reading, including exact location of seismograph and its distance from the blast;

2. Name of person taking the seismograph reading;

3. Name of person and firm analyzing the seismograph record.

4. Type of instrument, sensitivity and calibration signal or certification of annual calibration.

(q) Shot location;

(r) Sketch of delay pattern; and

(s) Reasons and conditions for unscheduled blasts.

4C.05 Blasting Procedures

(a) All blasting shall be conducted only during daytime hours, between sunrise and sunset; Provided, that based on public requests or other consideration, including the proximity to residential areas, the ~~director~~ Commissioner may specify more restrictive time periods. No blasting shall be conducted on Sunday. Blasting may 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; and

3. All charged holes shall be guarded and posted against unauthorized entry.

(c) A maximum air blast level of 128 decibel linear peak shall not be exceeded at any residence or occupied structure within one-half (1/2) mile of the blasting site other than operational facilities of the mine.

(d) Use of explosives: Surface blasting requirements. Flyrock, including blasted material traveling along the ground, shall not be cast from the blasting vicinity more than half the distance to the nearest dwelling or other occupied structure and in no case beyond the bounds of the area under permit, or beyond the area of regulated access required under paragraph (b) of this section.

Access to the area shall be controlled to prevent the presence of livestock or unauthorized personnel during blasting and until an authorized representative of the person who conducts the surface mining activities 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.

(e) If required by the ~~director~~ Commissioner, air blast levels will be measured by an instrument with a linear frequency response range of 6Hz to 200 Hz or greater.

(f) No blasting within five hundred (500) feet of an underground mine not totally abandoned shall be permitted except with the concurrence of the West Virginia Department of ~~Mines~~ Energy, the operator of the underground mine and MSHA. The ~~director~~ 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.

(g) 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: $W = (D/50)^2$ if the nearest structure is within three hundred (300) feet, $W = (D/55)^2$ if the nearest structure is between three hundred (300) and five thousand (5000) feet, or $W = (D/65)^2$ if the nearest structure is greater than five thousand (5000) feet from the blast. "W" represents the maximum weight of explosives in pounds that can be detonated in any eight millisecond period and "D" represents the distance in feet from the nearest protected structure.

(h) The scaled distance formulas need not be used if a seismograph record at the nearest protected structure is obtained 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: 1.25 if the structure is within three hundred (300) feet, 1.0 if the structure is between three hundred (300) and five thousand (5000) feet, and 0.75 if the structure is greater than five thousand feet from the blast site.

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

(j) Protected structures include any dwellings, public buildings, schools, churches or community or institutional buildings outside the permit area in addition to those identified in 2.105 unless they are owned by the permittee. Structures owned by the permittee and leased to another person without a written waiver by the lessee are also protected.

(k) The ~~Director~~ Commissioner may waive the provisions of 4C.05(g) and 4C.05(h) of the Rules and Regulations in regard to the protection of 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 statement from the owner and when appropriate the operator of said structure, waiving the provisions of 4C.05(g) and (h).

(2) The Permittee submits a blasting plan detailing the protective measures to be taken in lieu of 4C.05(g) and 4C.05(h) and supporting documentation for those protective measures.

(3) Permittee shall submit an approval by the owner of the structure of alternative protective measures.

(4) Approval for the use of such alternative measures is obtained from the ~~director~~ Commissioner prior to the use of those measures in lieu of 4C.05(g) or (h).

(1) Alternative measures taken under 4C.05(K) shall not reduce the level of protection for other structures below the levels provided for in 4C.05(g) and (h).

4C.06 Certified Blasting Personnel - Each person responsible for blasting operations shall possess a valid certification from the ~~director~~ Commissioner of the West Virginia Department of ~~Mines~~ Energy.

4C.07 Preblast Survey - The operator shall inform all residents or owners of man-made dwellings or structures located within one-half mile of the permit area on how to request a preblast survey at least thirty (30) days prior to initiation of blasting. 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 governed by the following:

(a) Upon a written request to the ~~director~~ Commissioner by a resident or owner of a man-made 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 ~~director~~ Commissioner. If a structure is added to or renovated subsequent to a preblast survey, then upon request, a survey of such additions and/or renovation shall be performed in accordance with this section;

(b) The applicant or permittee shall conduct the survey to 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; and

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

(d) Surveys requested more than ten (10) days before the planned initiation of blasting shall be completed before blasting is initiated.

(e) 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.

4D. POSTMINING LAND USE

4D.01 General - All disturbed areas shall be restored in a timely manner to conditions that are capable of supporting the uses which they were capable of supporting before any mining or higher or better uses achieveable under the criteria and procedures of this subsection.

4D.02 Determining Pre-mining Use of Land - The premining uses of land to which the postmining land use is compared shall be those uses which the land previously supported if the land had not been previously mined and had been properly managed. The postmining land use for land that has been previously mined and not reclaimed shall be judged on the basis of the land use that existed prior to any mining; Provided, that if the land cannot be reclaimed to the land use that existed prior to any mining, the postmining land use shall be judged on the basis of the highest and best use that can be achieved which is compatible with surrounding areas and does not require the disturbance of areas previously unaffected by mining.

The postmining land use for land that has received improper management shall be judged on the basis of the premining use of surrounding lands that have received proper manangement. If the pre-mining 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.

The applicant shall submit a narrative of land capability and productivity, which analyzes the premining land-use description in accordance with ~~20-6-11~~22A-3-10(a)2 of the Act.

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4D.03 Land Use Categories - Change from one land use category to another in premining to postmining constitute an alternate land use and the operator shall meet the requirements of section 4D.04 and all other applicable sections of these rules and regulations. Land use is categorized in the following groups.

(a) Heavy Industry - Manufacturing facilities, powerplants, 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.

4D.04 Criteria for Approving Alternative Postmining Use of Land - An alternative post-mining land use may be approved by the ~~director~~ Commissioner after consultation with the landowner or the land management agency having jurisdiction over state or federal lands if the criteria contained in this paragraph for higher or better uses are met:

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

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

(c) The proposed postmining use is not impractical or unreasonable, inconsistent with applicable land use policies or plans, going to involve unreasonable delays in implementation or is in violation of any applicable law.

4E. FISH AND WILDLIFE CONSIDERATIONS

4E.01. Lands Inquiry - Prior to the issuance of an SMA number and as a part of the lands unsuitable inquiry, the ~~director~~ Commissioner, after consultation with other appropriate agencies, shall make a determination as to the necessity for a study of the potential impacts of the proposed operation on the fish and wildlife resources of the affected area. If such a study is determined to be necessary, the ~~Reclamation~~ Division of Mines and Minerals in consultation with the Wildlife Division of the Department of Natural Resources and such other agencies as deemed necessary, shall determine the level of detail and area of such studies.

4E.02. Protection of Fish, Wildlife and Related Environmental Values

(a) A person who conducts surface mining activities shall promptly report to the ~~director~~ Commissioner the presence in the permit area of any critical habitat of a threatened or endangered species listed by the Secretary of the Interior, any plant or animal listed as threatened or endangered by the State, or any bald or golden eagle, of which that person becomes aware and which was not previously reported to the ~~director~~ Commissioner by that person.

(b) Each person who conducts surface mining activities to the extent possible using the best technology currently available shall:

1. Restore, enhance where practicable or maintain natural riparian vegetation on the banks or streams, lakes and other wetland areas;

2. Afford protection to aquatic communities by avoiding stream channels as required or restore stream channels as required;

3. Restore, enhance where practicable or avoid disturbance of habitats of unusually high value for fish and wildlife;

4. Ensure the electric power lines on the permit area and incidental to surface mining activities are designed and constructed to minimize electrocution hazards to raptors unless the ~~director~~ Commissioner determines that such requirements are unnecessary;

5. Design fences, overland conveyors and other potential barriers to permit passage of large mammals unless the ~~director~~ Commissioner determines that such requirements are unnecessary;

6. Where cropland is to be the postmining land use, and where appropriate for wildlife and crop management practices, the operator shall intersperse the fields with trees or 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; and

7. 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.

4E.03. Habitat Development - Where fish and wildlife habitats are proposed as the postmining land use, the following will be required:

(a) All applicable requirements of these regulations shall be met with regard to adequate vegetation cover for bond release purposes;

(b) Plant species shall be selected on the basis of the following;

1. Nutritional value for fish and wildlife;

2. Uses for cover value for fish and wildlife;

3. Ability to support and enhance habitat after bond release; and

4. Distribute plant groupings to maximize habitat improvement such as edge effect and cover or such other benefits that may be desired.

(c) Experimental wildlife planting may be conducted in lieu of the above when approved by the ~~director~~ Commissioner and conducted under the guidance of an approved wildlife biologist.

4F. REVEGETATION

4F.01 General

(a) Objective - To quickly establish a vegetative cover on all disturbed areas to minimize erosion, provide economic benefits and restore aesthetic appeal. Revegetation will be concurrent with the operation as mining and backfilling progresses and be carried out in a manner that encourages a prompt vegetative cover and recovery of productivity levels compatible with the approved postmining land use.

(b) Achievement - Plants that will give a quick permanent cover and enrich the soil shall be given priority. A temporary cover shall be established as contemporaneously as practicable with backfilling and grading until a permanent cover is established in accordance with the Act and these rules and regulations. A temporary or permanent cover shall be established by the end of the first growing season and a permanent cover shall be established by the end of the second growing season.

(c) General Requirements - Each operator shall establish on all affected land a diverse, effective and permanent vegetation cover of the same seasonal variety native to the area of disturbed land or species that supports the approved postmining land use. The vegetative cover shall be capable of stabilizing the soil surface from erosion.

(d) All revegetation shall be in accordance with the preplan and carried out in a manner that encourages a prompt vegetative cover and recovery of productivity levels compatible with the approved postmining land use and in accordance with the Handbook or other technical guides as approved by the ~~director~~ Commissioner.

(e) Vegetative cover shall be considered of the appropriate seasonal variety when it consists of a mixture of species of equal or superior utility for the approved postmining land use when compared with the utility of naturally-occurring vegetation during each season of the year. All revegetation mixtures must include at least one herbaceous legume species.

(f) If both the premining and postmining land uses are cropland, planting of the crops normally grown will meet the requirements of paragraph 4F.01(a)

(g) Rills and gullies which form in areas that have been regraded and topsoiled and which either (1) disrupt the approved postmining land use or the reestablishment of the vegetative cover. or (2) cause or contribute

to a violation of water quality standards for receiving stream; shall be filled, regraded, or otherwise stabilized, topsoil shall be replaced, and the areas shall be reseeded or replanted.

4F.02 Minesoil Characteristics - Fertility, acidity and stoniness, together with steepness of slope, shall be used in the characterization of minesoils for the purpose of establishing vegetation. Premining overburden sampling and analysis or previous experience and correlation data, shall be submitted with the preplan for all acid-producing seams. The plan shall identify toxic strata and provide planned handling and final placement for acid strata.

Overburden analysis is to be in accordance with standard procedures outlined in Environmental Protection Agency Manual No. 600/2-78-054 (Field & Laboratory Methods Applicable to Overburdens and Minesoils) or other methods approved by the ~~Director~~ Commissioner.

4F.03 Function of Annual and Biennial Cover Crops - On areas where excessive erosion is likely to occur, rapid establishment of vegetative cover shall be required. Immediate seeding of approved annuals and biennials on such areas shall be considered as a means for achieving temporary vegetative cover only.

4F.04 Development of Planting Plan - Planting plans will be a part of the premining and reclamation plan and shall contain the following:

(a) A prediction of the minesoil character and the basis for the same;

(b) Treatment to neutralize acidity;

(c) Mechanical seed bed preparation;

(d) Rate and analysis of fertilization;

(e) Rates and types of mulch;

(f) Perennial vegetation including herbaceous and woody plants where appropriate, rate and species;

(g) Areas to be planted or seeded to trees and shrubs;

(h) Land use objective; and

(i) Maintenance schedule if appropriate.

4F.05 Substitute species. - Other species of trees, shrubs, grasses, legumes or vines may be substituted for native species if approved by the ~~director~~ Commissioner and meet the following conditions:

(a) The species are necessary to achieve a quick, temporary, and stabilizing cover that aids in controlling erosion and measures to establish permanent vegetation are included in the approved plan;

(b) The species are compatible with the plant and animal species of the region and will achieve the approved postmining land use; and

(c) The species meet the requirements of applicable state and federal seed or introduced species statutes.

4F.06 Postmining Soil Analysis - Tests for minesoil acidity, expressed as pH, shall be made after final grading and before seeding or planting. Minesoil tests shall be conducted in a representative manner utilizing accepted field indicators or other approved techniques. Minesoils which have a past history of or the potential of producing acidic chemical characteristics that could restrict vegetation establishment shall be analyzed by a qualified soil laboratory. The results of these tests shall be filed with the final planting plan along with any determination which would promote establishment of vegetation.

4F.07. Minimum Requirements of Soil Amendments

(a) 600 lbs/ac 10-20-10 or 10-20-20 fertilizer or equivalent.

Fertilizer rates based on soil analysis conducted by a qualified lab may be substituted for the minimum fertilizer rates.

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

(c) 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 ~~director~~ Commissioner.
Hydromulch	1,000 lbs.
Shredded Bark	50 cubic yards

The following materials may be used with wood fiber or wood cellulose on a limited basis upon approval by the ~~director~~ Commissioner.

Minimum Rate/Acre for Wood

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

4F.08. Standards for Evaluating Vegetative Cover

(a) Final Planting Report - The report shall be submitted to the ~~director~~ Commissioner within sixty days (60) after Phase I bond reduction and contain the actual acreage planted including application rates of soil amendments, seed and seedlings. Minimum rates of fertilizer shall apply unless substitute rates are approved and supported by soil tests from a qualified laboratory.

(b) A variance on a limited basis of the rate and species of seed and seedlings from those proposed in the reclamation plan may be granted upon prior approval by the ~~director~~ Commissioner.

(c) Time for Inspection - Prior to the recognized spring and fall planting seasons, the operator shall review all disturbed areas. The operator shall then cause those areas deficient of vegetative cover to be retreated (graded, seeded, planted, mulched, limed, etc.) to establish a satisfactory stand of vegetation.

(d) Standards for Perennials - Standards for legumes and perennial grasses shall require at least a ninety percent (90%) ground cover and the production of such plants on the revegetated area must be equal to that of similar unmined lands in the area of mining as approved by the Commissioner. Substandard areas shall not exceed one-fourth (1/4) acre in size nor total more than ten percent.

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

2. For areas to be used for cropland, success in revegetation of cropland shall be determined on the basis of crop production from the mined area. Crop production from the mined area shall be equal to or greater than that of similar unmined lands in the area of mining as approved by the Commissioner for the last two 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.

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.

(e) Standards for Forestland and/or Wildlife - 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. Standards for woody plants shall require a seventy percent (70%) establishment of ground cover of legumes and perennial grasses, and 450 trees (including volunteer tree species) and/or planted shrubs per acre, comprising a satisfactory vegetation ground cover sufficient to control erosion. 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 450 trees or shrubs per acre the standard for revegetation shall meet those standards contained in 4F.08 d.

(f) Standards for Commercial Woodland - This subsection sets forth forest resource conservation standards for reforestation operations to ensure that a cover of commercial tree species, sufficient for adequate use of the available growing space, is established after surface mining activities.

1. Stocking, i.e. the number of stems per unit area, will be used to determine the degree to which space is occupied by well-distributed, countable trees.

2. The following are the minimum performance standards for areas where commercial woodland is the approved postmining land use;

A. The area shall have a minimum stocking of 600 trees per acre;

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

C. Upon request for bond release, the number of trees and the ground cover shall be determined approved by the ~~director~~ Commissioner when the survival is equal to or greater than 450 trees per acre and there is seventy percent (70%) herbaceous cover.

(g) Evaluation of the success of revegetation in meeting the standards for success shall be based on statistically valid sampling techniques found in the handbook to evaluate ground cover, production and stocking. ~~The success standard is ninety percent (90%) statistical confidence.~~ The sampling techniques for measuring success shall use a ninety percent (90%) statistical confidence interval (i.e., one-sided test with a 0.10 alpha error.

4F.09 Vegetation Inspection Report - In no instance shall the ~~director~~ Commissioner conduct an official vegetative cover evaluation until the planting and seeding concerned has survived two (2) years after the last augmented seeding.

A vegetation inspection report shall be prepared by the ~~director~~ Commissioner and filed following the inspection to determine that the above evaluative standards have been complied with. If acceptable, the ~~director~~ Commissioner shall then release an additional twenty five percent (25%) of the bond or collateral.

4F.10 Final Inspection Report - Upon expiration of five (5) growing seasons following the date of the last augmented seeding or planting and upon request by the operator for final bond release, a final vegetation evaluation shall be made by the inspector. If it is determined at that time that the provisions of these regulations have been met, a final inspection report shall be filed by the inspector and remainder of the bond released.

4G. PRIME FARMLANDS

4G.01 Applicability - Surface operations conducted on prime farmlands shall comply with all requirements set forth in the Act and these regulations.

4G.02 Identification of Prime Farmland - Prime farmland shall be identified on the basis of soil surveys submitted by the applicant. The ~~director~~ Commissioner also may require data on drainage, flood control and subsurface water management.

The requirement for submission of soil surveys may be waived by the ~~director~~ Commissioner if the applicant can demonstrate according to the procedure outlined in 4G.03 of this section that no prime farmlands are involved. Soil surveys shall be conducted according to standards of the National Cooperative Soil Survey, which includes the procedures set forth in the U. S. Department of Agriculture Handbooks 436 (Soil Taxonomy) and 18 (Soil Survey).

4G.03. Negative Determination of Prime Farmland - The land shall not be considered as prime farmland where the applicant can demonstrate one or more of the following situations:

(a) Lands within the proposed permit boundaries have been used for production of cultivated crops for less than five (5) years out of twenty (20) years preceding the date of the permit application; Provided, that for lands obtained after passage of the Act (PL 9587) and retired from farming, the twenty (20) years shall precede the date of acquisition, including purchase, lease or option, of lands, for the purpose of mining.

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

(c) 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

(d) A written notification based on scientific findings and soil surveys that land within the proposed mining area does not meet the applicability requirements for prime farmlands and is submitted to the ~~director~~ Commissioner by a qualified person other than the applicant, and is approved by the ~~director~~ Commissioner.

4G.04 Plan for Restoration of Prime Farmland - The applicant shall submit to the ~~director~~ Commissioner a plan for the mining and restoration of any prime farmland within the proposed permit boundaries. This plan shall be used by the ~~director~~ Commissioner in judging the technological capability of the applicant to restore prime farmlands. This plan shall include:

(a) A description of the original undisturbed soil profile, as determined from a soil survey, showing the depth and thickness of each of the soil horizons that collectively constitute the root zone of the locally adapted crops and are to be removed, stored and replaced;

(b) The proposed method and type of equipment to be used for removal, storage and replacement of the soil in accordance with Section 4G.05 of these regulations;

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

(d) If applicable, documentation such as agricultural school studies or other scientific data from comparable areas that supports the use of other suitable material;

(e) Plans for seeding or cropping the final graded mine land and the conservation practices to control erosion and sedimentation during the first twelve (12) months after regrading is completed; and

(f) Available agricultural school studies, company data or other scientific data for comparable areas that demonstrate that the applicant using his proposed method of reclamation will achieve, within a reasonable time, equivalent or higher levels of yield after mining as existed before mining.

4G.05 Special Requirements - For all prime farmlands to be mined and reclaimed, the applicant shall meet the following special requirements:

(a) All soil horizons to be used in the reconstruction of the soil shall be removed before drilling, blasting or mining to prevent contaminating the soil horizons with undesirable materials. Where removal of soil horizons result in erosion that may cause air and water pollution, the ~~director~~ Commissioner shall specify methods of treatment to control erosion of exposed overburden the operator shall:

1. Remove separately the entire A horizon or other suitable soil materials which will create a final soil having an equal or greater productive capacity than that which existed prior to mining in a manner that prevents mixing or contamination with other material before replacement:

2. 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 equal or greater productive capacity than that which existed prior to mining in a manner that prevents mixing or contamination with other material; and

3. 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 equal or greater thickness and that can be shown to be equal or more favorable for plant growth than the B horizon, and that when replaced will create in the reconstructed soil a final root zone of comparable depth and quality to that which existed in the natural soil.

(b) If stockpiling of soil horizons is allowed by the ~~Director~~ Commissioner in lieu of immediate replacement, the A horizon and B horizon must be stored separately from each other. The stockpiles must be placed within the permit area and where they will not be disturbed or exposed to excessive erosion by water or wind before the stockpiled horizons can be redistributed on terrain graded to final contour. Stockpiles in place for more than thirty (30) days shall be protected from erosion;

(c) Replace the material from the B horizon or other suitable material specified in these regulations;

(d) Replace the A horizon or other suitable soil materials which will create a final soil having an equal or greater productive capacity than existed prior to mining; and

(e) Apply nutrients and soil amendments as needed to establish quick vegetative growth.

4G.06. 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, that person shall establish a vegetative cover capable of stabilizing the soil surface with respect to erosion. All vegetation shall be in compliance with the plan approved pursuant to section 4F and carried out in a manner that encourages prompt vegetative cover and recovery of productive capacity. Seeding and planting of disturbed areas shall be conducted during the first normal period for favorable planting conditions after final preparation. Suitable mulch and other soil stabilizing practices shall be used on all regraded and top-soiled areas;

(b) Within a time period specified in the permit, but not to exceed 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 commonly grown such as corn, soybeans, cotton, grain, hay, sorghum, wheat, oats, barley or other crops on surrounding prime farmland. The crops may be grown in rotation with hay or pasture crops as defined for cropland. The ~~director~~ Commissioner may approve a crop use of perennial plants for hay where this is a common long term use of prime farmland soils in the surrounding area. The level of management shall be equivalent to that on which the target yields are based; and

(c) Measurement of success in prime farmland revegetation will be determined based upon the techniques approved in the permit. As a minimum, the following standards shall be met:

1. Average annual crop production shall be determined based upon a minimum of three (3) years data. Crop production shall be measured for the three (3) years immediately prior to release of bond;

2. Revegetation on prime farmland shall be considered a success when the adjusted three (3) year average annual crop production is equivalent to, or higher than, the predetermined target level of crop production specified in the permit; and

3. Adjustment for weather induced variability in the annual mean crop production may be permitted by the ~~director~~ Commissioner.

4H. BONDING

4H.01 Requirements - An operator shall not conduct surface mining operations which result in disturbed area prior to such area being bonded in accordance with section ~~12~~11 of the Act and this section.

4H.02 Period of Liability - The ~~director~~ 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 repair of any rills and gullies 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.

4H.03 Terms and Conditions of the Bond

(a) The surety shall be subject to the following conditions:

1. The surety will give prompt notice to the permittee and the ~~director~~ 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 ~~director~~ 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 in violation of Section ~~2~~11 of the Act. The ~~director~~ 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 90 days. During this period the ~~director~~ Commissioner shall conduct weekly inspections to ensure continuing compliance with other 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.

(b) Collateral bonds, except for letters of credit, shall be subject to the following conditions:

1. The ~~director~~ Commissioner shall obtain possession of and keep in custody all collateral deposited by the applicant, until authorized for release or replacement;

2. The ~~director~~ Commissioner shall value collateral at their current market value, not face value;

3. The ~~director~~ Commissioner shall require that certificates of deposit be assigned to the Department of ~~Natural Resources~~ Energy, in writing, and reflect this assignment upon the books of the bank issuing such certificates;

4. The ~~director~~ 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 ~~director~~ 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 ~~director~~ Commissioner shall only accept certificates of deposit in a bank in this state; and

7. The ~~director~~ 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.

(c) 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 ~~director~~ 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 ~~director~~ 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 ~~Natural Resources~~ Energy in part or in full upon demand and receipt from the ~~director~~ Commissioner of a notice of forfeiture;

4. The ~~director~~ 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 ~~director~~ 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 ~~director~~ 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 ~~director~~ 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 or 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 ~~director~~ 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 ~~1~~211 of the Act. The ~~director~~ 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 ~~director~~ 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.

(d) The estimated bond value of all collateral posted as bond assurance under 4H.03(b)(c) and (d) shall be subject to a margin bond value to market value ratio as determined by the ~~director~~ 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 ~~director~~ 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.

4H.04 Escrow Bonding

(a) The ~~director~~ 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 ~~director~~ Commissioner or deposited with the ~~director~~ Commissioner directly. Contributions to the account may be based on acres affected or tons of coal produced or any other rate approved by the ~~director~~ Commissioner. In all cases, the total bond including the escrow amount, as determined by the ~~director~~ Commissioner in the bonding schedule, shall not be less than the amount required under section ~~1~~211 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 ~~director~~ 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 ~~director~~ Commissioner.

4H.05 Self-Bonding

(a) The ~~director~~ Commissioner may accept a self-bond from the applicant under the following conditions:

1. The applicant shall designate the name and address of a suitable agent to receive service of process in the state where the surface coal mining operation is located;

2. The applicant, or the applicant's parent organization in the event the applicant is a subsidiary corporation, has a net worth, certified by a certified public accountant, of no less than six (6) times the total amount of self-bond obligations on all permits issued to the applicant in the United States for surface coal mining and reclamation operations;

3. The applicant grants the ~~director~~ Commissioner a mortgage or security interest in real or personal property located in the state which shall have a fair market value equal to or greater than the obligation created under the indemnity agreement;

4. The instrument creating such mortgage or security interest shall vest such interest in the Department of ~~Natural Resources~~ Energy so as to secure the right and power in the ~~director~~ Commissioner to immediately attach said property concurrent with the issuance of a notice of forfeiture and to sell or otherwise dispose of the property by a public and to establish the Department of ~~Natural Resources~~ Energy as the sole secured creditor with respect to such property, so as to assure the ~~director~~ Commissioner of a preferred claim over all other creditors in case of bankruptcy. For classes of property with respect to which a preferred claim cannot be maintained against subsequent bona fide purchasers for value under the Uniform Commercial Code, the instrument shall require possession of the property by the ~~director~~ Commissioner. The property subject to the security interest shall not be subject to any conflicting or prior security interest. The instrument creating the interest in real property shall be recorded as authorized for fee interests. The instrument creating the security interest in personal property shall be recorded in accordance with, and otherwise conform to, the requirements of the Uniform Commercial Code for perfecting a security interest in the state. In order for the ~~director~~ Commissioner to evaluate the adequacy of the property offered to submit a schedule of the real or personal property which will be pledged to secure the obligations under the indemnity agreement. The schedule shall include:

A. A description of the property;

B. The value of the property. The property shall be valued at fair market value as determined by an appraisal conducted by appraisers

appointed by the ~~director~~ Commissioner. The appraisal shall be expeditiously made and a copy thereof furnished to the ~~director~~ Commissioner and the permittee. The reasonable expense of the appraisal shall be borne by the permittee; and

C. Proof of the mortgager's possession of, and title to, the unencumbered real property within the state which is offered to secure the obligations under the bond. Such proof shall include:

(1) If the interest arises under a Federal or State lease, a status report prepared by an attorney, satisfactory to the ~~director~~ Commissioner as disinterested and competent to so evaluate the asset, and an affidavit from the owner in fee establishing that the leasehold could be transferred to the ~~director~~ Commissioner upon forfeiture;

(2) If title is "in fee", a title certificate or similar evidence of title and encumbrances prepared by an abstract office authorized to transact business within the state and satisfactory to the ~~director~~ Commissioner; and

(3) The property shall not include any lands in the process of being mined, reclaimed or the subject of this application. The operator may offer any lands the bonds for which have been released. In addition, any land used as security shall not be mined while it is security.

D. Proof that the person granting the security interest holds posession of, and title to, personal property within the state which is offered to secure the obligation of the permittee under the bond. Evidence of such ownership shall be submitted in a form satisfactory to the ~~director~~ Commissioner. The personal property offered shall not include:

(1) Property in which a security interest is held by any person;

(2) Fixtures;

(3) Goods which the operator sells in the ordinary course of his or her business;

(4) Securities which are not negotiable bonds of the U.S. Government or general revenue bonds of the State; or

(5) Certificates of deposit which are not federally insured or are issued by a depository that is unacceptable to the ~~director~~ Commissioner.

5. The applicant, or the applicant's parent organization in the event the applicant is a subsidiary corporation, shall have demonstrated to the satisfaction of the ~~director~~ Commissioner a history of financial solvency and continuous operation as a business entity for ten (10) years prior to filing the application. For purposes of this paragraph, such demonstration

shall include a financial statement in sufficient detail to allow the ~~director~~ Commissioner to determine whether it is reasonable to predict from the ownership patterns and financial history of the applicant that it will be financially capable of completing all reclamation requirements throughout the life of the surface coal mining and reclamation operation. Such statement shall include, at the minimum:

A. Identification of operator:

(1) For corporations, name, address, telephone number, state of incorporation, principal place of business, principal office in the state where the operation is located, the name, title and authority of persons signing the application, and a statement of authority to do business in the state where the operation is located; and

(2) For all other forms of business enterprises, name, address and telephone number and statement of how the enterprise is organized, law of the state under which it is formed, place of business, relationship and authority of the person signing the application, and principal office in the state where the operation is located;

B. Estimated amount of bond likely to be required after approval of the permit;

C. History of other bonds procured by the operator for mining operations in any state, including:

(1) Names of sureties, if any, for outstanding bonds;

(2) Amounts of outstanding bonds;

(3) Name of any surety which denied any bond; and

(4) Unsatisfied claims against any bond;

D. Brief chronological history of business operations conducted within the last ten (10) years, including information showing:

(1) Continuous operation for the ten (10) year period, and

(2) The jurisdiction within which each operation has been conducted;

E. A financial statement, including:

(1) Audited financial statements prepared and certified by a disinterested independent certified public accountant. All statements shall be prepared following generally accepted principles of accounting and shall include:

-i- A common size comparative balance sheet which shows assets, liabilities and owner's equity for the preceding ten (10) year period. The ~~director~~ Commissioner shall have the discretion to increase this length of time to any period which is necessary to show financial solvency and continuous operation. The common size comparative balance sheet shall be detailed with regard to owner's equity, especially retained earnings, so as to set forth a series of retained earnings statements showing the changes that have occurred in retained earnings during the required period of time;

-ii- A common size comparative income statement which shows all revenues and expenses for the preceding ten (10) year period or for such longer time as is required for the common size comparative balance sheet;

-iii- A statement of the operator's working capital and an analysis of assets and liabilities which shall include the following calculation for each year covered by the common-size comparative balance sheet and income statement and a schedule showing the percentage of each classification of current assets to total current assets; the current ratio; the acid-test ratio; the liquidity ratio; the asset ratio; and the return on investment;

-iv- In addition to the above, all ratios must be calculated with the bond amount added to the operator's current or total liabilities; and

-v- A ratio of the operator's capital assets subject to a mortgage or security interest to those liabilities to which the assets are subject. If the offer of real property or collateral for the bond will alter this ratio, this shall be illustrated.

(2) A satisfactory basis to compare all ratios submitted pursuant to (e)(1) above;

(3) The ~~director~~ Commissioner shall have the right to challenge, prohibit or prescribe the inclusion of any specific item or the value thereof within any of the above statements or ratios. If the value is challenged, the ~~director~~ Commissioner shall require an appraiser or appraisers to value the item. Any such appraisal shall be expeditiously made, and a copy thereof furnished to the ~~director~~ Commissioner and the permittee. The expense of the appraisers shall be borne by the operator. Final determination of the item under appraisal shall be made by the ~~director~~ Commissioner based upon the evidence of market value submitted.

(4) A final determination by an independent certified public accountant regarding the operator's ability to satisfactorily meet all obligations and costs under the proposed reclamation plan for the life of the mine; and

(5) If the ~~director~~ Commissioner deems necessary, evidence of financial responsibility through letters of credit or a rating of securities issued to the applicant by a recognized national securities rating company;

F. A statement listing any liens filed on the assets of the permittee or applicant in any jurisdiction in the United States, actions pending or judgments rendered within the last ten (10) years against the permittee or applicant but not satisfied, and petitions or actions in bankruptcy including actions for reorganization. Each such lien, action petition or judgment shall be identified by the named parties, the jurisdiction in which the matter was filed, and the case, file and final disposition or current status of any action still pending; and

G. A statement listing any notices issued by the Securities and Exchange Commission or proceedings initiated by any party alleging a failure to comply with any public disclosure or reporting requirement under the securities laws of the United States. Such statement shall include a summary of each such allegation, including the date, the requirement alleged to be violated, the party making the allegation, and the disposition or current status thereof;

6.A. The indemnity agreement has been executed by the applicant, and said agreement has also been executed by the following:

(1) If a corporation, two corporate officers who are authorized to sign the agreement by a resolution of the board of directors, a copy of which shall be provided;

(2) To the extent that the history or assets of a parent organization are relied upon to make the showings of this part, the parent organization and every parent organization of which it is a subsidiary, whether first-tier, second-tier, or further removed, in the form of (a) above;

(3) If a partnership, all of its general partners and their parent organization or principal investors; and

(4) If a married individual, the applicant's spouse.

B. The name of each person who signs the indemnity agreement shall be typed or printed beneath the signature. Any person who occupies more than one of the specified positions shall indicate each capacity in which he or she signs the indemnity agreement;

C. The indemnity agreement shall be a binding obligation, jointly and severally, on all who execute it; and

D. For purposes of this Paragraph, principal investor or parent organization means anyone with a ten percent (10%) or more beneficial ownership interest, directly or indirectly, in the applicant;

7. If at any time the conditions upon which the self-bond was

approved no longer prevail, the ~~director~~ Commissioner shall require the posting of a surety or collateral bond before mining operations may continue.

4H.06 Combined Surety/Escrow Bonding

(a) The ~~director~~ Commissioner may accept a combined surety/escrow bonding schedule provided that:

1. A surety bond payable to the ~~director~~ Commissioner is posted in the amount determined under Chapter 2022A, Article ~~6~~ 3, Section ~~12~~11 of the Code of West Virginia for reclamation of each successive increment; and

2. An interest-bearing escrow account, payable to the ~~director~~ 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 provisions of 4H.04 and 4H.05.

D. The surety bond shall be noncancellable by the surety during the bond term.

E. Surety bond coverage may be released by the ~~director~~ Commissioner without applying the bond-release criteria of the Act and Section 41 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 4H.04.

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 ~~director~~ Commissioner. For the purposes of this section, the development of the 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 ~~director~~ Commissioner. Deposits to the escrow account by the operator shall be made monthly and so reported to the ~~director~~ Commissioner. Failure to make deposits on schedule shall be just cause for action by the ~~director~~ Commissioner.

B. A certified escrow-account balance statement shall be provided quarterly to the surety and the ~~director~~ Commissioner.

C. Provisions of the escrow account shall be in accordance with subsection 4H.04 of these regulations.

D. The escrow account shall be subject to the 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 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 4I 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 re-establishing the escrow terms and deposit rate, subject to ~~director~~ Commissioner approval.

4H.07 Incremental Bonding

(a) When the applicant elects to bond in increments as specified in 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 preplan, 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 ~~director~~ 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 sections 4H.03 and 4H.04 of these regulations.

4I. PROCEDURES, CRITERIA AND SCHEDULE FOR RELEASE OF PERFORMANCE BOND

4I.01 Procedures for Seeking Release or Adjustment of Performance Bond Bond release application and contents. The permittee or any person authorized to act on his behalf, may file an application with the ~~director~~ Commissioner for release of all or part of the performance bond liability applicable to a particular permit after all reclamation restoration and abatement work in a reclamation phase as defined in subsection 4I.02 (c) has been completed on the entire permit area.

(a) Applications may only be filed at times or seasons that allow the ~~director~~ Commissioner to evaluate properly the reclamation operations alleged to have been completed.

(b) The application shall include copies of letters sent to adjoining property owners, surface owners, local government bodies, planning agencies and sewage and water treatment facilities or water companies in the locality of the permit area, notifying them of the permittee's intention to seek release of performance bond(s). These letters shall be sent before the permittee files the application for release.

(c) Within thirty (30) days after filing the application for release, the permittee shall submit proof of publication of the advertisement required by section ~~20-6-2~~ ~~(a)~~ 22A-3-23(a) of the Act. Such proof of publication shall be considered part of the bond release application.

4I.02 Criteria and Schedule for Release of Performance Bond

(a) The ~~director~~ Commissioner may release portions of the liability under performance bonds applicable to the permit area following the completion of reclamation phases as defined in paragraph (c) of this subsection and after giving notice to the surface owner, or agent, or lessee of the bond release inspection and an opportunity to participate therein.

(b) The maximum liability of performance bonds applicable to the permit area which may be released shall be calculated on the following basis:

1. Release of an amount not to exceed sixty percent (60%) of the total bond amount on the increment or permit area upon completion of phase I reclamation;

2. Release of an additional amount not to exceed twenty-five percent (25%) of the total original bond amount on the permit area upon completion of phase II reclamation, but in all cases the amount remaining shall be sufficient to establish vegetation and reconstruct any drainage structures; and

3. Release of the remaining portion of the total performance bond on the permit area after standards of phase III reclamation have been attained and final inspection and procedures of 4I.01 have been satisfied.

(c) For the purpose of this Part:

1. Reclamation phase I shall be deemed to have been completed when the permittee completes backfilling, topsoil replacement, regrading and drainage control in accordance with the approved reclamation plan.

2. Reclamation phase II shall be deemed to have been completed when:

A. Revegetation has been established in accordance with the approved reclamation plan and the standards for the success of revegetation are 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 regulations and the preplan;

~~C. The quality of untreated water discharge is equal to or better than the premining water quality discharged from the mining site.~~

~~B~~C. With respect to prime farmlands, soil productivity has been returned to the level of yield as required by the Act, these regulations and the preplan; and

E. The provisions of a plan approved by the ~~director~~ Commissioner for the sound future management of any permanent impoundment by the permittee or landowner have been implemented to the satisfaction of the ~~director~~ Commissioner;

3. Phase III reclamation shall be deemed to have been completed when:

A. The permittee has successfully completed all surface coal mining and reclamation operations in accordance with the approved reclamation plan so that the land is capable of supporting any postmining land use approved;

B. The permittee has achieved compliance with the requirements of the Act, these regulations and the preplan; and

C. The applicable liability period under Chapter ~~20~~ 22A, Article ~~6~~3, Section ~~13~~12(b)(20) of the Act has expired.

4I.03 Bond Release Procedures, Criteria and Schedule - For operations where coal removal or processing was completed prior to September 22, 1982 and a permanent program permit not issued pursuant to the provisions of ~~20-6-9~~22A-3-9;

Department of Energy
Division of Mines and Minerals
Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 4I.02.

(a) Upon satisfactory completion of backfilling and grading requirements, bond amounts not in excess of 75% of the total bond may be released upon approval of the ~~director~~ Commissioner. Provided, that a minimum of $250 per disturbed acre or $5,000, whichever is greater, shall be retained until satisfactory establishment of vegetation.

(b) Release of the remaining bond may be obtained upon completion of a minimum eighteen (18) months waiting period after final planting and satisfactory establishment of a permanent vegetative cover. ~~provided that the quality of the untreated water discharge is equal to or better than the premining water quality discharged from the mining site.~~

Department of Energy
Division of Mines and Minerals
Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 5

5 - PROSPECTING

5A. REQUIREMENTS OF A NOTICE OF INTENT TO PROSPECT

5A.01 Notice of Intent to Prospect - Less than 250 tons - The Notice of Intent shall be filed in triplicate using forms prescribed by the ~~director~~ Commissioner in clasp-type binders and shall contain the following:

(a) A map equivalent to a United States geological survey topographic quadrangle map (scale 1" = 2000') 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.

(b) In addition to the map the Notice shall include the following information:

1. Name, address and telephone number of the operator filing the Notice of Intent and an indication of whether or not the operator is a corporation, partnership, or individual;

2. Name, address and telephone number of the person who will be present and responsible for conducting prospecting;

3. Location of the operation (county, magisterial district and nearest post office);

4. Anticipated date of commencement and completion of any disturbance;

5. An indication of whether or not the operator or any person, partnership or corporation associated with the operator now have on file or have ever had on file a prospect bond associated with a prospect permit or Notice of Intent to Prospect in West Virginia. If yes, then a list of all prospect permits and Notices of Intent to Prospect must be included, together with an indication of their current reclamation status;

6. Source of legal right to enter and conduct operations;

7. An indication of whether or not the applicant or any subsidiary, affiliate, person, partnership, association, trust, or corporation controlled by or under common control with the operator has ever had a prospect bond or surface mine bond forfeited in West Virginia. If yes, an explanation should be attached;

8. The name, title, and address of every office, partner, or director of the operator, together with all persons owning ten percent (10%) or more of any class of stock of the operator; and

9. A reclamation plan which includes the following:

A. The method of prospecting;

B. The method for controlling runoff and sedimentation;

C. The method of regrading;

D. A plan for revegetation;

E. The method for sealing, casing or otherwise managing prospecting holes, bore holes, wells or other exposed underground openings created during the prospecting;

F. The method of constructing and/or utilizing roads;

G. A performance bond in the amount of $500 per acre or fraction thereof, in accordance with Section 4H of these regulations; and

H. A notarized signature of a principle officer of the operator indicating that the information contained in the Notice is true and correct to the best of his knowledge.

5A.02 Notice of Intent to Prospect - Greater than 250 Tons - If prospecting will remove 250 tons or more of coal, then the Notice of Intent to Prospect shall include the following in addition to the requirements of 5A.01.

(a) The estimated amount of coal to be removed and a description of the method to be used to determine these amounts;

(b) The reason why more than 250 tons is necessary in assessing the coal resources or making feasibility studies and a statement of how the coal removed will be used. Commercial sale of coal under this subsection is allowed for test purposes only;

(c) A map ~~in accordance with~~, indicating in addition to the requirements of paragraph 3G.02 of these regulations, the location of

critical habitats of any endangered or threatened species listed pursuant to the Endangered Species Act of 1973. The map required under 5A.01(a) may be deleted as long as all required information of that paragraph is shown on the map proposed in accordance with 3G.02;

(d) A copy of the legal ad published once 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 the filing;

3. The address of the regulatory authority where those whose interest is or may be adversely effected may submit written comments;

4. The closing date of the comment period;

5. A description of the general area of exploration;

6. A statement that an excess of 250 tons will be removed;

7. The purpose for removing more than 250 tons; and

8. An estimate of the total tonnage to be removed.

The public comment period shall be not less than fifteen (15) days and the ~~director~~ Commissioner shall not give his approval to this operation until after the close of the public comment period.

(e) The name, address, and telephone number of the applicant's representative who will be present and responsible for conducting the exploration activities;

(f) An estimated timetable for conducting and completing each phase of the exploration and reclamation;

(g) A description of any endangered or threatened species identified within the prospecting area.

(h) A description of cultural or historical resources listed or known to be eligible for listing on the National Register of historic places and known archeological sites.

5A.03 Approval of Notice of Intent to Prospect - Greater than 250 Tons.

(a) The ~~director~~ Commissioner shall approve a complete and accurate application for coal exploration filed in accordance with this part if he finds in writing that the applicant has demonstrated that the exploration

and reclamation described in the application will be completed in accordance with this section and not jeopardize or adversely effect any environmental resources to be described in the application.

(b) The ~~director~~ Commissioner shall provide notification in accordance with 30.05.

(c) The ~~director~~ Commissioner shall provide for review in accordance with section ~~20-6-24~~ 22-4-2 and ~~20-6-25~~ 22-4-3 of the Act.

5B. PERFORMANCE STANDARDS

5B.01 Applicability - This section governs the use of drilling or excavating equipment in an area not covered by a surface mining permit for the purpose of removing the overburden or to determine the location, quantity or quality of a natural coal deposit, or to make feasibility studies, or for any other purpose; Provided, however, that upon an affirmative demonstration that drilling operations are to be conducted solely for taxation or highway construction purposes, such drilling shall be exempted from this section by the ~~director~~ Commissioner.

5B.02 Prospecting Roads

(a) 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.

(b) All roads must be reclaimed or rehabilitated to a condition equal to or better than their pre-prospecting condition. Where a road will permanently remain after prospecting activities, the construction, maintenance and stabilization shall be governed by Section 4A of these rules and regulations.

(c) 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.

5B.03 Blasting - Blasting is prohibited on prospecting operations unless otherwise approved by the ~~director~~ Commissioner. Any blasting approved must be conducted in accordance with Section 4C.

5B.04 Drainage - All disturbances created by prospecting operations shall be conducted in such a manner to prevent or control erosion and siltation or pollution of water. Disturbances shall be exempt from specific design and construction criteria only if stabilization to control erosion is achieved through alternative measures. Any excavations which will disturb more than one acre on any site may be required to provide drainage control in accordance with section 4B of these regulations.

Department of Energy
Division of Mines and Minerals
Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 5B.05.

5B.05 Method of Operation

(a) All prospecting operations in steep slope conditions shall be conducted in a manner consistent with the steep slope requirements provided for in section 13 of the Act.

(b) The ~~director~~ Commissioner may limit prospecting operations within 100' of a perennial or intermittent stream, Provided, however, that roads or access ways may be located within 100' of an intermittent or perennial stream. Roads shall not be constructed up a streambed or drainage channel or in such proximity to such channel so as to significantly alter the normal flow of water.

(c) 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.

(d) All toxic or acid-forming materials encountered while prospecting shall be handled in accordance with the requirements of section 6B.05(b) of these regulations.

(e) All facilities and equipment shall be removed from the prospecting area when they are no longer needed.

(f) Topsoil shall be removed, stored and redistributed on disturbed areas as necessary to assure successful revegetation.

(g) 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, however, that reclamation cannot be delayed more than one (1) year from receipt of a surface mine application number.

(h) All disturbed areas must be revegetated in a manner consistent with section 4F.01 of these regulations.

5B.06 Bond Release - The performance bond or other securities accompanying a notice of intent shall be released upon satisfactory regrading and establishment of a permanent species vegetative cover. All applications for bond release shall be accompanied by a final map in accordance with subsection 3C showing the total disturbed area of the prospecting operation.

5B.07 Notice on Site - All operators conducting prospecting activities shall, while in the prospecting areas, have in their possession, a copy of the written approval or notice of intent for such activities issued by or submitted to the ~~director~~ Commissioner.

Department of Energy
Division of Mines and Minerals
Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 5B.08.

5B.08 Public Records - All information submitted to the Department of ~~Natural Resources~~ Energy as a part of the notice of intent to prospect as required in the Act and this section of the rules and regulations shall be made available for public inspection and copying at the nearest ~~Reclamation~~ Division Department of Energy field office; Provided, that information submitted to the ~~director~~ Commissioner pursuant to this sub-section as confidential concerning trade secrets or priviledged commercial or financial information which relates to the competitive rights of the person or entity intended to prospect the described area shall not be available for public examination.

5B.09 Endangered or Threatened Species - 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 .

6 - STANDARDS FOR SURFACE MINING OPERATIONS

6A. PERMIT REQUIREMENTS

6A.01 General - In addition to information required by Section ~~109~~ of the Act and that necessary to meet the determinations required by Section 18(b)(5) of the Act, the following general information shall be included with an application filed on forms provided by the ~~director~~ Commissioner:

(a) Return receipts of notification to residents residing on property contiguous to proposed permit area;

(b) A true copy of the notarized affidavit of publication and a copy of the advertisement setting forth the dates the advertisement appeared;

(c) The location of the operation (county, magisterial district, nearest post office and longitude and latitude);

(d) The name of the coal seam or seams to be mined; and

(e) Information on the type of bond to be filed and whether or not incremental bonding will be used.

6A.02 Hydrologic Information and Analysis - The application shall contain a statement describing the probable hydrologic consequences of the mining operations, both on and off the mine site with respect to the hydrologic balance. Modeling techniques may be included as part of the application. The latitude, longitude and elevation should be shown for each surface or groundwater sampling point for baseline information. Water sampling and analysis shall be in accordance with OSM approved methods.

(a) Baseline Ground Water Information

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 in sufficient numbers to allow the applicant to make a reasonable approximation of the baseline groundwater conditions and use;

2. Water quality descriptions including total dissolved solids, alkalinity, acidity, sulfates, specific conductance, pH, total iron and total manganese; Provided, that correlation data from other monitoring which does not include one or more of the above parameters may be accepted; Provided further, that limited validation samples may be required;

3. For significant aquifers, ground water quantity descriptions including discharge rates and depth to water under seasonal conditions; and

4. If the determination of the probable hydrologic consequences (PHC) indicates that a currently used or significant ground water resource is likely to be adversely impacted, additional information shall be provided on the baseline properties of the ground water system as necessary to evaluate such probable hydrologic consequences or to plan remedial or reclamation activities.

(b) Baseline Surface Water Information

1. The name, location and description of streams into which water will be discharged;

2. Water quality descriptions including information on total suspended solids, total dissolved solids, specific conductance, pH, acidity, alkalinity, sulfates, total iron and total manganese; Provided, that correlation data from other monitoring which does not include one or more of the above parameters may be accepted; Provided further, that limited validation samples may be required;

3. Water quantity descriptions including information on seasonal flow rates; 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 adversely impacted, 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 or to plan remedial and reclamation activities.

(c) Probable hydrologic consequences assessment. The application shall include a determination of the probable hydrologic consequences (PHC) of the proposed mining and reclamation upon the quality and quantity of ground and surface water under seasonal flow conditions in the proposed permit area and potentially impacted offsite areas. The PHC determination shall be based on baseline data (including the geologic description contained in 6A.03) collected at or near the site of the proposed operation, data representative of the site or a combination of both. The PHC determination shall include estimates of the impact of the proposed operation upon water quality, flooding or streamflow alteration and ground and surface water availability. Remedial measures for potential water quality or water quantity problems of local impact revealed by the PHC determinations shall be described or referenced.

(d) The applicant may submit data and analysis relevant to the cumulative hydrologic impact assessment with the application.

6A.03 Geology - The application shall contain a description of the geology in accordance with ~~109~~(a)(13) and (14), and ~~1110~~(a)(12) of the Act for the permit area.

(a) Chemical analyses shall, unless otherwise provided by the ~~director~~ Commissioner or by law or regulation, be determined by using standard procedures found in EPA Manual 600/2-78-054 (Field and Laboratory Methods Applicable to Overburden Minesoils). Such analysis shall include pyritic sulphur in the coal seam.

(b) In the event that any part of the data required under this subsection is available to the operator from previous investigations of the proposed permit area or adjacent areas with similar characteristics, the data may be used in lieu of development of new data if deemed acceptable by the ~~director~~ Commissioner in writing.

6A.04 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.

6B. Performance Standards

6B.01 Signs and Markers

(a) Permanent Monument - A permanent monument shall be posted at the entrances from public roads and highways and at other suitable locations. The monument shall consist of a sign constructed of wood, metal or other suitable material two feet by three feet (2' x 3') mounted on a two-inch (2") diameter pipe driven three feet (3') into the ground with four feet (4') exposed. Any suitable equivalent 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, 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. Once blasting operations are completed on this area, the blasting sign may be removed.

6B.02 Casing and Sealing of Holes - All boreholes, shafts, wells and auger holes shall be cased, sealed or otherwise managed to prevent pollution of surface or ground water and to prevent mixing of ground waters of significantly different quality in accordance with the approved pre-plan. 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 use in Section 6A.02 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 ~~Director~~ Commissioner, be transferred to another party another party for further use. The conditions of the transfer shall comply with State and local laws, regulations, and other requirements.

6B.03 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. Where the removal of vegetative material, topsoil or other materials may result in erosion, the ~~director~~ 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 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 and surface water drainage system.

(c) Top Soil Substitutes - Any material used for topsoiling must be capable of supporting and maintaining the approved postmining land use. This determination shall be based on the results of appropriate chemical and physical analysis of overburden and topsoil. These analyses shall include:

1. The determination shall include at a minimum pH, texture class and nutrient content; and

2. A certification of analysis shall be made by a qualified laboratory stating that (A) the proposed substitute material is suitable for sustaining vegetation, and (B) the analyses were conducted using standard testing procedures.

(d) 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 4F. These tests shall include nutrient analysis and lime requirement tests. Results of these tests shall be submitted to the ~~director~~ Commissioner with the final planting report as required by these regulations.

6B.04 Water Quality - Surface and ground water quality and quantity shall be protected by handling and managing earthen materials, groundwater discharges and 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 24-hour period whenever water quality or spoil stability may be adversely affected. All surface drainage from the disturbed area must pass through a sediment pond or series of sediment ponds.

(b) Effluent Limitations - Discharge from the permit area shall not violate effluent limitations or cause a violation of 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 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. Non-mechanical treatment systems may be utilized if flow is infrequent or small and timely and consistent treatment is assured.

(d) Breakthrough

1. 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 ~~director~~ Commissioner, any other parameter 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, two copies shall be submitted to the ~~director~~ Commissioner.

2. Should said analysis indicate the water quality to be less than applicable effluent limitations, seals shall be immediately constructed. These seals shall:

A. Prevent any air from entering the underground mine by way of the breakthrough; or

B. Prevent any air from entering the breakthrough while allowing the water to flow from the breakthrough; or

C. 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.

3. Alternate methods of handling discharges from breakthroughs may be employed where it can be established that applicable effluent limitations can be met.

(e) Surface water shall not be diverted or otherwise discharged into underground mine workings, unless the person who conducts the surface mining activities demonstrates to the ~~director~~ Commissioner that this will:

1. Abate water pollution or otherwise eliminate public hazards resulting from surface mining activities;

2. Be discharged as a controlled flow, meeting applicable effluent limitations for pH and total suspended solids, except that the pH and total suspended solid limitations may be exceeded, if approved by the ~~director~~ 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; or

E. Sludge;

3. Not cause, result in or contribute to a violation of applicable water quality standards or effluent limitations;

4. Minimizes disturbance to the hydrologic balance; and

5. Not discharge without MSHA approval.

6B.05 Acid Producing and Toxic Materials

(a) Drainage from acid-forming and toxic-forming materials into ground and surface water shall be avoided by:

1. Identifying, burying, blending, segregating and/or treating where necessary, within thirty (30) days after it is first exposed or a lesser period if required by the ~~director~~ Commissioner, spoil or other materials that will be toxic to vegetation or that will adversely affect water quality. Such materials shall be handled in accordance with methods set forth in the approved preplan; and

2. Acid-forming or toxic-forming material shall not be buried or stored in proximity to a drainage course or ground water system so as to cause a threat of water pollution.

(b) Treatment of Toxic Material - All exposed coal seams remaining after mining and any acid-forming, toxic-forming, combustible materials or any other waste materials that are exposed, shall be covered with a minimum of four feet (4') of nontoxic and noncombustible material or test, treat and blend material to provide materials suitable to prevent water pollution. If necessary, this material shall be treated to neutralize toxicity in order to prevent water pollution, sustained combustion and/or to minimize adverse effects on plant growth and land uses. Where necessary to protect against upward migration of salts or exposure by erosion, to provide adequate depth for plant growth or to otherwise meet local conditions, the ~~director~~ Commissioner shall specify thicker amounts of cover using non-toxic material.

6B.06 Monitoring Requirements

(a) Surface Water Monitoring

1. All water discharged from the permit area shall be sampled and analyzed and otherwise monitored in accordance with the Clean Water Act of 1977 and all applicable standards of the NPDES program and a monthly report of all measurements shall be submitted to the ~~director~~ Commissioner; Provided, that all violations of effluent standards shall be reported to the ~~director~~ Commissioner within five (5) days of receipt of analytical analysis.

2. Where any discharge from the permit area requires treatment during the mining operation in order to meet the water quality standards set forth in the NPDES regulations, surface 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 year history of meeting the water quality standards shall be adequate to establish that the hydrologic balance is being preserved.

(b) Ground Water Monitoring - If the PHC determination indicates that adverse impacts may occur to a significant ground water resource, a ground water monitoring plan in accordance with Section 15(b)(2) of the Act should be included in the permit application. The plan shall include a statement of the quantity and quality parameters to be monitored, sampling frequency and duration, site location and a narrative that describes how the data may be used to determine the impact, if any, of the operation upon the hydrologic balance. At a minimum, total dissolved solids, specific conductance, pH, acidity, alkalinity, total iron, total manganese and water levels shall be monitored at each approved monitoring location and the results submitted to the ~~director~~ Commissioner at least every three (3) months.

6B.07 Method of Operation

(a) Steep Slope Mining

1. Applicability - On surface mining operations where the natural slope exceeds twenty degrees (20°), the provisions of this section in addition to other applicable provisions of these regulations shall apply. On lesser slopes that require measures to protect the area below the operation from landslides or other similar disturbances as determined by the ~~director~~ Commissioner on the basis of soils, climate, method of operation, geology and other regional characteristics, the provisions of this section, in addition to other applicable provisions of these regulations, shall also apply. These provisions do not apply where mining is done on a flat or gently rolling terrain with an occasional steep slope through which the mining proceeds and leaves a plain or predominately flat area.

2. Downslope Placement - Spoil or debris shall not be placed on the downslope except in specified fill areas designed for such placement. Nothing in this section shall prohibit the placement of materials in haulroad or access road fills on slopes steeper than twenty degrees (20°) so long as the fills are constructed in accordance with these regulations.

3. Highwall Elimination - The highwall shall be eliminated and 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 accordance with these regulations. Land above the highwall shall not be disturbed unless the ~~director~~ Commissioner finds that the disturbance is necessary to:

A. Blend the solid highwall and the backfilled material;

B. Control surface runoff;

C. Provide access to the area above the highwall; or

D. Comply with applicable health and safety laws.

4. Stabilization - 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. The method and design specifications of compacting material shall be approved by the ~~director~~ Commissioner. Woody materials shall not be buried in the backfilled area unless the ~~director~~ Commissioner determines that the proposed method for placing woody material beneath the highwall will not deteriorate the stable condition of the backfilled area. The operation shall at a minimum retain all overburden and spoil on the solid portion of existing or new benches and backfill and grade to the most moderate slope possible.

5. Drainage Channels and Flumes - When mining through natural watercourses or when water is to be directed across or through the backfill, a drainage channel, flumes or french drains 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 non-toxic durable rock, asphalt, concrete or any other material approved by the ~~director~~ Commissioner. Channels, flumes and drains shall be constructed in accordance with criteria contained in the Handbook unless otherwise approved.

(b) Auger Operations

1. Augering may be prohibited if the ~~director~~ Commissioner determines that such augering poses a potential hazard to the environment, public welfare and safety or to protect against adverse water quality impacts or if subsidence resulting from auger mining may damage structures or buildings.

2. Auger holes shall be sealed within seventy-two (72) hours after completion with an impervious and noncombustible material, if the holes are discharging water containing acid or toxic-forming material.

3. Variance from Sealing Auger Holes - An auger hole need not be sealed if the ~~director~~ Commissioner finds that an impoundment of the 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 water quality standards. Adequate drainage through the backfill from any unsealed auger holes shall be constructed as shown in the approved preplan.

4. Auger mining shall be conducted so as to maximize the utilization and conservation of the coal.

A. Auger mining shall be planned and conducted to maximize recoverability of mineral reserves remaining after mining and reclamation are complete.

B. Each person who conducts auger mining operations shall leave areas of undisturbed coal, as approved by the ~~director~~ Commissioner, to provide access for future underground mining activities to coal reserves remaining after augering is completed, unless it is established that the coal reserves have been depleted or are so limited in thickness or extent that it will not be practicable to recover the remaining coal. This determination shall be made by the ~~director~~ Commissioner upon presentation of appropriate technical evidence by the operator.

(c) Mountaintop Removal

1. Applicability - Where the mountaintop removal technique is applied, the provisions of this section, in addition to other applicable provisions of these regulations, shall apply.

2. The Final Graded Slopes - The final graded top plateau slopes on the mined area shall be less than 5 horizontal to 1 vertical so as to create a level plateau or gently rolling configuration and the outslopes of the plateau shall not exceed 2 horizontal to 1 vertical.

3. Drainage - The resulting level or gently rolling contour shall be graded to drain inward from the outslope except at specific points where it drains over the outslope in constructed channels. Such channels shall be protected from erosion and constructed using design criteria similar to that found in the Handbook.

(d) Inactive Status - Inactive operation status will be considered for a period not to exceed one (1) year from date of approval; Provided, that prior written approval is obtained from the ~~director~~ Commissioner; Provided further, that inactive status shall not be approved unless the operator demonstrates that reclamation is current and all water management practices will be maintained during the inactive period and all exposed coal is covered with nontoxic material. The ~~director~~ Commissioner may also require progress maps prior to approval. Where it can be adequately demonstrated by the permittee that inactive status to exceed one (1) year is necessary, the ~~director~~ Commissioner may extend inactive status beyond the one (1) year limitation in increments not to exceed six (6) months.

(e) Requirements for Special Land Use Purposes - Operations that meet the requirements of this paragraph may be conducted under a varience from the requirement to restore affected areas to the approximate original contour if the following requirements are satisfied:

1. The alternative post-mining land use requirements of Paragraph 4D.04 are met;

2. All applicable requirements of the Act and regulatory program other than the requirement to restore affected areas to their approximate original contour are met;

3. After consultation with appropriate land use planning agencies, if any, the potential use is shown to constitute an equal or better economic or public use;

4. The proposed use is designed and certified by an approved person in accordance with professional standards established to assure the stability, drainage and configuration necessary for the intended use of the site;

5. The highwall is completely backfilled with spoil material in a manner which results in a static safety factor of 1.3 using standard geotechnical analysis;

6. Only spoil not necessary to achieve the postmining land use shall be removed from the mine bench; and

7. The surface land owner of the permit area has requested in writing that a variance be granted so as to render the land after reclamation suitable for an alternative land use as defined in Paragraph 4D.03.

8. The watershed of the permit and adjacent area will be deemed improved if:

A. There is reduction in the amount of pollutants or reduced flood hazards;

B. Volume of seasonal flows do not adversely affect the environment; and

C. Appropriate state agency approves the plan.

9. Federal, State and local government agencies with an interest in the proposed land use have a maximum of sixty (60) days in which to review and comment on the proposed use.

(f) No mining within five hundred (500) feet of an underground mine not totally abandoned without approval by MSHA.

6B.08 Disposal of Excess Spoil - Spoil not required to achieve the approximate original contour shall be transported to and placed in a controlled manner in designated disposal areas within the permit area which have been designed in accordance with this subsection. Coal processing wastes and/or toxic material shall not be disposed of in such fills unless they are designed in accordance with the refuse disposal regulations. Where environmental benefits will occur, spoil not needed to restore the approximate original contour of the land and reclaim land within the permit area may, in a manner consistent with the Act and these regulations, be deposited on another area under a permit issued pursuant to the Act or on abandoned mine lands under a

contract for reclamation conducted pursuant to the provisions of the Act and these rules and regulations.

(a) Disposal of Excess Spoil on Existing Benches - Spoil material not required to return the area to the approximate original contour may be placed on a bench if the following conditions are met:

1. All excess spoil must be hauled, placed and retained on the solid portion of the existing bench; and

2. The spoil must be compacted or otherwise mechanically stabilized and the existing highwall eliminated to the extent possible with the available spoil to achieve a static safety factor of 1.3.

(b) Valley Fills - The spoil shall be transported and placed in a controlled manner, concurrently compacted as necessary to insure long-term mass stability and prevent mass movement.

1. Minimum design and construction requirements - The design and construction of all valley fills must be certified by a registered professional engineer.

A. If the fill area contains springs, natural watercourses or wet weather seeps, lateral drains shall be constructed from the wet areas to the rock core in such a manner that infiltration of the water into the fill will be prevented. If springs, natural watercources or wet weather seeps are encountered, a system of underdrains shall be constructed from each spring or seepage area as lateral drains to the rock core. If no filter is designed for the underdrain or rock core, sufficient capacity shall be provided to allow for partial plugging of the drain and/or rock core.

B. The foundation of the fill shall be designed to assure that the valley fill shall have a long-term static safety factor of 1.5 or greater.

C. The outer slope of the fill shall be no steeper than 2 horizontal to 1 vertical (2:1). A minimum of twenty foot (20') wide bench shall be installed at a maximum of every fifty feet (50') in vertical height with a 3 percent (3%) to 5 percent (5%) slope toward the fill and a one percent (1%) slope toward the rock core.

D. 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. If

a rock core chimney drain is not used, an underdrain designed and constructed using accepted engineering practices approved by the ~~Director~~ Commissioner and a surface diversion system capable of handling a 100-year, 24-hour precipitation event are required. A rock core shall be designed with a minimum width of sixteen feet (16') and shall be comprised of durable rock with a minimum dimension of twelve inches (12"). The rock core shall consist of no more than ten percent (10%) fines. This core shall be progressively constructed as the layers are brought up through the valley fill. The top of the rock core shall form a trapezoidal channel for possible flows over the core instead of through it in the event the pores of the core become blocked by debris or sediment over time. This channel shall be sufficient to pass a 100-year, 24-hour precipitation event.

E. All areas upon which the valley fill is to be placed shall first be cleared progressively of all trees, brush, shrubs and other organic material. This material shall be removed from the fill area. No more than three (3) acres, excluding roadway for construction of the fill, shall be cleared in the valley fill site until the first lift is completed.

F. The fill shall be constructed in compacted layers beginning at the toe of the valley fill. The layers shall be constructed approximately parallel in thicknesses not to exceed four feet (4) and compacted unless otherwise approved by the ~~director~~ Commissioner.

G. During and after construction, the top of the fill shall be graded to drain back to the head of the fill on a slope not greater than three percent (3%). A drainage pocket shall be maintained at the head of the fill at all times to intercept surface runoff and direct it into the core.

H. Other than the drainage pocket provided for in G. above, no impoundments shall be constructed on completed fills. In no case shall this pocket have a potential for impounding more than ten thousand (10,000) cubic feet of water.

I. Where the toe of the spoil rests on a downslope in excess of thirty-six percent (36%), keyway cuts or rock toe buttresses shall be constructed of sufficient size to ensure stability of the fill as determined in a stability analysis.

2. Plans, design data and construction specifications - The following material must be included in the application:

A. A profile view of the valley fill showing the original ground line and proposed construction limits;

B. A cross-section located through the intersection of the top and the face of the proposed valley fill showing the original ground line, the proposed construction limits and the rock core;

C. A plan view and cross-sections of designed rock toe buttresses, if applicable;

D. Enginneering calculations demonstrating the static safety factor for the proposed design; and

E. Details of foundation preparations, keyways, etc., if applicable.

(c) Side Hill Fills - Side hill fills shall be located on the most moderate slopes and naturally stable areas available with a downslope at the toe of the fill not to exceed thirty-six percent (36%). Where possible, fill materials suitable for disposal shall be placed upon or above a natural terrace, bench or berm if such placement provides additional stability and prevents mass movement.

1. Geotechnical investigation - Each application shall contain the results of a geotechnical investigation of the proposed disposal area. The investigation shall include such factors as adverse geologic conditions, soil characteristics and depth of bedrock, springs, seeps and groundwater flow and a description of materials to be placed in the fill and drains. The level of such geotechnical investigation shall be determined by a registered professional engineer based upon specific site conditions, available site information and the history of similar fills in nearby areas, and additional engineering data required for design.

2. Design and construction requirements - The design and construction of all side hill fills must be certified by a registered professional engineer. The following minimum design and construction requirements must be met:

A. If the fill area contains springs, natural watercourses or wet weather seeps, lateral drains shall be constructed from the wet areas in such a manner that infiltration of the water into the fill will be minimized. The drains shall be designed and constructed of course, durable rock. No single rock utilized in the underdrain may occupy more than twenty-five percent (25%) of the width of the drain.

B. All areas upon which the fill is to be placed shall first be cleared progressively of all trees, brush, shrubs and other organic material. This material shall be removed from the fill area.

C. The fill shall be constructed in concurrently compacted layers not exceeding four feet (4') in thickness.

D. The foundation of the fill shall be designed to assure that it shall have a static safety factor of at least 1.5.

E. The outer slope of the fill shall be no steeper than two horizontal to one vertical (2:1). A minimum twenty foot (20') wide bench shall be installed at a maximum of every fifty feet (50) in vertical height of the fill with a three percent (3%) to five percent (5%) slope towards the fill and a one percent (1%) slope towards a stabilized channel capable of passing a 100-year, 24-hour precipitation event.

F. Surface water runoff from and around the side hill fill shall be diverted away from the fill and into stabilized channels designed to pass safely the runoff from a 100-year, 24-hour precipitation event.

G. A subsurface drainage system shall be provided to safely collect and transport water from springs and seeps to the surface where it cannot affect the stability of the fill. Underdrains shall be constructed of durable rock and shall be provided with a filter unless the drain is designed of a sufficient capacity to allow for partial plugging.

H. No impoundments shall be constructed on completed fills.

3. Plans, design data and construction specifications - The application shall contain at a minimum the following information:

A. A cross-section of the side hill fill showing the original ground and the proposed finish grade at two hundred foot (200') stations.

B. Plans, design data and construction specifications for any diversions;

C. A plan view and cross-section of designed rock toe buttresses;

D. Engineering calculations demonstrating the static safety factor of the proposed fill design; and

E. Details of foundation preparations, keyways, etc., if applicable.

(d) Durable Rock Fills - Special excess spoil fill placement by dumping in a single lift may be approved based upon the specific site conditions provided that the excess spoil consists of at least eighty percent (80%) by volume sandstone, limestone or other durable rocks that do not slake in water and that the slope at the toe of the fill is less than twenty percent (20%). Loads of nondurable spoil in the fill shall be mixed with hard rock spoil in a manner to limit on a unit basis concentrations of noncemented clay or shale in the fill. Such materials shall comprise no more than twenty percent (20%) of the fill volume. Any such fill must be designed by a registered professional engineer experienced in the design and construction of earth and rock fill embankments.

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1. Geotechnical investigation - Each application shall contain the results of a geotechnical investigation of the proposed disposal site. The investigation shall include such factors as adverse geologic conditions, soil characteristics and depth in foundation zones, bedrock, springs, seeps and groundwater flow, potential effects of subsidence and a description of materials to be placed in rock cores and drains. The extent of such geotechnical investigation shall be determined by a registered professional engineer based upon specific site conditions, available site information and an additional engineering data required for design.

2. Minimum design and construction requirements - The design and construction of all durable rock fills must be certified by a registered professional engineer. The following minimum design and construction requirements must be met:

A. 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;

B. The final outer slope of the fill shall be no steeper than two horizontal to one vertical (2:1). A minimum twenty foot (20') wide bench shall be installed at a maximum of every fifty feet (50') in vertical height of the fill with a three (3) to five (5) percent slope towards the fill and a one percent (1%) slope toward the drainage channel;

C. All areas upon which the valley fill is to be placed shall first be cleared progressively of all trees, brush, shrubs and other organic material. This material shall be removed from the fill area;

D. If the fill area contains springs, natural watercourses or wet weather seeps, lateral drains shall be provided in such a manner that infiltration of the water into the fill will be prevented;

E. Drainage channels sufficient to carry a 100-year, 24-hour precipitation event shall be constructed to channel water around or through the fill in such a manner as to prevent zones of saturation within the fill provided that drainage from above the fill shall not be routed through the fill; and

F. The grade of the top surface of the completed fill shall not exceed five percent (5%) and shall slope toward the properly designed drainage channel with no impoundments.

3. Plans, design data and construction specifications - The following material must be included in the application:

A. A profile view of the valley fill showing the original ground and proposed construction limits;

B. A cross-section located through the intersection of the top of the face of the proposed fill showing the original ground and proposed construction limits;

C. Plan view, cross section, and design criteria for drainage channels or rock cores;

D. Plan view and cross-section of designed rock toe buttresses, if applicable;

E. Engineering calculations demonstrating the static safety factor of the proposed design; and

F. Details of foundation preparations, keyways, etc., if applicable.

(e) Certification - Certification of all excess spoil fills shall be as follows:

1. The fill and appurtanant structures shall be designed using recognized professional standards and certified by a registered professional engineer experienced in the design of earth and rockfill embankments; and

2. The fill shall be inspected for stability by a registered professional engineer or other qualified professional specialist under the direction of the professional engineer, quarterly throughout construction and during critical construction periods such as foundation preparation, under-drain placement, installation of surface drainage systems, and construction of rock toe buttresses. After completion of the inspection, a report certified by the registered professional engineer shall be submitted to the ~~director~~ Commissioner within two (2) weeks. A copy of the certified report shall be maintained at the mine site; and

3. After total completion of the valley fill, a certification form shall be completed and submitted to the ~~director~~ Commissioner by the registered professional engineer overseeing construction of the fill.

6B.09 Backfilling and Regrading - 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 of repose or such lesser slope as is necessary to achieve a minimum long-term static safety factor of 1.3 and prevent slides.

(a) Keeping Operation Current - Grading, backfilling and water management practices as approved in the preplans shall be kept current as follows:

1. Where the operation includes only contour mining (no augering) the grading and backfilling shall follow the mineral removal by a period not to exceed sixty (60) days or 1,500 linear feet;

2. Where the operation includes 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 not more than thirty (30) days or 1,500 linear feet, but in no event shall more than 3,000 linear feet of pit be exposed at any time;

3. Where the operation includes only augering, the grading and backfilling shall follow the augering by a period not to exceed thirty (30) days or 1,000 linear feet;

4. Area Mining - Should the operation include only area mining, the backfilling and grading shall not be more than two spoil ridges behind the pit being worked. Maximum linear feet of open pit shall not exceed 3,000 feet at any time;

5. Mountaintop Removal - For surface mine operations that remove entire coal seams running through the upper fraction of a mountain, hill or ridge (by removing all the overburden, backfilling and regrading) shall follow the same guidelines for area and contour mining as found in this section. The outer perimeter and drainage area shall be stabilized, regraded, seeded and mulched immediately upon construction. Where more than one component spread of equipment is being utilized on the same permit area, the backfilling and regrading shall be considered current when each area meets the requirements of Paragraph (4) of this subsection;

6. 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;

7. The period of time or the distance required to be current may be reasonably extended where the permittee affirmatively demonstrates that site conditions or weather changes make adherence to these guidelines impractical. A written waiver must be obtained from the ~~director~~ Commissioner for such extension;

8. Removal of Regrading Equipment - Operable regrading equipment shall be kept on the permit area until satisfactory completion of grading unless otherwise approved; and

9. Variance from Reclamation Requirements - Reclamation requirements may be postponed on a surface mining permit where surface mining operations and underground mining operations are proposed on the same area; Provided, that all requirements set forth in Section ~~13~~12 of the Act are met.

(b) Grading Outer Spoil - All outer spoil shall be graded so as to blend into the adjoining undisturbed lands.

(c) Erosion Control - All disturbed areas shall be regraded, protected and stabilized in a manner which effectively controls erosion.

(d) Reaffecting Previously Mined Areas

1. Operations proposing to remine existing benches permitted prior to July 1, 1977 and not proposing to substantially reaffect the existing highwall, shall at a minimum completely eliminate the newly created highwall and utilize the excess spoil material to eliminate as much of the pre-existing highwall as possible. This regulation applies only to those situations where mining is proposed in order to remove coal seams lying below the seam originally mined prior to July 1, 1977.

2. Auger operations proposing to affect previously mined areas that were not reclaimed to the standards of this section shall demonstrate in writing that if the volume of all reasonably available spoil is insufficient to completely backfill the highwall, the highwall shall be eliminated to the maximum extent technically practical in accordance with the following criteria:

A. The backfill designed by a registered professional engineer has a minimum static safety factor of at least 1.3;

B. All spoil generated by the auger mining operation and any associated surface coal mining and reclamation operation and any other reasonably available spoil, that when rehandled will not cause a hazard to the public safety or significant damage to the environment, shall be used to backfill the area;

C. The coal seam mined shall be covered with a minimum of four (4) feet of non-acid, non-toxic forming material, and the backfill graded to a slope which is compatible with the approved post mining land use and which provides adequate drainage and long term stability.

D. Any remnant of the highwall shall be stable and not pose a hazard to the public health and safety or to the environment; and

E. 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.

(e) Regraded Drainage Control - Drainage control on regraded areas shall be provided to 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 rip-rap channels, tracking in, small depressions or other devices that may be approved by the ~~director~~ Commissioner.

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7 - STANDARDS FOR SURFACE EFFECTS OF UNDERGROUND MINING

7A. PERMIT REQUIREMENTS

7A.01 General - In addition to information required by Sections ~~109~~ and 18(b)(5) of the Act, the following general information shall be included with an application filed on forms provided by the ~~director~~ Commissioner.

(a) Return receipts of notification to residents residing on property contiguous to proposed permit area.

(b) A true copy of the notarized affidavit of publication and a copy of the advertisement setting forth the dates the advertisement appeared.

(c) The location of the operation (county, magisterial district, nearest post office and longitude and latitude).

(d) The name of the coal seam or seams to be mined.

(e) Information on the type of bond to be filed and whether or not incremental bonding will be used.

(f) An indication of whether or not there will be a gravity discharge.

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

1. Name and series of the sheet;

2. Scale, latitude and longitude;

3. Limits of underground mining operation proposed;

4. Surface area to be permitted;

5. Cropline of the mineral;

6. Location and identification of all mine openings for the proposed mine shafts, slopes and drifts, and boreholes; and

7. Location of all surface residents of structures not owned by the applicant over the area to be mined.

(h) Attach a copy of a mine development map drawn to scale showing:

1. Boundaries of underground mining operation and any adjacent active or abandoned mines in the same seam;

2. Present extent of underground mining as well as projected headings;

3. Date, scale, north arrow, dip and strike arrow and average dip;

4. All gas, oil and water wells;

5. Location of all known faults and test drill holes;

6. Area and extent of previous or proposed auger or strip mining in the same seam;

7. Location and thickness of barriers; and

8. Elevation of all entries, fanways and boreholes.

7A.02 Hydrologic Information and Analysis - The application shall contain a statement describing the probable hydrologic consequences (PHC) of the mining operations, both on and off the mine site with respect to the hydrologic balance. Modeling techniques may be included as part of the application. The latitude, longitude and elevation should be shown for each surface or groundwater sampling point for baseline information. Water sampling and analysis shall be in accordance with OSM approved methods.

(a) Baseline Ground Water Information

1. The location, ownership and use (if any) of known existing wells, springs, and other ground water resources including discharges from other active or abandoned mines in sufficient numbers to allow the applicant to make a reasonable approximation of the baseline ground water conditions and use.

2. Water quality descriptions including total dissolved solids, alkalinity, acidity, sulfates, specific conductance, pH, total iron, total manganese; Provided, that correlation data from other monitoring which does not include one or more of the above parameters may be accepted; Provided further, that limited validation samples may be required.

3. For significant aquifers, ground water quantity descriptions including discharge rates and depth to water under seasonal conditions.

4. If the determination of the probable hydrologic consequences (PHC) indicates that a currectly used or significant ground water resource is likely to be adversely impacted, additional information shall be provided on the baseline properties of the ground water system as necessary to evaluate such probable hydrologic consequences (PHC) or to plan remedial or reclamation activities.

(b) Baseline Surface Water Information

1. The name, location and description of streams into which water will be discharged.

2. Water quality descriptions including information on total suspended solids, total dissolved solids, specific conductance, pH, acidity, alkalinity, sulfates, total iron, and total manganese; Provided, that correlation data from other monitoring which does not include one or more of the above parameters may be accepted; Provided further, that limited validation samples may be required.

3. Water quantity descriptions including information on seasonal flow rates.

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 adversely impacted, 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 (PHC) or to plan remedial and reclamation activities.

(c) Probable hydrologic consequences assessment. The application shall include a determination of the probable hydrologic consequences (PHC) of the proposed mining and reclamation upon the quality and quantity of ground and surface water under seasonal flow conditions in the proposed permit area and potentially impacted offsite areas. The PHC determination shall be based on baseline data (including the geologic description provided in accordance with 7A.03) collected at or near the site of the proposed operation, data representative of the site, or a combination of both. The PHC determination shall include estimates of the impact of the proposed operation upon water quality, flooding or streamflow alteration and ground and surface water availability. Remedial measures for potential water quality or water quantity problems of local impact revealed by the PHC determinations shall be described or referenced.

(d) The applicant may submit data and analysis relevant to the cumulative hydrologic impact assessment with the application.

7A.03 Geology - The application shall contain a description of the geology, in accordance with ~~10~~9(a)(13) and (14), and ~~11~~10(a)(12) of the Act, for the permit area.

(a) Chemical analyses shall, unless otherwise provided by the ~~director~~ Commissioner or by law or regulation, be determined by using standard procedures found in EPA Manual 600/2-78-054 (Field and Laboratory Methods Applicable to Overburden Minesoils).

(b) In the event that any part of the data required under this subsection is available to the operator from previous investigations on the proposed permit area or adjacent areas with similar characteristics, the data may be used in lieu of development of new data if deemed acceptable by the ~~director~~ Commissioner in writing.

(c) The clay content of the stratum immediately below the coal seam and the pyrite content and potential alkalinity of the stratum immediately below the coal seam shall be analyzed.

7A.04 Mine Abandonment - A plan shall be included in the application and shall contain the following information:

(a) The maximum head of water expected on the barrier and mine seals;

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

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

7B. PERFORMANCE STANDARDS

7B.01 Signs and Markers

(a) Permanent Monument - A permanent monument shall be posted at the entrances from public roads and highways and at other suitable locations. The monument shall consist of a sign constructed of wood, metal or other suitable material two feet by three feet (2' x 3') mounted on a two inch (2") diameter pipe driven three feet (3') into the ground with four feet (4') exposed. Any suitable equivalent substitute may be approved. The sign shall clearly indicate the company name, permit numbers, 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 operations on the surface, signs reading "Blasting Area" shall be conspicuously displayed at 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. Once blasting operations are completed on this area the blasting sign may be removed.

(f) Slope Measurements - Slope measurements shall be clearly marked prior to pre-inspection at each 200' interval perpendicular to the cropline, where applicable.

7B.02 Casing and Sealing of Holes - All boreholes, shafts, auger holes and wells shall be cased, sealed or otherwise managed to prevent pollution of surface or ground water and to prevent mixing of ground waters of significantly different quality. All boreholes within the permit area which extend beneath the coal to be mined and into water bearing strata shall be permanently plugged unless the boreholes have been approved for use in 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 ~~Director~~ Commissioner, be transferred to another party another party for further use. The conditions of the transfer shall comply with State and local laws, regulations, and other requirements.

7B.03 Topsoil - If a borrow site is to be used for topsoil, it must be shown on the proposal map accompanied by appropriate reclamation plan.

(a) Removal - If no borrow area is provided, then 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. Where the removal of vegetative material, topsoil or other materials may result in erosion, the ~~director~~ Commissioner may limit the size of the area from which these materials are removed at any one time.

(b) Redistribution - 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 and surface water drainage system.

(c) Top Soil Substitutes - Any material used for topsoiling must be capable of supporting and maintaining the approved postmining land use. This determination shall be based on the results of appropriate chemical and physical analysis of overburden and topsoil. These analyses shall include:

1. The determination shall include at a minimum pH, texture class, and nutrient content; and

2. A certification of analysis shall be made by a qualified laboratory stating that (A) the proposed substitute material is suitable for sustaining vegetation, and (B) the analyses were conducted using standard testing procedures.

(d) 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 4F. These tests shall include nutrient analysis and lime requirement tests. Results of these tests shall be submitted to the ~~director~~ Commissioner with the final planting report as required by these regulations.

7B.04 Water Quality - Surface and ground water quality and quantity shall be protected by handling and managing earthen materials, groundwater discharges and runoff in a manner that minimizes the formation of acid or toxic drainage or infiltration and restores the approximate pre-mining water availability.

(a) Water Quality Control - 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 until discharges from such areas will not cause a violation of water quality standards.

(b) Effluent Limitations - Discharge from the permit area shall not violate effluent limitations or cause a violation of 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 40 CFR Part 434.

(c) Unless otherwise approved by the ~~director~~ 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.

(d) 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.

Non-mechanical treatment systems may be utilized if flow is infrequent or small and timely and consistent treatment is assured.

(e) Breakthrough

1. Any surface or underground breakthrough of water which may affect a surface discharge and is 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 ~~director~~ Commissioner, any other parameter characteristics of the discharge. Such analysis shall be made by a competent water analyst or chemist. The original and at least one copy of the analysis shall be retained by the operator, two copies shall be submitted to the ~~director~~ Commissioner.

2. Should said analysis indicate the water quality to be less than applicable effluent limitations, seals shall be immediately constructed. These seals shall:

A. Prevent any air from entering the underground mine by way of the breakthrough; or

B. Prevent any air from entering the breakthrough while allowing the water to flow from the breakthrough; or

C. 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.

3. Alternate methods of handling discharges from breakthroughs may be employed where it can be established that applicable effluent limitations can be met.

(f) Surface water shall not be diverted or otherwise discharged into underground mine workings, unless the person who conducts the mining activities demonstrates to the ~~director~~ Commissioner that this will:

1. Abate water pollution or otherwise eliminate public hazards resulting from mining activities;

2. Be discharged as a controlled flow, meeting applicable effluent limitations for pH and total suspended solids, except that the pH and total suspended solid limitations may be exceeded if approved by the ~~director~~ 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; or

E. Sludge;

3. In any event, the discharge into underground mines of surface waters will not cause, result in or contribute to a violation of applicable water quality standards or effluent limitations;

4. Minimizes disturbance to the hydrologic balance; and

5. Not discharge without MSHA approval.

7B.05 Discharge from Underground Operations - No person shall locate openings for new drift mine workings 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 2.04 of these regulations, then site specific data must be submitted demonstrating that this is not an acid or iron producing seam in this location.

7B.06 Acid Producing and Toxic Materials - All exposed coal seams remaining after mining and any acid-forming, toxic-forming, combustible materials, or any other waste materials that are exposed, shall be covered with a minimum of four feet (4') of nontoxic and noncombustible material or tested, treated and blended to provide materials suitable to prevent water pollution. If necessary, this material shall be treated to neutralize toxicity in order to prevent water pollution and sustained combustion and/or to minimize adverse effects on plant growth and land uses. Where necessary to protect against upward migration of salts, exposure by erosion, to provide an adequate depth for plant growth or to otherwise meet local conditions, the ~~director~~ Commissioner shall specify thicker amounts of cover using non-toxic material.

7B.07 Monitoring Requirements

(a) Surface Water Monitoring

1. All water discharged from the permit area shall be sampled, analyzed and otherwise monitored in accordance with the Clean Water Act of 1977 and all applicable standards of the NPDES program, and a monthly report of all measurements shall be submitted to the ~~director~~ Commissioner; Provided, that all violations of effluent standards shall be reported to the ~~director~~ Commissioner within five (5) days of receipt of analytical analyses; and

2. Where any discharge from the permit area requires treatment during the mining operation in order to meet the water quality standards set forth in the NPDES regulations, surface 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 water quality standards shall be adequate to establish that the hydrologic balance is being preserved.

(b) Ground Water Monitoring - If the PHC determination indicates that adverse impacts may occur to a significant ground water resource, a ground water monitoring plan in accordance with Section 15(b)(2) of the Act should be included in the permit application. The plan shall include a statement of the quantity and quality parameters to be monitored, sampling frequency and duration, site location, and a narrative that describes how the data may be used to determine the impact, if any, of the operation upon the hydrologic balance. At a minimum, total dissolved solids, specific conductance, pH, acidity, alkalinity, total iron, total manganese, and water levels shall be monitored at each approved monitoring location, and the results submitted to the ~~director~~ Commissioner, at least every three (3) months.

7B.08 Method of Operation

(a) Steep Slope Mining

1. Applicability - On mining operations where the natural slope exceeds twenty degrees (20°), the provisions of this section in addition to other applicable provisions of these regulations, shall apply. On lesser slopes that require measures to protect the area below the mining operation from disturbance as determined by the ~~director~~ Commissioner on the basis of consideration of soils, climate, method of operation, geology and other regional characteristics, the provisions of this section, in addition to other applicable provisions of these regulations, shall also apply.

2. Downslope Placement - Spoil or debris shall not be placed on the downslope except in specified fill areas designed for such placement. Nothing in this section shall prohibit the placement of materials in haulroad or access road fills on slopes steeper than twenty degrees (20°) so long as the fills are constructed in accordance with these regulations.

3. Highwall Elimination - The highwall shall be eliminated and the disturbed area graded to the approximate original contour in accordance with the provisions of this paragraph and subsection 7B.11.

4. Stabilization - The material used to backfill and eliminate the highwall shall be sufficiently compacted or otherwise mechanically stabilized so as to ensure stability of the backfill with a static safety factor of 1.3. The method and design specifications of compacting material shall be approved by the ~~director~~ Commissioner. Woody materials shall not be buried in the backfilled area unless the ~~director~~ Commissioner determines that the proposed method for placing woody material beneath the highwall will not deteriorate the stable condition of the backfilled area. The operation shall at a minimum retain all overburden and spoil on the solid portion of existing or new benches and backfill and grade to the most moderate slope possible.

5. Drainage Channels and Flumes - When mining through natural watercourses or when water is to be directed across or through the backfill, a drainage channel, flumes or french drains shall be constructed across or through the backfill in order to ensure stability and to prevent erosion. Such drainage channels, flumes or french drains shall be constructed of non-toxic durable rock, asphalt, concrete or any other material approved by the ~~director~~ Commissioner. Channels, flumes and drains shall be constructed in accordance with criteria contained in the Handbook unless otherwise approved.

(b) Inactive Status - Inactive operation status will be considered for a period not to exceed one (1) year from date of approval; Provided, that prior written approval is obtained from the ~~director~~ Commissioner; Provided further, that inactive status shall not be approved unless the operator demonstrates that reclamation is current and all water management practices will be maintained during the inactive period. The ~~director~~ Commissioner may also require progress maps prior to approval.

Where it can be adequately demonstrated by the permittee that inactive status to exceed one (1) year is necessary, the ~~director~~ Commissioner may extend inactive status beyond the one (1) year limitation in increments not to exceed six (6) months.

(c) Requirements for Special Land Use Purposes - Operations that meet the requirements of this paragraph may be conducted under a variance from the requirement to restore affected areas to the approximate original contour if the following requirements are satisfied:

1. The alternative postmining land use requirements of paragraph 4D.04 are met;

2. All applicable requirements of the Act and regulatory program other than the requirement to restore affected areas to their approximate original contour are met;

3. After consultation with appropriate land use planning agencies, if any, the potential use is shown to constitute an equal or better economic or public use;

4. The proposed use is designed and certified by an approved person in conformance with professional standards established to assure the stability, drainage and configuration necessary for the intended use of the site;

5. The highwall is completely backfilled with spoil material in a manner which results in a static safety factor of 1.3 using standard geotechnical analysis; and

6. The surface land owner of the permit area has requested in writing that a variance be granted so as to render the land after reclamation suitable for an alternative land use as defined in paragraph 4D.03.

7B.09 Disposal of Excess Spoil - Spoil not required to achieve the approximate original contour shall be transported to and placed in a controlled manner in designated disposal areas within the permit area in accordance with the criteria and specifications found in section 6B of these regulations and in the Handbook or other appropriate design as approved in the preplan. Coal processing wastes and/or toxic material shall not be disposed of in such fills unless they are designed in accordance with the refuse disposal regulations. Where environmental benefits will occur, spoil not needed to restore the approximate original contour of the land and reclaim land within the permit area may, in a manner consistent with the Act and these regulations, be deposited on another area under a permit issued pursuant to the Act or on abandoned mine lands under a contract for reclamation conducted pursuant to the provisions of the Act and these rules and regulations.

(a) Disposal of Excess Spoil on Existing Benches - Spoil material not required to return the area to the approximate original contour may be placed on a pre-existing bench if the following conditions are met:

1. All excess spoil must be hauled, placed and retained on the solid portion of the bench; and

2. The spoil must be compacted or otherwise mechanically stabilized and the existing highwall eliminated to the extent possible with the available spoil to achieve a static safety factor of 1.3.

(b) Disturbance Within Fill Site - At no time shall the disturbance in the valley fill area be greater than the sediment storage requirement provided by the sediment structures until two or more lifts of the valley fill have been installed.

(c) 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.

7B.10 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 disturbance at any one time 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.

1. 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 within thirty (30) days of completion of the storage area.

2. 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 mulched so as to establish a satisfactory permanent vegetative cover. Trees shall be required only on those areas that:

A. Will not be redisturbed by future reclamation activities; or

B. Are necessary in order to meet the approved postmining land use. Seeding and planting of these areas shall be conducted during the first seeding season.

(b) Mine Site Organization and Aesthetics - Indiscriminate dumping or discarding of materials, litter, junked equipment, containers, or other non-coal wastes shall be prohibited. These materials shall be properly placed in areas specifically designated for their storage or disposal or removed from the area. Regrading 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.

7B.11 Backfilling and Regrading - 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 of repose or such lesser slope as is necessary to achieve a minimum long-term static safety factor of 1.3 and prevent slides.

(a) Time Schedule for Regrading and Backfilling - Regrading and backfilling will proceed 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 completed within 180 days of completion of underground mining. Should particular site conditions or weather make adherence to these guidelines impractical, the period of time required to be current may be reasonably extended.

(b) 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 and application rates are found in these regulations.

(c) Variances from Highwall Elimination - All underground mining operations which were in existence and which created highwalls prior to August 3, 1977 shall not be required to eliminate the highwall if the operator can demonstrate that it is economically or 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 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 feet (4') of non-acid producing materials.

(d) Grading Outer Spoil - All outer spoil shall be graded so as to blend into the adjoining undisturbed lands.

(e) Erosion Control - All disturbed areas shall be regraded, protected and stabilized in a manner which effectively controls erosion.

(f) Reaffecting Previously Mined Areas

1. Mining of seams below existing bench - Operations proposing to mine below existing bench and not reaffecting existing highwall shall, at a minimum, completely eliminate newly created highwall and utilize excess spoil material to eliminate as much of the pre-existing highwall as possible.

2. Mining of Existing Bench - Operations proposing to mine on the existing bench and not reaffecting existing highwall shall, at a minimum, backfill four feet (4') above the coal seam and eliminate as much of the pre-existing highwall as possible.

(g) Regraded Drainage Control - Drainage control on regraded areas shall be provided to prevent excessive erosion or additional contributions of suspended solids to the receiving stream, ensure safety and conserve soil moisture. Drainage control measures include, but are not limited to, diversion ditches, flumes and rip rap channels, tracking in, small depressions or other devices that may be approved by the ~~director~~ Commissioner.

(h) 1. 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:

A. The fill is not located so as to be detrimental to the environment or to the health and safety of the public;

B. Stability of the fill shall be demonstrated through standard geotechnical analysis to be consistent with the backfilling and grading requirements; and

C. The surface of the fill has been vegetated in accordance with section 4F of these regulations.

2. The approximate original contour variance contained in (h) 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.

7C. Subsidence Control

7C.01 Public Notice - The mining schedule 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 beneath his or her property or residence. The return receipt shall be kept at the mine office. The notification shall contain, at a minimum:

(a) Company name, permit number and address;

(b) Identification of specific areas in which mining will take place;

(c) Dates of mining activities that could cause subsidence and affect specific structures; and

(d) Measures to be taken to prevent or control adverse surface effects.

7C.02 Surface Owner Protection

(a) Each person who conducts underground mining activities shall adopt all measures technologically and economically feasible to prevent subsidence causing material damage or reducing the value or reasonably foreseeable use of surface lands.

(b) Each person who conducts underground mining which results in subsidence that causes material damage or reduces the value or reasonably foreseeable use of the surface lands shall restore the land to a condition capable of supporting uses it was capable of supporting before subsidence. He shall also, where such person does not specifically possess the right to subside without liability to surface owners, at the option of the owner of each such damaged structure:

1. Restore, rehabilitate or remove and replace each damaged structure promptly after the damage is suffered, to the condition it would be in if no subsidence had occurred; or

2. Purchase the damaged structure for its fair market, pre-subsidence value and shall promptly, after subsidence occurs, insure that it does not constitute a public nuisance or a hazard to health and safety or the environment; or

3. Compensate the owner of any surface structure in the full amount of the diminution in value resulting from subsidence.

(c) Before mining begins, noncancellable premium prepaid insurance or other means approved by the ~~director~~ Commissioner may be required to assure that every person with an interest in the surface will be imdemnified for all damages which they might suffer as a result of subsidence.

(d) 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 ~~director~~ Commissioner finds that mining will not cause material damage or reduce the forseeable use. The ~~director~~ 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 ~~director~~ Commissioner may suspend mining under or adjacent to such features or facilities until the subsidence control plan is modified.

7C.03 Subsidence Control Plan

~~(a)~~ Each application shall include a subsidence control plan which includes the following:

~~1. A survey that identifies structures 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.~~

~~2. A general description of the technique of coal removal, such as longwall, room and pillar, pillar removal, hydraulic mining or other extraction methods;~~

~~3. 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, lithology, and other geologic and hydrologic conditions, which affect the likelihood or extent of subsidence and subsidence related damage; and~~

~~5. A description of the measures to be taken, in accordance with 7C.02, to mitigate or remedy any material damage or diminution in value or foreseeable use that may occur due to expected subsidence, except where the person conducting underground mining activities possess the right to subside without liability to surface owners.~~

Department of Energy
Division of Mines and Minerals
Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 7C.03.

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

(a) All Underground Mines

1. Survey - topographic map of a scale 1" = 1000' or less; the survey shall cover all areas overlying the projected mine areas within the angle of critical deformation but at least 15° from any coal removal.

A. All renewable resource lands which include but may not be limited to: agricultural or pasture lands, intensively managed commercial forests, and public use lands.

B. All structures clearly identified for use (including all protected structures as set out in 7C.02(d) of the Regulations). Structures shall include but not be limited to public roads, high tension power lines, gas collection and transmission lines, gas and oil wells, public or commercial water system distribution lines, dwellings, utility buildings, public buildings, industrial or commercial buildings, impoundments, coal refuse piles, and other structures typically shown on USGS Topographic Maps.

C. Intermittent and perennial streams.

D. Public and private water supplies (wells, springs, etc.)

2. A description of all significant aquifers. This information can be included by reference in the PHC portion of the application.

3. A general description of the technique of coal removal (i.e. room and pillar with pillar removal, longwall, hydraulic mining, etc.)

4. The Commissioner may waive the remainder of the requirements for a subsidence plan if the survey indicates and the Commissioner determines that no material damage or diminution of value or foreseeable use of the land could be caused by subsidence.

(b) Longwall Mining or Room and Pillar with 80% Recovery or Greater

1. All areas where planned subsidence is projected based on angle of critical deformation (may be shown or survey map, mine development map or other map on which in the information from the survey is easily discernable). If it is proposed that the angle of critical deformation is less than 15°, supporting data must be included.

2. 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.

3. For all areas identified by the survey indicate what measures will be taken to prevent material damage or reduction in value or reasonable 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 and supporting foundations of structures.

4. Specify anticipated effects of planned subsidence.

(c) All Underground Mines

1. Strike and dip of coal in accordance with 7C.03(a)4.

2. A map showing surface contours and bottom of coal contours (this can be done on the survey map or proposal map or separately) or an overburden isopach map in accordance with 7C.03(a)4.

3. Average seam thickness.

4. Overburden lithology which adequately represents the projected underground mining area and how the lithology was obtained.

5. Hydrologic conditions which may affect subsidence.

6. Other geologic conditions which may affect subsidence.

(d) Room and Pillar Mining with Less Than 80% Extraction

1. On the development map, show all first mining and areas of planned pillar extraction in accordance with 7A.01.

2. Describe anticipated secondary mining plans including percent extraction in accordance with 7C.03(a)5, 7C.02(a) and (d).

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. Any purported angle of critical deformation less than 15° must be supported by data. 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 in accordance with 7C.03(a)5, 7C.02(a) and (d). If it is not technologically and economically feasible, a detailed explanation must be included.

(e) All Underground Mines

1. A description of the measures to be taken in order to repair subsidence damage to structures, should any occur, as specified in Sections 7C.02(b)1 - 3.

2. Any other measures taken to mitigate or remedy any material damage or diminution in value or foreseeable use that mya occur.

3. 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.

4. When a applicant feels it has the right to subside, a copy of relevant portions of the actual document providing the right to subside must be included. When the applicant has the right to subside, subparagraghs 1 and 2 of this section need not be addressed.

(f) All Underground Mines - List all owners of property and residents within the area above the proposed underground workings. This list could be included on the survey or mine development map if sufficiently legible. The area above the underground works shall mean within the angle of critical deformation but at least 15° from any coal removal.

(g) Additional Requirements - Proposals to mine under or adjacent to features or facilities indicated in Section 7C.02(d) (i.e., churches, schools, public buildings, etc.) must be made in writing.

(h) In addition to the information required above, other information may be required on a site specific basis.

7D Incidental Boundary Revisions - 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 underground development such as additional drift openings, shafts, boreholes and related structures and the uphill expansion of existing refuse areas. Incidental boundary revisions shall not be granted for areas not uniquely related to underground mines such as coal storage, refuse disposal (except the uphill expansion of existing refuse areas) and coal haulage.

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8 - FACILITIES INCIDENTAL TO COAL MINING

8A. PERMIT REQUIREMENTS - This section shall apply to facilities required for or used incidentally for operation of the mine such as, but not limited to, mine buildings and coal processing plants not included in a mine permit. This section also applies to coal loading facilities at or near the mine site but not included in the mine permit.

8A.01 General - In addition to information required by sections ~~10~~9 and 18(b)(5) of the Act and sections 3 and 4 of these regulations, the following general information shall be included with an application filed on forms provided by the ~~director~~ Commissioner:

(a) Return receipts of notification to residents residing on property contiguous to proposed permit area;

(b) A true copy of the notarized affidavit of publication and a copy of the advertisement setting forth the dates the advertisement appeared;

(c) The location of the operation (county, magisterial district, nearest post office and longitude and latitude); and

(d) Information on the type of bond to be filed and whether or not incremental bonding will be used.

8A.02 Hydrologic Information and Analysis - The application shall contain a statement describing the probable hydrologic consequences of the mining operations, both on and off the mine site with respect to the hydrologic balance. Modeling techniques may be included as part of the application. The latitude, longitude and elevation should be shown for each surface or groundwater sampling point for baseline information. Water sampling and analysis shall be in accordance with OSM approved methods.

(a) Baseline Groundwater Information

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 in sufficient numbers to allow the applicant to make a reasonable approximation of the baseline groundwater conditions and use.

2. Water quality descriptions including total dissolved solids, alkalinity, acidity, sulfates, specific conductance, pH, total iron and total manganese; Provided, that correlation data from other monitoring which does not include one or more of the above parameters may be accepted; Provided further, that limited validation samples may be required.

3. For significant aquifers, ground water quantity descriptions including discharge rates and depth to water under seasonal conditions.

4. If the determination of the probable hydrologic consequences (PHC) indicates that a currectly used or significant ground water resource is likely to be adversely impacted, additional information shall be provided on the baseline properties of the ground water system as necessary to evaluate such probable hydrologic consequences or to plan remedial or reclamation activities.

(b) Baseline Surface Water Information

1. The name, location and description of streams into which water will be discharged.

2. Water quality descriptions including information on total suspended solids, total dissolved solids, specific conductance, pH, acidity, alkalinity, sulfates, total iron, and total manganese; Provided, that correlation data from other monitoring which does not include one or more of the above parameters may be accepted; Provided further, that limited validation samples may be required.

3. Water quantity descriptions including information on seasonal flow rates.

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 adversely impacted, additional information shall be provided on the baseline properties of the surface water system as necessary to fully evaluate such probable hydrologic consequences or to plan remedial and reclamation activities.

(c) Probable hydrologic consequences assessment. The application shall include a determination of the probable hydrologic consequences (PHC) of the proposed mining and reclamation upon the quality and quantity of ground and surface water under seasonal flow conditions in the proposed permit area and potentially impacted offsite areas. The PHC determination shall be based on baseline data collected at or near the site of the proposed operation, data representative of the site, or a combination of both. The PHC determination shall include estimates of the impact of the proposed operation upon water quality, flooding or streamflow alteration and ground and surface water availability. Remedial measures for potential water quality or water quantity problems of local impact revealed by the PHC determinations shall be described or referenced.

(d) The applicant may submit data and analysis relavant to the cummulative hydrologic impact assessment with the application.

8B. PERFORMANCE STANDARDS

8B.01 Signs and Markers

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(a) Permanent Monument - A permanent mounument shall be posted at the entrance from public roads and highways and at other suitable locations. The monument shall consist of a sign constructed of wood, metal, or other suitable material two feet by three feet (2' x 3') mounted on a two-inch (2") diameter pipe driven three feet (3') into the ground with four feet (4') exposed. Any suitable equivalent substitute may be approved. The sign shall clearly indicate the company name, permit numbers, 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, signs reading "Blasting Area" shall be displayed conspicuously at all approaches to the blasting site and along haulageways and access roads to the facility and 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.

8B.02 Casing and Sealing of Holes - All boreholes, shafts, auger holes and wells shall be cased, sealed or otherwise managed to prevent pollution of surface or ground water and to prevent mixing of ground waters of significantly different quality. All boreholes within the permit area which extend beneath the coal to be mined and into water bearing strata shall be permanently plugged unless the boreholes have been approved for use in 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 ~~Director~~ Commissioner, be transferred to another party another party for further use. The conditions of the transfer shall comply with State and local laws, regulations, and other requirements.

8B.03 Topsoil - Procedures for topsoil handling will be in accordance with 6B.03 of these regulations.

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8B.04 Water Quality - Surface and ground water quality and quantity shall be protected by handling and managing earthen materials, groundwater discharges and runoff in a manner that minimizes the formation of acid or toxic drainage or infiltration and restores the approximate pre-mining water availability.

(a) Water Quality Control - 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 until stabilized to prevent erosion or sedimentation.

(b) Effluent Limitations - Discharge from the permit area shall not violate effluent limitations or cause a violation of 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 40 CFR Part 434.

(c) Treatment Facilities - Adequate facilities shall be installed, operated and maintained using the best technology currently available in accordance to 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. Non-mechanical treatment systems may be utilized if flow is infrequent or small and timely and consistent treatment is assured.

(d) Surface water shall not be diverted or otherwise discharged into underground mine workings, unless the person who conducts the surface mining activities demonstrates to the ~~director~~ Commissioner that this will:

1. Abate water pollution or otherwise eliminate public hazards resulting from surface mining activities;

2. Be discharged as a controlled flow, meeting applicable effluent limitations for pH and total suspended solids, except that the pH and total suspended solid limitations may be exceeded, if approved by the ~~director~~ Commissioner, and is limited to:

A. Coal processing waste;

B. Fly ash from a coalfired facility;

C. Inert materials used for stabilizing underground mines;

D. Underground mine development wastes; or

E. Sludge;

3. In any event, the discharge into underground mines of surface waters will not cause, result in or contribute to a violation of applicable water quality standards or effluent limitations;

4. Minimizes disturbance to the hydrologic balance; and

5. Not discharge without MSHA approval.

8B.05 Acid Producing and Toxic Materials

(a) Drainage from acid-forming and toxic-forming materials into ground and surface water shall be avoided by:

1. Identifying, burying, blending, segregating and/or treating where necessary, spoil or other materials that will be toxic to vegetation or that will adversely affect water quality within thirty (30) days after it is first exposed or a lesser period if required by the ~~director~~ Commissioner. Such materials shall be handled in accordance with methods set forth in the approved preplan; and

2. Acid-forming or toxic-forming material shall not be buried or stored in proximity to a drainage course or ground water system so as to cause a threat of water pollution.

(b) Treatment of Toxic Material - Any acid-forming, toxic-forming, combustible , or other waste materials that are exposed, shall be surrounded with a minimum of four feet (4') of non-toxic and non-combustible material or test, treat and blend material to provide materials suitable to prevent water pollution.

If necessary, this material shall be treated to neutralize toxicity in order to prevent water pollutions and sustained combustion and/or to minimize adverse effects on plant growth and land uses. Where necessary to protect against upward migration of salts, exposure by erosion, to provide an adequate depth for plant growth, or to otherwise meet local conditions, the ~~director~~ Commissioner shall specify thicker amounts of cover using non-toxic material.

8B.06 Monitoring Requirements

(a) Surface Water Monitoring:

1. All water discharged from the permit area shall be sampled and analyzed and otherwise monitored in accordance with the Clean Water Act of 1977 and all applicable standards of the NPDES program and a monthly report

of all measurements shall be submitted to the ~~director~~ Commissioner, Provided, that all violations of effluent standards shall be reported to the ~~director~~ Commissioner within five (5) days of receipt of analytical analysis.

2. Where any discharge from the permit area requires treatment during the mining operation in order to meet the water quality standards set forth in the NPDES regulations, surface 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 water quality standards shall be adequate to establish that the hydrologic balance is being preserved.

(b) Ground Water Monitoring - If the PHC determination indicates that adverse impacts may occur to a significant ground water resource, a ground water monitoring plan in accordance with section 15(b)(2) of the Act should be included in the permit application. The plan shall include a statement of the quantity and quality parameters to be monitored, sampling frequency and duration, site location and a narrative that describes how the data may be used to determine the impact, if any, of the operation upon the hydrologic balance. At a minimum, total dissolved solids, specific conductance, pH, acidity, alkalinity, total iron, total manganese, and water levels shall be monitored at each approved monitoring location and the results susbmitted to the ~~director~~ Commissioner at least every three (3) months.

8B.07 Method of Operation

(a) Steep Slope Mining

1. Applicability - On surface mining operations where the natural slope exceeds twenty degrees (20°), the provisions of this section in addition to other applicable provisions of these regulations, shall apply. On lesser slopes that require measures to protect the area below the operation from landslides or other similar disturbances as determined by the ~~director~~ Commissioner on the basis of soils, climate, method of operation, geology and other regional characteristics, the provisions of this section, in addition to other applicable provisions of these regulations, shall also apply.

2. Downslope Placement - Spoil or debris shall not be placed on the downslope except in specified fill areas designed for such placement. Nothing in this section shall prohibit the placement of materials in haulroad or access road embankments on slopes steeper than twenty degrees (20°) so long as the embankments are constructed in accordance with these regulations.

3. Highwall Elimination - 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 accordance with these regulations. Land above the highwall shall not be disturbed unless the ~~director~~ Commissioner finds that the disturbance is necessary to:

A. Blend the solid highwall and the backfilled material;

B. Control surface runoff;

C. Provide access to the area above the highwall; or

D. Comply with applicable health and safety laws.

4. Stabilization - 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. The method and design of specifications of compacting material shall be approved by the ~~director~~ Commissioner. Woody materials shall not be buried in the backfilled area unless the ~~director~~ Commissioner determines that the proposed method for placing woody material beneath the highwall will not deteriorate the stable condition of the backfilled area. The operation shall at a minimum retain all overburden and spoil on the solid portion of existing or new benches and backfill and grade to the most moderate slope possible.

5. Drainage Channels and Flumes - When construction activities progress through natural watercourses, or when water is to be directed across or through the operation or backfill, a drainage channel, flume or french drain shall be constructed across or through the operation or backfill in order to ensure stability and to prevent erosion. Such drainage channels, flumes or french drains shall be constructed of non-toxic durable rock, asphalt, concrete or any other material approved by the ~~director~~ Commissioner. Channels, flumes and drains shall be constructed in accordance with criteria contained in the Handbook unless otherwise approved.

(b) Inactive Status - Inactive operation status will be considered for a period not to exceed one (1) year from date of approval; Provided, that prior written approval is obtained from the ~~director~~ Commissioner; Provided further, that inactive status shall not be approved unless the operator demonstrates that reclamation is current and all water management practices will be maintained during the inactive period and all exposed coal is covered with nontoxic material. The ~~director~~ Commissioner may also require progress maps prior to approval. Where it can be adequately demonstrated by the permittee that inactive status to exceed one (1) year is necessary, the ~~director~~ Commissioner may extend inactive status beyond the one (1) year limitation in increments not to exceed six (6) months.

(c) Requirements for Special Land Use Purposes - Operations that meet the requirements of this paragraph may be conducted under a variance

from the requirement to restore affected areas to the approximate original contour if the following requirements are satisfied:

1. The alternative postmining land use requirements of Paragraph 4D.04 are met;

2. All applicable requirements of the Act and regulatory program other than the requirement to restore affected areas to their approximate original contour are met;

3. After consultation with appropriate land use planning agencies, if any, the potential use is shown to constitute an equal or better economic or public use;

4. The proposed use is designed and certified by an approved person in conformance with professional standards established to assure the stability, drainage and configuration necessary for the intended use of the site;

5. The highwall is completely backfilled with spoil material in a manner which results in a static safety factor of 1.3 using standard geotechnical analysis;

6. Only spoil not necessary to achieve the postmining land use shall be removed from the mine bench; and

7. The surface land owner of the permit area has requested in writing that a variance be granted so as to render the land after reclamation suitable for an alternative land use as defined in Paragraph 4D.03.

8B.08 Site Development

(a) Time Schedule for Site Excavation - Time schedule for site excavation and/or construction activities shall be consistent with the approved preplan but shall provide for minimum disturbance at any one time consistent with good environmental procedures; Provided, all applicable drainage system components as approved in the pre-plan shall be installed prior to any disturbance for site development.

1. Temporary Revegetation - All topsoil and spoil storage areas which will be in place for less than one (1) year shall be seeded and mulched with a mixture of annual grasses and grains in order to reduce erosion. This seeding and mulching must be done within thirty (30) days of completion of the storage area.

2. 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 mulched with a combination of annual and perennial grasses and legumes. Trees shall be required only on those areas that:

A. will not be redisturbed by future reclamation activities; or

B. are necessary in order to meet the approved postmining land use. Seeding and planting of these areas shall be conducted during the first normal seeding season after the completion of the disturbance.

(b) Disposal of Excess Spoil on Existing Benches - Excess spoil will be placed in accordance with 6B.08 of these regulations.

8B.09 Backfilling and Regrading - Spoil returned to the mined-out area shall be backfilled and graded to approximate original contour with all highwalls eliminated and achieve a postmining slope that does not exceed either the angle of repose or such lesser slope as is necessary to achieve a minimum long-term static safety factor of 1.3 and prevent slides.

(a) Time Schedule for Regrading and Backfilling - Regrading, backfilling and revegetation will proceed as contemporaneously as practicable with operations and as reflected on the approved construction and reclamation plan; Provided, that final backfilling and regrading shall be completed within sixty (60) days of removal of the facility unless an alternate postmining land use has been approved in which case backfilling and regrading shall be accomplished as specified in the approved preplan. Should particular site conditions or weather make adherence to these guidelines impractical, the period of time required to be current may be reasonably extended. A written waiver must be obtained from the ~~director~~ Commissioner for such extension.

(b) Revegetation shall be kept current by establishing a temporary or permanent cover on regraded areas by the end of the first growing season and a permanent cover by the end of the second growing season. Standards and procedures for establishing a satisfying vegetative cover and guidelines for species selection and application rates are found in these regulations.

(c) Grading Outer Spoil - All outer spoil shall be graded so as to blend into the adjoining undisturbed lands.

(d) Erosion Control - All disturbed areas shall be regraded, protected and stabilized in a manner which effectively controls erosion.

(e) Regraded Drainage Control - Drainage control on regraded areas shall be provided to prevent excessive erosion or additional contribution of suspended solids to the receiving stream, ensure safety and conserve soil mositure. Drainage control measures include, but are not limited to, diversion ditches, flumes and riprap channels, tracking in, small depressions and other devices that may be approved by the ~~director~~ Commissioner.

8B.10 In-situ Mining - (a) Any in-situ mining will be conducted in accordance with sections 3, 4 and 7 ~~and 8~~ of these regulations. In addition,

the mining and reclamation operations plan involving in-situ processing activities shall contain information establishing how those operations will be conducted in compliance with the requirements of paragraph (b), including:

1. Delineation of proposed holes and wells and production zone for approval of the Commissioner;

2. Specifications of drill holes and casings proposed to be used;

3. A plan for treatment, confinement or disposal of all acid-forming, toxic-forming or radioactive gases, solids, or liquids constituting a fire, health, safety or environmental hazard caused by the mining and recovery process; and

4. Plans for monitoring surface and ground water and air quality, as required by the Commissioner.

(b) 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) Each person who conducts in-situ processing activities shall submit for approval as part of the application for permit under paragraph (a) and follow after approval, 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) 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.

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(e) 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.

(f) No permit shall be issued for operations covered by this section, unless the Commissioner first finds, in writing, upon the basis of a complete application made in accordance with paragraph (a) of this section, that the operation will be conducted in compliance with all requirements of this section and section 7 of these regulations.

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9 - COAL REMOVAL INCIDENTAL TO DEVELOPMENT

This section shall apply to all incidental operations in accordance with ~~20-6-31~~22A-3-28 of the Code which are two acres or less. Projects with incidental coal removal affecting more than two acres shall comply with Sections 3, 4 and 6 of these regulations.

9A. PERMIT REQUIREMENTS

9A.01 General - In addition to the requirements of section ~~31~~28 of the Act and these rules and regulations, an application for an incidental permit shall contain a map in accordance with the following:

(a) Size of map shall be no more than 30" x 42";

(b) Map scale shall be 1" = 200';

(c) A separate drainage map shall be required unless all necessary information can be clearly and legibly reflected on the preplan map;

(d) Show by appropriate markings the boundaries of the area of land to be disturbed for the development and shall differentiate all lands to be disturbed in conjunction with coal removal to include the area of coal to be removed, any necessary spoil area, all drainage structures and haulageways;

(e) The cropline of the seam of coal;

(f) The total number of acres of coal to be removed;

(g) Advertisement in accordance with section 3B of these regulations;

(h) Show the date on which map was prepared, a north arrow, quadrangle name, location map and strike and dip of coal seam;

(i) Show the drainage plan in accordance with 4B of these regulations;

(j) Where the natural slope of the land below the coal outcrop is less than twenty degrees (20°) and downslope placement of overburden or spoil is proposed, the map shall indicate the location and percent slope of the land at each two hundred foot (200') interval along the cropline. Measurements shall be taken downslope and perpendicular to the cropline; and

(k) Insurance in accordance with 3D of the regulations.

9A.02 Application - Application for an incidental permit shall be submitted on forms prescribed by the ~~director~~ Commissioner and shall contain the following:

(a) The names and addresses of:

1. The permit applicant;

2. The owner of record of the property, surface and mineral, to be mined;

3. The holders of record of any leasehold interest in the property;

4. Any purchaser of record of the property under a real estate contract;

5. The operator, if he is a person different from the applicant; and

6. If any of these are business entities other than a single proprietor, the names and addresses of the principals, officers and resident agent;

(b) Notification to residents residing on property contiguous to the proposed permit area;

(c) A statement of any current surface mining permits held by the applicant in this state and the permit number and each pending application.

(d) If the applicant is a partnership, corporation, association or other business entity, the following where applicable: The names and addresses of every officer, partner, resident agent, director or person performing a function similar to a director together with the names and addresses of any person owning of record ten percent (10%) or more of any class of voting stock of the applicant and a list of all names under which the applicant, officer, director, partner or principal shareholder previously operated a surface mining operation in the United States within the five-year period preceding the date of submission of the application;

(e) A statement of whether the applicant or any officer, partner, director, principal shareholder of the applicant, any subsidiary, affiliate or persons controlled by or under common control with the applicant, has ever been officer, partner, director or principal shareholder in a company which has ever held a federal or state mining permit which in the five-year period prior to the date of submission of the application has been permanently suspended or revoked or has had a mining bond or similar security deposited in lieu of bond forfeited and, if so, a brief explanation of the facts involved;

(f) A description of the type and method of surface mining operation that exists or is proposed, the engineering techniques used or proposed and the equipment used or proposed to be used;

(g) The anticipated starting and termination dates of each phase of the surface mining operation and the number of acres of land to be affected;

(h) A description of the legal documents upon which the applicant bases his legal right to enter and conduct surface mining operations on the proposed permit area and whether that right is the subject of pending court litigation; Provided, that nothing in this article may be construed as vesting in the ~~director~~ Commissioner the jurisdiction of adjudicate property-rights disputes; and

(i) A reasonable estimate of the number of acres of coal that would be mined as a result of the proposed development.

9A.03 Notification - A copy of the notification to all owners of surface contiguous to any part of the proposed mining operation. Such notice shall be accompanied by return receipts.

9A.04 Necessity for Coal Removal - A statement of the necessity for the coal removal as it relates to the development.

9A.05 Permits or Approvals - As necessary from the appropriate land use, planning, or zoning agencies.

9A.06 Utilities - The availability of all necessary utilities or services required for the development.

9A.07 Site Development Plan - A site development plan in accordance with the following:

(a) A time schedule for site development to include all structures, roads, buildings, etc.;

(b) A clear plot of the development area versus coal mining area;

(c) All areas to be regraded and revegetated which will not be redisturbed during development; and

(d) Evidence of financial commitment necessary for the development and the feasibility of the planned development.

9A.08 Blasting Plan - Where required, in accordance with section 4C.01 of these regulations with the exception of the following:

(a) All blasting conducted on an incidental permit will conform to the scaled vibration standards required in section 4C.05(g),(h) and (i) of these regulations, and

(b) Where blasting is to be conducted, all residents or owners of a manmade structure within 1000' of the proposed blasting area shall be notified by certified mail in advance of any blasting.

9A.09 Vegetation Plan - Shall be in accordance with 4F of these regulations.

9A.10 Final Surface Configuration - The application shall contain cross sections which accurately depict the final surface configuration that will be achieved as proposed in the reclamation plan.

9B. PERFORMANCE STANDARDS

9B.01 Signs and Markers - Shall be in accordance with section 6B.01 of these regulations.

9B.02 Topsoil - Unless otherwise specified in the preplan and for the purposes of this section where topsoil is to be segregated and redistributed, such activities shall be in compliance with section 6B.03.

9B.03 Water Quality - Shall be in accordance with section 6B.04.

9B.04 Acid Producing and Toxic Materials - Shall be in accordance with section 6B.05 of these regulations.

9B.05 Monitoring Requirements - Shall be in accordance with section 6B.06.

9B.06 Method of Operation - Shall be in accordance with section 6B.07 of these regulations.

9B.07 Site Development - Time schedule for site excavation and/or construction activities shall be consistent with the approved preplan but shall provide for minimum disturbance at any one time consistent with good environmental procedures; Provided, all applicable drainage system components as approved in the preplan shall be installed prior to any disturbance for site development.

(a) Temporary Revegetation - All topsoil and spoil storage areas which will be in place for one (1) year shall be seeded and mulched with a mixture of annual grasses and grains in order to reduce erosion. This seeding and mulching must be done within thirty (30) days of completion of the storage area.

(b) 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 mulched with a combination of annual and perennial grasses and legumes. Trees shall be required only on those areas that:

1. Will not be redisturbed by future reclamation activities; and

2. Are necessary in order to meet the approved postmining land use. Seeding and planting of these areas shall be conducted during the first normal seeding season after the completion of the disturbance.

9B.08 Backfilling and Regrading

(a) Operator Responsibility - In planning and executing operations, the operator shall have, at all times, proper regard for all backfilling and regrading requirements imposed by the Act and all rules and regulations adopted pursuant thereto and all provisions of the approved preplan.

(b) Time Schedule for Regrading and Backfilling - Regrading, backfilling and revegetation will proceed as contemporaneously as practicable with operations and as reflected on the approved construction and reclamation plan; Provided, final backfilling and regrading in accordance with the site development plan shall be completed within sixty (60) days of completion of coal removal. 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 shall be kept current by establishing a temporary or permanent cover on regraded areas by the end of the first growing season and a permanent cover by the end of the second growing season. Revegetation shall be in accordance with section 4F of these regulations.

(d) Grading Outer Spoil - All outer spoil shall be graded so as to blend into the adjoining undisturbed lands.

(e) Erosion Control - All disturbed areas shall be regraded, protected and stabilized in a manner which effectively controls erosion.

(f) Reaffecting Previously Mined Areas - Where operations are reaffecting previously mined lands that have not been restored to the standard of these regulations and sufficient spoil is not available to otherwise comply with these regulations, the permittee shall at a minimum: Retain all overburden and spoil on the solid portion of existing or new benches and backfill and grade to the most moderate slope possible which does not exceed the angle of repose. In all cases, the highwall must be eliminated; Provided, if the preexisting highwall has not been reaffected then elimination of the preexisting highwall will not be required.

(g) Regraded Drainage Control - Drainage control on regraded areas shall be provided as approved in the preplan to prevent excessive erosion or additional contribution of suspended solids to the receiving stream, ensure safety and conserve soil moisture. Drainage control measures include, but are not limited to, diversion ditches, flumes and riprap channels, tracking in, small depressions and other devices that may be approved by the ~~director~~ Commissioner.

(h) Storage of Overburden to be Used for Regrading

1. All material to be used in final regrading must be placed within the permit area as specified in the approved preplan in a manner

which will ensure mass stabilization and adhere to all applicable regulations governing excess spoil disposal.

2. Erosion and sediment control shall be maintained in accordance with the approved preplan.

3. Revegetation shall meet the requirements pursuant to section 4F of these rules and regulations.

9B.09 Landowner Exemption - Where landowners are engaged in construction which involves coal removal which does not require the disturbance of more than one (1) acre of privately owned land, the following provisions shall be met:

(a) Prior to the removal of coal, a landowner shall submit to the ~~director~~ Commissioner the following:

1. A plot drawn to scale of the land to be disturbed including the limits of construction, all associated landscaping and all roads or haulroads. Under no circumstances may the total disturbance exceed one (1) acre;

2. Copies of all deeds to the land and deeds or leases showing the right to extract the coal;

3. All building and sewage permits, if required by state or local laws; and

4. A sworn and notarized statement from the landowner that he intends to complete construction.

(b) Clearly visible perimeter markers shall show the boundaries of the area indicated on the plot plan;

(c) Construction must begin within six (6) months of mineral removal;

(d) No landowner may mine coal on this or any additional tract of land unless construction has been completed on the initial tract of land pursuant to this section; and

(e) If the landowner engaged the services of another party for the removal of the coal, the other party must first obtain an incidental permit; Provided, if the party engaged is also under contract with the landowner to complete the construction, such a permit shall not be required.

9C. FEDERAL OR STATE HIGHWAY OR OTHER CONSTRUCTION EXEMPTION

9C.01 Exemption Criteria - 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:

(a) 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

(b) 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.

9C.02 Coal Extraction Limits - 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.

9D. PUBLIC INSPECTION - All information submitted to the Department of ~~Natural Resources~~ Energy as a part of the application for an incidental permit as required in the Act and this section of the rules and regulations shall be made available for public inspection and copying at the nearest ~~Reclamation Division~~ Department of Energy field office; Provided, that information submitted to the ~~director~~ Commissioner pursuant to this subsection as confidential concerning trade secrets or privileged commercial or financial information which relates to the competitive rights of the person or entity intended to prospect the described area shall not be available for public examination; Provided further, that the application for an incidental permit shall be posted at the nearest ~~Reclamation Division~~ Department of Energy field office for seven (7) days prior to the ~~director~~ Commissioner's decision to grant or deny issuance of a permit for removal of coal incidental to development.

9E. Criteria for Approval of Two Acre Permits

(a) The Commissioner shall not grant approval to applications filed pursuant to 22A-3-9a of the Code which would result in two (2) or more related operations of two acres or less.

(b) Except as provided in paragragh (d) of this section, surface coal mining operations shall be deemed related if they occur within twelve months of each other, are physically related, and are under common ownership or control.

1. Operations shall be deemed physically related if drainage from both operations flows into the same watershed at or before a point within five aerial miles of either operation.

2. Operations shall be deemed under common ownership or control if they are owned or controlled, directly or indirectly, by or on behalf of:

A. The same person;

B. Two or more persons, one of whom controls, is under common control with, or is controlled by the other; or

C. Members of the same family and their relatives, unless it is established that there is no direct or indirect business relationship between or among them.

3. For purposes of this paragragh, "control" means: ownership of 50 percent or more of the voting shares of, or general partnership in, an entity; any relationship which gives one person the ability in fact or law to direct what the other does; or any relationship which gives one person express or implied authority to determine the manner in which coal at different sites will be mined, handled, sold or disposed of.

(c) This section applies to the extraction of coal for commercial purposes where the surface coal mining and reclamation operation, together with any related operations, has or will have an affected area of two acres or less. Where a segment of a road is used for access or coal haulage by more than one surface coal mining operation, the entire segment shall be included in the affected area of each of those operations; provided, that two or more operations which are deemed related pursuant to paragragh (b) of this section shall be considered as one operation for purposes of this section.

(d) Notwithstanding the provisions of paragragh (b) of this section, the Commissioner may determine that two or more surface coal mining operations shall not be deemed related if, considering the history and circumstances relating to the coal, its location, the operations at the sites in question, all related operations and all persons mentioned in paragragh (b) of this section, the Commissioner concludes in writing that there is no intention on the part of such operations or persons to evade the requirements of the Act and this section.

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Section 11.

11 - SMALL OPERATOR ASSISTANCE PROGRAM

11A.01 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.

(a) 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.

11A.02 Program Services - Where a qualified small operator requests assistance, the ~~Division of Reclamation~~ Department of Energy shall:

(a) 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 ~~10~~9(a) (11) (14) of the Act. The probable hydrologic consequences shall also include the information requested in Section ~~10~~9(a) (7) (8) (10) (12) (13) (15) thru (19) inclusive of the act as this information is necessary to properly evaluate the "Determination" and "Statement".

11A.03 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 production from all locations during any consecutive 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 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; and

(3) All coal produced by operations owned by persons who directly or indirectly control the applicant by reasonby direction of the management.

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11A.04 Request for Assistance - Each applicant requesting assistance shall complete an application on forms prescribed by the ~~director~~ 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 and thickness of coal seam to be mined;

(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 Section 11A.03. 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 preceeding 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 in accordance with Section 3C of these regulations and including the additional information as follows, as stated in Section ~~10~~9, (a)(12), (13E), (13F), (13J) 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.

11A.05 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 the division shall select the services of one or more qualified laboratories to perform this work. A copy of the contract or other appropriate work order and the final report shall be provided to the applicant.

11A.06 Qualified Laboratories

(a) General - A qualified laboratory means a designated public agency, private consulting firm or analytical laboratory approved by the ~~Division of Reclamation~~ 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:

A. Most current edition of the Standard Methods for the Examination of Water and Waste Water;

B. Methods for Chemical Analysis of Water and Wastes; and

C. EPA Manual 600/2-78-054 Field and Laboratory Methods Applicable to Overburden Minesoils;

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 ~~Division of Reclamation~~ Department of Energy.

11A.07 Liability of Operators

(a) The applicant shall reimburse the ~~Division of Reclamation~~ 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; or

4. The applicant's actual and attributed annual production of coal for all locations exceeds 100,000 tons during any consecutive 12-month period either during the term of the permit for which assistance is provided or during the first five years after issuance of the permit whichever is shorter.

(b) The ~~division~~ Commissioner can waive the reimbursement obligation if it finds that the applicant at all times acted in good faith.

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Section 12.

12 - NOTICE OF CITIZEN SUITS AND REQUESTS FOR INSPECTION

12A. Notice of Citizen's Suits - A person who intends to initiate a civil action on his own behalf under section 2825 of the Act shall give notice of intent to do so in accordance with the following:

(a) Notice shall be given by certified mail to the ~~director~~ Commissioner in all cases. A copy of the notice shall also be sent by first class mail to the Office of Surface Mining Field Office Director;

(b) In suits against any person or 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 ~~director~~ Commissioner, ~~reclamation commission~~, 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 ommission 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.

12B. Citizen's Request for State Inspections

12B.01 Request Procedure - Any person may request a State inspection by furnishing to the ~~director~~ Commissioner a signed, written statement (or an oral report followed by a signed, written statement) giving the ~~director~~ Commissioner reason to believe that a violation exists and setting forth a phone number and address where the person can be contacted.

12B.02 Confidentiality - The identity of any person supplying information to the ~~director~~ Commissioner relating to a possible violation or imminent danger or harm shall remain confidential with the ~~director~~ Commissioner, if requested by that person, unless that person elects to accompany the inspector on the inspection.

12B.03 Inspection Procedure - If an inspection is conducted as a result of information provided to the ~~director~~ Commissioner by a person as described in section 12B.01 of these regulations, 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 warrent.

12B.04 Facts and Findings - 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 ~~director~~ Commissioner shall send the following:

(a) 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;

(b) If no State inspection was conducted, an explanation of the reason why;

(c) An explanation of the person's right to informal review of the action or inaction of the ~~director~~ Commissioner; and

(d) Copies of all materials in paragraphs (a) and (b) of this section within the time limits specified in those paragraphs 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 Section 12B.02 of these regulations.

12B.05 Review of Inspections - Any person who is or may be adversely affected by a surface coal mining operation may notify the ~~director~~ 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 ~~director~~ 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 to remedy the noncompliance. The ~~director~~ Commissioner shall furnish the complainant with a written decision of the reasons for his determination and actions, if any, he has taken.

12B.06 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 ~~director~~ 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 ~~director~~ 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.

12B.07 Public Record

(a) Copies of all records, reports, inspection materials or information obtained under the West Virginia Surface Mining Act, except information in Paragraph (b) of this section, shall be made available to the public at regional, district or field offices in the area of mining so that they are conveniently available to residents in the area of mining.

(b) 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.

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Section 13.

13 - PROCEDURES FOR DESIGNATING LANDS UNSUITABLE FOR MINING

13A. PETITIONS

13A.01 Right to Petition

(a) The Commissioner or any ~~Any~~ person having an interest which is or may be adversely affected, ~~or the director~~, has the right to petition the ~~Reclamation Commission~~ Department of Energy to have an area designated as unsuitable for surface coal mining operations, or to have an existing designation terminated.

(b) Designation - The only information that a petitioner need provide is:

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, notorized 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 - The only information that a petitioner need provide to terminate a designation is:

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 section 13A.07(b); or

B. Reclamation now being technologically and economically feasible, if the designation was based on the criteria found in section 13A.07(a); 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 section 13A.07(b);

3. The petitioner's name, notorized 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.

13A.02 Initial Processing, Record-keeping, and Notification Requirements

(a) Within thirty (30) days of receipt of a petition, the ~~Reclamation Commission~~ Commissioner shall notify the petitioner by certified mail whether or not the petition is complete under section 13A.01 (b) or (c).

(b) The ~~Reclamation Commission~~ Commissioner shall determine whether any identified mineable coal resources exist in the area covered by the petition, without requiring any showing from the petitioner. If the regulatory authority 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 ~~Reclamation Commission~~ Commissioner may reject petitions for designations or terminations of designations which are frivolous. Once the requirements of section 13A.01(b) are met, no party shall bear any burden of proof, but each accepted petition shall be considered and acted upon by the ~~Reclamation Commission~~ 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 ~~Reclamation Commission~~ Commissioner shall determine if the new petition presents new allegations of facts. If the petition does not contain new allegations of facts, the ~~Reclamation Commission~~ 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 ~~Reclamation Commission~~ Commissioner determines that the petition is incomplete or frivolous, it 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 ~~Reclamation Commission~~ 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 ~~Reclamation Commission~~ Commissioner from issuing a decision on that permit application. The ~~Reclamation Commission~~ 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 weeks after the determination that a petition is complete, the ~~Reclamation Commission~~ Commissioner shall circulate copies of the petition to, and request submissions of relevant information from, other interested governmental agencies, the petitioner, intervenors, persons with an ownership interest of record in the property and other persons known to the ~~Reclamation Commission~~ Commissioner to have an interest in the property.

(i) Within three (3) weeks after the determination that a petition is complete, the ~~Reclamation Commission~~ 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 ~~Reclamation Commission~~ Commissioner holds a hearing under section 13A.03, 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 complete petition is filed, the ~~Reclamation Commission~~ Commissioner shall compile and maintain a record consisting of all documents relating to the petition filed with or prepared by the regulatory authority. The ~~Reclamation Commission~~ 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 regulatory authority.

13A.03 Hearing Requirements

(a) Within ten (10) months after receipt of a complete petition, the ~~Reclamation Commission~~ Commissioner shall hold a public hearing in the locality of the area covered by the petition. If all petitioners and intervenors agree, the hearing need not be held. The hearing shall be legislative and fact-finding in nature. The ~~Reclamation Commission~~ Commissioner shall make a verbatim transcript of the hearing.

(b) 1. The ~~Reclamation Commission~~ Commissioner shall give notice of the date, time, and location of the hearing to:

A. Local, State and Federal agencies which may have an interest in the decision on the petition;

B. The petitioner and the intervenors; and

C. Any person with an ownership or other interest known to the regulatory authority in the area covered by the petition.

2. Notice of the hearing shall be sent by certified mail and postmarked not less than thirty (30) days before the scheduled date of the hearing.

(c) The ~~Reclamation Commission~~ 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 ~~Reclamation Commission~~ 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 ~~Reclamation Commission~~ 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 intervenors stipulate agreement prior to the hearing, the petition may be withdrawn from consideration.

13A.04 Decision

(a) In reaching its decision, the ~~Reclamation Commission~~ 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 Section 13A.03(e); and

4. Any other relevant information submitted during the comment period.

(b) A final written decision shall be issued by the ~~Reclamation Commission~~ 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 ~~Reclamation Commission~~ 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 ~~Reclamation Commission~~ Commissioner with respect to a petition, or the failure of the ~~Commission~~ Commissioner to act within the time limits set forth in this Section, shall be subject to judicial review by a court of competent jurisdiction in accordance with State law.

13A.05 Data Base and Inventory System Requirements

(a) The ~~Reclamation Commission~~ 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 ~~Reclamation Commission~~ Commissioner shall include in the system information relevant to the criteria in paragraph 13A.07(b) 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 ~~Reclamation Commission~~ 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 ~~Reclamation Commission~~ Commissioner to prepare the statements required by Section 13A.03(e); and

2. That which becomes available from petitions, publications, experiments, permit applications, mining and reclamation operations and other sources.

13A.06 Public Information - The ~~Reclamation Commission~~ 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 ~~director~~ Commissioner determines that such disclosure might risk destruction or harm.

(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.

13A.07 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 ~~Reclamation Commission~~ 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.

13A.08 ~~Director~~ Commissioner's Responsibility for Implementation

(a) The ~~director~~ Commissioner shall not issue permits which are inconsistent with designations made pursuant to section 22 of the Act.

(b) The ~~director~~ Commissioner shall maintain a cumulative map of areas designated as unsuitable for all or certain types of surface coal mining operations.

(c) The ~~director~~ 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.

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Section 14.

14 - INSPECTION AND ENFORCEMENT

14A. Violations

14A.01 Notice of Violations - Each surface mining reclamation inspector shall note all violations of the operator and shall initiate an enforcement action for each violation so noted.

14A.02 Cessation Orders

(a) West Virginia Code ~~20-6~~22A-3-16 (a) provides that a reclamation inspector "shall have the authority to issue a cessation order where the operation creates an imminent danger to the health or safety of the public or is causing or can reasonable by expected to cause significant, imminent environmental harm to land, air or water resources..." Any reclamation inspector or supervisor who finds such a condition shall exercise their authority and forthwith issue a cessation order.

(b) Any cessation order issued under the provisions of West Virginia Code ~~20-6-17~~22A-3-16(a) shall remain in effect until the violation has been abated or until modified, vacated or terminated by the ~~director~~ Commissioner or the Reclamation Board of Review or by a Court.

(c) In any cessation order issued, the reclamation inspector shall determine the steps necessary to abate the violation in the most expeditious manner possible and shall include the necessary measures in the order.

14A.03 Pattern of Violations

(a) 1. Suspension or Revocation of a Permit - If the ~~director~~ Commissioner determines that a pattern of violations of any requirements of this Chapter, the regulations or any permit condition required by the Act exists or has existed, and that the violations were caused by the permittee willfully or through unwarranted failure to comply with those requirements or conditions, the ~~director~~ Commissioner shall issue an order to a permittee requiring him to show cause why his permit and right to mine under the Act should not be suspended or revoked. A willful violation is a violation resulting from an intentional act or omission. 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. Violations by any person 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.

2. The ~~director~~ 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, after considering the circumstances, including:

A. The number of violations cited on more than one occasion of the same or related requirements of this Article, the permit or the regulations;

B. The number of violations, cited on more than one occasion, of different requirements of this Article, the regulations or the permit; and

C. The extent to which the violations were isolated departures from lawful conduct.

3. The ~~Director~~ Commissioner shall promptly review the history of violations of any permittee who has been cited for violations of the same or related requirements of this Article, the regulations or the permit during three or more inspections of the permit area within any 12-month period. After such review, the ~~director~~ Commissioner shall determine whether or not a pattern of violations exists.

14A.03(b) ~~The director may decline to issue a show cause order, or may vacate an outstanding show cause order if he finds taking into account exceptional factors present in the particular case, it would be demonstrably unjust to issue or to fail to vacate the show cause order. The basis for this finding shall be fully explained and documented in the records of the case.~~

(b) ~~(c)~~ If the permittee files an answer to the show cause order and requests a hearing, a public hearing shall be provided. The ~~director~~ commissioner shall give thirty days written notice of the date, time and place of the hearing to the permittee and any intervenor. The ~~director~~ commissioner shall publish it, if practicable, in a newspaper of general circulation in the area of the surface coal mining and reclamation operations, and shall post it at the regional, district or field office closest to those operations.

(c) ~~(d)~~ Within sixty (60) days of the hearing, the ~~director~~ commissioner shall issue a written determination as to whether a pattern of violations exists and, if appropriate, an order. If the ~~director~~ commissioner revokes or suspends the permit and the permittees right to mine under the Act, the permittee shall immediately cease surface coal mining operations on the permit area and shall:

1. If the permit and the right to mine under the Act are revoked, complete reclamation within the time specified in the order; or

2. If the permit and right to mine under the Act are suspended, complete all affirmative obligations to abate all conditions, practices or violations, as specified in the order.

14B. Civil Penalties

Department of Energy
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Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 14B.01.

14B.01 The ~~director~~ Commissioner shall review each notice of violation and cessation order in order to determine whether a civil penalty will be assessed, the amount of the penalty, and whether each day of a continuing violation will be deemed a separate violation for purposes of the total penalty assessed.

(a) The ~~director~~ Commissioner shall assess a civil penalty for each day of continuing violation for each cessation order, except that such penalty shall not be assessed for more than thirty (30) days for each such violation. If the cessation order has not been abated or modified within the thirty (30) day period, the ~~director~~ Commissioner shall take appropriate action pursuant to ~~20-6~~22A-3-17(b), ~~20-6~~22A-3-17(f) or ~~20-6~~22A-3-17(h) of the Act.

(b) For Notices of Violations, the ~~director~~ Commissioner may not assess a civil penalty if the amount is less than one thousand dollars ($1000).

(c) For the purposes of this section, the assessment officer shall not determine the proposed penalty assessment until such time as the ~~director~~ Commissioner has caused an inspection of the violation to be conducted. The ~~director~~ Commissioner must conduct the inspection of the violation within the first fifteen (15) days after the notice or order was served.

14B.02 Procedure for Assessing Civil Penalties - Civil penalty amounts shall be determined on notices of violation in accordance with the factors specified in section 17(c) of the Act and utilizing a numerical system contained in subsection (c) of this paragragh.

(a) Show cause orders, cessation orders or notices of violation may not be vacated because of inability to comply.

(b) Unless caused by lack of diligence, inability to comply may be considered only in mitigation of the amount of civil penalty and of the duration of the suspension of a permit.

(c) 1. History of previous violations is an accounting of each Notice of Violation and Cessation Order that was not withdrawn and was written on a particular operation in the previous twelve (12) months.

Previous Violations Rate Schedule

Previous Violation	Rate Per Violation
3 - 5	20.00
6 - 10	40.00
over 10	60.00

2. Seriousness of the violation.

____ 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.

____ 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 will not result.

____ Violation extends beyond the permit area and results in a minor degree of potential or actual harm or impact on the public.

____ Violation extends beyond the permit area and results in a significant degree of environmental harm or danger to the public.

____ Violation is or can reasonable be expected to result in significant, imminent environmental harm or created an imminent danger to the health or safety of the public.

Proposed penalty rating (1 2), (3 4), (5 6), (7 8) and (9 10).

Civil Penalty Rate Schedule - Seriousness of Violation

Rating	0	1	2	3	4	5	6	7	8	9	10
Seriousness	---	100	115	132	152	175	201	231	265	305	350

3. Operator Negligence.

____ This violation is considered beyond control of the operator or his employees and no negligence can be attributed to this violation.

____ 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.

____ This violation was obvious and no action was taken by the operator to correct the problem.

____ The operator failed to adequately respond to previous enforcement action.

____ The operator had been officially notified of this problem and did not make any effort at correcting the problem.

Proposed Penalty Rating: (0), (1 2), (3 4), (5 6) and (7 8)

Civil Penalty Rate Schedule - Operator Negligence

Rating	0	1	2	3	4	5	6	7	8	9	10
Negligence	0	25	31	40	50	63	79	99	125	---	---

4. Operator's Good Faith

____ Operator failed to take appropriate action.

____ Operator took prompt by minimal action to correct the violation.

____ Operator started promptly on demedial measures and worked diligently to correct the violation.

____ Operator started immediately and expended all reasonable efforts to correct the violation. Violation was abated before required date.

____ Operator was already working on remedial measures and expended extreme effort in correcting the violation. Violation was abated in minimum possible time.

Proposed Penalty Rating: (0), (1 2), (3 4), (5 6) and (7 8).

Good Faith Rating Schedule

Seriousness / Good Faith	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	4	10	14	21	32	47	69	103	156	224
3	5	11	17	26	39	57	83	121	182	250
4	6	14	21	32	48	69	99	141	213	280
5	7	16	26	40	59	84	118	165	250	313
6	9	20	32	50	72	102	141	193	292	350
7	10	23	40	61	89	124	169	226	242	391
8	12	28	49	76	109	150	202	265	343	437

5. Determination of Penalty Amount.

Factor	Rating	Rate Per Point	Assessment
No Previous Violations		$	$
Seriousness of Violation			
Operator Negligence			
Good Faith		(-)	(-)
Total Amount of Penalty Assessment			$

6. The proposed penalty ratings utilized in 14B.02(c)(2), (3) and (4) are used in these respective sections by the ~~Director~~ Commissioner to determine the penalty amounts based on selection of a proposed rate to match the indicated situation which best describes the factor being assessed.

14C. Fees and Costs of Administrative Proceedings

14C.01 Any party 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 judgement. 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:

(a) 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;

(b) To any participating party other than the violator or his representative from the Department of ~~Natural Resources~~ Energy upon a determination that the party made a significant contribution to a full and fair determination of the issues;

(c) To a violator from the Department of ~~Natural Resources~~ Energy when the violator demonstrates that the Department of ~~Natural Resources~~ Energy issues cessation order, a show cause order or notice of violation in bad faith and for the purpose of harrassing or embarrassing the violator, provided that no award shall be made under this subsection if Department of ~~Natural Resources~~ Energy prevails upon the issue of a violation;

(d) To a violator from any participating party other than the Department of ~~Natural Resources~~ Energy where such participating parties initiated or participated in in the magistrate proceeding in bad faith and for the purpose of harrassing or embarrassing the violator; and

(e) To the Department of ~~Natural Resources~~ Energy from any participating party where the Department of ~~Natural Resources~~ Energy demonstrates that any such party participated in such proceeding in bad faith and for the purpose of harrassing or embarrassing the Department of ~~Natural Resources~~ 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 this Act.

14D. Inspections & Informal Conferences

14D.01 (a) The provisions of section 15 of the Act may be applied to operations conducted under section ~~8~~7 of the Act.

(b) Inspections conducted under the provisions of Section 15 of the Act may be partial inspections, provided, that complete inspections are conducted at least once per quarter.

(c) Notices of informal conferences held as a result of the provisions of section 16 of the Act shall be posted at the nearest ~~DNR~~ Department of Energy field 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.

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Division of Mines and Minerals
Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 15.

15 - OPEN MEETINGS

15A. OPEN MEETINGS

15A.01 (a) ~~Reclamation Commission and~~ Reclamation Board of Review - All meetings of the ~~Reclamation Commission and~~ 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) In the event of any emergency requiring immediate official action such efforts to notify the public shall be taken as circumstances allow.

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Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 16.

16 - APPEALS TO THE RECLAMATION BOARD OF REVIEW

16A. APPEALS TO THE RECLAMATION BOARD OF REVIEW

16A.01 Site Visit - 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 intervenors be given notice of the visit and are given an opportunity to accompany the Board.

16A.02 Final Decision - 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.

16A.03 BURDEN OF PROOF - The burden of proof shall be on the party seeking to reverse the decision of the ~~director~~ Commissioner.

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Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 17F.01

(a) Design storm - All impoundments related to the surface effects of coal mining shall be designed to meet the following criteria based upon hazard classification. Precipitation values may be obtained from Technical Paper 40, U.S. National Weather Service.

(b) Class A Impoundments shall be designed for a minimum of P_{100}+0.12 (PMP-P_{100}) inches of rainfall in six hours plus three feet of freeboard. If the storage times effective height is less than 3,000 (acre-feet)(feet) then Soil Conservation Service Pond Standard 378 may be substituted.

(c) Class B impoundments shall be designed for a minimum of P_{100}+0.40 (PMP-P_{100}) inches of rainfall in six hours plus three feet of freeboard.

(d) Class C impoundments shall be designed for the probable maximum precipitation of the appropriate duration.

(e) Impoundment Requirements - All impoundments must be capable of passing that portion of the design storm that cannot be safely stored in the impoundment.

(f) Class A impoundments must be provided with an open channel spillway unless otherwise approved by the director. Ninety percent of the stored portion of the design storm must be discharged or removed within ten days after the storm event.

(g) Class B impoundments shall be designed with either an open channel spillway only, or with an emergency spillway and a principal spillway together. Ninety percent of the stored portion of the design storm shall be discharged or removed within ten days after the storm event.

(h) Class C dams may be designed in one of three ways:

1. An impoundment designed without discharge structures shall be capable of storing a minimum of two 36 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.

2. An impoundment designed with a decant or principal spillway only shall be capable of storing at least one 36 hour duration probable maximum storm. Ninety percent of the stored portion of the storm shall be discharged or removed within ten days after the storm event.

3. 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 hour duration probable maximum storm that cannot be safely stored in the impoundment. Ninety percent of the stored portion of the storm shall be discharged or removed within ten days after the storm event.

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Section 17G.

17G. Spillways and Outlet Works

17G.01 Spillways - One or more spillways must be provided to pass that portion of the design storm that cannot be safely stored using standard engineering flood routing techniques and to draw down the stored portion of the design storm within the specified time. The outlets of all spillways must be carried safely beyond the toe of the dam to a natural drainway.

17G.02 Open Channel Spillways - All channels must comply with this Section, Section 17~~B.05-d.2.(e)~~H.01 and the following additional requirements:

(a) Any open channel spillway designed for less than 100% probable maximum precipitation shall be provided with freeboard above the maximum water surface as determined by the equation $1+.025vd^{1/3}$.

(b) 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 ~~director~~ Commissioner.

(c) Topsoil removed from channel excavation shall be handled in accordance with Section 17~~E~~P.02.

17G.03 Pipe Spillways - All pipe spillways must comply with the requirements of this Section and the following additional requirements.

(a) The pipe spillway inlet must be protected by a designed trash rack.

(b) All riser type spillways must be designed to prevent vortexing.

(c) A skimming device is required where floating pollutants exist or are anticipated.

(d) An adequate foundation and bedding shall be designed for all pipes and risers.

(e) all pipe spillways shall be designed to provide seepage control along the conduit.

(f) The pipe spillway shall be of sufficient strength to withstand the maximum load of the fill above it.

(g) All pipe spillways shall be constructed of suitable material to resist deterioration for the design life of the facility.

(h) The outlet of all pipes, where blockage by animals can occur, must be protected by an animal guard.

17G.04 Drainpipes - All freshwater impoundments meeting the size requirements of Sections 17GB.01b1 and 17GB.01b2 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.

17G.05 Concrete Structures - Concrete structures shall be designed in accordance with standard engineering practice. Special design considerations should be provided where deterioration of the environment may be expected.

17G.06 Diversion Channels - The entire coal refuse embankment shall be protected from surface water runoff by diversion systems unless otherwise approved by the ~~director~~ Commissioner.

(a) Design storm - All diversion ditches and stream channel diversions shall be designed to carry the peak runoff from a 100-year frequency, six hour duration rainfall.

(b) Freeboard - A freeboard equal to or greater than the formula $1+.025vd^{1/3}$ shall be added to the design flow depth of the diversion ditch to obtain the total depth of the diversion ditch.

(c) Additional Requirements - All ditches must comply with this Section, Section 17G.05-d.2.(c)H.01 and the following additional requirements:

1. Each diversion ditch must be designed to carry the peak flow with freeboard from the contributing watershed area.

2. 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.

3. 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 ~~director~~ Commissioner.

4. Topsoil removed from the channel excavation shall be handled in accordance with Section 17EP.02.

5. 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.

6. 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 without excessive erosion.

7. Diversions in refuse must be lined with soil or a suitable substitute unless sediment protection is provided.

8. 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 height or storage limits for impoundments as defined by Section 17B.01 b.2 are not exceeded, the pipe or conduit is used in conjunction with surface ditches to meet applicable design storm requirements (Section 17B.05d.2.(b.)(i.))G.01(a), and 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.

17H. Hydrology and Hydraulics

17H.01 Hydraulics - All hydraulic structures shall be designed to safely control the flow using energy dissipators and/or channel protection based upon design flow velocity to prevent excessive erosion. 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 ~~director~~ Commissioner. No surface runoff or slurry may be diverted into underground mines unless diverted in accordance with Section 17B.05-1L.

17H.02 Hydrological and Hydraulic Analyses All hydrological and hydraulic design must be done using accepted engineering methods and meet the minimum requirements of this Section. 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 shall 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.

17H.03 Subsurface Drainage - All springs, seepage, and groundwater flow observed or anticipated during wet conditions must be identified. If site conditions dictate necessity, a properly designed subdrainage system for the purpose of structural integrity and preservation of water quality shall be provided to:

(a) Intercept all anticipated or observed groundwater sources and/or seepage;

(b) Be constructed of durable rock consisting of non-degradable, non-acid or toxic forming rock such as natural sand or gravel, sandstone, or other durable rock that will not slake in water and will be free of coal, clay or shale. Limestone may not be utilized in any location where acid

water conditions are observed or anticipated unless otherwise approved by the ~~director~~ Commissioner. Subdrainage systems shall be protected by a properly designed filter zone or filter cloth where required;

(c) Be designed and sized based upon measured or anticipated flows using standard engineering design techniques with field data and computations for design provided in the submittal.

(d) The upstream end of the subdrain shall be covered by a filter medium during all phases so as to protect against contamination.

17I. Stability

17I.01 All coal refuse impoundments must be analyzed and/or designed in accordance with this Section. Non-impounding coal refuse embankments must be designed in accordance with this Section unless any proposed modifications to the design standards of this Section are justified through appropriate stability analysis. Where obvious site conditions indicate that failure will not occur, the ~~director~~ Commissioner may waive the requirement for a stability analysis on non-impounding structures so long as all other design requirements of Section 17~~B.05.f.2~~I.03(a) are met.

17I.02 Design Data Required - All data required for the structural analysis and/or design of coal refuse embankments and impoundments shall be presented in the submittal in graphical or tabular form.

(a) Subsurface Investigation - 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, insitu 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 as 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.

(b) Laboratory investigation - 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.

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Section 17I.03

17I.03 Design Requirements

(a) Foundation stability - Potential subsidence and settlement and their consequences must be considered using standard engineering techniques. The foundation must have or must be treated to have adequate bearing capacity to support the embankment and any appurtenant works.

(b) Slope stability - Coal refuse embankments and impoundments must achieve a minimum static factor of safety of 1.5 and a seismic factor of safety of 1.2 for construction and longterm conditions under normal and proposed hydrostatic conditions using standard geotechnical engineering techniques. Any final graded slope shall be no steeper than 2H:1V between benches with a 20-foot wide bench for each 50 feet of change in elevation.

(c) Compaction - Compaction shall be specified for construction or modification of all coal refuse disposal areas to insure that future stability and prevention of combustion is attained. Minimum spreading and compaction requirements shall be a maximum of two foot horizontal lifts to achieve 90 percent Standard Proctor Density (AASHTO Specification T 99-74). Special compaction requirements shall be considered for approval for such cases as fine refuse (-28 mesh), combined refuse, coarse refuse where 30 percent of the material will not pass the 3/4 sieve, impervious zones, refuse placement over previously burning refuse, initial lifts over fine refuse, etc.

(d) Liquefaction - The potential for liquefaction must be considered. Safeguards against the development of this condition shall be provided where required.

(e) Instrumentation - Considerations for 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.

17I.04 Stability Analyses - All stability analyses shall be done using standard engineering techniques. The submittal shall include cross-sections at critical locations in the embankment 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.

17J ~~17I.05~~ Abandoned Openings - Plans for sealing abandoned openings and covering the seal with four feet of an impermeable non-toxic material before placement of refuse over them shall be submitted to the ~~director~~ Commissioner. 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.

17K. Combustion Control - Coal refuse fires shall be extinguished. Plans for the extinguishment of burning areas shall be submitted to the regulatory authority and shall 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, and who have an understanding of the procedure to be used, shall be involved in the extinguishing operation.

17L. Underground Refuse Disposal

17L.01 Plans for underground refuse disposal shall be submitted to and approved by the ~~director~~ Commissioner and the Mine Safety and Health Administration. All plans must include:

(a) Method of disposal including a description of the source of the transport medium;

(b) Maps of mines where coal refuse materials are to be disposed with a description of the percent of mine void to be filled;

(c) Considerations to location of active workings including plans, specifications and methods of constructing underground retaining walls;

(d) Potential areas of breakout in active mine workings and on the surface of the ground;

(e) Effects of subsidence on the plan;

(f) The effects on groundwater including a permanent monitoring well or station to be located in the lowest practical elevation of the backfill area;

(g) Gradient of the mine from the backfill area;

(h) Description of stratum underlying the mined coal, source and potential acid or toxic-forming quality of the waste, and the treatment of water if released to surface streams; and

(i) A contingency plan formulated to alleviate or correct any hazardous conditions which may result from a blowout.

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Section 17M.

17M. Waste Disposal in Non-Approved Areas

17M.01 Any coal refuse materials or acid mine treatment sludge not previously approved for disposal at the site by the director may be disposed of in the permit area only if approved by the ~~director~~ Commissioner. Approval shall be based on a showing by the person conducting surface or underground mining activities in the permit area using hydrologic, geologic, geotechnical, physical, and chemical analyses, that disposal of these materials does not:

(a) Adversely affect water quality, water flows or vegetation;

(b) Create public hazards;

(c) Cause instability in the disposal areas.

17N Reprocessing or Removal of Abandoned Coal Refuse Disposal Piles

17N.01 A special permit may be obtained for reprocessing or removal of an abandoned coal refuse disposal area. This permit must accomplish a more desirable land use or have the effect of protecting the public and the environment. A bond of $1,000 per disturbed acre, $10,000 minimum, in the permit area shall be provided.

17N.02 Application Requirements - An application for a special permit for removal of an abandoned refuse disposal area shall be submitted to the director for review. Plans and specifications for removal and reclamation shall be prepared by or under the direct supervision of an engineer. The application shall include two sets of maps and plans on standard 24" by 36" size plan sheets with seven copies of a submittal containing a project narrative, reclamation plan, specifications, supporting data, reduced maps and plans.

(a) The project narrative shall include as 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 between engineers and those persons responsible for construction of the operation.

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

(c) 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.

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

(e) 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.

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

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

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

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

17N.03 Design Requirements

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

1. Provide sediment control facilities in accordance with the Handbook for Surface Mining requirements. Variances may be granted where the operator can show that insufficient space exists to meet the Handbook for Surface Mining requirements and that existing or proposed sediment structures will meet effluent standards.

2. Provide diversion or discharge facilities in accordance with the requirements of this section.

3. Provide for removal of refuse in successive horizontal lifts with a maximum elevation difference between working benches of twelve 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.

4. Provide a plan for fire control in present or unforeseen burning areas in accordance with Section 17B~~.05.H~~K.

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

6. Provide adequate revegetation of refuse and natural ground slopes in accordance with Section 4F of the Surface Mining regulations. All refuse materials disturbed by the operation shall be provided with a minimum cover of non-toxic and non-combustible material sufficient to establish adequate vegetation.

(b) Specific Requirements

1. Non-impounding Refuse Areas

A. Working surface ditches shall be designed where necessary based on the one year, 24 hour duration storm event as a minimum during the operation.

B. Removal operations shall not create any impoundment of water through the life of the project.

C. For partial removal within the permit area, a 100-year, 6-hour duration diversion ditch shall be provided for that part of the pile where refuse will remain. A stability analysis shall be performed as deemed necessary by the ~~director~~ Commissioner to demonstrate an adequate factor of safety in critical areas where refuse will remain.

2. Impounding Refuse Areas

A. Sufficient storage and spillway capacity for the design storm shall be provided through the removal operation. The design storm shall be in accordance with Sections 17D.~~05b~~ and 17B-~~01~~-~~d~~-2F.

B. A maximum five foot elevation difference is permitted between the elevation of slurry and the breach invert elevation unless otherwise approved by the ~~director~~ Commissioner.

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

D. 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 ~~director~~ Commissioner to demonstrate an adequate factor of safety in critical areas for the remaining refuse embankment. A 100-year, 6-hour duration diversion ditch shall be provided in accordance with Section 17B-~~05~~-~~d~~-2-~~(b)~~G.06.

(c) Disposal of Reprocessing Coal Refuse Materials - If reprocessing coal refuse materials are to be disposed of in the special permit area, the refuse disposal area must, in addition to applicable general requirements, be designed to:

1. Provide compaction of refuse in accordance with Section 17B-~~05~~-~~f~~-2-~~(e)~~I.

2. Disposal of reprocessing coal refuse materials from outside the special permit area shall be in accordance with Section 17B.06M..

170. Abandonment Requirements - The abandonment plan shall address the following requirements and include a schedule for their implementation:

170.01 No impoundment exceeding 10,000 cubic-feet of water shall remain upon constructed fills upon abandonment. Impoundments remaining upon abandonment must meet the requirements of Section 4B.05(e) of the Surface Mining regulations.

170.02 No refuse embankment or impoundment may be abandoned until it meets the requirements of Sections ~~17D.02, 17D.03, 17D.05~~17C.01(a)11, 12 and 14, Section 4F of the Surface Mining regulations, and has final bond release.

170.03 A timetable in working days and plans to remove each structure meeting the size requirements of 17GB.01(b)3 shall be provided where appropriate.

170.04 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 5 percent unless otherwise approved by the ~~director~~ Commissioner.

170.05 All pipes under refuse areas left as non-impounding fills shall be sealed with concrete at the upstream end prior to abandonment.

170.06 At abandonment all fine refuse disposal areas shall be covered with a minimum three foot layer of coarse refuse prior to final covering in accordance with Section 17B0.07g of the Surface Mining regulations unless otherwise approved by the ~~director~~ Commissioner.

170.07 At abandonment all coal refuse shall be covered with a minimum of 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 ~~director~~ Commissioner may allow less than 4 feet of cover material where it can be demonstrated that the requirements of Section 4F of the Surface Mining regulations shall be met.

170.08 A certificate of approval for completion of construction shall be issued upon completion of the above requirements. A certificate may be issued for fresh water impoundments after completion of construction has been certified.

17P. PERFORMANCE STANDARDS

17P.01 Signs and Markers

(a) Permanent Monument - A permanent monument shall be posted at the entrance from public roads and highways and at other suitable locations. The monument shall consist of a sign constructed of wood, metal, or other suitable material 2' x 3' mounted on a two-inch diameter pipe driven three feet into the ground with four feet exposed. Any suitable equivalent substitute may be approved. The sign shall clearly indicate the company name, permit numbers, business address and telephone number.

(b) Perimeter Marker - A two-inch diameter pipe or suitable substitute shall be driven into the earth with a minimum of three feet 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 will 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 of other vegetation supporting 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 during construction on the site, signs reading "Blasting Area" shall be displayed conspicuously at all approaches to the blasting site and along haulageways and access roads to the mining operation. The sign shall be two feet by three feet reading "Blasting Area" and explaining the blasting warning and the all clear signals and shall be posted at all entrances to the permit area.

17P.02 Topsoil

(a) Removal - The limits of topsoil removal shall be either within the refuse disposal area or in borrow sites as permitted by the ~~director~~ Commissioner. Borrow areas for topsoil will not be approved unless insufficient topsoil is available at the coal refuse site. 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 plans.

1. Where the removal of vegetative material, topsoil, or other materials may result in excessive erosion, the ~~director~~ Commissioner may limit the size of the area from which these materials are removed at any one time.

2. Topsoil or substitute materials not being immediately utilized shall be redistributed at a time when the physical and chemical properties

of topsoil can be protected and erosion can be minimized; provided that the ~~director~~ Commissioner may approve or require that other erosion control measures be utilized. Provided further, that unless approved by the ~~director~~ Commissioner, stockpiled topsoil and other materials shall not be moved until required for redistribution on a regraded area.

(b) Materials to be removed - If the topsoil is less than 6 inches, a 6-inch layer that includes the A horizon and the unconsolidated material immediately below the A horizon and all unconsolidated material if the total available is less than 6 inches, shall be removed and the mixture segregated and redistributed as the surface soil layer, unless topsoil substitutes are approved by the ~~director~~ Commissioner pursuant to 17EP.02(e). of this Section.

(c) Segregation Requirements - Topsoil not being immediately utilized shall be protected from wind and water erosion and kept free of contamination by acid or toxic materials. Protective measures include, but are not limited to vegetative cover.

(d) Redistribution - Topsoil and other materials shall be redistributed in a manner that:

1. Achieves an approximate uniform, stable thickness of at least six inches, consistent with the approved post mining land uses, contours and surface water drainage system;

2. Prevents excess compaction of topsoil; and

3. Protects the topsoil from wind and water erosion before and after it is seeded.

4. After final grading and before the replacement of topsoil and other materials segregated in accordance with this section, regraded land shall be scarified or otherwise treated as required by the ~~director~~ Commissioner to eliminate slippage surfaces and to promote root penetration. If the person who conducts the surface mining activities shows, through appropriate tests, and the ~~director~~ Commissioner approves, that no harm will be caused to the topsoil and vegetation, scarification may be conducted after topsoiling.

(e) Top Soil Substitutes - If top soil is of insufficient quantity or of poor quality for sustaining vegetation, and if other strata can be shown to be more suitable for vegetation requirements, then the operator shall remove, segregate, and preserve in a like manner such other strata which is best able to support vegetation. Any material used for topsoiling must be capable of supporting and maintaining the approved post mining land use. This determination shall be based on the results of appropriate chemical and physical analyses of overburden and topsoil. These analyses shall include:

1. Determinations of pH, net acidity or alkalinity, nitrogen, phosphorus, potassium, calcium, manganese, texture class, and other analyses as may be required by the director. The ~~director~~ Commissioner may also require, where he deems necessary, results of field-site tests or greenhouse tests be used to demonstrate the feasibility of using substitute materials;

2. Results of analyses, trials and tests shall be included in the pre-plan. Certification of trials and tests shall be made by a laboratory approved by the ~~director~~ Commissioner stating that:

A. The proposed substitute material is equal to or more suitable for sustaining the vegetation than is the available topsoil;

B. The substitute material is the best available material to support the vegetation; and

C. The trials and tests were conducted using standard testing procedures, the results of which shall be included in the pre-plan.

(f) Nutrients and Soil amendments shall be applied to the redistributed surface soil layer in accordance with Section 4F.06, 4F.07 and 4F.08a of the Surface Mining regulations.

17P.03 Water Quality

(a) Water Quality Control - All reasonable measures shall be taken to intercept all surface water by the use of diversions, culverts and drainage ditches or other methods to prevent water from entering the operational area. All water leaving the permit area will meet Federal and State water quality statutes, regulations, standards or effluent limitations. All surface drainage from the disturbed area must pass through a sediment pond or series of sediment ponds or other approved sediment or treatment control structures.

(b) Effluent Limitations

1. Before grade release, discharge from the permit area must comply with the requirements of Section 6B.06a(2) and 7B.07a(2) of the Surface Mining regulations.

2. After grade release, assure that any leachate therefrom will not lower the water quality of the river, stream or drainway into which it is discharged.

(c) Treatment Facilities - Adequate facilities shall be installed, operated, and maintained according to the approved pre-plan to treat any water discharged from the disturbed area so that it complies with all federal and state laws and regulations and the limitations of this section. Non-mechanical treatment systems may be utilized if flow is infrequent or small and timely and consistent treatment is assured.

(d) Breakthrough

1. 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 ~~director~~ Commissioner, any other parameter 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, two copies shall be submitted to the ~~chief of the division of reclamation~~ Department of Energy.

2. Should said analysis indicate the water to be less than the applicable effluent limitations, seals shall be immediately constructed. These seals shall either:

A. prevent any air from entering the underground mine by way of the breakthrough; or

B. prevent any air from entering the breakthrough while allowing the water to flow from the breakthrough; or

C. Seal the breakthrough of acid water so that it cannot flow. Such seals shall be constructed of stone, brick, block earth or impervious materials which are acid resistant.

3. Alternate methods of handling discharges from breakthroughs may be employed where it can be established that applicable effluent limitations can be met.

17P.04 Drainage, Sediment Control and Haulageways - Shall be developed in accordance with Section 4A and Section 4B of the Surface Mining regulations.

17P.05 Diversions and Spillways

(a) All diversion and spillway construction must comply with Sections 17EP.02a, 17EP.04 and the following requirements:

1. Diversions and spillways shall be constructed according to the approved plans and specifications. Any changes and/or modifications must be approved by the ~~director~~ Commissioner prior to implementation.

2. Diversion ditches shall be installed concurrently or after sediment structures are built and before other site preparation begins.

3. When downslope placement of fill material is used in the construction of diversion ditches, the fill material shall be compacted in layers to achieve the design configuration in accordance with the following requirements:

A. All areas upon which the fill is to be placed shall first be progressively cleared of all trees, brush, shrubs, and other organic material. This material shall be removed from the fill area;

B. Depositing and compacting the fill in layers shall begin at the toe of the fill. The layers shall be constructed approximately parallel with proposed finish grade. All material shall be deposited in uniform horizontal layers and compacted with haulage equipment.

C. The thickness of the layers shall not exceed four feet.

4. Excess excavation material not needed to construct or maintain the spillway or diversion ditches must be properly disposed of in the permit area unless otherwise approved by the ~~director~~ Commissioner.

5. If leakage or seepage occurs from the constructed diversion ditch, measures shall be taken to eliminate the seepage by sealing or other means.

6. All rip-rap material shall be of hard, durable rock which is not acid-forming or toxic-forming. Rip-rap shall be placed to prevent size segregation.

7. When bedding is used under rip-rap, the rock material shall be placed in a manner so as not to disturb or contaminate the bedding.

8. When protective channel linings are required, the linings shall be installed as soon as the ditch is constructed to grade.

9. When concrete is used in construction of spillways and diversion ditches, the concrete shall be placed and cured in accordance with AASHTO specifications. Standard engineering tests shall be performed to insure that the concrete meets the design specifications.

(b) Maintenance

1. All spillways and diversions shall be maintained to operate according to the design plans and specifications.

2. Routine maintenance of diversion ditches and spillways shall be performed. Maintenance shall include removal of sediment, brush, trees, rocks and re-establishment of the structure to its original hydraulic design.

3. All failures resulting from landslides or slope failures which may have a potential adverse effect on public property, public health and safety, or the environment must be corrected immediately. Such failures must be reported immediately to the ~~director~~ Commissioner.

4. Routine inspections shall be made by qualified persons of all hydraulic structures to insure proper operation. Special inspections shall be conducted whenever a significant storm flow through the structures has occurred.

5. All culvert pipes must be repaired or replaced when damaged, distorted, or otherwise fail to function property according to the approved design.

(c) Certification - Each hydraulic structure shall be certified according to Section 17EP.08d by an engineer. The certification shall affirm that the structure was constructed according to the approved plans and list any variations or discrepancies.

17P.06 Acid Producing and Toxic Materials

(a) Drainage from acid-forming and toxic-forming materials into ground and surface water shall be avoided by:

1. Identifying, burying, blending and/or treating where necessary, spoil or other materials that will be toxic to vegetation or that will adversely affect water quality. Such materials shall be handled in accordance with methods and a schedule as set forth in the approved preplan; and

2. Acid-forming or toxic-forming material shall not be buried or stored so as to cause or pose a threat of water pollution.

(b) Treatment of Toxic Material - Any acid-forming, toxic-forming, combustible materials, or any other waste materials that are exposed, shall be provided with a minimum six inch cover of nontoxic and noncombustible material beneath the topsoil layer. If necessary, this material shall be treated to neutralize toxicity in order to prevent water pollution and sustained combustion and/or to minimize adverse effects on plant growth and land uses. Where necessary to protect against upward migration of salts, exposure by erosion, to provide an adequate depth for plant growth, or to otherwise meet local conditions, the ~~director~~ Commissioner shall specify thicker amounts of cover using non-toxic material.

17P.07 Water Monitoring Requirements - shall be in accordance with Sections 6B.04b, 6B.06, 7B.04b and 7B.07 of the Surface Mining regulations.

17P.08 Site Development

(a) Sediment control and diversion ditches shall be installed according to the approved plan before other site preparation or construction begins.

(b) Progressive clearing and grubbing must be performed within the coal refuse disposal area, impoundment areas, topsoil borrow areas, and topsoil

stockpile areas prior to construction unless otherwise approved by the ~~director~~ Commissioner.

(c) Embankment Construction

1. Foundation preparation to include keyways, installation of mine seals according to Section 17D.05g, subdrains, removal of soft areas, and similar site preparation operations dictated by the approved plan and site conditions shall be accomplished prior to the placement of coal refuse. Inspection of foundation preparation by the ~~director~~ Commissioner is required before refuse may be placed.

2. Refuse materials shall be placed in accordance with the placement and compaction requirements in the approved plan for the particular site or minimum spreading and compaction requirements shall be a maximum of two foot horizontal lifts and 90 percent Standard Proctor Density (ASSHTO Specification T 99-74). It shall be unacceptable to place extraneous combustible materials such as wood, rags, trash and garbage, grease and oil, etc., in the coal refuse disposal area.

3. Grading

A. The working surface and outslopes of a coal refuse fill shall be concurrently graded through all phases of embankment construction.

B. Top of fill and benches shall be graded no flatter than two percent in any direction to divert surface runoff away from the face of the fill and into stabilized working surface diversion ditches.

C. The top of the fill shall be graded in such a manner so as not to impound water unless specifically authorized by the ~~director~~ Commissioner.

D. Fill material shall be graded in such a controlled manner to allow surface and subsurface drainage to be compatible with natural surroundings and ensure a long term static factor of safety of 1.5.

E. The face of the fill shall be graded no steeper than two horizontal to one vertical.

F. The vertical difference between benches shall not exceed 50 feet.

G. The width of the individual benches shall be not less than 20 feet unless specifically approved by the ~~director~~ Commissioner.

H. In all cases final grading shall be conducted in such a manner as to follow approved plans and to provide a surface for placement of topsoil.

I. When erosion creates rills or gullies 9 inches deep, or if refuse materials are exposed in finished or topsoiled slopes, the rills and gullies shall be filled, graded or otherwise stabilized and the area reseeded or replanted according to Reclamation specifications. The ~~director~~ Commissioner may require that rills and gullies of lesser size be stabilized and the area reseeded or replanted if the rills or gullies result in excessive erosion.

J. Where water will be impounded against the upstream face, the face may be riprapped or otherwise stabilized to protect against damage due to wave action.

K. Routine maintenance of the embankment shall be performed during the mining operation. Vegetative growth shall be cut when necessary to facilitate inspection and repairs. Any combustible material present on the surface other than material such as mulch or dry vegetation used for surface stability shall be removed and all other appropriate maintenance procedures shall be followed.

4. Stability - Determination of Unstable Conditions - Inspections shall be made by a qualified person for signs of unstable conditions. The qualified person shall consider steepness of slopes, seepage, bulges, scarps, vertical displacement, excessive erosion, piping, sudden changes in monitoring devices and other visible factors which could indicate potential failure of the embankment, diversion structures, spillways, and other appurtanences. Inspections shall include such observations and tests as may be necessary to evaluate imminent or significant environmental harm. These considerations shall be documented in accordance with Section 17EP.08d. Inspection frequency will be in accordance with Section 17EP.08d. If an imminent danger to human life, property or the environment is determined, persons downstream must be warned of the hazard and any necessary emergency actions taken. The ~~director~~ Commissioner must be immediately notified according to Section 17EP.08d 3(e).

5. Freeboard - Freeboard for the stage of construction or operation shall be maintained at all times in accordance with the design storm criteria and the approved plan.

(d) Quality Control

1. Plans, specifications and all previous inspection reports shall be available at or near the mine office nearest to the site for reference by construction personnel and the ~~director~~ Commissioner.

2. Until construction has been completed and certified, a visual inspection for construction progress, determination of unstable conditions, and hydraulic structure performance shall be held at a minimum of every seven days for impoundments and at least quarterly for non-impounding areas by a qualified person unless more frequent inspections are required by the

~~director~~ Commissioner based on specific site conditions. Inspections shall be held after heavy rainfall events to determine problems and remedial measures. Piezometers and other monitoring devices shall be monitored at intervals not exceeding seven days by a qualified person. Other monitoring devices should be monitored at intervals as specified in the approved plan. Inspections may include such observations and tests as may be necessary to evaluate the potential hazard to human life and property, to insure that all organic material and topsoil have been removed and that proper construction and maintenance are occurring in accordance with the approved plans and specifications. Inspections may terminate when the coal refuse disposal area has been properly abandoned in accordance with Section 17~~P~~O.07, or at such a later time as the ~~director~~ Commissioner may require. A written record of all inspections and monitoring device readings shall be maintained at or near the mine office nearest the site for inspection.

3. Reporting Requirements

A. A written report containing results of visual inspections of construction progress and determination of unstable conditions shall be submitted every thirty days for coal refuse structures if requested by the ~~director~~ Commissioner. The report should include but not be limited to a summary of instrumentation data, testing data, freeboard, elevations, crest elevation, slurry elevation and specific construction problems. The underdrains and protective filters must be supported by color photographs.

B. Plan and cross-section progress maps shall be submitted to the ~~director~~ Commissioner if so ordered by the ~~director~~ Commissioner.

C. Certification of construction by an engineer on forms supplied by the ~~director~~ Commissioner for each major portion of the construction sequence and each hydraulic structure shall be submitted as they are completed to the ~~director~~ Commissioner. Upon completion of construction, and annually thereafter until the permit has final bond release, certification shall be provided by an engineer that the project is functioning as designed. The certification report shall include statements on:

(1) Existing and required monitoring procedures and instrumentation;

(2) The design depth and elevation of any impounded waters at the time of the initial certification report or the average and maximum depths and elevations of any impounded waters over the past year for the annual certification reports;

(3) Existing storage capacity of the dam or embankments;

(4) Any fires occurring in the construction material up to the date of the initial certification or over the past year for the annual certification reports; and

(5) Any other aspects of the dam or embankment affecting stability.

D. Any change in construction sequence or other modification of the site must be reported to the ~~director~~ Commissioner and any significant change must receive approval prior to implementation.

E. Should a condition occur which is dangerous to human life, property or the environment, the ~~director~~ Commissioner shall be informed immediately. Immediate action shall be taken by the person owning, operating, or controlling the structure to alleviate the hazard. Emergency procedures developed in accordance with Section 17D.~~05~~02 shall be implemented to protect life and property downstream. The site shall be inspected and monitored at least once every eight hours until the emergency situation is alleviated. Continuous monitoring may be required by the ~~director~~ Commissioner when there is an imminent danger to the health or safety of the public.

17P.09 Materials Removal

(a) Drainage control measures shall meet the requirements of Sections 17EP.03, 17EP.04 and 17EP.05 (except Section 17EP.02a). After grade release, discharges from the permit area shall not lower the water quality of receiving streams. 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 Section 4A of the Surface Mining regulations can otherwise be met, the requirements of Section 4A may be waived.

(b) Method of Operation

1. Removal of refuse shall be accomplished in successive horizontal lifts with a maximum elevation difference between working benches of twelve 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, final graded refuse slopes shall be no steeper than 2H:1V and at least one bench for every 50 feet of change in elevation shall be provided.

4. Should burning areas be encountered, the fires shall be extinguished in accordance with Section 17EP.11, and removal of refuse shall be done in a safe manner.

Department of Energy
Division of Mines and Minerals
Legislative Rules, Chapter 22A
Article 3, Series (1985)
Section 17A

17 - COAL REFUSE DISPOSAL REGULATIONS

17A. GENERAL

17A.01 Scope - These regulations establish general and specific rules for permit applications and plans and specifications submittals, hazard classification, emergency procedures, hydrology, hydraulics, spillways, diversion channels, concrete structures, pipes, subsurface drainage, stability, abandoned mine openings, combustion control, underground coal refuse disposal, reprocessing of abandoned coal refuse areas, abandonment, and performance standards for signs and markers, topsoil, water quality, drainage, sediment control, haulageways, diversions, spillways, acid producing and toxic materials, water monitoring requirements, site development, quality control, reporting requirements, materials removal, underground coal refuse disposal, and burning coal refuse piles.

17A.02 Applicability - These rules and regulations:

(a) Apply to all coal refuse disposal areas operated after January 18, 1981. Operated means to enter upon a coal processing waste pile, or part thereof, for the purpose of disposing, depositing, dumping or removing coal processing wastes, or to employ a coal processing waste pile for retarding the flow of or for the impoundment of water.

(b) Apply to all new and existing coal refuse reprocessing operations. Such operations must obtain a permit prior to commencing operations.

(c) Operators of new coal refuse disposal areas after January 18, 1981, must submit a complete permit application in accordance with applicable parts of Chapter 2022A, Article 63 of the Code of West Virginia and these regulations. Owners of all operating coal refuse disposal areas must submit plans and specifications for approval in accordance with Chapter 2022A, Article 63, Section 1312(f) of the Code of West Virginia and these regulations.

17B. PERMITS

17C.01 Standard Permits or Plans and Specifications
Standard permits or plans and specifications in accordance with the applicability section are required for all coal refuse disposal areas of the following types:

(a) Non-impounding coal refuse areas - Submit the appropriate application forms and plans according to the applicable sections of these regulations.

(b) Impounding Structures - Submit the appropriate application forms and plans with the following variations:

1. Impoundments defined as dams in Chapter 20, Article 5D of the Code of West Virginia (Dam Control Act) shall require a Certificate of Approval.

2. Impoundments capable of storing 20 acre feet and having an embankment greater than 5 feet in height measured at upstream toe or are 20 feet or more in height measured at the upstream toe must comply with these rules and regulations, regardless of construction materials.

3. All other impoundments not meeting the minimum criteria of 17GB.01b1 or 17GB.01b2 must meet minimum requirements of the Handbook for Surface Mining. Special approval may be given to short term, special purpose ponds for disposal of materials.

(c) Plans for reprocessing or removal of materials from an approved coal refuse disposal area shall be included in the standard permit.

17GB.02 Special Permits - A special permit may be granted for reprocessing or removal of abandoned coal refuse disposal areas in accordance with Section 17BN.06 and 17EP.09 of these regulations.

17BC. SUBMITTAL REQUIREMENTS

17BC.01 Submittals - Submittals for construction, operation, enlargement, modification, removal of materials, and abandonment of all coal refuse disposal areas shall be in accordance with these regulations. The submittal shall be prepared by or under the direct supervision of, and certified by, an engineer experienced in the design and construction of similar facilities.

(a) The coal refuse disposal portion of the submittal shall contain the following information in order:

1. Narrative and Discussion

2. Emergency Procedures if required by Section 17B.05eH.01 of these regulations.

3. Hydrology and Hydraulics

A. Design data in graphical or tabular form

B. Hydrologic analysis shall include all supporting calculations, charts, graphics, tables.

C. Hydraulic analysis shall include all supporting calculations, cross sections, profiles, and results.

D. If computer analysis is used include input data and results used specifically in the design only.

4. Stability

A. Design data in graphical or tabular form.

B. Stability analysis shall include supporting calculations, charts, cross-sections and results.

C. If computer analysis is used include input data and results used specifically in the design only.

5. Haulageways and sediment control.

6. If applicable, plans and calculations concerning abandoned mine openings, combustion control, underground coal refuse disposal, and disposal of coal refuse or sludge from outside the permit area.

7. Abandonment plan.

8. Specifications

9. Maps and Drawings (reduced size if necessary for engineering drawings)

10. Separate from the other copies of the submittal, two sets of maps and plans on standard 24" by 36" size plan sheets shall be submitted.

11. Narrative and Discussion - A general narrative and discussion of the project shall be submitted to include as a minimum a discussion of existing site conditions, the design life of the facility, quantity and type of coal refuse to be placed, subsidence potential, design methodology backed up with design computations and data, 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, possible abandonment prior to the planned design life, and a sequence for construction of drainage facilities, critical construction phases, reclamation and final abandonment procedures. In addition, 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 shall be included.

12. Maps

A. Maps and plans shall be provided showing the site in relation to major highways, county seats, 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 shall be provided. The minimum mapping requirement shall be a 7 1/2 minute U.S.G.S. map with the site plotted on it.

C. A plan view of the site shall be provided 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 crosssections, location of borings, test pits and instrumentation and other pertinent data required for project control.

D. Cross-sections of the coal refuse disposal area transversely and longitudinally shall be provided showing original ground, subdrain location, elevations, benches, spillways, and other pertinent features of the site. A cross-section shall be provided for stability computations showing the site at critical areas with materials profile plotted.

E. Cross-sections and profiles of major drainage facilities shall be provided. Cross-sections shall be taken in all critical areas.

12. Construction drawings shall be provided for subdrains, spillways, antiseep mechanisms, and other pertinent structures at the site.

13. Specifications - Specifications for site development shall be provided to include as a minimum:

A. clearing and grubbing

B. topsoil stockpiling

C. excess material disposal

D. subdrain construction

E. slopes

F. grades

G. details of the coal refuse disposal area and drainage facilities

H. spreading and compaction requirements during placement

I. material and/or gradation requirements for subdrainage structures

J. water quality control from acid-forming or toxic-forming materials

K. pipes

L. concrete

M. anti-seep mechanisms

N. channel protection

O. installation and reading of monitoring devices

P. inspection and maintenance

Q. topsoil redistribution

R. seeding and mulching

14. Pre-development Analysis

A. Hydrologic Balance

17C.02 Structures meeting the requirements of 17GB.01(b)1 and 17GB.01(b)2 shall be prohibited unless the following can be demonstrated:

(a) The quality of the impounded water shall be suitable on a permanent basis for its intended use, and discharge of water from the impoundment must comply with the requirements of Section 6B.04 and 7B.04 of the surface mining regulations.

(b) The level of the water shall be sufficiently stable to support the intended use.

(c) Adequate safety and access to the impounded water shall be provided for proposed water users.

(d) Water impoundments shall not result in the diminution of the quality or quantity of water used by adjacent or surrounding landowners for agricultural, industrial, recreational, or domestic use.

(e) The design, construction and maintenance of dams and impoundments shall achieve the minimum design requirements applicable to structures constructed and maintained under the provisions of Sections B17C and E17P of these regulations. All other impoundments (as specified in 17GB.01(b)3.) must meet the minimum design requirements of the Handbook for Surface Mining.

(f) The size of the impoundment is adequate for its intended purposes.

(g) The impoundment will be suitable for the approved post-mining land use.

17C.03 Sediment Control - Slope protection and vegetation shall be provided to minimize surface erosion at the site and sediment control measures shall be required where necessary to reduce the sediment leaving the site.

17C.04 Excavations for special purpose ponds (17GB.01 b.3.) that will impound water during or after the mining operation shall have perimeter slopes that are stable and shall not be steeper than 2H:1V or shall meet the requirements of the Handbook for Surface Mining (Excavated Pond Section).

Where surface runoff enters the impoundment area, the side slopes shall be protected against erosion.

17D. Hazard Classification

17D.01 Impoundments - The hazard potential of structures meeting the requirements of Sections 17B.01b1 and 17B.01b2 shall be determined by the applicant based on the potential loss that would result due to a failure and the classification determined as listed below:

(a) 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 25 feet in height measured at the downstream toe or 200 acre-feet storage volume or having a watershed exceeding 500 acres shall not be a Class A structure.

(b) 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.

(c) 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.

17D.02 Emergency Procedures - 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 director in writing. The ~~director~~ Commissioner may then notify the Office of Emergency Services and request that emergency procedures be developed for the coal refuse disposal area.

17E. Hydrology and Hydraulics

17E.01 Design Data Required - All data (precipitation, watershed characteristics, etc.), graphs, curves, etc. required for hydrologic and hydraulic design of coal refuse embankments and impoundments shall be presented.

17F. Design Requirements

17F.01 Impoundments and Dams