



4310-05-P

DEPARTMENT OF THE INTERIOR

Office of Surface Mining Reclamation and Enforcement

30 CFR Parts 700, 701, 773, 774, 777, 779, 780, 783, 784, 785, 800, 816, 817, 824, and 827

[Docket ID: OSM-2010-0018; S1D1S SS08011000 SX064A000 17S180110; S2D2S SS08011000 SX064A000 17X501520]

RIN: 1029-AC63

Congressional Nullification of the Stream Protection Rule under the Congressional Review Act

AGENCY: Office of Surface Mining Reclamation and Enforcement, Interior.

ACTION: Final rule; CRA Revocation.

SUMMARY: By operation of the Congressional Review Act, the Stream Protection Rule shall be treated as if it had never taken effect. The Office of Surface Mining Reclamation and Enforcement issues this document to effect the removal of any amendments, deletions or other modifications made by the nullified rule, and the reversion to the text of the regulations in effect immediately prior to the effective date of the Stream Protection Rule.

DATES: This rule is effective on [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*]. The incorporation by reference of material listed in the rule was previously approved by the Director of the Federal Register.

ADDRESSES: Previous documents related to the Stream Protection Rule, published at 81 FR 93066 (Dec. 20, 2016), are available at www.regulations.gov in Docket No. OSM-2010-0018.

FOR FURTHER INFORMATION CONTACT: Kathleen Vello, Office of Surface Mining Reclamation and Enforcement, U.S. Department of the Interior, 1849 C Street NW, Mail Stop 4550, MIB, Washington, D.C. 20240 Telephone: 202-208-1908.

SUPPLEMENTARY INFORMATION: The Office of Surface Mining Reclamation and Enforcement published the Stream Protection Rule on December 20, 2016 (81 FR 93066). The rule became effective on January 19, 2017. On February 1, 2017, the United States House of Representatives passed a joint resolution of disapproval (H.J. Res. 38) of the Stream Protection Rule in accordance with the Congressional Review Act, 5 U.S.C. 801 et seq. The Senate passed the joint resolution of disapproval on February 2, 2017 (Cong. Rec. p. S611). President Trump then signed the resolution into law as Public Law 115-5 on February 16, 2017. Under the terms of the Congressional Review Act, the Office of Surface Mining Reclamation and Enforcement's Stream Protection Rule must be "treated as though such rule had never taken effect." 5 U.S.C. 801(f).

However, because the Congressional Review Act does not include direction regarding the removal, by the Office of the Federal Register or otherwise, of the voided language from the Code of Federal Regulations, the Office of Surface Mining Reclamation and Enforcement must publish this document to effect the removal of the voided text. This document will enable the Office of the Federal Register to effectuate congressional intent to remove the voided text of the Stream Protection Rule which is to

be treated as if it had never taken effect and to restore the previous language and prior state of the Code of Federal Regulations.

This action is not an exercise of the Department's rulemaking authority under the Administrative Procedure Act because the Department is not "formulating, amending, or repealing a rule" under 5 U.S.C. 551(5). Rather, the Department is effectuating changes to the Code of Federal Regulations to reflect what congressional action has already accomplished—namely, the nullification of any changes purported to have been made to the Code of Federal Regulations by the Stream Protection Rule and the reversion to the regulatory text in effect immediately prior to January 19, 2017, the effective date of the Stream Protection Rule. Accordingly, the Department is not soliciting comments on this action. Moreover, this action is not a final agency action subject to judicial review.

List of Subjects

30 CFR Part 700

Administrative practice and procedure, Reporting and recordkeeping requirements, Surface mining, Underground mining.

30 CFR Part 701

Law enforcement, Surface mining, Underground mining.

30 CFR Part 773

Administrative practice and procedure, Reporting and recordkeeping requirements, Surface mining, Underground mining.

30 CFR Part 774

Reporting and recordkeeping requirements, Surface mining, Underground mining.

30 CFR Part 777

Reporting and recordkeeping requirements, Surface mining, Underground mining.

30 CFR Part 779

Environmental protection, Reporting and recordkeeping requirements, Surface mining.

30 CFR Part 780

Incorporation by reference, Reporting and recordkeeping requirements, Surface mining.

30 CFR Part 783

Environmental protection, Reporting and recordkeeping requirements, Underground mining.

30 CFR Part 784

Reporting and recordkeeping requirements, Underground mining.

30 CFR Part 785

Reporting and recordkeeping requirements, Surface mining, Underground mining.

30 CFR Part 800

Insurance, Reporting and recordkeeping requirements, Surety bonds, Surface mining, Underground mining.

30 CFR Part 816

Environmental protection, Incorporation by reference, Reporting and recordkeeping requirements, Surface mining.

30 CFR Part 817

Environmental protection, Incorporation by reference, Reporting and recordkeeping requirements, Underground mining.

30 CFR Part 824

Environmental protection, Surface mining.

30 CFR Part 827

Environmental protection, Surface mining, Underground mining.

For the reasons given in the preamble, and under the authority of the Congressional Review Act (5 U.S.C. 801 *et seq.*) and Public Law 115-5 (February 16, 2017), the Department of the Interior, Office of Surface Mining Reclamation and Enforcement amends parts 700, 701, 773, 774, 777, 779, 780, 783, 784, 785, 800, 816, 817, 824, and 827 of chapter VII of title 30 of the Code of Federal Regulations as follows:

1. Revise part 700 to read as follows:

PART 700—GENERAL

Sec.

- 700.1 Scope.
- 700.2 Objective.
- 700.3 Authority.
- 700.4 Responsibility.
- 700.5 Definitions.
- 700.10 Information collection.
- 700.11 Applicability.

700.12 Petitions to initiate rulemaking.
700.13 Notice of citizen suits.
700.14 Availability of records.
700.15 Computation of time.

AUTHORITY: 30 U.S.C. 1201 *et seq.*

§700.1 Scope.

The regulations in chapter VII of 30 CFR, consisting of parts 700 through 899, establish the procedures through which the Secretary of the Interior will implement the Surface Mining Control and Reclamation Act of 1977 (Pub. L. 95-87, 91 Stat. 445 (30 U.S.C. 1201 *et. seq.*)). Chapter VII is divided into 13 subchapters.

(a) Subchapter A contains introductory information intended to serve as a guide to the rest of the chapter and to the regulatory requirements and definitions generally applicable to the programs and persons covered by the Act.

(b) Subchapter B contains regulations covering the initial regulatory program which apply before the applicability of permanent program regulations to persons conducting surface coal mining and reclamation operations and other persons covered by the Act.

(c) Subchapter C sets forth regulations covering applications for and decisions on permanent State programs; the process to be followed for substituting a Federal program for an approved State program, if necessary; the process for assuming temporary Federal enforcement of an approved State program; and the process for implementing a Federal program in a State when required by the Act.

(d) Subchapter D of this chapter identifies the procedures that apply to surface coal mining and reclamation operations conducted on Federal lands rather than State or

private lands and incorporates by reference the requirements of the applicable regulatory program and the inspection and enforcement requirements of subchapter L of this chapter.

(e) Subchapter E of this chapter contains regulations that apply to surface coal mining and reclamation operations conducted on Indian lands.

(f)(1) Subchapter F implements the requirements of the Act for—

(i) Designating lands which are unsuitable for all or certain types of surface coal mining operations;

(ii) Terminating designations no longer found to be appropriate; and

(iii) Prohibiting surface coal mining and reclamation operations on those lands or areas where the Act states that surface coal mining operations should not be permitted or should be permitted only after specified determinations are made.

(2) Subchapter F does not include regulations governing designation of areas unsuitable for noncoal mining under the terms of section 601 of the Act or the designation of Federal lands under the Federal lands review provisions of section 522(b) of the Act. The Bureau of Land Management of the Department of the Interior is responsible for these provisions which will be implemented when promulgated by regulations in title 43 of the Code of Federal Regulations.

(g) Subchapter G governs applications for and decisions on permits for surface coal mining and reclamation operations on non-Indian and non-Federal lands under a State or Federal program. It also governs coal exploration and permit application and decisions on permits for special categories of coal mining on non-Indian and non-

Federal lands under a State or Federal program. Regulations implementing the experimental practices provision of the Act are also included in subchapter G.

(h) Subchapter J sets forth requirements for performance bonds and public liability insurance for both surface mining and underground mining activities.

(i) Subchapter K sets forth the environmental and other performance standards which apply to coal exploration and to surface coal mining and reclamation operations during the permanent regulatory program. The regulations establish the minimum requirements for operations under State and Federal programs. Performance standards applicable to special mining situations such as anthracite mines, steep slope mining, alluvial valley floors, and prime farmlands are included.

(j) Subchapter L sets forth the inspection, enforcement, and civil penalty provisions that apply to a State, Federal, or Federal lands program.

(k) Subchapter M sets forth the requirements for the training, examination, and certification of blasters.

(l) Subchapter P sets forth the provisions for protection of employees who initiate proceedings under the Act or testify in any proceedings resulting from the administration or enforcement of the Act.

(m) Subchapter R sets forth the regulations for the abandoned mine land reclamation program. These regulations include the fee collection requirements and the mechanisms for implementing the State and Federal portions of the abandoned mine land reclamation program.

(n) Subchapter S sets forth the regulations that apply to grants for mining and mineral research institutes and grants for mineral research projects.

§700.2 Objective.

The objective of chapter VII is to fulfill the purposes of the Act found in section 102 in a manner which is consistent with the language of the Act, its legislative history, other applicable laws, and judicial interpretations.

§700.3 Authority.

The Secretary is authorized to administer the requirements of the Act, except the following:

(a) Provisions of the Act that authorize the Secretary of Agriculture to establish programs for the reclamation of rural lands, identification of prime agricultural lands, and other responsibilities described in the Act. Regulations promulgated by the Secretary of Agriculture are in 7 CFR;

(b) Provisions of the Act for which responsibility is specifically assigned to other Federal agencies, including the Department of Labor, the Environmental Protection Agency, the Corps of Engineers, the Council on Environmental Quality, and the Department of Energy; and

(c) Authority retained by the States to enforce State laws or regulations which are not inconsistent with the Act and this chapter, including the authority to enforce more stringent land use and environmental controls and regulations.

§700.4 Responsibility.

(a) The Director of the Office of Surface Mining Reclamation and Enforcement, under the general direction of the Assistant Secretary, Energy and Minerals, is responsible for exercising the authority of the Secretary, except for the following:

(1) Approval, disapproval or withdrawal of approval of a State program and implementation of a Federal program. The Director is responsible for exercising the authority of the Secretary to substitute Federal enforcement of a State program under section 521(b) of the Act.

(2) Designation of non-Federal lands or Federal lands without the concurrence of the Federal surface managing agency as unsuitable for all or certain types of surface coal mining operations under section 522 of the Act and as unsuitable for non-coal mining under section 601 of the Act; and

(3) Authority to approve or disapprove mining plans to conduct surface coal mining and reclamation operations on Federal lands.

(b) The Director is responsible for consulting with Federal land-managing agencies and Federal agencies with responsibility for natural and historic resources on Federal lands on actions which may have an effect on their responsibilities.

(c) The States are responsible for the regulation of surface coal mining and reclamation operations under the initial regulatory program and surface coal mining and reclamation operations and coal exploration under an approved State program and the reclamation of abandoned mine lands under an approved State Reclamation Plan on non-Federal and non-Indian lands in accordance with procedures in this chapter.

(d) The Secretary may delegate to a State through a cooperative agreement certain authority relating to the regulation of surface coal mining and reclamation operations on Federal lands in accordance with 30 CFR part 745.

(e) The Director, Office of Hearings and Appeals, U.S. Department of the Interior, is responsible for the administration of administrative hearings and appeals required or authorized by the Act pursuant to the regulations in 43 CFR part 4.

§700.5 Definitions.

As used throughout this chapter, the following terms have the specified meaning except where otherwise indicated—

Act means the Surface Mining Control and Reclamation Act of 1977 (Pub. L. 95-87).

AML means abandoned mine land(s).

AML inventory means OSM's listing of abandoned mine land problems eligible to be reclaimed using moneys from the Abandoned Mine Reclamation Fund or the Treasury as appropriate.

Anthracite means coal classified as anthracite in ASTM Standard D 388-77. Coal classifications are published by the American Society of Testing and Materials under the title, *Standard Specification for Classification of Coals by Rank*, ASTM D 388-77, on pages 220 through 224. Table 1 which classifies the coals by rank is presented on page 223. This publication is hereby incorporated by reference as it exists on the date of adoption of these regulations. Notices of changes made to this publication will be periodically published by the Office of Surface Mining in the FEDERAL REGISTER. This

ASTM Standard is on file and available for inspection at the OSM Office, U.S.

Department of the Interior, South Interior Building, Washington, DC 20240, at each OSM Regional Office, District Office and Field Office, and at the central office of the applicable State Regulatory Authority, if any. Copies of this publication may also be obtained by writing to the above locations. A copy of this publication will also be on file for public inspection at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html

. Incorporation by reference provisions approved by the Director of the Federal Register February 7, 1979. The Director's approval of this incorporation by reference expires on July 1, 1981.

Coal means combustible carbonaceous rock, classified as anthracite, bituminous, subbituminous, or lignite by ASTM Standard D 388-77, referred to and incorporated by reference in the definition of *Anthracite* immediately above.

Department means the Department of the Interior.

Director means the Director, Office of Surface Mining Reclamation and Enforcement, or the Director's representative.

Eligible lands and water means lands and water eligible for expenditures under title IV of SMCRA and this chapter. Eligible lands and water for reclamation or drainage abatement expenditures under the Abandoned Mine Land program contained in this chapter are those which were mined for coal or which were affected by such mining, wastebanks, coal processing, or other coal mining processes and left or abandoned in either an unreclaimed or inadequately reclaimed condition prior to August 3, 1977, and

for which there is no continuing reclamation responsibility. However, lands and water damaged by coal mining operations after that date and on or before November 5, 1990, may also be eligible for reclamation if they meet the requirements specified in §874.12(d) and (e) of this chapter. Following certification of the completion of all known coal problems, eligible lands and water for noncoal reclamation purposes are those sites that meet the eligibility requirements specified in §875.14 of this chapter. For additional eligibility requirements for water projects, see §874.14 of this chapter, and for lands affected by remining operations, see section 404 of SMCRA.

Emergency means a sudden danger or impairment that presents a high probability of substantial physical harm to the health, safety, or general welfare of people before the danger can be abated under normal program operation procedures.

Expended means that moneys have been obligated, encumbered, or committed by contract by the State, Tribe, or us for work to be accomplished or services to be rendered.

Extreme danger means a condition that could reasonably be expected to cause substantial physical harm to persons, property, or the environment and to which persons or improvements on real property are currently exposed.

Federal lands means any land, including mineral interests, owned by the United States, without regard to how the United States acquired ownership of the lands or which agency manages the lands. It does not include Indian lands. However, lands or mineral interests east of the 100th meridian west longitude owned by the United States and entrusted to or managed by the Tennessee Valley Authority are not subject to sections 714 (surface owner protection) and 715 (Federal lessee protection) of the Act.

Federal lands program means a program established by the Secretary pursuant to section 523 of the Act to regulate surface coal mining and reclamation operations on Federal lands.

Fund means the Abandoned Mine Reclamation Fund established on the books of the U.S. Treasury for the purpose of accumulating revenues designated for reclamation of abandoned mine lands and other activities authorized by section 401 of SMCRA.

Indian lands means all lands, including mineral interests, within the exterior boundaries of any Federal Indian reservation, notwithstanding the issuance of any patent, and including rights-of-way, and all lands including mineral interests held in trust for or supervised by an Indian tribe.

Indian tribe means any Indian tribe, band, group, or community having a governing body recognized by the Secretary.

Office means the Office of Surface Mining Reclamation and Enforcement established under title II of the Act.

Left or abandoned in either an unreclaimed or inadequately reclaimed condition means, for Abandoned Mine Land programs, lands and water:

(1) Which were mined or which were affected by such mining, wastebanks, processing or other mining processes prior to August 3, 1977, or between August 3, 1977, and November 5, 1990, as authorized pursuant to section 402(g)(4) of SMCRA, and on which all mining has ceased;

(2) Which continue, in their present condition, to degrade substantially the quality of the environment, prevent or damage the beneficial use of land or water resources, or endanger the health and safety of the public; and

(3) For which there is no continuing reclamation responsibility under State or Federal laws, except as provided in sections 402(g)(4) and 403(b)(2) of SMCRA.

OSM and *OSMRE* mean the Office of Surface Mining Reclamation and Enforcement established under title II of the Act.

Person means an individual, Indian tribe when conducting surface coal mining and reclamation operations on non-Indian lands, partnership, association, society, joint venture, joint stock company, firm, company, corporation, cooperative or other business organization and any agency, unit, or instrumentality of Federal, State or local government including any publicly owned utility or publicly owned corporation of Federal State or local government.

Person having an interest which is or may be adversely affected or person with a valid legal interest shall include any person—

(a) Who uses any resource of economic, recreational, esthetic, or environmental value that may be adversely affected by coal exploration or surface coal mining and reclamation operations or any related action of the Secretary or the State regulatory authority; or

(b) Whose property is or may be adversely affected by coal exploration or surface coal mining and reclamation operations or any related action of the Secretary or the State regulatory authority.

Project means a delineated area containing one or more abandoned mine land problems. A project may be a group of related reclamation activities with a common objective within a political subdivision of a State or within a logical, geographically defined area, such as a watershed, conservation district, or county planning area.

Public office means a facility under the direction and control of a governmental entity which is open to public access on a regular basis during reasonable business hours.

Reclamation activity means the reclamation, abatement, control, or prevention of adverse effects of past mining by an Abandoned Mine Land program.

Reclamation program means a program established by a State or an Indian tribe in accordance with Title IV of SMCRA for reclamation of lands and water adversely affected by past mining, including the reclamation plan and annual applications for grants under the plan.

Regional Director means a Regional Director of the Office or a Regional Director's representative.

Regulatory authority means the department or agency in each State which has primary responsibility at the State level for administering the Act in the initial program, or the State regulatory authority where the State is administering the Act under a State regulatory program, or the Secretary in the initial or permanent program where the Secretary is administering the Act, or the Secretary when administering a Federal program or Federal lands program or when enforcing a State program pursuant to section 521(b) of the Act.

Regulatory program means any approved State or Federal program or, in a State with no approved State or Federal program and coal exploration and surface coal mining and reclamation operations are on Federal lands, the requirements of subchapters A, F, G, J, K, L, M, and P of this chapter.

Secretary means the Secretary of the Interior or the Secretary's representative.

SMCRA means the Surface Mining Control and Reclamation Act of 1977, 30 U.S.C. 1201 *et seq.*, as amended.

State regulatory authority means the department or agency in each State which has primary responsibility at the State level for administering the initial or permanent State regulatory program.

Surface coal mining operations mean—

(a) Activities conducted on the surface of lands in connection with a surface coal mine or, subject to the requirements of section 516 of the Act, surface operations and surface impacts incident to an underground coal mine, the products of which enter commerce or the operations of which directly or indirectly affect interstate commerce. Such activities include excavation for the purpose of obtaining coal, including such common methods as contour, strip, auger, mountain top removal, box cut, open pit, and area mining; the use of explosives and blasting; in situ distillation or retorting; leaching or other chemical or physical processing; and the cleaning, concentrating, or other processing or preparation of coal. Such activities also include the loading of coal for interstate commerce at or near the mine site. *Provided*, these activities do not include the extraction of coal incidental to the extraction of other minerals, where coal does not exceed $16\frac{2}{3}$ percent of the tonnage of minerals removed for purposes of commercial use or sale, or coal exploration subject to section 512 of the Act; and, *Provided further*, that excavation for the purpose of obtaining coal includes extraction of coal from coal refuse piles; and

(b) The areas upon which the activities described in paragraph (a) of this definition occur or where such activities disturb the natural land surface. These areas

shall also include any adjacent land the use of which is incidental to any such activities, all lands affected by the construction of new roads or the improvement or use of existing roads to gain access to the site of those activities and for haulage and excavation, workings, impoundments, dams, ventilation shafts, entryways, refuse banks, dumps, stockpiles, overburden piles, spoil banks, culm banks, tailings, holes or depressions, repair areas, storage areas, processing areas, shipping areas, and other areas upon which are sited structures, facilities, or other property or material on the surface, resulting from or incident to those activities.

Surface coal mining and reclamation operations means surface coal mining operations and all activities necessary or incidental to the reclamation of such operations. This term includes the term surface coal mining operations.

Ton means 2000 pounds avoirdupois (.90718 metric ton).

§700.10 Information collection.

The collection of information, and recordkeeping requirements, contained in 30 CFR 700.11(d), 700.12(b) and 700.13 has approved by the Office of Management and Budget under 44 U.S.C. 3501 *et seq.* and assigned clearance number 1029-0094. The information collected in §700.11(d) is used by OSMRE and States to establish standards for determining when a mine site is no longer a surface coal mining and reclamation operation and thereby when regulatory jurisdiction may end. The information collection under §700.12(b) is used by OSMRE to consider need, costs, and benefits of a proposed regulatory change in order to grant or deny a petition that has

been submitted. Information collected in §700.13 identifies the person and nature of a citizen's suit, so that OSMRE or a state can respond appropriately.

§700.11 Applicability.

(a) Except as provided in paragraph (b) of this section, this chapter applies to all coal exploration and surface coal mining and reclamation operations, except:

(1) The extraction of coal by a landowner for his or her own noncommercial use from land owned or leased by him or her. Noncommercial use does not include the extraction of coal by one unit of an integrated company or other business or nonprofit entity which uses the coal in its own manufacturing or power plants;

(2) The extraction of 250 tons of coal or less by a person conducting a surface coal mining and reclamation operation. A person who intends to remove more than 250 tons is not exempted;

(3) The extraction of coal as an incidental part of Federal, State or local government-financed highway or other construction in accordance with part 707 of this chapter;

(4) The extraction of coal incidental to the extraction of other minerals where coal does not exceed $16\frac{2}{3}$ percent of the total tonnage of coal and other minerals removed for purposes of commercial use or sale in accordance with part 702 of this chapter.

(5) Coal exploration on lands subject to the requirement of 43 CFR parts 3480-3487.

(b) This chapter does not apply 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. For purposes of this paragraph:

(1) 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 paragraph (b)(2) of this section shall be considered as one operation for purposes of this paragraph.

(2) Except as provided in paragraph (b)(3) 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.

(i) 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.

(ii) 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;

(iii) For purposes of this paragraph, *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.

(3) Notwithstanding the provisions of paragraph (b)(2) of this section, the regulatory authority may determine, in accordance with the procedures applicable to requests for determination of exemption pursuant to paragraph (c) of this section, 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 paragraph (b)(2)(ii) of this section, the regulatory authority concludes in writing that the operations are not of the type which the Act was intended to regulate and that there is no intention on the part of such operations or persons to evade the requirements of the Act or the applicable regulatory program.

(4) The exemption provided by paragraph (b) of this section applies only to operations with an affected area of less than two acres where coal is being extracted for commercial purposes and to surface coal mining operations within that affected area incidental to such operations.

(c) The regulatory authority may on its own initiative and shall, within a reasonable time of a request from any person who intends to conduct surface coal mining operations, make a written determination whether the operation is exempt under this section. The regulatory authority shall give reasonable notice of the request to interested persons. Prior to the time a determination is made, any person may submit, and the regulatory authority shall consider, any written information relevant to the determination. A person requesting that an operation be declared exempt shall have the

burden of establishing the exemption. If a written determination of exemption is reversed through subsequent administrative or judicial action, any person who, in good faith, has made a complete and accurate request for an exemption and relied upon the determination, shall not be cited for violations which occurred prior to the date of the reversal.

(d)(1) A regulatory authority may terminate its jurisdiction under the regulatory program over the reclaimed site of a completed surface coal mining and reclamation operation, or increment thereof, when:

(i) The regulatory authority determines in writing that under the initial program, all requirements imposed under subchapter B of this chapter have been successfully completed; or

(ii) The regulatory authority determines in writing that under the permanent program, all requirements imposed under the applicable regulatory program have been successfully completed or, where a performance bond was required, the regulatory authority has made a final decision in accordance with the State or Federal program counterpart to part 800 of this chapter to release the performance bond fully.

(2) Following a termination under paragraph (d)(1) of this section, the regulatory authority shall reassert jurisdiction under the regulatory program over a site if it is demonstrated that the bond release or written determination referred to in paragraph (d)(1) of this section was based upon fraud, collusion, or misrepresentation of a material fact.

§700.12 Petitions to initiate rulemaking.

(a) Any person may petition the Director to initiate a proceeding for the issuance, amendment, or repeal of any regulation under the Act. The petition shall be submitted to the Office of the Director, Office of Surface Mining Reclamation and Enforcement, Department of the Interior, Washington, DC 20240.

(b) The petition shall be a concise statement of the facts, technical justification, and law which require issuance, amendment, or repeal of a regulation under the Act and shall indicate whether the petitioner desires a public hearing.

(c) Upon receipt of the petition, the Director shall determine if the petition sets forth facts, technical justification and law which may provide a reasonable basis for issuance, amendment or repeal of a regulation. Facts, technical justification or law previously considered in a petition or rulemaking on the same issue shall not provide a reasonable basis. If the Director determines that the petition has a reasonable basis, a notice shall be published in the FEDERAL REGISTER seeking comments from the public on the proposed change. The Director may hold a public hearing, may conduct an investigation or take other action to determine whether the petition should be granted.

(d) Within 90 days from receipt of the petition, the Director shall issue a written decision either granting or denying the petition. The Director's decision shall constitute the final decision for the Department.

(1) If the petition is granted, the Director shall initiate a rulemaking proceeding.

(2) If the petition is denied, the Director shall notify the petitioner in writing, setting forth the reasons for denial.

§700.13 Notice of citizen suits.

(a) A person who intends to initiate a civil action on his or her own behalf under section 520 of the Act shall give notice of intent to do so, in accordance with this section.

(b) Notice shall be given by certified mail to the Secretary and the Director in all cases and to the head of the State regulatory authority, if a complaint involves or relates to a specific State. A copy of the notice shall be sent by first class mail to the Regional Director, if the complaint involves or relates to surface coal mining and reclamation operations in a specific region of the Office.

(c) 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.

(d) Service of notice under this section is complete upon mailing to the last known address of the person being notified.

(e) 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, order, 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;

(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, of the person giving notice.

(f) A person giving notice of an alleged failure by the Secretary or a State regulatory authority to perform a mandatory act or duty under the Act shall state, to the extent known:

(1) The provision of the Act containing the mandatory act or duty allegedly not performed;

(2) Sufficient information to identify the omission alleged to constitute the failure to perform a mandatory act or duty under the Act;

(3) The name, address, and telephone number of the person giving notice; and

(4) The name, address, and telephone number of legal counsel, if any, of the person giving notice.

§700.14 Availability of records.

(a) Records required by the Act to be made available locally to the public shall be retained at the geographically closest office of the State or Federal regulatory authority having jurisdiction over the area involved.

(b) Other records or documents in the possession of the Office may be requested under 43 CFR part 2, which implements the Freedom of Information Act and the Privacy Act.

§700.15 Computation of time.

(a) Except as otherwise provided, computation of time under this chapter is based on calendar days.

(b) In computing any period of prescribed time, the day on which the designated period of time begins is not included. The last day of the period is included unless it is a Saturday, Sunday, or legal holiday on which the regulatory authority is not open for business, in which event the period runs until the end of the next day which is not a Saturday, Sunday, or legal holiday.

(c) Intermediate Saturdays, Sundays, and legal holidays are excluded from the computation when the period of prescribed time is 7 days or less.

2. Revise part 701 to read as follows:

PART 701—PERMANENT REGULATORY PROGRAM

Sec.

- 701.1 Scope.
- 701.2 Objective.
- 701.3 Authority.
- 701.4 Responsibility.
- 701.5 Definitions.
- 701.11 Applicability.

AUTHORITY: 30 U.S.C. 1201 *et seq.*

§701.1 Scope.

(a) This part provides general introductory material for the permanent regulatory program required by the Act.

(b) The following regulations apply to the permanent regulatory program:

(1) Subchapter C on State program application, approval, withdrawal, and grants, and Federal program implementation;

(2) Subchapter D on surface coal mining and reclamation operations on Federal lands;

(3) Subchapter E on surface coal mining and reclamation operations on Indian lands.

(4) Subchapter F on criteria for designating lands unsuitable for surface coal mining operations and the process for designating these lands or withdrawing the designation by the regulatory authority; *Provided, That*, part 761 is applicable during the initial regulatory program under subchapter B of this chapter and 30 CFR part 211¹ and that part 769 and other parts incorporated therein are applicable to the initial Federal lands program under 30 CFR part 211;

(5) Subchapter G on the process for application, approval, denial, revision, and renewal of permits for surface coal mining and reclamation operations, including the small operator assistance program, requirements for special categories of these operations, and requirements for coal exploration;

(6) Subchapter J on public liability insurance and performance bonds or other assurances of performance for surface coal mining and reclamation operations;

(7) Subchapter K on performance standards which apply to coal exploration, surface coal mining and reclamation operations, and special categories of these operations;

(8) Subchapter L on inspection and enforcement responsibilities and civil penalties; and

(9) Subchapter M on the training, examination, and certification of blasters.

§701.2 Objective.

The regulations in this part give—

(a) A general overview of the regulatory program to be implemented by the State or Federal regulatory authority;

(b) The applicability of that program to coal exploration and surface coal mining and reclamation operations; and

(c) The definitions that apply to the regulation of coal exploration and surface coal mining and reclamation operations.

§701.3 Authority.

The Secretary is required by section 501(b) of the Act to promulgate regulations which establish the permanent regulatory program; by section 523 of the Act to promulgate regulations which establish the Federal lands programs; and is authorized by section 710 of the Act to promulgate regulations which establish a Federal program for Indian lands.

§701.4 Responsibility.

(a) A State regulatory authority shall assume primary responsibility for regulation of coal exploration and surface coal mining and reclamation operations during the permanent regulatory program upon submission to and approval by the Secretary of a State program meeting all applicable requirements of the Act and this chapter. After

approval of the State program, the State regulatory authority has responsibility for review of and decisions on permits and bonding for surface coal mining and reclamation operations, approval of coal exploration which substantially disturbs the natural land surface and removes more than 250 tons of coal from the earth in any one location, inspection of coal exploration and surface coal mining and reclamation operations for compliance with the Act, this chapter, the State program, permits and exploration approvals, and for enforcement of the State program.

(b) While a State regulatory program is in effect, the Office's responsibility includes, but is not limited to—

(1) Evaluating the administration of the State program through such means as periodic inspections of coal exploration and surface coal mining and reclamation operations in the State and review of exploration approvals, permits, inspection reports, and other documents required to be made available to the Office;

(2) Referring to the State regulatory authority information which creates reasonable belief that a person is in violation of the Act, this chapter, the State regulatory program, a permit condition, or coal exploration approval condition, and initiating an inspection when authorized by the Act or this chapter;

(3) Issuing notices of violation when a State regulatory authority fails to take appropriate action to cause a violation to be corrected; and

(4) Issuing cessation orders, including imposing affirmative obligations, when a condition, practice, or violation exists which creates an imminent danger to the health or safety of the public, or is causing or could reasonably be expected to cause significant, imminent environmental harm to land, air, or water resources.

(c) The Office shall implement a Federal program in a State, if that State does not have an approved State program by June 3, 1980. The Office shall not implement a Federal program in a State for a period of up to 1 year following that date if the State's failure to have an approved program by that date is due to an injunction imposed by a court of competent jurisdiction.

(d) Under a Federal program, the Office shall be the regulatory authority for all coal exploration and surface coal mining and reclamation operations in that State and shall perform the functions that a State regulatory authority would perform under an approved State program.

(e) During the period in which a State program is in effect, the Office shall assume responsibility for enforcing permit conditions, issuing new or revised permits, and issuing necessary notices and orders, when required by 30 CFR part 733.

(f) The Secretary shall substitute a Federal program under 30 CFR part 736 for an approved State program, when required by 30 CFR part 733.

(g) The Secretary shall have the responsibility for administration of the Federal lands program. The Director and other Federal authorities shall have the responsibilities under a Federal lands program as are provided for under subchapter D of this chapter. In addition, State regulatory authorities shall have responsibilities to administer the Federal lands program as provided for under cooperative agreements approved by the Secretary in accordance with 30 CFR part 745.

(h) The Secretary shall have the responsibility for the administration of the Federal program for Indian lands, as provided for under subchapter E of this chapter.

The Director and other Federal authorities have the responsibilities under the Indian lands program as are provided for under subchapter E of this chapter.

§701.5 Definitions.

As used in this chapter, the following terms have the specified meanings, except where otherwise indicated:

Acid drainage means water with a pH of less than 6.0 and in which total acidity exceeds total alkalinity, discharged from an active, inactive or abandoned surface coal mine and reclamation operation or from an area affected by surface coal mining and reclamation operations.

Acid-forming materials means earth materials that contain sulfide minerals or other materials which, if exposed to air, water, or weathering processes, form acids that may create acid drainage.

Adjacent area means the area outside the permit area where a resource or resources, determined according to the context in which *adjacent area* is used, are or reasonably could be expected to be adversely impacted by proposed mining operations, including probable impacts from underground workings.

Administratively complete application means an application for permit approval or approval for coal exploration where required, which the regulatory authority determines to contain information addressing each application requirement of the regulatory program and to contain all information necessary to initiate processing and public review.

Affected area means any land or water surface area which is used to facilitate, or is physically altered by, surface coal mining and reclamation operations. The affected area includes the disturbed area; any area upon which surface coal mining and reclamation operations are conducted; any adjacent lands the use of which is incidental to surface coal mining and reclamation operations; all areas covered by new or existing roads used to gain access to, or for hauling coal to or from, surface coal mining and reclamation operations, except as provided in this definition; any area covered by surface excavations, workings, impoundments, dams, ventilation shafts, entryways, refuse banks, dumps, stockpiles, overburden piles, spoil banks, culm banks, tailings, holes or depressions, repair areas, storage areas, shipping areas; any areas upon which are sited structures, facilities, or other property material on the surface resulting from, or incident to, surface coal mining and reclamation operations; and the area located above underground workings. The affected area shall include every road used for purposes of access to, or for hauling coal to or from, surface coal mining and reclamation operations, unless the road (a) was designated as a public road pursuant to the laws of the jurisdiction in which it is located; (b) is maintained with public funds, and constructed, in a manner similar to other public roads of the same classification within the jurisdiction; and (c) there is substantial (more than incidental) public use.

Agricultural activities means, with respect to alluvial valley floors, the use of any tract of land for the production of animal or vegetable life, based on regional agricultural practices, where the use is enhanced or facilitated by subirrigation or flood irrigation. These uses include, but are not limited to, farming and the pasturing or grazing of

livestock. These uses do not include agricultural activities which have no relationship to the availability of water from subirrigation or flood irrigation practices.

Agricultural use means the use of any tract of land for the production of animal or vegetable life. The uses include, but are not limited to, the pasturing, grazing, and watering of livestock, and the cropping, cultivation, and harvesting of plants.

Alluvial valley floors means the unconsolidated stream-laid deposits holding streams with water availability sufficient for subirrigation or flood irrigation agricultural activities but does not include upland areas which are generally overlain by a thin veneer of colluvial deposits composed chiefly of debris from sheet erosion, deposits formed by unconcentrated runoff or slope wash, together with talus, or other mass-movement accumulations, and windblown deposits.

Applicant means any person seeking a permit, permit revision, renewal, and transfer, assignment, or sale of permit rights from a regulatory authority to conduct surface coal mining and reclamation operations or, where required, seeking approval for coal exploration.

Applicant/Violator System or *AVS* means an automated information system of applicant, permittee, operator, violation and related data OSM maintains to assist in implementing the Act.

Application means the documents and other information filed with the regulatory authority under this chapter for the issuance of permits; revisions; renewals; and transfer, assignment, or sale of permit rights for surface coal mining and reclamation operations or, where required, for coal exploration.

Approximate original contour means that surface configuration achieved by backfilling and grading of the mined areas so that the reclaimed area, including any terracing or access roads, closely resembles the general surface configuration of the land prior to mining and blends into and complements the drainage pattern of the surrounding terrain, with all highwalls, spoil piles and coal refuse piles eliminated. Permanent water impoundments may be permitted where the regulatory authority has determined that they comply with 30 CFR 816.49 and 816.56, 816.133 or 817.49, 817.56, and 817.133.

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

Arid and semiarid area means, in the context of alluvial valley floors, an area of the interior western United States, west of the 100th meridian west longitude, experiencing water deficits, where water use by native vegetation equals or exceeds that supplied by precipitation. All coalfields located in North Dakota west of the 100th meridian west longitude, all coalfields in Montana, Wyoming, Utah, Colorado, New Mexico, Idaho, Nevada, and Arizona, the Eagle Pass field in Texas, and the Stone Canyon and the Lone fields in California are in arid and semiarid areas.

Auger mining means a method of mining coal at a cliff or highwall by drilling holes into an exposed coal seam from the highwall and transporting the coal along an auger bit to the surface.

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. The term includes equipment, devices, systems, methods, or techniques which are currently available anywhere as determined by the Director, even if they are not in routine use. The term includes, but is not limited to, construction practices, siting requirements, vegetative selection and planting requirements, animal stocking requirements, scheduling of activities and design of sedimentation ponds in accordance with 30 CFR parts 816 and 817. Within the constraints of the permanent program, the regulatory authority shall have the discretion to determine the best technology currently available on a case-by-case basis, as authorized by the Act and this chapter.

Coal exploration means the field gathering of:

(a) surface or subsurface geologic, physical, or chemical data by mapping, trenching, drilling, geophysical, or other techniques necessary to determine the quality and quantity of overburden and coal of an area; or

(b) the gathering of environmental data to establish the conditions of an area before beginning surface coal mining and reclamation operations under the requirements of this chapter.

Coal mine waste means coal processing waste and underground development waste.

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

Coal preparation plant means a facility where coal is subjected to chemical or physical processing or cleaning, concentrating, or other processing or preparation. It includes facilities associated with coal preparation activities, including, but not limited to the following: loading facilities; storage and stockpile facilities; sheds; shops, and other buildings; water-treatment and water-storage facilities; settling basins and impoundments; and coal processing and other waste disposal areas.

Coal processing waste means earth materials which are separated and wasted from the product coal during cleaning, concentrating, or other processing or preparation of coal.

Combustible material means organic material that is capable of burning, either by fire or through oxidation, accompanied by the evolution of heat and a significant temperature rise.

Compaction means increasing the density of a material by reducing the voids between the particles and is generally accomplished by controlled placement and mechanical effort such as from repeated application of wheel, track, or roller loads from heavy equipment.

Complete and accurate application means an application for permit approval or approval for coal exploration where required, which the regulatory authority determines to contain all information required under the Act, this subchapter, and the regulatory program that is necessary to make a decision on permit issuance.

Control or controller, when used in parts 773, 774, and 778 of this chapter, refers to or means—

- (a) A permittee of a surface coal mining operation;

- (b) An operator of a surface coal mining operation; or
- (c) Any person who has the ability to determine the manner in which a surface coal mining operation is conducted.

Cropland means land used for the production of adapted crops for harvest, alone or in a rotation with grasses and legumes, and includes row crops, small grain crops, hay crops, nursery crops, orchard crops, and other similar specialty crops.

Cumulative impact area means the area, including the permit area, within which impacts resulting from the proposed operation may interact with the impacts of all anticipated mining on surface- and ground-water systems. Anticipated mining shall include, at a minimum, the entire projected lives through bond releases of:

- (a) The proposed operation,
- (b) all existing operations,
- (c) any operation for which a permit application has been submitted to the regulatory authority, and
- (d) all operations required to meet diligent development requirements for leased Federal coal for which there is actual mine development information available.

Disturbed area means an area where vegetation, topsoil, or overburden is removed or upon which topsoil, spoil, coal processing waste, underground development waste, or noncoal waste is placed by surface coal mining operations. Those areas are classified as *disturbed* until reclamation is complete and the performance bond or other assurance of performance required by subchapter J of this chapter is released.

Diversion means a channel, embankment, or other manmade structure constructed to divert water from one area to another.

Downslope means the land surface between the projected outcrop of the lowest coalbed being mined along each highwall and a valley floor.

Drinking, domestic or residential water supply means water received from a well or spring and any appurtenant delivery system that provides water for direct human consumption or household use. Wells and springs that serve only agricultural, commercial or industrial enterprises are not included except to the extent the water supply is for direct human consumption or human sanitation, or domestic use.

Embankment means an artificial deposit of material that is raised above the natural surface of the land and used to contain, divert, or store water, support roads or railways, or for other similar purposes.

Ephemeral stream means a stream which flows only in direct response to precipitation in the immediate watershed or in response to the melting of a cover of snow and ice, and which has a channel bottom that is always above the local water table.

Essential hydrologic functions means the role of an alluvial valley floor in collecting, storing, regulating, and making the natural flow of surface or ground water, or both, usefully available for agricultural activities by reason of the valley floor's topographic position, the landscape, and the physical properties of its underlying materials. A combination of these functions provides a water supply during extended periods of low precipitation.

Excess spoil means spoil material disposed of in a location other than the mined-out area; provided that spoil material used to achieve the approximate original contour or to blend the mined-out area with the surrounding terrain in accordance with

§§816.102(d) and 817.102(d) of this chapter in non-steep slope areas shall not be considered excess spoil.

Existing structure means a structure or facility used in connection with or to facilitate surface coal mining and reclamation operations for which construction begins prior to the approval of a State program or implementation of a Federal program or Federal lands program, whichever occurs first.

Farming means, with respect to alluvial valley floors, the primary use of those areas for the cultivation, cropping or harvesting of plants which benefit from irrigation, or natural subirrigation, that results from the increased moisture content in the alluvium of the valley floors. For purposes of this definition, harvesting does not include the grazing of livestock.

Federal program means a program established by the Secretary pursuant to section 504 of the Act to regulate coal exploration and surface coal mining and reclamation operations on non-Federal and non-Indian lands within a State in accordance with the Act and this chapter.

(a) *Complete Federal program* means a program established by the Secretary pursuant to section 504 of the Act before June 3, 1980, or upon the complete withdrawal of a State program after June 3, 1980, by which the Director regulates all coal exploration and surface coal mining and reclamation operations.

(b) *Partial Federal program* means a program established by the Secretary pursuant to sections 102, 201 and 504 of the Act upon the partial withdrawal of a State program, by which the Director may regulate appropriate portions of coal exploration and surface coal mining and reclamation operations.

Flood irrigation means, with respect to alluvial valley floors, supplying water to plants by natural overflow or the diversion of flows, so that the irrigated surface is largely covered by a sheet of water.

Fugitive dust means that particulate matter not emitted from a duct or stack which becomes airborne due to the forces of wind or surface coal mining and reclamation operations or both. During surface coal mining and reclamation operations it may include emissions from haul roads; wind erosion of exposed surfaces, storage piles, and spoil piles; reclamation operations; and other activities in which material is either removed, stored, transported, or redistributed.

Gravity discharge means, with respect to underground mining activities, mine drainage that flows freely in an open channel downgradient. Mine drainage that occurs as a result of flooding a mine to the level of the discharge is not gravity discharge.

Ground cover means the area of ground covered by the combined aerial parts of vegetation and the litter that is produced naturally onsite, expressed as a percentage of the total area of measurement.

Ground water means subsurface water that fills available openings in rock or soil materials to the extent that they are considered water saturated.

Half-shrub means a perennial plant with a woody base whose annually produced stems die back each year.

Head-of-hollow fill means a fill structure consisting of any material, other than organic material, placed in the uppermost reaches of a hollow where side slopes of the existing hollow, measured at the steepest point, are greater than 20 degrees or the average slope of the profile of the hollow from the toe of the fill to the top of the fill is

greater than 10 degrees. In head-of-hollow fills the top surface of the fill, when completed, is at approximately the same elevation as the adjacent ridge line, and no significant area of natural drainage occurs above the fill draining into the fill area.

Higher or better uses means postmining land uses that have a higher economic value or nonmonetary benefit to the landowner or the community than the premining land uses.

Highwall means the face of exposed overburden and coal in an open cut of a surface coal mining activity or for entry to underground mining activities.

Highwall remnant means that portion of highwall that remains after backfilling and grading of a remining permit area.

Historically used for cropland means

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

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

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

Hydrologic 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, runoff, evaporation, and changes in ground and surface water storage.

Hydrologic regime means the entire state of water movement in a given area. It is a function of the climate and includes the phenomena by which water first occurs as atmospheric water vapor, passes into a liquid or solid form, falls as precipitation, moves along or into the ground surface, and returns to the atmosphere as vapor by means of evaporation and transpiration.

Imminent danger to the health and safety of the public means the existence of any condition or practice, or any violation of a permit or other requirements of the Act in a surface coal mining and reclamation operation, which could reasonably be expected to cause substantial physical harm to persons outside the permit area before the condition, practice, or violation can be abated. A reasonable expectation of death or serious injury before abatement exists if a rational person, subjected to the same condition or practice giving rise to the peril, would avoid exposure to the danger during the time necessary for abatement.

Impounding structure means a dam, embankment or other structure used to impound water, slurry, or other liquid or semi-liquid material.

Impoundments means all water, sediment, slurry or other liquid or semi-liquid holding structures and depressions, either naturally formed or artificially built.

In situ processes means activities conducted on the surface or underground in connection with in-place distillation, retorting, leaching, or other chemical or physical processing of coal. The term includes, but is not limited to, in situ gasification, in situ leaching, slurry mining, solution mining, borehole mining, and fluid recovery mining.

Intermittent stream means—

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

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

Irreparable damage to the environment means any damage to the environment, in violation of the Act, the regulatory program, or this chapter, that cannot be corrected by actions of the applicant.

Knowing or *knowingly* means that a person who authorized, ordered, or carried out an act or omission knew or had reason to know that the act or omission would result in either a violation or a failure to abate or correct a violation.

Land use means specific uses or management-related activities, rather than the vegetation or cover of the land. Land uses may be identified in combination when joint or seasonal uses occur and may include land used for support facilities that are an integral part of the use. Changes of land use from one of the following categories to another shall be considered as a change to an alternative land use which is subject to approval by the regulatory authority.

(a) *Cropland*. Land used for the production of adapted crops for harvest, alone or in rotation with grasses and legumes, that include row crops, small grain crops, hay crops, nursery crops, orchard crops, and other similar crops.

(b) *Pastureland or land occasionally cut for hay*. Land used primarily for the long-term production of adapted, domesticated forage plants to be grazed by livestock or occasionally cut and cured for livestock feed.

(c) *Grazingland*. Land used for grasslands and forest lands where the indigenous vegetation is actively managed for grazing, browsing, or occasional hay production.

(d) *Forestry*. Land used or managed for the long-term production of wood, wood fiber, or wood-derived products.

(e) *Residential*. Land used for single-and multiple-family housing, mobile home parks, or other residential lodgings.

(f) *Industrial/Commercial*. Land used for—

(1) Extraction or transformation of materials for fabrication of products, wholesaling of products, or long-term storage of products. This includes all heavy and light manufacturing facilities.

(2) Retail or trade of goods or services, including hotels, motels, stores, restaurants, and other commercial establishments.

(g) *Recreation*. Land used for public or private leisure-time activities, including developed recreation facilities such as parks, camps, and amusement areas, as well as areas for less intensive uses such as hiking, canoeing, and other undeveloped recreational uses.

(h) *Fish and wildlife habitat.* Land dedicated wholly or partially to the production, protection, or management of species of fish or wildlife.

(i) *Developed water resources.* Land used for storing water for beneficial uses, such as stockponds, irrigation, fire protection, flood control, and water supply.

(j) *Undeveloped land or no current use or land management.* Land that is undeveloped or, if previously developed, land that has been allowed to return naturally to an undeveloped state or has been allowed to return to forest through natural succession.

Lands eligible for reining means those lands that would otherwise be eligible for expenditures under section 404 or under section 402(g)(4) of the Act.

Material damage, in the context of §§784.20 and 817.121 of this chapter, means:

(a) Any functional impairment of surface lands, features, structures or facilities;

(b) Any physical change that has a significant adverse impact on the affected land's capability to support any current or reasonably foreseeable uses or causes significant loss in production or income; or

(c) Any significant change in the condition, appearance or utility of any structure or facility from its pre-subsidence condition.

Materially damage the quantity or quality of water means, with respect to alluvial valley floors, to degrade or reduce by surface coal mining and reclamation operations the water quantity or quality supplied to the alluvial valley floor to the extent that resulting changes would significantly decrease the capability of the alluvial valley floor to support farming.

MSHA means the Mine Safety and Health Administration.

Moist bulk density means the weight of soil (oven dry) per unit volume. Volume is measured when the soil is at field moisture capacity (1/3 bar moisture tension). Weight is determined after drying the soil at 105°C.

Mulch means vegetation residues or other suitable materials that aid in soil stabilization and soil moisture conservation, thus providing micro-climatic conditions suitable for germination and growth.

Non-commercial building means any building, other than an occupied residential dwelling, that, at the time the subsidence occurs, is used on a regular or temporary basis as a public building or community or institutional building as those terms are defined in §761.5 of this chapter. Any building used only for commercial agricultural, industrial, retail or other commercial enterprises is excluded.

Noxious plants means species that have been included on official State lists of noxious plants for the State in which the surface coal mining and reclamation operation occurs.

Occupied residential dwelling and structures related thereto means, for purposes of §§784.20 and 817.121, any building or other structure that, at the time the subsidence occurs, is used either temporarily, occasionally, seasonally, or permanently for human habitation. This term also includes any building, structure or facility installed on, above or below, or a combination thereof, the land surface if that building, structure or facility is adjunct to or used in connection with an occupied residential dwelling. Examples of such structures include, but are not limited to, garages; storage sheds and barns; greenhouses and related buildings; utilities and cables; fences and other

enclosures; retaining walls; paved or improved patios, walks and driveways; septic sewage treatment facilities; and lot drainage and lawn and garden irrigation systems. Any structure used only for commercial agricultural, industrial, retail or other commercial purposes is excluded.

Operator means any person engaged in coal mining who removes or intends to remove more than 250 tons of coal from the earth or from coal refuse piles by mining within 12 consecutive calendar months in any one location.

Other treatment facilities mean any chemical treatments, such as flocculation or neutralization, or mechanical structures, such as clarifiers or precipitators, that have a point source discharge and are utilized:

(a) To prevent additional contributions of dissolved or suspended solids to streamflow or runoff outside the permit area, or

(b) To comply with all applicable State and Federal water-quality laws and regulations.

Outslope means the face of the spoil or embankment sloping downward from the highest elevation to the toe.

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

Own, owner, or ownership, as used in parts 773, 774, and 778 of this chapter (except when used in the context of ownership of real property), means being a sole proprietor or owning of record in excess of 50 percent of the voting securities or other instruments of ownership of an entity.

Perennial stream means a stream or part of a stream that flows continuously during all of the calendar year as a result of ground-water discharge or surface runoff. The term does not include *intermittent stream* or *ephemeral stream*.

Performance bond means a surety bond, collateral bond or self-bond or a combination thereof, by which a permittee assures faithful performance of all the requirements of the Act, this chapter, a State, Federal or Federal lands program, and the requirements of the permit and reclamation plan.

Permanent diversion means a diversion remaining after surface coal mining and reclamation operations are completed which has been approved for retention by the regulatory authority and other appropriate State and Federal agencies.

Permanent impoundment means an impoundment which is approved by the regulatory authority and, if required, by other State and Federal agencies for retention as part of the postmining land use.

Permit means a permit to conduct surface coal mining and reclamation operations issued by the State regulatory authority pursuant to a State program or by the Secretary pursuant to a Federal program. For purposes of the Federal lands program, permit means a permit issued by the State regulatory authority under a cooperative agreement or by OSM where there is no cooperative agreement.

Permit area means the area of land, indicated on the approved map submitted by the operator with his or her application, required to be covered by the operator's performance bond under subchapter J of this chapter and which shall include the area of land upon which the operator proposes to conduct surface coal mining and reclamation operations under the permit, including all disturbed areas; provided that

areas adequately bonded under another valid permit may be excluded from the permit area.

Permittee means a person holding or required by the Act or this chapter to hold a permit to conduct surface coal mining and reclamation operations issued by a State regulatory authority pursuant to a State program, by the Director pursuant to a Federal program, by the Director pursuant to a Federal lands program, or, where a cooperative agreement pursuant to section 523 of the Act has been executed, by the Director and the State regulatory authority.

Precipitation event means a quantity of water resulting from drizzle, rain, snow, sleet, or hail in a limited period of time. It may be expressed in terms of recurrence interval. As used in these regulations, *precipitation event* also includes that quantity of water emanating from snow cover as snowmelt in a limited period of time.

Previously mined area means land affected by surface coal mining operations prior to August 3, 1977, that has not been reclaimed to the standards of 30 CFR chapter VII.

Prime farmland means those lands which are defined by the Secretary of Agriculture in 7 CFR part 657 (FEDERAL REGISTER Vol. 4 No. 21) and which have historically been used for cropland as that phrase is defined above.

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

Property to be mined means both the surface estates and mineral estates within the permit area and the area covered by underground workings.

Rangeland means land on which the natural potential (climax) plant cover is principally native grasses, forbs, and shrubs valuable for forage. This land includes natural grasslands and savannahs, such as prairies, and juniper savannahs, such as brushlands. Except for brush control, management is primarily achieved by regulating the intensity of grazing and season of use.

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

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

Reclamation means those actions taken to restore mined land as required by this chapter to a postmining land use approved by the regulatory authority.

Recurrence interval means the interval of time in which a precipitation event is expected to occur once, on the average. For example, the 10-year 24-hour precipitation event would be that 24-hour precipitation event expected to occur on the average once in 10 years.

Reference area means a land unit maintained under appropriate management for the purpose of measuring vegetation ground cover, productivity and plant species diversity that are produced naturally or by crop production methods approved by the regulatory authority. Reference areas must be representative of geology, soil, slope, and vegetation in the permit area.

Refuse pile means a surface deposit of coal mine waste that does not impound water, slurry, or other liquid or semi-liquid material.

Remining means conducting surface coal mining and reclamation operations which affect previously mined areas.

Renewable resource lands means aquifers and areas for the recharge of aquifers and other underground waters, areas for agricultural or silvicultural production of food and fiber, and grazinglands.

Replacement of water supply means, with respect to protected water supplies contaminated, diminished, or interrupted by coal mining operations, provision of water supply on both a temporary and permanent basis equivalent to premining quantity and quality. Replacement includes provision of an equivalent water delivery system and payment of operation and maintenance costs in excess of customary and reasonable delivery costs for premining water supplies.

(a) Upon agreement by the permittee and the water supply owner, the obligation to pay such operation and maintenance costs may be satisfied by a one-time payment in an amount which covers the present worth of the increased annual operation and maintenance costs for a period agreed to by the permittee and the water supply owner.

(b) If the affected water supply was not needed for the land use in existence at the time of loss, contamination, or diminution, and if the supply is not needed to achieve the postmining land use, replacement requirements may be satisfied by demonstrating that a suitable alternative water source is available and could feasibly be developed. If the latter approach is selected, written concurrence must be obtained from the water supply owner.

Road means a surface right-of-way for purposes of travel by land vehicles used in surface coal mining and reclamation operations or coal exploration. A road consists of the entire area within the right-of-way, including the roadbed, shoulders, parking and side areas, approaches, structures, ditches, and surface. The term includes access and haulroads constructed, used, reconstructed, improved, or maintained for use in surface coal mining and reclamation operations or coal exploration, including use by coal hauling vehicles to and from transfer, processing, or storage areas. The term does not include ramps and routes of travel within the immediate mining area or within spoil or coal mine waste disposal areas.

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.

Sedimentation pond means an impoundment used to remove solids from water in order to meet water quality standards or effluent limitations before the water leaves the permit area.

Significant, imminent environmental harm to land, air or water resources means—

(a) An environmental harm is an adverse impact on land, air, or water resources which resources include, but are not limited to, plant and animal life.

(b) An environmental harm is imminent, if a condition, practice, or violation exists which—

(1) Is causing such harm; or,

(2) May reasonably be expected to cause such harm at any time before the end of the reasonable abatement time that would be set under section 521(a)(3) of the Act.

(c) An environmental harm is significant if that harm is appreciable and not immediately reparable.

Siltation structure means a sedimentation pond, a series of sedimentation ponds, or other treatment facility.

Slope means average inclination of a surface, measured from the horizontal, generally expressed as the ratio of a unit of vertical distance to a given number of units of horizontal distance (e.g., 1v: 5h). It may also be expressed as a percent or in degrees.

Soil horizons means contrasting layers of soil parallel or nearly parallel to the land surface. Soil horizons are differentiated on the basis of field characteristics and laboratory data. The four master soil horizons are—

(a) *A horizon*. The uppermost mineral layer, often called the surface soil. It is the part of the soil in which organic matter is most abundant, and leaching of soluble or suspended particles is typically the greatest;

(b) *E horizon*. The layer commonly near the surface below an A horizon and above a B horizon. An E horizon is most commonly differentiated from an overlying A horizon by lighter color and generally has measurably less organic matter than the A horizon. An E horizon is most commonly differentiated from an underlying B horizon in the same sequum by color of higher value or lower chroma, by coarser texture, or by a combination of theses properties;

(c) *B horizon*. The layer that typically is immediately beneath the E horizon and often called the subsoil. This middle layer commonly contains more clay, iron, or aluminum than the A, E, or C horizons; and

(d) *C horizon*. The deepest layer of soil profile. It consists of loose material or weathered rock that is relatively unaffected by biologic activity.

Soil survey means a field and other investigation, resulting in a map showing the geographic distribution of different kinds of soils and an accompanying report that describes, classifies, and interprets such soils for use. Soil surveys must meet the standards of the National Cooperative Soil Survey as incorporated by reference in 30 CFR 785.17(c)(1).

Special bituminous coal mines means those mines in existence on January 1, 1972, or mines adjoining or having a common boundary with those mines for which development began after August 3, 1977, that are located in the State of Wyoming and that are being mined or will be mined according to the following criteria:

(a) Surface mining takes place on a relatively limited site for an extended period of time. The surface opening of the excavation is at least the full size of the excavation and has a continuous border.

(b) Excavation of the mine pit follows a coal seam that inclines 15° or more from the horizontal, and as the excavation proceeds downward it expands laterally to maintain stability of the pitwall or as necessary to accommodate the orderly expansion of the total mining operation.

(c) The amount of material removed from the pit is large in comparison to the surface area disturbed.

(d) There is no practicable alternative to the deep open-pit method of mining the coal.

(e) There is no practicable way to reclaim the land as required in subchapter K.

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

Stabilize means to control movement of soil, spoil piles, or areas of disturbed earth by modifying the geometry of the mass, or by otherwise modifying physical or chemical properties, such as by providing a protective surface coating.

State program means a program established by a State and approved by the Secretary pursuant to section 503 of the Act to regulate surface coal mining and reclamation operations on non-Indian and non-Federal lands within that State, according to the requirements of the Act and this chapter. If a cooperative agreement under part 745 has been entered into, a State program may apply to Federal lands, in accordance with the terms of the cooperative agreement.

Steep slope means any slope of more than 20° or such lesser slope as may be designated by the regulatory authority after consideration of soil, climate, and other characteristics of a region or State.

Subirrigation means, with respect to alluvial valley floors, the supplying of water to plants from underneath or from a semisaturated or saturated subsurface zone where water is available for use by vegetation.

Substantially disturb means, for purposes of coal exploration, to significantly impact land or water resources by blasting; by removal of vegetation, topsoil, or overburden; by construction of roads or other access routes; by placement of excavated

earth or waste material on the natural land surface or by other such activities; or to remove more than 250 tons of coal.

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

Surface mining activities means those surface coal mining and reclamation operations incident to the extraction of coal from the earth by removing the materials over a coal seam, before recovering the coal, by auger coal mining, or by recovery of coal from a deposit that is not in its original geologic location.

Suspended solids or nonfilterable residue, expressed as milligrams per liter, means organic or inorganic materials carried or held in suspension in water which are retained by a standard glass fiber filter in the procedure outlined by the Environmental Protection Agency's regulations for waste water and analyses (40 CFR part 136).

Temporary diversion means a diversion of a stream or overland flow which is used during coal exploration or surface coal mining and reclamation operations and not approved by the regulatory authority to remain after reclamation as part of the approved postmining land use.

Temporary impoundment means an impoundment used during surface coal mining and reclamation operations, but not approved by the regulatory authority to remain as part of the approved postmining land use.

Topsoil means the A and E soil horizon layers of the four master soil horizons.

Toxic-forming materials means earth materials or wastes which, if acted upon by air, water, weathering, or microbiological processes, are likely to produce chemical or physical conditions in soils or water that are detrimental to biota or uses of water.

Toxic mine drainage means water that is discharged from active or abandoned mines or other areas affected by coal exploration or surface coal mining and reclamation operations, which contains a substance that through chemical action or physical effects is likely to kill, injure, or impair biota commonly present in the area that might be exposed to it.

Transfer, assignment, or sale of permit rights means a change of a permittee.

Unanticipated event or condition, as used in §773.13 of this chapter, means an event or condition related to prior mining activity which arises from a surface coal mining and reclamation operation on lands eligible for remining and was not contemplated by the applicable permit.

Underground development waste means waste-rock mixtures of coal, shale, claystone, siltstone, sandstone, limestone, or related materials that are excavated, moved, and disposed of from underground workings in connection with underground mining activities.

Underground mining activities means a combination of—

(a) Surface operations incident to underground extraction of coal or in situ processing, such as construction, use, maintenance, and reclamation of roads, above-ground repair areas, storage areas, processing areas, shipping areas, areas upon which are sited support facilities including hoist and ventilating ducts, areas utilized for the disposal and storage of waste, and areas on which materials incident to underground mining operations are placed; and

(b) Underground operations such as underground construction, operation, and reclamation of shafts, adits, underground support facilities, in situ processing, and underground mining, hauling, storage, and blasting.

Undeveloped rangeland means, for purposes of alluvial valley floors, lands where the use is not specifically controlled and managed.

Upland areas means, with respect to alluvial valley floors, those geomorphic features located outside the floodplain and terrace complex, such as isolated higher terraces, alluvial fans, pediment surfaces, landslide deposits, and surfaces covered with residuum, mud flows or debris flows, as well as highland areas underlain by bedrock and covered by residual weathered material or debris deposited by sheetwash, rillwash, or windblown material.

Valley fill means a fill structure consisting of any material, other than organic material, that is placed in a valley where side slopes of the existing valley, measured at the steepest point, are greater than 20 degrees, or where the average slope of the profile of the valley from the toe of the fill to the top of the fill is greater than 10 degrees.

Violation, when used in the context of the permit application information or permit eligibility requirements of sections 507 and 510(c) of the Act and related regulations, means—

(1) A failure to comply with an applicable provision of a Federal or State law or regulation pertaining to air or water environmental protection, as evidenced by a written notification from a governmental entity to the responsible person; or

(2) A noncompliance for which OSM has provided one or more of the following types of notice or a State regulatory authority has provided equivalent notice under corresponding provisions of a State regulatory program—

(i) A notice of violation under §843.12 of this chapter.

(ii) A cessation order under §843.11 of this chapter.

(iii) A final order, bill, or demand letter pertaining to a delinquent civil penalty assessed under part 845 or 846 of this chapter.

(iv) A bill or demand letter pertaining to delinquent reclamation fees owed under part 870 of this chapter.

(v) A notice of bond forfeiture under §800.50 of this chapter when—

(A) One or more violations upon which the forfeiture was based have not been abated or corrected;

(B) The amount forfeited and collected is insufficient for full reclamation under §800.50(d)(1) of this chapter, the regulatory authority orders reimbursement for additional reclamation costs, and the person has not complied with the reimbursement order; or

(C) The site is covered by an alternative bonding system approved under §800.11(e) of this chapter, that system requires reimbursement of any reclamation costs incurred by the system above those covered by any site-specific bond, and the person has not complied with the reimbursement requirement and paid any associated penalties.

Violation, failure or refusal, for purposes of parts 724 and 846 of this chapter, means—

(1) A failure to comply with a condition of a Federally-issued permit or of any other permit that OSM is directly enforcing under section 502 or 521 of the Act or the regulations implementing those sections; or

(2) A failure or refusal to comply with any order issued under section 521 of the Act, or any order incorporated in a final decision issued by the Secretary under the Act, except an order incorporated in a decision issued under section 518(b) or section 703 of the Act.

Violation notice means any written notification from a regulatory authority or other governmental entity, as specified in the definition of *violation* in this section.

Water table means the upper surface of a zone of saturation, where the body of ground water is not confined by an overlying impermeable zone.

Willful or *willfully* means that a person who authorized, ordered or carried out an act or omission that resulted in either a violation or the failure to abate or correct a violation acted—

(1) Intentionally, voluntarily, or consciously; and

(2) With intentional disregard or plain indifference to legal requirements.

§701.11 Applicability.

(a) Any person who conducts surface coal mining operations on non-Indian or non-Federal lands on or after 8 months from the date of approval of a State program or implementation of a Federal program shall have a permit issued pursuant to the applicable State or Federal program. However, under conditions specified in 30 CFR 773.4(b) of this chapter, a person may continue operations under a previously issued

permit after 8 months from the date of approval of a State program or implementation of a Federal program.

(b) Any person who conducts surface coal mining operations on Federal lands on or after 8 months from the date of approval of a State program or implementation of a Federal program for the State in which the Federal lands are located shall have a permit issued pursuant to part 740 of this chapter. However, under conditions specified in §740.13(a)(3) of this chapter, a person may continue such operations under a mining plan previously approved pursuant to 43 CFR part 3480 or a permit issued by the State under the interim State program after 8 months after the date of approval of a State program or implementation of a Federal program.

(c) Any person who conducts surface coal mining operations on Indian lands on or after eight months from the effective date of the Federal program for Indian lands shall have a permit issued pursuant to part 750 of this chapter. However, a person who is authorized to conduct surface coal mining operations may continue to conduct those operations beyond eight months from the effective date of the Federal program for Indian lands if the following conditions are met:

(1) An application for a permit to conduct those operations has been made to the Director within two months after the effective date of the Federal program for Indian lands and the initial administrative decision on that application has not been issued; and

(2) Those operations are conducted in compliance with all terms and conditions of the existing authorization to mine, the requirements of the Act, 25 CFR part 216, and the requirements of all applicable mineral agreements, leases or licenses.

(d) The requirements of subchapter K of this chapter shall be effective and shall apply to each surface coal mining and reclamation operation for which the surface coal mining operation is required to obtain a permit under the Act, on the earliest date upon which the Act and this chapter require a permit to be obtained, except as provided in paragraph (e) of this section.

(e)(1) Each structure used in connection with or to facilitate a coal exploration or surface coal mining and reclamation operation shall comply with the performance standards and the design requirements of subchapter K of this chapter, except that—

(i) An existing structure which meets the performance standards of subchapter K of this chapter but does not meet the design requirements of subchapter K of this chapter may be exempted from meeting those design requirements by the regulatory authority. The regulatory authority may grant this exemption only as part of the permit application process after obtaining the information required by 30 CFR 780.12 or 784.12 and after making the findings required in 30 CFR 773.15;

(ii) If the performance standard of subchapter B of this chapter is at least as stringent as the comparable performance standard of subchapter K of this chapter, an existing structure which meets the performance standards of subchapter B of this chapter may be exempted by the regulatory authority from meeting the design requirements of subchapter K of this chapter. The regulatory authority may grant this exemption only as part of the permit application process after obtaining the information required by 30 CFR 780.12 or 784.12 and after making the findings required in 30 CFR 773.15;

(iii) An existing structure which meets a performance standard of subchapter B of this chapter which is less stringent than the comparable performance standards of subchapter K of this chapter or which does not meet a performance standard of subchapter K of this chapter, for which there was no equivalent performance standards in subchapter B of this chapter, shall be modified or reconstructed to meet the performance and design standard of subchapter K of this chapter pursuant to a compliance plan approved by the regulatory authority only as part of the permit application as required in 30 CFR 780.12 or 784.12 and according to the findings required by 30 CFR 773.15;

(iv) An existing structure which does not meet the performance standards of subchapter B of this chapter and which the applicant proposes to use in connection with or to facilitate the coal exploration or surface coal mining and reclamation operation shall be modified or reconstructed to meet the performance and design standards of subchapter K prior to issuance of the permit.

(2) The exemptions provided in paragraphs (e)(1)(i) and (e)(1)(ii) of this section shall not apply to—

(i) The requirements for existing and new coal mine waste disposal facilities; and

(ii) The requirements to restore the approximate original contour of the land.

(f)(1) Any person conducting coal exploration on non-Federal and non-Indian lands on or after the date on which a State program is approved or a Federal program implemented, shall either file a notice of intention to explore or obtain approval of the regulatory authority, as required by 30 CFR part 772.

(2) Coal exploration performance standards in 30 CFR part 815 shall apply to coal exploration on non-Federal and non-Indian lands which substantially disturbs the natural land surface 2 months after approval of a State program or implementation of a Federal program.

3. Revise part 773 to read as follows:

PART 773—REQUIREMENTS FOR PERMITS AND PERMIT PROCESSING

Sec.

- 773.1 Scope and purpose.
- 773.3 Information collection.
- 773.4 Requirements to obtain permits.
- 773.5 Regulatory coordination with requirements under other laws.
- 773.6 Public participation in permit processing.
- 773.7 Review of permit applications.
- 773.8 General provisions for review of permit application information and entry of information into AVS.
- 773.9 Review of applicant and operator information.
- 773.10 Review of permit history.
- 773.11 Review of compliance history.
- 773.12 Permit eligibility determination.
- 773.13 Unanticipated events or conditions at remaining sites.
- 773.14 Eligibility for provisionally issued permits.
- 773.15 Written findings for permit application approval.
- 773.16 Performance bond submittal.
- 773.17 Permit conditions.
- 773.19 Permit issuance and right of renewal.
- 773.21 Initial review and finding requirements for improvidently issued permits.
- 773.22 Notice requirements for improvidently issued permits.
- 773.23 Suspension or rescission requirements for improvidently issued permits.
- 773.25 Who may challenge ownership or control listings and findings.
- 773.26 How to challenge an ownership or control listing or finding.
- 773.27 Burden of proof for ownership or control challenges.
- 773.28 Written agency decision on challenges to ownership or control listings or findings.

AUTHORITY: 30 U.S.C. 1201 *et seq.*, 16 U.S.C. 470 *et seq.*, 16 U.S.C. 661 *et seq.*, 16 U.S.C. 703 *et seq.*, 16 U.S.C. 668a *et seq.*, 16 U.S.C. 469 *et seq.*, and 16 U.S.C. 1531 *et seq.*

§773.1 Scope and purpose.

This part provides minimum requirements for permits and permit processing and covers obtaining and reviewing permits; coordinating with other laws; public participation; permit decision and notification; permit conditions; and permit term and right of renewal.

§773.3 Information collection.

The collections of information contained in part 773 have been approved by the Office of Management and Budget under 44 U.S.C. 3501 *et seq.* and assigned clearance number 1029-0115. The information collected will be used by the regulatory authority in processing surface coal mining permit applications. Persons intending to conduct surface coal mining operations must respond to obtain a benefit. A Federal agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Response is required to obtain a benefit in accordance with SMCRA. Send comments regarding burden estimates or any other aspect of this collection of information, including suggestions for reducing the burden, to the Office of Surface Mining

Reclamation and Enforcement, Information Collection Clearance Officer, Room 202—
SIB, 1951 Constitution Avenue, NW., Washington, DC 20240.

§773.4 Requirements to obtain permits.

(a) *All operations.* On and after 8 months from the effective date of a permanent regulatory program within a State, no person shall engage in or carry out any surface coal mining operations, unless such person has first obtained a permit issued by the regulatory authority except as provided for in paragraph (b) of this section. A permittee need not renew the permit if no surface coal mining operations will be conducted under the permit and solely reclamation activities remain to be done. Obligations established under a permit continue until completion of surface coal mining and reclamation operations, regardless of whether the authorization to conduct surface coal mining operations has expired or has been terminated, revoked, or suspended.

(b) *Continuation of initial program operations.* (1) If a State program receives final disapproval under part 732 of this chapter, including judicial review of the disapproval, existing surface coal mining and reclamation operations may continue pursuant to the provisions of subchapter B of this chapter and section 502 of the Act until promulgation of a complete Federal program for the State. During this period, no new permits for surface coal mining and reclamation operations shall be issued by the State. Permits that lapse during this period may continue in full force and effect within the specified permit area until promulgation of a Federal program for the State.

(2) Except for coal preparation plants separately authorized to operate under 30 CFR 785.21(e), a person conducting surface coal mining operations, under a permit

issued or amended by the regulatory authority in accordance with the requirements of section 502 of the Act, may conduct such operations beyond the period prescribed in paragraph (a) of this section if—

(i) Not later than 2 months following the effective date of a permanent regulatory program, regardless of litigation contesting that program, an application for a permanent regulatory program permit is filed for any operation to be conducted after the expiration of 8 months from such effective date in accordance with the provisions of the regulatory program;

(ii) The regulatory authority has not yet rendered an initial administrative decision approving or disapproving the permit; and

(iii) The surface coal mining and reclamation operation is conducted in compliance with the requirements of the Act, subchapter B of this chapter, applicable State statutes and regulations, and all terms and conditions of the initial program authorization or permit.

(3) No new initial program permits may be issued after the effective date of a State program unless the application was received prior to such date.

(c) *Continued operations under Federal program permits.* (1) A permit issued by the Director pursuant to a Federal program for a State shall be valid under any superseding State program approved by the Secretary.

(2) The Federal permittee shall have the right to apply to the State regulatory authority for a State permit to supersede the Federal permit.

(3) The State regulatory authority may review a permit issued pursuant to the superseded Federal program to determine that the requirements of the Act and the

approved State program are not violated by the Federal permit, and to the extent that the approved State program contains additional requirements not contained in the Federal program for the State, the State regulatory authority shall—

- (i) Inform the permittee in writing;
- (ii) Provide the permittee an opportunity for a hearing;
- (iii) Provide the permittee a reasonable opportunity to resubmit the permit application in whole or in part, as appropriate; and
- (iv) Provide the permittee a reasonable time to conform ongoing surface coal mining and reclamation operations to the requirements of the State program.

(d) *Continued operations under State program permits.* (1) A permit issued pursuant to a previously approved or conditionally approved State program shall be valid under a superseding Federal program.

(2) Immediately following promulgation of a Federal program, the Director shall review the permits issued under the previously approved State program to determine that the requirements of the Act, this chapter, and the Federal program are not violated. If the Director determines that a permit was granted contrary to the requirements of this Act, the Director shall—

- (i) Inform the permittee in writing;
- (ii) Provide the permittee an opportunity for a hearing;
- (iii) Provide the permittee a reasonable opportunity to resubmit the permit application in whole or in part, as appropriate; and

(iv) Provide the permittee a reasonable time to conform ongoing surface coal mining and reclamation operations to the requirements of the Federal program, as prescribed in the Federal program for the State.

§773.5 Regulatory coordination with requirements under other laws.

Each regulatory program shall, to avoid duplication, provide for the coordination of review and issuance of permits for surface coal mining and reclamation operations with applicable requirements of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*); the Fish and Wildlife Coordination Act, as amended (16 U.S.C. 661 *et seq.*); the Migratory Bird Treaty Act of 1918, as amended (16 U.S.C. 703 *et seq.*); The National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 *et seq.*); the Bald Eagle Protection Act, as amended (16 U.S.C. 668a); for Federal programs only, the Archeological and Historic Preservation Act of 1974 (16 U.S.C. 469 *et seq.*); and the Archaeological Resources Protection Act of 1979 (16 U.S.C. 470aa *et seq.*) where Federal and Indian lands covered by that Act are involved.

§773.6 Public participation in permit processing.

(a) *Filing and public notice.* (1) Upon submission of an administratively complete application, an applicant for a permit, significant revision of a permit under §774.13, or renewal of a permit under §774.15, shall place an advertisement in a local newspaper of general circulation in the locality of the proposed surface coal mining and reclamation operation at least once a week for four consecutive weeks. A copy of the advertisement

as it will appear in the newspaper shall be submitted to the regulatory authority. The advertisement shall contain, at a minimum, the following:

(i) The name and business address of the applicant.

(ii) A map or description which clearly shows or describes the precise location and boundaries of the proposed permit area and is sufficient to enable local residents to readily identify the proposed permit area. It may include towns, bodies of water, local landmarks, and any other information which would identify the location. If a map is used, it shall indicate the north direction.

(iii) The location where a copy of the application is available for public inspection.

(iv) The name and address of the regulatory authority where written comments, objections, or requests for informal conferences on the application may be submitted under paragraphs (b) and (c) of this section.

(v) If an applicant seeks a permit to mine within 100 feet of the outside right-of-way of a public road or to relocate or close a public road, except where public notice and hearing have previously been provided for this particular part of the road in accordance with §761.14 of this chapter; a concise statement describing the public road, the particular part to be relocated or closed, and the approximate timing and duration of the relocation or closing.

(vi) If the application includes a request for an experimental practice under §785.13, a statement indicating that an experimental practice is requested and identifying the regulatory provisions for which a variance is requested.

(2) The applicant shall make an application for a permit, significant revision under §774.13, or renewal of a permit under §774.15 available for the public to inspect and

copy by filing a full copy of the application with the recorder at the courthouse of the county where the mining is proposed to occur, or an accessible public office approved by the regulatory authority. This copy of the application need not include confidential information exempt from disclosure under paragraph (d) of this section. The application required by this paragraph shall be filed by the first date of newspaper advertisement of the application. The applicant shall file any changes to the application with the public office at the same time the change is submitted to the regulatory authority.

(3) Upon receipt of an administratively complete application for a permit, a significant revision to a permit under §774.13, or a renewal of a permit under §774.15, the regulatory authority shall issue written notification indicating the applicant's intention to mine the described tract of land, the application number or other identifier, the location where the copy of the application may be inspected, and the location where comments on the application may be submitted. The notification shall be sent to—

(i) Local governmental agencies with jurisdiction over or an interest in the area of the proposed surface coal mining and reclamation operation, including but not limited to planning agencies, sewage and water treatment authorities, water companies; and

(ii) All Federal or State governmental agencies with authority to issue permits and licenses applicable to the proposed surface coal mining and reclamation operation and which are part of the permit coordinating process developed in accordance with section 503(a)(6) or section 504(h) of the Act, or §773.5; or those agencies with an interest in the proposed operation, including the U.S. Department of Agriculture Soil Conservation Service district office, the local U.S. Army Corps of Engineers district engineer, the

National Park Service, State and Federal fish and wildlife agencies, and the historic preservation officer.

(b) *Comments and objections on permit applications.* (1) Within a reasonable time established by the regulatory authority, written comments or objections on an application for a permit, significant revision to a permit under §774.13, or renewal of a permit under §774.15 may be submitted to the regulatory authority by public entities notified under paragraph (a)(3) of this section with respect to the effects of the proposed mining operations on the environment within their areas of responsibility.

(2) Written objections to an application for a permit, significant revision to a permit under §774.13, or renewal of a permit under §774.15 may be submitted to the regulatory authority by any person having an interest which is or may be adversely affected by the decision on the application, or by an officer or head of any Federal, State, or local government agency or authority, within 30 days after the last publication of the newspaper notice required by paragraph (a) of this section.

(3) The regulatory authority shall upon receipt of such written comments or objections—

- (i) Transmit a copy of the comments or objections to the applicants; and
- (ii) File a copy for public inspection at the same public office where the application is filed.

(c) *Informal conferences.* (1) Any person having an interest which is or may be adversely affected by the decision on the application, or an officer or a head of a Federal, State, or local government agency, may request in writing that the regulatory

authority hold an informal conference on the application for a permit, significant revision to a permit under §774.13, or renewal of a permit under §774.15. The request shall—

- (i) Briefly summarize the issues to be raised by the requestor at the conference;
- (ii) State whether the requestor desires to have the conference conducted in the locality of the proposed operation; and

- (iii) Be filed with the regulatory authority no later than 30 days after the last publication of the newspaper advertisement required under paragraph (a) of this section.

(2) Except as provided in paragraph (c)(3) of this section, if an informal conference is requested in accordance with paragraph (c)(1) of this section, the regulatory authority shall hold an informal conference within a reasonable time following the receipt of the request. The informal conference shall be conducted as follows:

- (i) If requested under paragraph (c)(1)(ii) of this section, it shall be held in the locality of the proposed surface coal mining and reclamation operation.

- (ii) The date, time, and location of the informal conference shall be sent to the applicant and other parties to the conference and advertised by the regulatory authority in a newspaper of general circulation in the locality of the proposed surface coal mining and reclamation operation at least 2 weeks before the scheduled conference.

- (iii) If requested in writing by a conference requestor at a reasonable time before the conference, the regulatory authority may arrange with the applicant to grant parties to the conference access to the proposed permit area and, to the extent that the applicant has the right to grant access to it, to the adjacent area prior to the established

date of the conference for the purpose of gathering information relevant to the conference.

(iv) The requirements of section 5 of the Administrative Procedure Act, as amended (5 U.S.C. 554), shall not apply to the conduct of the informal conference. The conference shall be conducted by a representative of the regulatory authority, who may accept oral or written statements and any other relevant information from any party to the conference. An electronic or stenographic record shall be made of the conference, unless waived by all the parties. The record shall be maintained and shall be accessible to the parties of the conference until final release of the applicant's performance bond or other equivalent guarantee pursuant to subchapter J of this chapter.

(3) If all parties requesting the informal conference withdraw their request before the conference is held, the informal conference may be canceled.

(4) Informal conferences held in accordance with this section may be used by the regulatory authority as the public hearing required under §761.14(c) of this chapter on proposed relocation or closing of public roads.

(d) *Public availability of permit applications*—(1) *General availability.* Except as provided in paragraph (d)(2) or (d)(3) of this section, all applications for permits; revisions; renewals; and transfers, assignments or sales of permit rights on file with the regulatory authority shall be available, at reasonable times, for public inspection and copying.

(2) *Limited availability.* Except as provided in paragraph (d)(3)(i) of this section, information pertaining to coal seams, test borings, core samplings, or soil samples in an application shall be made available to any person with an interest which is or may be

adversely affected. Information subject to this paragraph shall be made available to the public when such information is required to be on public file pursuant to State law.

(3) *Confidentiality.* The regulatory authority shall provide procedures, including notice and opportunity to be heard for persons both seeking and opposing disclosure, to ensure confidentiality of qualified confidential information, which shall be clearly identified by the applicant and submitted separately from the remainder of the application. Confidential information is limited to—

(i) Information that pertains only to the analysis of the chemical and physical properties of the coal to be mined, except information on components of such coal which are potentially toxic in the environment;

(ii) Information required under section 508 of the Act that is not on public file pursuant to State law and that the applicant has requested in writing to be held confidential;

(iii) Information on the nature and location of archeological resources on public land and Indian land as required under the Archeological Resources Protection Act of 1979 (Pub. L. 96-95, 93 Stat. 721, 16 U.S.C. 470).

§773.7 Review of permit applications.

(a) The regulatory authority will review an application for a permit, revision, or renewal; written comments and objections submitted; and records of any informal conference or hearing held on the application and issue a written decision, within a reasonable time set by the regulatory authority, either granting, requiring modification of,

or denying the application. If an informal conference is held under §773.6(c) of this part, the decision will be made within 60 days of the close of the conference.

(b) The applicant for a permit or revision of a permit shall have the burden of establishing that his application is in compliance with all the requirements of the regulatory program.

§773.8 General provisions for review of permit application information and entry of information into AVS.

(a) Based on an administratively complete application, we, the regulatory authority, must undertake the reviews required under §§773.9 through 773.11 of this part.

(b) We will enter into AVS—

(1) The information you are required to submit under §§778.11 and 778.12(c) of this subchapter.

(2) The information you submit under §778.14 of this subchapter pertaining to violations which are unabated or uncorrected after the abatement or correction period has expired.

(c) We must update the information referred to in paragraph (b) of this section in AVS upon our verification of any additional information submitted or discovered during our permit application review.

§773.9 Review of applicant and operator information.

(a) We, the regulatory authority, will rely upon the information that you, the applicant, are required to submit under §778.11 of this subchapter, information from AVS, and any other available information, to review your and your operator's organizational structure and ownership or control relationships.

(b) We must conduct the review required under paragraph (a) of this section before making a permit eligibility determination under §773.12 of this part.

§773.10 Review of permit history.

(a) We, the regulatory authority, will rely upon the permit history information you, the applicant, submit under §778.12 of this subchapter, information from AVS, and any other available information to review your and your operator's permit histories. We must conduct this review before making a permit eligibility determination under §773.12 of this part.

(b) We will also determine if you or your operator have previous mining experience.

(c) If you or your operator do not have any previous mining experience, we may conduct an additional review under §774.11(f) of this subchapter. The purpose of this review will be to determine if someone else with mining experience controls the mining operation.

§773.11 Review of compliance history.

(a) We, the regulatory authority, will rely upon the violation information supplied by you, the applicant, under §778.14 of this subchapter, a report from AVS, and any

other available information to review histories of compliance with the Act or the applicable State regulatory program, and any other applicable air or water quality laws, for—

- (1) You;
- (2) Your operator;
- (3) Operations you own or control; and
- (4) Operations your operator owns or controls.

(b) We must conduct the review required under paragraph (a) of this section before making a permit eligibility determination under §773.12 of this part.

§773.12 Permit eligibility determination.

Based on the reviews required under §§773.9 through 773.11 of this part, we, the regulatory authority, will determine whether you, the applicant, are eligible for a permit under section 510(c) of the Act.

(a) Except as provided in §§773.13 and 773.14 of this part, you are not eligible for a permit if we find that any surface coal mining operation that—

- (1) You directly own or control has an unabated or uncorrected violation; or
- (2) You or your operator indirectly control has an unabated or uncorrected violation and your control was established or the violation was cited after November 2, 1988.

(b) We will not issue you a permit if you or your operator are permanently ineligible to receive a permit under §774.11(c) of this subchapter.

(c) After we approve your permit under §773.15 of this part, we will not issue the permit until you comply with the information update and certification requirement of §778.9(d) of this subchapter. After you complete that requirement, we will again request a compliance history report from AVS to determine if there are any unabated or uncorrected violations which affect your permit eligibility under paragraphs (a) and (b) of this section. We will request this report no more than five business days before permit issuance under §773.19 of this part.

(d) If you are ineligible for a permit under this section, we will send you written notification of our decision. The notice will tell you why you are ineligible and include notice of your appeal rights under part 775 of this subchapter and 43 CFR 4.1360 through 4.1369.

§773.13 Unanticipated events or conditions at remining sites.

(a) You, the applicant, are eligible for a permit under §773.12 if an unabated violation—

(1) Occurred after October 24, 1992; and

(2) Resulted from an unanticipated event or condition at a surface coal mining and reclamation operation on lands that are eligible for remining under a permit that was held by the person applying for the new permit.

(b) For permits issued under §785.25 of this subchapter, an event or condition is presumed to be unanticipated for the purpose of this section if it—

(1) Arose after permit issuance;

(2) Was related to prior mining; and

(3) Was not identified in the permit application.

§773.14 Eligibility for provisionally issued permits.

(a) This section applies to you if you are an applicant who owns or controls a surface coal mining and reclamation operation with—

(1) A notice of violation issued under §843.12 of this chapter or the State regulatory program equivalent for which the abatement period has not yet expired; or

(2) A violation that is unabated or uncorrected beyond the abatement or correction period.

(b) We, the regulatory authority, will find you eligible for a provisionally issued permit under this section if you demonstrate that one or more of the following circumstances exists with respect to all violations listed in paragraph (a) of this section—

(1) For violations meeting the criteria of paragraph (a)(1) of this section, you certify that the violation is being abated to the satisfaction of the regulatory authority with jurisdiction over the violation, and we have no evidence to the contrary.

(2) As applicable, you, your operator, and operations that you or your operator own or control are in compliance with the terms of any abatement plan (or, for delinquent fees or penalties, a payment schedule) approved by the agency with jurisdiction over the violation.

(3) You are pursuing a good faith—

(i) Challenge to all pertinent ownership or control listings or findings under §§773.25 through 773.27 of this part; or

(ii) Administrative or judicial appeal of all pertinent ownership or control listings or findings, unless there is an initial judicial decision affirming the listing or finding and that decision remains in force.

(4) The violation is the subject of a good faith administrative or judicial appeal contesting the validity of the violation, unless there is an initial judicial decision affirming the violation and that decision remains in force.

(c) We will consider a provisionally issued permit to be improvidently issued, and we must immediately initiate procedures under §§773.22 and 773.23 of this part to suspend or rescind that permit, if—

(1) Violations included in paragraph (b)(1) of this section are not abated within the specified abatement period;

(2) You, your operator, or operations that you or your operator own or control do not comply with the terms of an abatement plan or payment schedule mentioned in paragraph (b)(2) of this section;

(3) In the absence of a request for judicial review, the disposition of a challenge and any subsequent administrative review referenced in paragraph (b)(3) or (4) of this section affirms the validity of the violation or the ownership or control listing or finding; or

(4) The initial judicial review decision referenced in paragraph (b)(3)(ii) or (4) of this section affirms the validity of the violation or the ownership or control listing or finding.

§773.15 Written findings for permit application approval.

No permit application or application for a significant revision of a permit shall be approved unless the application affirmatively demonstrates and the regulatory authority finds, in writing, on the basis of information set forth in the application or from information otherwise available that is documented in the approval, the following:

(a) The application is accurate and complete and the applicant has complied with all requirements of the Act and the regulatory program.

(b) The applicant has demonstrated that reclamation as required by the Act and the regulatory program can be accomplished under the reclamation plan contained in the permit application.

(c) The proposed permit area is—

(1) Not within an area under study or administrative proceedings under a petition, filed pursuant to parts 764 and 769 of this chapter, to have an area designated as unsuitable for surface coal mining operations, unless the applicant demonstrates that before January 4, 1977, he has made substantial legal and financial commitments in relation to the operation covered by the permit application; or

(2) Not within an area designated as unsuitable for surface coal mining operations under parts 762 and 764 or 769 of this chapter or within an area subject to the prohibitions of §761.11 of this chapter.

(d) For mining operations where the private mineral estate to be mined has been severed from the private surface estate, the applicant has submitted to the regulatory authority the documentation required under §778.15(b) of this chapter.

(e) The regulatory authority has made an assessment of the probable cumulative impacts of all anticipated coal mining on the hydrologic balance in the cumulative impact

area and has determined that the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area.

(f) The applicant has demonstrated that any existing structure will comply with §701.11(d), and the applicable performance standards of subchapter B or K of this chapter.

(g) The applicant has paid all reclamation fees from previous and existing operations as required by subchapter R of this chapter.

(h) The applicant has satisfied the applicable requirements of part 785 of this chapter.

(i) The applicant has, if applicable, satisfied the requirements for approval of a long-term, intensive agricultural postmining land use, in accordance with the requirements of §816.111(d) or §817.111(d).

(j) The 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.*).

(k) The regulatory authority has taken into account the effect of the proposed permitting action on properties listed on and eligible for listing on the National Register of Historic Places. This finding may be supported in part by inclusion of appropriate permit conditions or changes in the operation plan protecting historic resources, or a documented decision that the regulatory authority has determined that no additional protection measures are necessary.

(l) For a proposed remining operation where the applicant intends to reclaim in accordance with the requirements of §816.106 or §817.106 of this chapter, the site of the operation is a *previously mined area* as defined in §701.5 of this chapter.

(m) For permits to be issued under §785.25 of this chapter, the permit application must contain:

(i) Lands eligible for remining;

(ii) An identification of the potential environmental and safety problems related to prior mining activity which could reasonably be anticipated to occur at the site; and

(iii) Mitigation plans to sufficiently address these potential environmental and safety problems so that reclamation as required by the applicable requirements of the regulatory program can be accomplished.

(n) The applicant is eligible to receive a permit, based on the reviews under §§773.7 through 773.14 of this part.

§773.16 Performance bond submittal.

If the regulatory authority decides to approve the application, it shall require that the applicant file the performance bond or provide other equivalent guarantee before the permit is issued, in accordance with the provisions of subchapter J of this chapter.

§773.17 Permit conditions.

Each permit issued by the regulatory authority shall be subject to the following conditions:

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

(b) The permittee shall conduct all surface coal mining and reclamation operations only as described in the approved application, except to the extent that the regulatory authority otherwise directs in the permit.

(c) The permittee shall comply with the terms and conditions of the permit, all applicable performance standards of the Act, and the requirements of the regulatory program.

(d) Without advance notice, delay, or a search warrant, upon presentation of appropriate credentials, the permittee shall allow the authorized representatives of the Secretary and the State regulatory authority to—

(1) Have the right of entry provided for in §§842.13 and 840.12 of this chapter;
and

(2) Be accompanied by private persons for the purpose of conducting an inspection in accordance with parts 840 and 842, when the inspection is in response to an alleged violation reported to the regulatory authority by the private person.

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

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

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

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

(f) As applicable, the permittee shall comply with §701.11(d) and subchapter B or K of this chapter for compliance, modification, or abandonment of existing structures.

(g) The operator shall pay all reclamation fees required by subchapter R of this chapter for coal produced under the permit for sale, transfer or use, in the manner required by that subchapter.

§773.19 Permit issuance and right of renewal.

(a) *Decision.* If the application is approved, the permit shall be issued upon submittal of a performance bond in accordance with subchapter J. If the application is disapproved, specific reasons therefore shall be set forth in the notification required by paragraph (b) of this section.

(b) *Notification.* The regulatory authority shall issue written notification of the decision to the following persons and entities:

(1) The applicant, each person who files comments or objections to the permit application, and each party to an informal conference.

(2) The local governmental officials in the local political subdivision in which the land to be affected is located within 10 days after the issuance of a permit, including a description of the location of the land.

(3) If the regulatory authority is a State agency, the local OSM office.

(c) *Permit term.* Each permit shall be issued for a fixed term of 5 years or less, unless the requirements of §778.17 of this chapter are met.

(d) *Right of renewal.* Permit application approval shall apply to those lands that are specifically designated as the permit area on the maps submitted with the application and for which the application is complete and accurate. Any valid permit issued in accordance with paragraph (a) of this section shall carry with it the right of successive renewal, within the approved boundaries of the existing permit, upon expiration of the term of the permit, in accordance with §774.15.

(e) *Initiation of operations.* (1) A permit shall terminate if the permittee has not begun the surface coal mining and reclamation operation covered by the permit within 3 years of the issuance of the permit.

(2) The regulatory authority may grant a reasonable extension of time for commencement of these operations, upon receipt of a written statement showing that such an extension of time is necessary, if—

(i) Litigation precludes the commencement or threatens substantial economic loss to the permittee; or

(ii) There are conditions beyond the control and without the fault or negligence of the permittee.

(3) With respect to coal to be mined for use in a synthetic fuel facility or specified major electric generating facility, the permittee shall be deemed to have commenced surface mining operations at the time that the construction of the synthetic fuel or generating facility is initiated.

(4) Extensions of time granted by the regulatory authority under this paragraph shall be specifically set forth in the permit, and notice of the extension shall be made public by the regulatory authority.

§773.21 Initial review and finding requirements for improvidently issued permits.

(a) If we, the regulatory authority, have reason to believe that we improvidently issued a permit to you, the permittee, we must review the circumstances under which the permit was issued. We will make a preliminary finding that your permit was improvidently issued if, under the permit eligibility criteria of the applicable regulations implementing section 510(c) of the Act in effect at the time of permit issuance, your permit should not have been issued because you or your operator owned or controlled a surface coal mining and reclamation operation with an unabated or uncorrected violation.

(b) We will make a finding under paragraph (a) of this section only if you or your operator—

(1) Continue to own or control the operation with the unabated or uncorrected violation;

(2) The violation remains unabated or uncorrected; and

(3) The violation would cause you to be ineligible under the permit eligibility criteria in our current regulations.

(c) When we make a preliminary finding under paragraph (a) of this section, we must serve you with a written notice of the preliminary finding, which must be based on

evidence sufficient to establish a *prima facie* case that your permit was improvidently issued.

(d) Within 30 days of receiving a notice under paragraph (c) of this section, you may challenge the preliminary finding by providing us with evidence as to why the permit was not improvidently issued under the criteria in paragraphs (a) and (b) of this section.

(e) The provisions of §§773.25 through 773.27 of this part apply when a challenge under paragraph (d) of this section concerns a preliminary finding under paragraphs (a) and (b)(1) of this section that you or your operator currently own or control, or owned or controlled, a surface coal mining operation.

§773.22 Notice requirements for improvidently issued permits.

(a) We, the regulatory authority, must serve you, the permittee, with a written notice of proposed suspension or rescission, together with a statement of the reasons for the proposed suspension or rescission, if—

(1) After considering any evidence submitted under §773.21(d) of this part, we find that a permit was improvidently issued under the criteria in §773.21 paragraphs (a) and (b) of §773.21 of this part; or

(2) Your permit was provisionally issued under §773.14(b) of this part and one or more of the conditions in §§773.14(c)(1) through (4) exists.

(b) If we propose to suspend your permit, we will provide 60 days notice.

(c) If we propose to rescind your permit, we will provide 120 days notice.

(d) If you wish to appeal the notice, you must exhaust administrative remedies under the procedures at 43 CFR 4.1370 through 4.1377 (when OSM is the regulatory authority) or under the State regulatory program equivalent (when a State is the regulatory authority).

(e) After we serve you with a notice of proposed suspension or rescission under this section, we will take action under §773.23 of this part.

(f) The regulations for service at §843.14 of this chapter, or the State regulatory program equivalent, will govern service under this section.

(g) The times specified in paragraphs (b) and (c) of this section will apply unless you obtain temporary relief under the procedures at 43 CFR 4.1376 or the State regulatory program equivalent.

§773.23 Suspension or rescission requirements for improvidently issued permits.

(a) Except as provided in paragraph (b) of this section, we, the regulatory authority, must suspend or rescind your permit upon expiration of the time specified in §773.22(b) or (c) of this part unless you submit evidence and we find that—

(1) The violation has been abated or corrected to the satisfaction of the agency with jurisdiction over the violation;

(2) You or your operator no longer own or control the relevant operation;

(3) Our finding for suspension or rescission was in error;

(4) The violation is the subject of a good faith administrative or judicial appeal (unless there is an initial judicial decision affirming the violation, and that decision remains in force);

(5) The violation is the subject of an abatement plan or payment schedule that is being met to the satisfaction of the agency with jurisdiction over the violation; or

(6) You are pursuing a good faith challenge or administrative or judicial appeal of the relevant ownership or control listing or finding (unless there is an initial judicial decision affirming the listing or finding, and that decision remains in force).

(b) If you have requested administrative review of a notice of proposed suspension or rescission under §773.22(e) of this part, we will not suspend or rescind your permit unless and until the Office of Hearings and Appeals or its State counterpart affirms our finding that your permit was improvidently issued.

(c) When we suspend or rescind your permit under this section, we must—

(1) Issue you a written notice requiring you to cease all surface coal mining operations under the permit; and

(2) Post the notice at our office closest to the permit area.

(d) If we suspend or rescind your permit under this section, you may request administrative review of the notice under the procedures at 43 CFR 4.1370 through 4.1377 (when OSM is the regulatory authority) or under the State regulatory program equivalent (when a State is the regulatory authority). Alternatively, you may seek judicial review of the notice.

§773.25 Who may challenge ownership or control listings and findings.

You may challenge a listing or finding of ownership or control using the provisions under §§773.26 and 773.27 of this part if you are—

- (a) Listed in a permit application or AVS as an owner or controller of an entire surface coal mining operation, or any portion or aspect thereof:
- (b) Found to be an owner or controller of an entire surface coal mining operation, or any portion or aspect thereof, under §§773.21 or 774.11(g) of this subchapter; or
- (c) An applicant or permittee affected by an ownership or control listing or finding.

§773.26 How to challenge an ownership or control listing or finding.

This section applies to you if you challenge an ownership or control listing or finding.

(a) To challenge an ownership or control listing or finding, you must submit a written explanation of the basis for the challenge, along with any evidence or explanatory materials you wish to provide under §773.27(b) of this part, to the regulatory authority, as identified in the following table.

If the challenge concerns . . .	Then you must submit a written explanation to . . .
(1) a pending State or Federal permit application.....	the regulatory authority with jurisdiction over the application.
(2) your ownership or control of a surface coal mining operation, and you are not currently seeking a permit.	the regulatory authority with jurisdiction over the surface coal mining operation.

(b) The provisions of this section and of §§773.27 and 773.28 of this part apply only to challenges to ownership or control listings or findings. You may not use these provisions to challenge your liability or responsibility under any other provision of the Act or its implementing regulations.

(c) When the challenge concerns a violation under the jurisdiction of a different regulatory authority, the regulatory authority with jurisdiction over the permit application or permit must consult the regulatory authority with jurisdiction over the violation and the AVS Office to obtain additional information.

(d) A regulatory authority responsible for deciding a challenge under paragraph (a) of this section may request an investigation by the AVS Office.

(e) At any time, you, a person listed in AVS as an owner or controller of a surface coal mining operation, may request an informal explanation from the AVS Office as to the reason you are shown in AVS in an ownership or control capacity. Within 14 days of your request, the AVS Office will provide a response describing why you are listed in AVS.

§773.27 Burden of proof for ownership or control challenges.

This section applies to you if you challenge an ownership or control listing or finding.

(a) When you challenge a listing of ownership or control, or a finding of ownership or control made under §774.11(g) of this subchapter, you must prove by a preponderance of the evidence that you either—

(1) Do not own or control the entire surface coal mining operation or relevant portion or aspect thereof; or

(2) Did not own or control the entire surface coal mining operation or relevant portion or aspect thereof during the relevant time period.

(b) In meeting your burden of proof, you must present reliable, credible, and substantial evidence and any explanatory materials to the regulatory authority. The materials presented in connection with your challenge will become part of the permit file, an investigation file, or another public file. If you request, we will hold as confidential any information you submit under this paragraph which is not required to be made available to the public under §842.16 of this chapter (when OSM is the regulatory authority) or under §840.14 of this chapter (when a State is the regulatory authority).

(c) Materials you may submit in response to the requirements of paragraph (b) of this section include, but are not limited to—

(1) Notarized affidavits containing specific facts concerning the duties that you performed for the relevant operation, the beginning and ending dates of your ownership or control of the operation, and the nature and details of any transaction creating or severing your ownership or control of the operation.

(2) Certified copies of corporate minutes, stock ledgers, contracts, purchase and sale agreements, leases, correspondence, or other relevant company records.

(3) Certified copies of documents filed with or issued by any State, municipal, or Federal governmental agency.

(4) An opinion of counsel, when supported by—

(i) Evidentiary materials;

(ii) A statement by counsel that he or she is qualified to render the opinion; and

(iii) A statement that counsel has personally and diligently investigated the facts of the matter.

§773.28 Written agency decision on challenges to ownership or control listings or findings.

(a) Within 60 days of receipt of your challenge under §773.26(a) of this part, we, the regulatory authority identified under §773.26(a) of this part, will review and investigate the evidence and explanatory materials you submit and any other reasonably available information bearing on your challenge and issue a written decision. Our decision must state whether you own or control the relevant surface coal mining operation, or owned or controlled the operation, during the relevant time period.

(b) We will promptly provide you with a copy of our decision by either—

(1) Certified mail, return receipt requested; or

(2) Any means consistent with the rules governing service of a summons and complaint under Rule 4 of the Federal Rules of Civil Procedure, or its State regulatory program counterparts.

(c) Service of the decision on you is complete upon delivery and is not incomplete if you refuse to accept delivery.

(d) We will post all decisions made under this section on AVS.

(e) Any person who receives a written decision under this section, and who wishes to appeal that decision, must exhaust administrative remedies under the procedures at 43 CFR 4.1380 through 4.1387 or, when a State is the regulatory authority, the State regulatory program counterparts, before seeking judicial review.

(f) Following our written decision or any decision by a reviewing administrative or judicial tribunal, we must review the information in AVS to determine if it is consistent

with the decision. If it is not, we must promptly revise the information in AVS to reflect the decision.

4. Revise part 774 to read as follows:

**PART 774--REVISION; RENEWAL; TRANSFER, ASSIGNMENT, OR SALE OF
PERMIT RIGHTS; POST-PERMIT ISSUANCE REQUIREMENTS; AND OTHER
ACTIONS BASED ON OWNERSHIP, CONTROL, AND VIOLATION INFORMATION**

Sec.

774.1 Scope and purpose.

774.9 Information collection.

774.10 Regulatory authority review of permits.

774.11 Post-permit issuance requirements for regulatory authorities and other actions based on ownership, control, and violation information.

774.12 Post-permit issuance information requirements for permittees.

774.13 Permit revisions.

774.15 Permit renewals.

774.17 Transfer, assignment, or sale of permit rights.

AUTHORITY: 30 U.S.C. 1201 *et seq.*

§774.1 Scope and purpose.

This part provides requirements for revision; renewal; transfer, assignment, or sale of permit rights; entering and updating information in AVS following the issuance of a permit; post-permit issuance requirements for regulatory authorities and permittees; and other actions based on ownership, control, and violation information.

§774.9 Information collection.

(a) The collections of information contained in part 774 have been approved by the Office of Management and Budget under 44 U.S.C. 3501 *et seq.* and assigned clearance number 1029-0116. Regulatory authorities will use this information to:

- (1) Determine if the applicant meets the requirements for revision; renewal; transfer, assignment, or sale of permit rights;
- (2) Enter and update information in AVS following the issuance of a permit; and
- (3) Fulfill post-permit issuance requirements and other obligations based on ownership, control, and violation information.

(b) A Federal agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Response is required to obtain a benefit in accordance with SMCRA. Send comments regarding burden estimates or any other aspect of this collection of information, including suggestions for reducing the burden, to the Office of Surface Mining Reclamation and Enforcement, Information Collection Clearance Officer, Room 202-SIB, 1951 Constitution Avenue, NW., Washington, DC 20240.

§774.10 Regulatory authority review of permits.

(a) The regulatory authority shall review each permit issued and outstanding under an approved regulatory program during the term of the permit. This review shall occur not later than the middle of each permit term and as follows:

- (1) Permits with a term longer than 5 years shall be reviewed no less frequently than the permit midterm or every 5 years, whichever is more frequent.

(2) Permits with variances granted in accordance with §785.14 of this chapter (mountaintop removal) and §785.18 of this chapter (variance for delay in contemporaneous reclamation requirement in combined surface and underground mining operations) of this chapter shall be reviewed no later than 3 years from the date of issuance of the permit unless, for variances issued in accordance with §785.14 of this chapter, the permittee affirmatively demonstrates that the proposed development is proceeding in accordance with the terms of the permit.

(3) Permits containing experimental practices issued in accordance with §785.13 of this chapter and permits with a variance from approximate original contour requirements in accordance with §785.16 shall be reviewed as set forth in the permit or at least every 2½ years from the date of issuance as required by the regulatory authority, in accordance with §§785.13(g) and 785.16(c) of this chapter, respectively.

(b) After the review required by paragraph (a) of this section, or at any time, the regulatory authority may, by order, require reasonable revision of a permit in accordance with §774.13 to ensure compliance with the Act and the regulatory program.

(c) Any order of the regulatory authority requiring revision of a permit shall be based upon written findings and shall be subject to the provisions for administrative and judicial review in part 775 of this chapter. Copies of the order shall be sent to the permittee.

(d) Permits may be suspended or revoked in accordance with subchapter L of this chapter.

§774.11 Post-permit issuance requirements for regulatory authorities and other actions based on ownership, control, and violation information.

(a) For the purposes of future permit eligibility determinations and enforcement actions, we, the regulatory authority, must enter into AVS the data shown in the following table—

We must enter into AVS all . . .	Within 30 days after . . .
(1) permit records	the permit is issued or subsequent changes made.
(2) unabated or uncorrected violations	the abatement or correction period for a violation expires.
(3) changes to information initially required to be provided by an applicant under 30 CFR 778.11.	receiving notice of a change.
(4) changes in violation status	abatement, correction, or termination of a violation, or a decision from an administrative or judicial tribunal.

(b) If, at any time, we discover that any person owns or controls an operation with an unabated or uncorrected violation, we will determine whether enforcement action is appropriate under part 843, 846 or 847 of this chapter. We must enter the results of each enforcement action, including administrative and judicial decisions, into AVS.

(c) We must serve a preliminary finding of permanent permit ineligibility under section 510(c) of the Act on you, an applicant or operator, if the criteria in paragraphs (c)(1) and (c)(2) are met. In making a finding under this paragraph, we will only consider control relationships and violations which would make, or would have made, you ineligible for a permit under §§773.12(a) and (b) of this subchapter. We must make a preliminary finding of permanent permit ineligibility if we find that—

(1) You control or have controlled surface coal mining and reclamation operations with a demonstrated pattern of willful violations under section 510(c) of the Act; and

(2) The violations are of such nature and duration with such resulting irreparable damage to the environment as to indicate your intent not to comply with the Act, its implementing regulations, the regulatory program, or your permit.

(d) You may request a hearing on a preliminary finding of permanent permit ineligibility under 43 CFR 4.1350 through 4.1356.

(e) Entry into AVS.

(1) If you do not request a hearing, and the time for seeking a hearing has expired, we will enter our finding into AVS.

(2) If you request a hearing, we will enter our finding into AVS only if that finding is upheld on administrative appeal.

(f) At any time, we may identify any person who owns or controls an entire surface coal mining operation or any relevant portion or aspect thereof. If we identify such a person, we must issue a written preliminary finding to the person and the applicant or permittee describing the nature and extent of ownership or control. Our written preliminary finding must be based on evidence sufficient to establish a prima facie case of ownership or control.

(g) After we issue a written preliminary finding under paragraph (f) of this section, we will allow you, the person subject to the preliminary finding, 30 days in which to submit any information tending to demonstrate your lack of ownership or control. If, after reviewing any information you submit, we are persuaded that you are not an owner or

controller, we will serve you a written notice to that effect. If, after reviewing any information you submit, we still find that you are an owner or controller, or if you do not submit any information within the 30-day period, we will issue a written finding and enter our finding into AVS.

(h) If we identify you as an owner or controller under paragraph (g) of this section, you may challenge the finding using the provisions of §§773.25, 773.26, and 773.27 of this subchapter.

§774.12 Post-permit issuance information requirements for permittees.

(a) Within 30 days after the issuance of a cessation order under §843.11 of this chapter, or its State regulatory program equivalent, you, the permittee, must provide or update all the information required under §778.11 of this subchapter.

(b) You do not have to submit information under paragraph (a) of this section if a court of competent jurisdiction grants a stay of the cessation order and the stay remains in effect.

(c) Within 60 days of any addition, departure, or change in position of any person identified in §778.11(c) of this subchapter, you must provide—

- (1) The information required under §778.11(d) of this subchapter; and
- (2) The date of any departure.

§774.13 Permit revisions.

(a) *General.* During the term of a permit, the permittee may submit an application to the regulatory authority for a revision of the permit.

(b) *Application requirements and procedures.* the regulatory authority shall establish—

(1) A time period within which the regulatory authority will approve or disapprove an application for a permit revision; and

(2) Guidelines establishing the scale or extent of revisions for which all the permit application information requirements and procedures of this subchapter, including notice, public participation, and notice of decision requirements of §§773.6, 773.19(b) (1) and (3), and 778.21, shall apply. Such requirements and procedures shall apply at a minimum to all significant permit revisions.

(c) *Criteria for approval.* No application for a permit revision shall be approved unless the application demonstrates and the regulatory authority finds that reclamation as required by the Act and the regulatory program can be accomplished, applicable requirements under §773.15 which are pertinent to the revision are met, and the application for a revision complies with all requirements of the Act and the regulatory program.

(d) *Request to change permit boundary.* Any extensions to the area covered by the permit, except incidental boundary revisions, shall be made by application for a new permit.

§774.15 Permit renewals.

(a) *General.* A valid permit, issued pursuant to an approved regulatory program, shall carry with it the right of successive renewal, within the approved boundaries of the existing permit, upon expiration of the term of the permit.

(b) *Application requirements and procedures.* (1) An application for renewal of a permit shall be filed with the regulatory authority at least 120 days before expiration of the existing permit term.

(2) An application for renewal of a permit shall be in the form required by the regulatory authority and shall include at a minimum—

(i) The name and address of the permittee, the term of the renewal requested, and the permit number or other identifier;

(ii) Evidence that a liability insurance policy or adequate self-insurance under §800.60 of this chapter will be provided by the applicant for the proposed period of renewal;

(iii) Evidence that the performance bond in effect for the operation will continue in full force and effect for any renewal requested, as well as any additional bond required by the regulatory authorities pursuant to subchapter J of this chapter;

(iv) A copy of the proposed newspaper notice and proof of publication of same, as required by §778.21 of this chapter; and

(v) Additional revised or updated information required by the regulatory authority.

(3) Applications for renewal shall be subject to the requirements of public notification and public participation contained in §§773.6 and 773.19(b) of this chapter.

(4) If an application for renewal includes any proposed revisions to the permit, such revisions shall be identified and subject to the requirements of §774.13.

(c) *Approval process—*(1) *Criteria for approval.* The regulatory authority shall approve a complete and accurate application for permit renewal, unless it finds, in writing that—

(i) The terms and conditions of the existing permit are not being satisfactorily met;

(ii) The present surface coal mining and reclamation operations are not in compliance with the environmental protection standards of the Act and the regulatory program;

(iii) The requested renewal substantially jeopardizes the operator's continuing ability to comply with the Act and the regulatory program on existing permit areas;

(iv) The operator has not provided evidence of having liability insurance or self-insurance as required in §800.60 of this chapter;

(v) The operator has not provided evidence that any performance bond required to be in effect for the operation will continue in full force and effect for the proposed period of renewal, as well as any additional bond the regulatory authority might require pursuant to subchapter J of this chapter; or

(vi) Additional revised or updated information required by the regulatory authority has not been provided by the applicant.

(2) *Burden of proof.* In the determination of whether to approve or deny a renewal of a permit, the burden of proof shall be on the opponents of renewal.

(3) *Alluvial valley floor variance.* If the surface coal mining and reclamation operation authorized by the original permit was not subject to the standards contained in sections 510(b)(5) (A) and (B) of the Act and §785.19 of this chapter, because the permittee complied with the exceptions in the proviso to section 510(b)(5) of the Act, the portion of the application for renewal of the permit that addresses new land areas previously identified in the reclamation plan for the original permit shall not be subject to

the standards contained in sections 510(b)(5) (A) and (B) of the Act and §785.19 of this chapter.

(d) *Renewal term.* Any permit renewal shall be for a term not to exceed the period of the original permit established under §773.19.

(e) *Notice of decision.* The regulatory authority shall send copies of its decision to the applicant, to each person who filed comments or objections on the renewal, to each party to any informal conference held on the permit renewal, and to OSM if OSM is not the regulatory authority.

(f) *Administrative and judicial review.* Any person having an interest which is or may be adversely affected by the decision of the regulatory authority shall have the right to administrative and judicial review set forth in part 775 of this chapter.

§774.17 Transfer, assignment, or sale of permit rights.

(a) *General.* No transfer, assignment, or sale of rights granted by a permit shall be made without the prior written approval of the regulatory authority. At its discretion, the regulatory authority may allow a prospective successor in interest to engage in surface coal mining and reclamation operations under the permit during the pendency of an application for approval of a transfer, assignment, or sale of permit rights submitted under paragraph (b) of this section, provided that the prospective successor in interest can demonstrate to the satisfaction of the regulatory authority that sufficient bond coverage will remain in place.

(b) *Application requirements.* An applicant for approval of the transfer, assignment, or sale of permit rights shall—

(1) Provide the regulatory authority with an application for approval of the proposed transfer, assignment, or sale including—

(i) The name and address of the existing permittee and permit number or other identifier;

(ii) A brief description of the proposed action requiring approval; and

(iii) The legal, financial, compliance, and related information required by part 778 of this chapter for the applicant for approval of the transfer, assignment, or sale of permit rights.

(2) 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 permittee, the permit number or other identifier, the geographic location of the permit, and the address to which written comments may be sent;

(3) Obtain appropriate performance bond coverage in an amount sufficient to cover the proposed operations, as required under subchapter J of this chapter.

(c) *Public participation.* Any person having an interest which is or may be adversely affected by a decision on the transfer, assignment, or sale of permit rights, including an official of any Federal, State, or local government agency, may submit written comments on the application to the regulatory authority within a time specified by the regulatory authority.

(d) *Criteria for approval.* The regulatory authority may allow a permittee to transfer, assign, or sell permit rights to a successor, if it finds in writing that the successor—

(1) Is eligible to receive a permit in accordance with §§773.12 and 773.14 of this chapter;

(2) Has submitted a performance bond or other guarantee, or obtained the bond coverage of the original permittee, as required by subchapter J of this chapter; and

(3) Meets any other requirements specified by the regulatory authority.

(e) *Notification.* (1) The regulatory authority shall notify the permittee, the successor, commenters, and OSM, if OSM is not the regulatory authority, of its findings.

(2) The successor shall immediately provide notice to the regulatory authority of the consummation of the transfer, assignment, or sale of permit rights.

(f) *Continued operation under existing permit.* The successor in interest shall assume the liability and reclamation responsibilities of the existing permit and shall conduct the surface coal mining and reclamation operations in full compliance with the Act, the regulatory program, and the terms and conditions of the existing permit, unless the applicant has obtained a new or revised permit as provided in this subchapter.

5. Revise part 777 to read as follows:

PART 777—GENERAL CONTENT REQUIREMENTS FOR PERMIT APPLICATIONS

Sec.

777.1 Scope.

777.10 Information collection.

777.11 Format and contents.

777.13 Reporting of technical data.

777.14 Maps and plans: General requirements.

777.15 Completeness.

777.17 Permit fees.

AUTHORITY: Pub. L. 95-87, 30 U.S.C. 1201 *et seq.*

§777.1 Scope.

This part provides minimum requirements concerning the general content for permit applications under a State or Federal program.

§777.10 Information collection.

The information collection requirements contained in part 777 have been approved by the Office of Management and Budget under 44 U.S.C. 3507 and assigned clearance number 1029-0032. The information is being collected to meet the requirements of sections 507, 508, and 510(b) of the Act. It provides general requirements for permit application format and contents. The obligation to respond is mandatory.

§777.11 Format and contents.

(a) An application shall—

- (1) Contain current information, as required by this subchapter;
- (2) Be clear and concise; and
- (3) Be filed in the format required by the regulatory authority.

(b) If used in the application, referenced materials shall either be provided to the regulatory authority by the applicant or be readily available to the regulatory authority. If provided, relevant portions of referenced published materials shall be presented briefly and concisely in the application by photocopying or abstracting and with explicit citations.

(c) Applications for permits; revisions; renewals; or transfers, sales or assignments of permit rights shall be verified under oath, by a responsible official of the applicant, that the information contained in the application is true and correct to the best of the official's information and belief.

§777.13 Reporting of technical data.

(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 descriptions of the methodology used to collect and analyze the data.

(b) Technical analyses shall be planned by or under the direction of a professional qualified in the subject to be analyzed.

§777.14 Maps and plans: General requirements.

(a) Maps submitted with applications shall be presented in a consolidated format, to the extent possible, and shall include all the types of information that are set forth on topographic maps of the U.S. Geological Survey of the 1:24,000 scale series. Maps of the permit area shall be at a scale of 1:6,000 or larger. Maps of the adjacent area shall clearly show the lands and waters within those areas and be in a scale determined by the regulatory authority, but in no event smaller than 1:24,000.

(b) All maps and plans submitted with the application shall distinguish among each of the phases during which surface coal mining operations were or will be conducted at any place within the life of operations. At a minimum, distinctions shall be

clearly shown among those portions of the life of operations in which surface coal mining operations occurred—

- (1) Prior to August 3, 1977;
- (2) After August 3, 1977, and prior to either—
 - (i) May 3, 1978; or
 - (ii) In the case of an applicant or operator which obtained a small operator's exemption in accordance with §710.12 of this chapter, January 1, 1979;
- (3) After May 3, 1978 (or January 1, 1979, for persons who received a small operator's exemption) and prior to the approval of the applicable regulatory program;
- (4) After the estimated date of issuance of a permit by the regulatory authority under the approved regulatory program.

§777.15 Completeness.

An application for a permit to conduct surface coal mining and reclamation operations shall be complete and shall include at a minimum—

(a) For surface mining activities, the information required under parts 778, 779, and 780 of this chapter, and, as applicable to the operation, part 785 of this chapter; and

(b) For underground mining activities, the information required under parts 778, 783, and 784 of this chapter, and, as applicable to the operation, part 785 of this chapter.

§777.17 Permit fees.

An application for a surface coal mining and reclamation permit shall be accompanied by a fee determined by the regulatory authority. The fee may be less than, but shall not exceed, the actual or anticipated cost of reviewing, administering, and enforcing the permit. The regulatory authority may develop procedures to allow the fee to be paid over the term of the permit.

6. Revise part 779 to read as follows:

**PART 779—SURFACE MINING PERMIT APPLICATIONS—MINIMUM
REQUIREMENTS FOR INFORMATION ON ENVIRONMENTAL RESOURCES**

Sec.

- 779.1 Scope.
- 779.2 Objectives.
- 779.4 Responsibilities.
- 779.10 Information collection.
- 779.11 General requirements.
- 779.12 General environmental resources information.
- 779.18 Climatological information.
- 779.19 Vegetation information.
- 779.20 [Reserved]
- 779.21 Soil resources information.
- 779.24 Maps: General requirements.
- 779.25 Cross sections, maps, and plans.

AUTHORITY: 30 U.S.C. 1201 *et seq.*; sec. 115 of Pub. L. 98-146, (30 U.S.C. 1257), and 16 U.S.C. 470 *et seq.*

§779.1 Scope.

This part establishes the minimum requirements for the Secretary's approval of regulatory program provisions for the environmental resources contents of applications for surface mining activities.

§779.2 Objectives.

The objectives of this part are to ensure that each application provides to the regulatory authority a complete and accurate description of the environmental resources that may be impacted or affected by proposed surface mining activities.

§779.4 Responsibilities.

(a) It is the responsibility of the applicant to provide, except where specifically exempted in this part, all information required by this part in the application.

(b) It is the responsibility of State and Federal government agencies to provide information for applications as specifically required by this part.

§779.10 Information collection.

The information collection requirements contained in 30 CFR 779.11, 779.12, 779.13, 779.14, 779.15, 779.16, 779.17, 779.18, 779.19, 779.21, 779.22, 779.24, 779.25 and 779.27 have been approved by the Office of Management and Budget under 44 U.S.C. 3507 and assigned clearance number 1029-0035. The information is

being collected to meet the requirements of sections 507 and 508 of Pub. L. 95-87, which require the applicant to present an adequate description of the existing pre-mining environmental resources within and around the proposed mine plan area. This information will be used by the regulatory authority to determine whether the applicant can comply with the performance standards of the regulations for surface coal mining and whether reclamation of these areas is feasible. The obligation to respond is mandatory.

§779.11 General requirements.

Each permit application shall include a description of the existing, premining environmental resources within the proposed permit area and adjacent areas that may be affected or impacted by the proposed surface mining activities.

§779.12 General environmental resources information.

Each application shall describe and identify—

(a) The lands subject to surface coal mining operations over the estimated life of those operations and the size, sequence, and timing of the subareas for which it is anticipated that individual permits for mining will be sought; and

(b)(1) The nature of cultural, historic and archeological resources listed or eligible for listing on the National Register of Historic Places and known archeological sites within the proposed permit and adjacent areas. The description shall be based on all

available information, including, but not limited to, information from the State Historic Preservation Officer and from local archeological, historical, and cultural preservation agencies.

(2) The regulatory authority may require the applicant to identify and evaluate important historic and archeological resources that may be eligible for listing on the National Register of Historic Places, through

- (i) Collection of additional information,
- (ii) Conduct of field investigations, or
- (iii) Other appropriate analyses.

§779.18 Climatological information.

(a) When requested by the regulatory authority, the application shall contain a statement of the climatological factors that are representative of the proposed permit area, including:

- (1) The average seasonal precipitation;
- (2) The average direction and velocity of prevailing winds; and
- (3) Seasonal temperature ranges.

(b) The regulatory authority may request such additional data as deemed necessary to ensure compliance with the requirements of this subchapter.

§779.19 Vegetation information.

(a) The permit application shall, if required by the regulatory authority, contain a map that delineates existing vegetative types and a description of the plant communities within the proposed permit area and within any proposed reference area. This description shall include information adequate to predict the potential for reestablishing vegetation.

(b) When a map or aerial photograph is required, sufficient adjacent areas shall be included to allow evaluation of vegetation as important habitat for fish and wildlife for those species of fish and wildlife identified under 30 CFR 780.16.

§779.20 [Reserved]

§779.21 Soil resources information.

(a) The applicant shall provide adequate soil survey information of the permit area consisting of the following:

- (1) A map delineating different soils;
- (2) Soil identification;
- (3) Soil description; and

(4) Present and potential productivity of existing soils.

(b) Where the applicant proposes to use selected overburden materials as a supplement or substitute for topsoil, the application shall provide results of the analyses, trials, and tests required under 30 CFR 816.22.

§779.24 Maps: General requirements.

The permit application shall include maps showing—

(a) All boundaries of lands and names of present owners of record of those lands, both surface and subsurface, included in or contiguous to the permit area;

(b) The boundaries of land within the proposed permit area upon which the applicant has the legal right to enter and begin surface mining activities;

(c) The boundaries of all areas proposed to be affected over the estimated total life of the proposed surface mining activities, with a description of size, sequence, and timing of the mining of sub-areas for which it is anticipated that additional permits will be sought;

(d) The location of all buildings on and within 1,000 feet of the proposed permit area, with identification of the current use of the buildings;

(e) The location of surface and sub-surface man-made features within, passing through, or passing over the proposed permit area, including, but not limited to major electric transmission lines, pipelines, and agricultural drainage tile fields;

(f) The location and boundaries of any proposed reference areas for determining the success of revegetation;

(g) The locations of water supply intakes for current users of surface water flowing into, out of, and within a hydrologic area defined by the regulatory authority, and those surface waters which will receive discharges from affected areas in the proposed permit area;

(h) Each public road located in or within 100 feet of the proposed permit area;

(i) The boundaries of any public park and locations of any cultural or historical resources listed or eligible for listing in the National Register of Historic Places and known archeological sites within the permit and adjacent areas.

(j) Each cemetery that is located in or within 100 feet of the proposed permit area.

(k) Any land within the proposed permit area which is within the boundaries of any units of the National System of Trails or the Wild and Scenic Rivers System, including study rivers designated under section 5(a) of the Wild and Scenic Rivers Act; and

(l) Other relevant information required by the regulatory authority.

§779.25 Cross sections, maps, and plans.

(a) The application shall include cross sections, maps, and plans showing—

- (1) Elevations and locations of test borings and core samplings;
- (2) Elevations and locations of monitoring stations used to gather data for water quality and quantity, fish and wildlife, and air quality, if required, in preparation of the application;
- (3) Nature, depth, and thickness of the coal seams to be mined, any coal or rider seams above the seam to be mined, each stratum of the overburden, and the stratum immediately below the lowest coal seam to be mined;
- (4) All coal crop lines and the strike and dip of the coal to be mined within the proposed permit area;
- (5) Location and extent of known workings of active, inactive, or abandoned underground mines, including mine openings to the surface within the proposed permit and adjacent areas;
- (6) Location and extent of sub-surface water, if encountered, within the proposed permit or adjacent areas;
- (7) Location of surface water bodies such as streams, lakes, ponds, springs, constructed or natural drains, and irrigation ditches within the proposed permit and adjacent areas;
- (8) Location and extent of existing or previously surface-mined areas within the proposed permit area;

(9) Location and dimensions of existing areas of spoil, waste, and non-coal waste disposal, dams, embankments, other impoundments, and water treatment and air pollution control facilities within the proposed permit area;

(10) Location, and depth if available, of gas and oil wells within the proposed permit area and water wells in the permit area and adjacent area;

(b) Cross sections, maps and plans included in a permit application as required by this section shall be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer, a professional geologist, or in any State which authorizes land surveyors to prepare and certify such cross sections, maps and plans, a qualified, registered, professional, land surveyor, with assistance from experts in related fields such as landscape architecture, and shall be updated as required by the regulatory authority.

7. Revise part 780 to read as follows:

**PART 780—SURFACE MINING PERMIT APPLICATIONS—MINIMUM
REQUIREMENT FOR RECLAMATION AND OPERATION PLAN**

Sec.

- 780.1 Scope.
- 780.2 Objectives.
- 780.4 Responsibilities.
- 780.10 Information collection.
- 780.11 Operation plan: General requirements.
- 780.12 Operation plan: Existing structures.
- 780.13 Operation plan: Blasting.
- 780.14 Operation plan: Maps and plans.
- 780.15 Air pollution control plan.
- 780.16 Fish and wildlife information.

780.18 Reclamation plan: General requirements.
780.21 Hydrologic information.
780.22 Geologic information.
780.23 Reclamation plan: Land use information.
780.25 Reclamation plan: Siltation structures, impoundments, banks, dams, and embankments.
780.27 Reclamation plan: Surface mining near underground mining.
780.28 [Reserved]
780.29 Diversions.
780.31 Protection of publicly owned parks and historic places.
780.33 Relocation or use of public roads.
780.35 Disposal of excess spoil.
780.37 Road systems.
780.38 Support facilities.

AUTHORITY: 30 U.S.C. 1201 *et seq.* and 16 U.S.C. 470 *et seq.*

§780.1 Scope.

This part provides the minimum requirements for the Secretary's approval of regulatory program provisions for the mining operations and reclamation plan portions of applications for permits for surface mining activities, except to the extent that different requirements for those plans are established under 30 CFR part 785.

§780.2 Objectives.

The objectives of this part are to insure that the regulatory authority is provided with comprehensive and reliable information on proposed surface mining activities, and to ensure that those activities are allowed to be conducted only in compliance with the Act, this chapter, and the regulatory program.

§780.4 Responsibilities.

(a) It is the responsibility of the applicant to provide to the regulatory authority all of the information required by this part, except where specifically exempted in this part.

(b) It is the responsibility of State and Federal governmental agencies to provide information to the regulatory authority where specifically required in this part.

§780.10 Information collection.

(a) The collections of information contained in part 780 have been approved by the Office of Management and Budget under 44 U.S.C. 3501 *et seq.* and assigned clearance number 1029-0036. The information will be used by the regulatory authority to determine whether the applicant can comply with the applicable performance and environmental standards in Public Law 95-87. Response is required to obtain a benefit.

(b) Public Reporting burden for this information is estimated to average 28 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Information Collection Clearance Officer, Office of Surface Mining Reclamation and Enforcement, 1951 Constitution Ave. NW., Room 203, Washington, DC 20240; and the Office of Management and Budget, Paperwork Reduction Project 1029-0036, Washington, DC 20503.

§780.11 Operation plan: General requirements.

Each application shall contain a description of the mining operations proposed to be conducted during the life of the mine within the proposed permit area, including, at a minimum, the following:

(a) A narrative description of the type and method of coal mining procedures and proposed engineering techniques, anticipated annual and total production of coal, by tonnage, and the major equipment to be used for all aspects of those operations; and

(b) A narrative explaining the construction, modification, use, maintenance, and removal of the following facilities (unless retention of such facilities is necessary for postmining land use as specified in §816.133):

(1) Dams, embankments, and other impoundments;

(2) Overburden and topsoil handling and storage areas and structures;

(3) Coal removal, handling, storage, cleaning, and transportation areas and structures;

(4) Spoil, coal processing waste, and non-coal waste removal, handling, storage, transportation, and disposal areas and structures;

(5) Mine facilities; and

(6) Water and air pollution control facilities.

§780.12 Operation plan: Existing structures.

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

(1) Location;

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

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

(4) A showing, including relevant monitoring data or other evidence, whether the structure meets the performance standards of subchapter K (Permanent Program Standards) of this chapter or, if the structure does not meet the performance standards of subchapter K of this chapter, a showing whether the structure meets the performance standards of subchapter B (Interim Program Standards) of this chapter.

(b) Each application shall contain a compliance plan for each existing structure proposed to be modified or reconstructed for use in connection with or to facilitate the surface coal mining and reclamation operation. The compliance plan shall include—

(1) Design specifications for the modification or reconstruction of the structure to meet the design and performance standards of subchapter K of this chapter;

(2) A construction schedule which shows dates for beginning and completing interim steps and final reconstruction;

(3) Provisions for monitoring the structure during and after modification or reconstruction to ensure that the performance standards of subchapter K of this chapter are met; and

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

§780.13 Operation plan: Blasting.

(a) *Blasting plan.* Each application shall contain a blasting plan for the proposed permit area, explaining how the applicant will comply with the requirements of §§816.61 through 816.68 of this chapter. This plan shall include, at a minimum, information setting forth the limitations the operator will meet with regard to ground vibration and airblast, the bases for those limitations, and the methods to be applied in controlling the adverse effects of blasting operations.

(b) *Monitoring system.* Each application shall contain a description of any system to be used to monitor compliance with the standards of §816.67 including the type, capability, and sensitivity of any blast-monitoring equipment and proposed procedures and locations of monitoring.

(c) *Blasting near underground mines.* Blasting operations within 500 feet of active underground mines require approval of the State and Federal regulatory authorities concerned with the health and safety of underground miners.

§780.14 Operation plan: Maps and plans.

Each application shall contain maps and plans as follows:

(a) The maps and plans shall show the lands proposed to be affected throughout the operation and any change in a facility or feature to be caused by the proposed operations, if the facility or feature was shown under 30 CFR 779.24 through 779.25.

(b) The following shall be shown for the proposed permit area:

(1) Buildings, utility corridors and facilities to be used;

(2) The area of land to be affected within the proposed permit area, according to the sequence of mining and reclamation;

(3) Each area of land for which a performance bond or other equivalent guarantee will be posted under subchapter J of this chapter;

(4) Each coal storage, cleaning and loading area;

(5) Each topsoil, spoil, coal waste, and non-coal waste storage area;

(6) Each water diversion, collection, conveyance, treatment, storage, and discharge facility to be used;

(7) Each air pollution collection and control facility;

(8) Each source of waste and each waste disposal facility relating to coal processing or pollution control;

(9) Each facility to be used to protect and enhance fish and wildlife and related environmental values;

(10) Each explosive storage and handling facility; and

(11) Location of each sedimentation pond, permanent water impoundment, coal processing waste bank, and coal processing waste dam and embankment, in accordance with 30 CFR 780.25, and fill area for the disposal of excess spoil in accordance 30 CFR 780.35.

(c) Except as provided in §§780.25(a)(2), 780.25(a)(3), 780.35(a), 816.71(b), 816.73(c), 816.74(c) and 816.81(c) of this chapter, cross sections, maps and plans required under paragraphs (b)(4), (5), (6), (10) and (11) of this section shall be prepared by, or under the direction of, and certified by a qualified registered professional engineer, a professional geologist, or in any State which authorizes land surveyors to prepare and certify such cross sections, maps and plans, a qualified, registered, professional, land surveyor, with assistance from experts in related fields such as landscape architecture.

§780.15 Air pollution control plan.

(a) For all surface mining activities with projected production rates exceeding 1,000,000 tons of coal per year and located west of the 100th meridian west longitude, the application shall contain an air pollution control plan which includes the following:

(1) An air quality monitoring program to provide sufficient data to evaluate the effectiveness of the fugitive dust control practices proposed under paragraph (a)(2) of this section to comply with Federal and State air quality standards; and

(2) A plan for fugitive dust control practices as required under 30 CFR 816.95.

(b) For all other surface mining activities the application shall contain an air pollution control plan which includes the following:

(1) An air quality monitoring program, if required by the regulatory authority, to provide sufficient data to evaluate the effectiveness of the fugitive dust control practices under paragraph (b)(2) of this section to comply with applicable Federal and State air quality standards; and

(2) A plan for fugitive dust control practices, as required under 30 CFR 816.95.

§780.16 Fish and wildlife information.

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

(1) The scope and level of detail for such information shall be determined by the regulatory authority in consultation with State and Federal agencies with responsibilities

for fish and wildlife and shall be sufficient to design the protection and enhancement plan required under paragraph (b) of this section.

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

(i) Listed or proposed endangered or threatened species of plants or animals or their critical habitats listed by the Secretary under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), or those species or habitats protected by similar State statutes;

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

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

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

(1) Be consistent with the requirements of §816.97 of this chapter;

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

(3) Include—

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

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

(c) *Fish and Wildlife Service review.* Upon request, the regulatory authority shall provide the resource information required under paragraph (a) of this section and the protection and enhancement plan required under paragraph (b) of this section to the U.S. Department of the Interior, Fish and Wildlife Service Regional or Field Office for their review. This information shall be provided within 10 days of receipt of the request from the Service.

§780.18 Reclamation plan: General requirements.

(a) Each application shall contain a plan for reclamation of the lands within the proposed permit area, showing how the applicant will comply with section 515 of the Act, subchapter K of this chapter, and the environmental protection performance standards of the regulatory program. The plan shall include, at a minimum, all information required under 30 CFR 780.18 through 780.37.

(b) Each plan shall contain the following information for the proposed permit area—

(1) A detailed timetable for the completion of each major step in the reclamation plan;

(2) A detailed estimate of the cost of reclamation of the proposed operations required to be covered by a performance bond under subchapter J of this chapter, with supporting calculations for the estimates;

(3) A plan for backfilling, soil stabilization, compacting, and grading, with contour maps or cross sections that show the anticipated final surface configuration of the proposed permit area, in accordance with 30 CFR 816.102 through 816.107;

(4) A plan for removal, storage, and redistribution of topsoil, subsoil, and other material to meet the requirements of §816.22 of this chapter. A demonstration of the suitability of topsoil substitutes or supplements under §816.22(b) of this chapter shall be based upon analysis of the thickness of soil horizons, total depth, texture, percent coarse fragments, pH, and areal extent of the different kinds of soils. The regulatory authority may require other chemical and physical analyses, field-site trials, or

greenhouse tests if determined to be necessary or desirable to demonstrate the suitability of the topsoil substitutes or supplements.

(5) A plan for revegetation as required in 30 CFR 816.111 through 816.116, including, but not limited to, descriptions of the—

(i) Schedule of revegetation;

(ii) Species and amounts per acre of seeds and seedlings to be used;

(iii) Methods to be used in planting and seeding;

(iv) Mulching techniques;

(v) Irrigation, if appropriate, and pest and disease control measures, if any; and

(vi) Measures proposed to be used to determine the success of revegetation as required in 30 CFR 816.116.

(vii) A soil testing plan for evaluation of the results of topsoil handling and reclamation procedures related to revegetation.

(6) A description of the measures to be used to maximize the use and conservation of the coal resource as required in 30 CFR 816.59;

(7) A description of measures to be employed to ensure that all debris, acid-forming and toxic-forming materials, and materials constituting a fire hazard are disposed of in accordance with 30 CFR 816.89 and 816.102 and a description of the contingency plans which have been developed to preclude sustained combustion of such materials;

(8) A description, including appropriate cross sections and maps, of the measures to be used to seal or manage mine openings, and to plug, case, or manage exploration holes, other bore holes, wells, and other openings within the proposed permit area, in accordance with 30 CFR 816.13 through 816.15; and

(9) A description of steps to be taken to comply with the requirements of the Clean Air Act (42 U.S.C. 7401 *et seq.*), the Clean Water Act (33 U.S.C. 1251 *et seq.*), and other applicable air and water quality laws and regulations and health and safety standards.

§780.21 Hydrologic information.

(a) *Sampling and analysis methodology.* All water-quality analyses performed to meet the requirements of this section shall be conducted according to the methodology in the 15th edition of “Standard Methods for the Examination of Water and Wastewater,” which is incorporated by reference, or the methodology in 40 CFR parts 136 and 434. Water quality sampling performed to meet the requirements of this section shall be conducted according to either methodology listed above when feasible. “Standard Methods for the Examination of Water and Wastewater,” is a joint publication of the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation and is available from the American Public Health Association, 1015 15th Street, NW., Washington, DC 20036. This document is also available for inspection at the Office of the OSM Administrative Record, U.S. Department of the Interior, Room 5315, 1100 L Street, NW., Washington, DC; at the

OSM Eastern Technical Service Center, U.S. Department of the Interior, Building 10, Parkway Center, Pittsburgh, Pa.; at the OSM Western Technical Service Center, U.S. Department of the Interior, Brooks Tower, 1020 15th Street, Denver, Colo or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html

. This incorporation by reference was approved by the Director of the Federal Register on October 26, 1983. This document is incorporated as it exists on the date of the approval, and a notice of any change in it will be published in the FEDERAL REGISTER.

(b) *Baseline information.* The application shall include the following baseline hydrologic information, and any additional information required by the regulatory authority.

(1) *Ground-water information.* The location and ownership for the permit and adjacent areas of existing wells, springs, and other ground-water resources, seasonal quality and quantity of ground water, and usage. Water quality descriptions shall include, at a minimum, total dissolved solids or specific conductance corrected to 25°C, pH, total iron, and total manganese. Ground-water quantity descriptions shall include, at a minimum, approximate rates of discharge or usage and depth to the water in the coal seam, and each water-bearing stratum above and potentially impacted stratum below the coal seam.

(2) *Surface-water information.* The name, location, ownership, and description of all surface-water bodies such as streams, lakes, and impoundments, the location of any

discharge into any surface-water body in the proposed permit and adjacent areas, and information on surface-water quality and quantity sufficient to demonstrate seasonal variation and water usage. Water quality descriptions shall include, at a minimum, baseline information on total suspended solids, total dissolved solids or specific conductance corrected to 25°C, pH, total iron, and total manganese. Baseline acidity and alkalinity information shall be provided if there is a potential for acid drainage from the proposed mining operation. Water quantity descriptions shall include, at a minimum, baseline information on seasonal flow rates.

(3) *Supplemental information.* If the determination of the probable hydrologic consequences (PHC) required by paragraph (f) of this section indicates that adverse impacts on or off the proposed permit area may occur to the hydrologic balance, or that acid-forming or toxic-forming material is present that may result in the contamination of ground-water or surface-water supplies, then information supplemental to that required under paragraphs (b) (1) and (2) of this section shall be provided to evaluate such probable hydrologic consequences and to plan remedial and reclamation activities. Such supplemental information may be based upon drilling, aquifer tests, hydrogeologic analysis of the water-bearing strata, flood flows, or analysis of other water quality or quantity characteristics.

(c) *Baseline cumulative impact area information.* (1) Hydrologic and geologic information for the cumulative impact area necessary to assess the probable cumulative hydrologic impacts of the proposed operation and all anticipated mining on surface- and ground-water systems as required by paragraph (g) of this section shall be provided to the regulatory authority if available from appropriate Federal or State agencies.

(2) If the information is not available from such agencies, then the applicant may gather and submit this information to the regulatory authority as part of the permit application.

(3) The permit shall not be approved until the necessary hydrologic and geologic information is available to the regulatory authority.

(d) *Modeling.* The use of modeling techniques, interpolation or statistical techniques may be included as part of the permit application, but actual surface- and ground-water information may be required by the regulatory authority for each site even when such techniques are used.

(e) *Alternative water source information.* If the PHC determination required by paragraph (f) of this section indicates that the proposed mining operation may proximately result in contamination, diminution, or interruption of an underground or surface source of water within the proposed permit or adjacent areas which is used for domestic, agricultural, industrial or other legitimate purpose, then the application shall contain information on water availability and alternative water sources, including the suitability of alternative water sources for existing permining uses and approved postmining land uses.

(f) *Probable hydrologic consequences determination.* (1) The application shall contain a determination of the probable hydrologic consequences (PHC) of the proposed operation upon the quality and quantity of surface and ground water under seasonal flow conditions for the proposed permit and adjacent areas.

(2) The PHC determination shall be based on baseline hydrologic, geologic and other information collected for the permit application and may include data statistically representative of the site.

(3) The PHC determination shall include findings on:

(i) Whether adverse impacts may occur to the hydrologic balance;

(ii) Whether acid-forming or toxic-forming materials are present that could result in the contamination of surface or ground water supplies;

(iii) Whether the proposed operation may proximately result in contamination, diminution or interruption of an underground or surface source of water within the proposed permit or adjacent areas which is used for domestic, agricultural, industrial or other legitimate purpose; and

(iv) What impact the proposed operation will have on:

(A) Sediment yields from the disturbed area; (B) acidity, total suspended and dissolved solids, and other important water quality parameters of local impact; (C) flooding or streamflow alteration; (D) ground water and surface water availability; and (E) other characteristics as required by the regulatory authority.

(4) An application for a permit revision shall be reviewed by the regulatory authority to determine whether a new or updated PHC determination shall be required.

(g) *Cumulative hydrologic impact assessment.* (1) The regulatory authority shall provide an assessment of the probable cumulative hydrologic impacts (CHIA) of the proposed operation and all anticipated mining upon surface- and ground-water systems

in the cumulative impact area. The CHIA shall be sufficient to determine, for purposes of permit approval, whether the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area. The regulatory authority may allow the applicant to submit data and analyses relevant to the CHIA with the permit application.

(2) An application for a permit revision shall be reviewed by the regulatory authority to determine whether a new or updated CHIA shall be required.

(h) *Hydrologic reclamation plan.* The application shall include a plan, with maps and descriptions, indicating how the relevant requirements of part 816, including §§816.41 to 816.43, will be met. The plan shall be specific to the local hydrologic conditions. It shall contain the steps to be taken during mining and reclamation through bond release to minimize disturbances to the hydrologic balance within the permit and adjacent areas; to prevent material damage outside the permit area; to meet applicable Federal and State water quality laws and regulations; and to protect the rights of present water users. The plan shall include the measures to be taken to: Avoid acid or toxic drainage; prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow; provide water-treatment facilities when needed; control drainage; restore approximate premining recharge capacity and protect or replace rights of present water users. The plan shall specifically address and potential adverse hydrologic consequences identified in the PHC determination prepared under paragraph (f) of this section and shall include preventive and remedial measures.

(i) *Ground-water monitoring plan.* (1) The application shall include a ground-water monitoring plan based upon the PHC determination required under paragraph (f) of this section and the analysis of all baseline hydrologic, geologic and other information in the permit application. The plan shall provide for the monitoring of parameters that relate to the suitability of the ground water for current and approved postmining land uses and to the objectives for protection of the hydrologic balance set forth in paragraph (h) of this section. It shall identify the quantity and quality parameters to be monitored, sampling frequency, and site locations. It shall describe how the data may be used to determine the impacts of the operation upon the hydrologic balance. At a minimum, total dissolved solids or specific conductance corrected to 25°C, pH, total iron, total manganese, and water levels shall be monitored and data submitted to the regulatory authority at least every 3 months for each monitoring location. The regulatory authority may require additional monitoring.

(2) If an applicant can demonstrate by the use of the PHC determination and other available information that a particular water-bearing stratum in the proposed permit and adjacent areas is not one which serves as an aquifer which significantly ensures the hydrologic balance within the cumulative impact area, then monitoring of that stratum may be waived by the regulatory authority.

(j) *Surface-water monitoring plan.* (1) The application shall include a surface-water monitoring plan based upon the PHC determination required under paragraph (f) of this section and the analysis of all baseline hydrologic, geologic, and other information in the permit application. The plan shall provide for the monitoring of parameters that relate to the suitability of the surface water for current and approved

postmined land uses and to the objectives for protection of the hydrologic balance as set forth in paragraph (h) of this section as well as the effluent limitations found at 40 CFR part 434.

(2) The plan shall identify the surface-water quantity and quality parameters to be monitored, sampling frequency and site locations. It shall describe how the data may be used to determine the impacts of the operation upon the hydrologic balance.

(i) At all monitoring locations in the surface-water bodies such as streams, lakes, and impoundments, that are potentially impacted or into which water will be discharged and at upstream monitoring locations the total dissolved solids or specific conductance corrected to 25°C, total suspended solids, pH, total iron, total manganese, and flow shall be monitored.

(ii) For point-source discharges, monitoring shall be conducted in accordance with 40 CFR parts 122, 123 and 434 and as required by the National Pollutant Discharge Elimination System permitting authority.

(3) The monitoring reports shall be submitted to the regulatory authority every 3 months. The regulatory authority may require additional monitoring.

§780.22 Geologic information.

(a) *General.* Each application shall include geologic information in sufficient detail to assist in determining—

(1) The probable hydrologic consequences of the operation upon the quality and quantity of surface and ground water in the permit and adjacent areas, including the extent to which surface- and ground-water monitoring is necessary;

(2) All potentially acid- or toxic-forming strata down to and including the stratum immediately below the lowest coal seam to be mined; and

(3) Whether reclamation as required by this chapter can be accomplished and whether the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area.

(b) Geologic information shall include, at a minimum the following:

(1) A description of the geology of the proposed permit and adjacent areas down to and including the deeper of either the stratum immediately below the lowest coal seam to be mined or any aquifer below the lowest coal seam to be mined which may be adversely impacted by mining. The description shall include the areal and structural geology of the permit and adjacent areas, and other parameters which influence the required reclamation and the occurrence, availability, movement, quantity, and quality of potentially impacted surface and ground waters. It shall be based on—

(i) The cross sections, maps and plans required by §779.25 of this chapter;

(ii) The information obtained under paragraphs (b)(2) and (c) of this section; and

(iii) Geologic literature and practices.

(2) Analyses of samples collected from test borings; drill cores; or fresh, unweathered, uncontaminated samples from rock outcrops from the permit area, down

to and including the deeper of either the stratum immediately below the lowest coal seam to be mined or any aquifer below the lowest seam to be mined which may be adversely impacted by mining. The analyses shall result in the following:

(i) Logs showing the lithologic characteristics including physical properties and thickness of each stratum and location of ground water where occurring;

(ii) Chemical analyses identifying those strata that may contain acid- or toxic-forming or alkalinity-producing materials and to determine their content except that the regulatory authority may find that the analysis for alkalinity-producing materials is unnecessary; and

(iii) Chemical analyses of the coal seam for acid- or toxic-forming materials, including the total sulfur and pyritic sulfur, except that the regulatory authority may find that the analysis of pyritic sulfur content is unnecessary.

(c) If determined to be necessary to protect the hydrologic balance or to meet the performance standards of this chapter, the regulatory authority may require the collection, analysis, and description of geologic information in addition to that required by paragraph (b) of this section.

(d) An applicant may request the regulatory authority to waive in whole or in part the requirements of paragraph (b)(2) of this section. The waiver may be granted only if the regulatory authority finds in writing that the collection and analysis of such data is unnecessary because other equivalent information is available to the regulatory authority in a satisfactory form.

§780.23 Reclamation plan: Land use information.

(a) The plan shall contain a statement of the condition, capability, and productivity of the land within the proposed permit area, including:

(1) A map and supporting narrative of the uses of the land existing at the time of the filing of the application. If the premining use of the land was changed within 5 years before the anticipated date of beginning the proposed operations, the historic use of the land shall also be described. In the case of previously mined land, the use of the land prior to any mining shall also be described to the extent such information is available.

(2) A narrative of land capability and productivity, which analyzes the land-use description under paragraph (a) of this section in conjunction with other environmental resources information. The narrative shall provide analyses of:

(i) The capability of the land before any mining to support a variety of uses, giving consideration to soil and foundation characteristics, topography, vegetative cover, and the hydrology of the proposed permit area; and

(ii) The productivity of the proposed permit area before mining, expressed as average yield of food, fiber, forage, or wood products from such lands obtained under high levels of management. The productivity shall be determined by yield data or estimates for similar sites based on current data from the U.S. Department of Agriculture, State agricultural universities, or appropriate State natural resource or agricultural agencies.

(b) Each plan shall contain a detailed description of the proposed use, following reclamation, of the land within the proposed permit area, including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use of existing land use policies and plans. This description shall explain:

(1) How the proposed post mining land use is to be achieved and the necessary support activities which may be needed to achieve the proposed land use; and

(2) Where a land use different from the premining land use is proposed, all materials needed for approval of the alternative use under 30 CFR 816.133.

(3) The consideration which has been given to making all of the proposed surface mining activities consistent with surface owner plans and applicable State and local land use plans and programs.

(c) The description shall be accompanied by a copy of the comments concerning the proposed use by the legal or equitable owner of record of the surface of the proposed permit area and the State and local government agencies which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation.

§780.25 Reclamation plan: Siltation structures, impoundments, banks, dams, and embankments.

(a) *General.* Each application shall include a general plan and a detailed design plan for each proposed siltation structure, water impoundment, and coal processing waste bank, dam, or embankment within the proposed permit area.

(1) Each general plan shall—(i) Be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer, a professional geologist, or in any State which authorizes land surveyors to prepare and certify such plans, a qualified, registered, professional, land surveyor, with assistance from experts in related fields such as landscape architecture;

(ii) Contain a description, map, and cross section of the structure and its location;

(iii) Contain preliminary hydrologic and geologic information required to assess the hydrologic impact of the structure;

(iv) Contain a survey describing the potential effect on the structure from subsidence of the subsurface strata resulting from past underground mining operations if underground mining has occurred; and

(v) Contain a certification statement which includes a schedule setting forth the dates that any detailed design plans for structures that are not submitted with the general plan will be submitted to the regulatory authority. The regulatory authority shall have approved, in writing, the detailed design plan for a structure before construction of the structure begins.

(2) Impoundments meeting the Class B or C criteria for dams in the U.S.

Department of Agriculture, Soil Conservation Service Technical Release No. 60 (210-

VI-TR60, Oct. 1985), "Earth Dams and Reservoirs," Technical Release No. 60 (TR-60) shall comply with the requirements of this section for structures that meet or exceed the size of other criteria of the Mine Safety and Health Administration (MSHA). The technical release is hereby incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. TR-60 may be viewed and downloaded from OSM's Web site at <http://www.osmre.gov/programs/TDT/damsafety.shtm>. It also is available for inspection at the OSM Headquarters Office, Office of Surface Mining Reclamation and Enforcement, Administrative Record, Room 252, 1951 Constitution Ave. NW., Washington, DC or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. Each detailed design plan for a structure that meets or exceeds the size or other criteria of MSHA, §77.216(a) of this chapter shall:

(i) Be prepared by, or under the direction of, and certified by a qualified registered professional engineer with assistance from experts in related fields such as geology, land surveying, and landscape architecture;

(ii) Include any geotechnical investigation, design, and construction requirements for the structure;

(iii) Describe the operation and maintenance requirements for each structure;
and

(iv) Describe the timetable and plans to remove each structure, if appropriate.

(3) Each detailed design plan for structures not included in paragraph (a)(2) of this section shall:

(i) Be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer, or in any State which authorizes land surveyors to prepare and certify such plans, a qualified, registered, professional land surveyor, except that all coal processing waste dams and embankments covered by §§816.81-816.84 of this chapter shall be certified by a qualified, registered, professional engineer;

(ii) Include any design and construction requirements for the structure, including any required geotechnical information;

(iii) Describe the operation and maintenance requirements for each structure; and

(iv) Describe the timetable and plans to remove each structure, if appropriate.

(b) *Siltation structures.* Siltation structures shall be designed in compliance with the requirements of §816.46 of this chapter.

(c) *Permanent and temporary impoundments.* (1) Permanent and temporary impoundments shall be designed to comply with the requirements of §816.49 of this chapter.

(2) Each plan for an impoundment meeting the size or other criteria of the Mine Safety and Health Administration shall comply with the requirements of §§77.216-1 and 77.216-2 of this title. The plan required to be submitted to the District Manager of MSHA

under §77.216 of this title shall be submitted to the regulatory authority as part of the permit application in accordance with paragraph (a) of this section.

(3) For impoundments not included in paragraph (a)(2) of this section, the regulatory authority may establish through the State program approval process, engineering design standards that ensure stability comparable to a 1.3 minimum static safety factor in lieu of engineering tests to establish compliance with the minimum static safety factor of 1.3 specified in §816.49(a)(4)(ii) of this chapter.

(d) *Coal processing waste banks.* Coal processing waste banks shall be designed to comply with the requirements of 30 CFR 816.81-816.84.

(e) *Coal processing waste dams and embankments.* Coal processing waste dams and embankments shall be designed to comply with the requirements of 30 CFR 816.81-816.84. Each plan shall comply with the requirements of the Mine Safety and Health Administration, 30 CFR 77.216-1 and 77.216-2, and shall contain the results of a geotechnical investigation of the proposed dam or embankment foundation area, to determine the structural competence of the foundation which will support the proposed dam or embankment structure and the impounded material. The geotechnical investigation shall be planned and supervised by an engineer or engineering geologist, according to the following:

(1) The number, location, and depth of borings and test pits shall be determined using current prudent engineering practice for the size of the dam or embankment, quantity of material to be impounded, and subsurface conditions.

(2) The character of the overburden and bedrock, the proposed abutment sites, and any adverse geotechnical conditions which may affect the particular dam, embankment, or reservoir site shall be considered.

(3) All springs, seepage, and ground water flow observed or anticipated during wet periods in the area of the proposed dam or embankment shall be identified on each plan.

(4) Consideration shall be given to the possibility of mudflows, rock-debris falls, or other landslides into the dam, embankment, or impounded material.

(f) If the structure meets the Class B or C criteria for dams in TR-60 or meets the size or other criteria of §77.216(a) of this chapter, each plan under paragraphs (b), (c), and (e) of this section shall include a stability analysis of the structure. The stability analysis shall include, but not be limited to, strength parameters, pore pressures, and long-term seepage conditions. The plan shall also contain a description of each engineering design assumption and calculation with a discussion of each alternative considered in selecting the specific design parameters and construction methods.

§780.27 Reclamation plan: Surface mining near underground mining.

For surface mining activities within the proposed permit area to be conducted within 500 feet of an underground mine, the application shall describe the measures to be used to comply with 30 CFR 816.79.

§780.28 [Reserved]

§780.29 Diversions.

Each application shall contain descriptions, including maps and cross sections, of stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with 30 CFR 816.43 of this chapter.

§780.31 Protection of publicly owned parks and historic places.

(a) For any publicly owned parks or any places listed on the National Register of Historic Places that may be adversely affected by the proposed operation, each plan shall describe the measures to be used—

(1) To prevent adverse impacts, or

(2) If a person has valid existing rights, as determined under §761.16 of this chapter, or if joint agency approval is to be obtained under §761.17(d) of this chapter, to minimize adverse impacts.

(b) The regulatory authority may require the applicant to protect historic or archeological properties listed on or eligible for listing on the National Register of Historic Places through appropriate mitigation and treatment measures. Appropriate mitigation and treatment measures may be required to be taken after permit issuance

provided that the required measures are completed before the properties are affected by any mining operation.

§780.33 Relocation or use of public roads.

Each application shall describe, with appropriate maps and cross-sections, the measures to be used to ensure that the interests of the public and landowners affected are protected if, under §761.14 of this chapter, the applicant seeks to have the regulatory authority approve—

(a) Conducting the proposed surface mining activities within 100 feet of the right-of-way line of any public road, except where mine access or haul roads join that right-of-way; or

(b) Relocating a public road.

§780.35 Disposal of excess spoil.

(a) Each application shall contain descriptions, including appropriate maps and cross section drawings, of the proposed disposal site and design of the spoil disposal structures according to 30 CFR 816.71-816.74. These plans shall describe the geotechnical investigation, design, construction, operation, maintenance, and removal, if appropriate, of the site and structures.

(b) Except for the disposal of excess spoil on pre existing benches, each application shall contain the results of a geotechnical investigation of the proposed disposal site, including the following:

(1) The character of bedrock and any adverse geologic conditions in the disposal area,

(2) A survey identifying all springs, seepage, and ground water flow observed or anticipated during wet periods in the area of the disposal site;

(3) A survey of the potential effects of subsidence of the subsurface strata due to past and future mining operations;

(4) A technical description of the rock materials to be utilized in the construction of those disposal structures containing rock chimney cores or underlain by a rock drainage blanket; and

(5) A stability analysis including, but not limited to, strength parameters, pore pressures and long-term seepage conditions. These data shall be accompanied by a description of all engineering design assumptions and calculations and the alternatives considered in selecting the specific design specifications and methods.

(c) If, under 30 CFR 816.71(d), rock-toe buttresses or key-way cuts are required, the application shall include the following:

(1) The number, location, and depth of borings or test pits which shall be determined with respect to the size of the spoil disposal structure and subsurface conditions; and

(2) Engineering specifications utilized to design the rock-toe buttress or key-way cuts which shall be determined in accordance with paragraph (b)(5) of this section.

§780.37 Road systems.

(a) *Plans and drawings.* Each applicant for a surface coal mining and reclamation permit shall submit plans and drawings for each road, as defined in §701.5 of this chapter, to be constructed, used, or maintained within the proposed permit area. The plans and drawings shall—

(1) Include a map, appropriate cross sections, design drawings and specifications for road widths, gradients, surfacing materials, cuts, fill embankments, culverts, bridges, drainage ditches, low-water crossings, and drainage structures;

(2) Contain the drawings and specifications of each proposed road that is located in the channel of an intermittent or perennial stream, as necessary for approval of the road by the regulatory authority in accordance with §816.150(d)(1) of this chapter;

(3) Contain the drawings and specifications for each proposed ford of perennial or intermittent streams that is used as a temporary route, as necessary for approval of the ford by the regulatory authority in accordance with §816.151(c)(2) of this chapter;

(4) Contain a description of measures to be taken to obtain approval of the regulatory authority for alteration or relocation of a natural stream channel under §816.151(d)(5) of this chapter;

(5) Contain the drawings and specifications for each low-water crossing of perennial or intermittent stream channels so that the regulatory authority can maximize the protection of the stream in accordance with §816.151(d)(6) of this chapter; and

(6) Describe the plans to remove and reclaim each road that would not be retained under an approved postmining land use, and the schedule for this removal and reclamation.

(b) *Primary road certification.* The plans and drawings for each primary road shall be prepared by, or under the direction of, and certified by a qualified registered professional engineer, or in any State which authorizes land surveyors to certify the design of primary roads a qualified registered professional land surveyor, with experience in the design and construction of roads, as meeting the requirements of this chapter; current, prudent engineering practices; and any design criteria established by the regulatory authority.

(c) *Standard design plans.* The regulatory authority may establish engineering design standards for primary roads through the State program approval process, in lieu of engineering tests, to establish compliance with the minimum static safety factor of 1.3 for all embankments specified in §816.151(b) of this chapter.

§780.38 Support facilities.

Each applicant for a surface coal mining and reclamation permit shall submit a description, plans, and drawings for each support facility to be constructed, used, or

maintained within the proposed permit area. The plans and drawings shall include a map, appropriate cross sections, design drawings, and specifications sufficient to demonstrate compliance with §816.181 of this chapter for each facility.

8. Revise part 783 to read as follows:

**PART 783—UNDERGROUND MINING PERMIT APPLICATIONS—MINIMUM
REQUIREMENTS FOR INFORMATION ON ENVIRONMENTAL RESOURCES**

Sec.

- 783.1 Scope.
- 783.2 Objectives.
- 783.4 Responsibilities.
- 783.10 Information collection.
- 783.11 General requirements.
- 783.12 General environmental resources information.
- 783.18 Climatological information.
- 783.19 Vegetation information.
- 783.20 [Reserved]
- 783.21 Soil resources information.
- 783.24 Maps: General requirements.
- 783.25 Cross sections, maps, and plans.

AUTHORITY: 30 U.S.C. 1201 *et seq.*; sec. 115 of Pub. L. 98-146, (30 U.S.C. 1257), and 16 U.S.C. 470 *et seq.*

§783.1 Scope.

This part establishes the minimum requirements for the Secretary's approval of regulatory program provisions for the environmental resources contents of applications for permits for underground mining activities.

§783.2 Objectives.

The objectives of this part are to ensure that each application provides to the regulatory authority a complete and accurate description of the environmental resources that may be impacted or affected by proposed underground mining activities.

§783.4 Responsibilities.

(a) It is the responsibility of the applicant to provide, except where specifically exempted in this part, all information required by this part in the application.

(b) It is the responsibility of State and Federal Government agencies to provide information for applications as specifically required by this part.

§783.10 Information collection.

The information collection requirements contained in 30 CFR 783.11, 783.12, 783.13, 783.14, 783.15, 783.16, 783.17, 783.18, 783.19, 783.21, 783.22, 783.23, 783.24 and 783.25 have been approved by the Office of Management and Budget under 44 U.S.C. 3507 and assigned clearance number 1029-0038. The information is being collected to meet the requirements of sections 507 and 508 of Pub. L. 95-87, which require the permit applicant to present an adequate description of the existing pre-mining environmental resources within and around the proposed mine plan area. This information will be used by the regulatory authority to determine whether the applicant can comply with the performance standards for underground mining. The obligation to respond is mandatory.

§783.11 General requirements.

Each permit application shall include a description of the existing, premining environmental resources within the proposed permit area and adjacent areas that may be affected or impacted by the proposed underground mining activities.

§783.12 General environmental resources information.

Each application shall describe and identify—

(a) The lands subject to surface coal mining operations over the estimated life of those operations and the size, sequence, and timing of the subareas for which it is anticipated that individual permits for mining will be sought; and

(b) The nature of cultural historic and archeological resources listed or eligible for listing on the National Register of Historic Places and known archeological sites within the proposed permit and adjacent areas.

(1) The description shall be based on all available information, including, but not limited to, information from the State Historic Preservation Officer and local archeological, historical, and cultural preservation groups.

(2) The regulatory authority may require the applicant to identify and evaluate important historic and archeological resources that may be eligible for listing on the National Register of Historic Places, through the—

- (i) Collection of additional information,
- (ii) Conduct of field investigations, or
- (iii) Other appropriate analyses.

§783.18 Climatological information.

(a) When requested by the regulatory authority, the application shall contain a statement of the climatological factors that are representative of the proposed permit area, including—

- (1) The average seasonal precipitation;
- (2) The average direction and velocity of prevailing winds; and
- (3) Seasonal temperature ranges.

(b) The regulatory authority may request such additional data as deemed necessary to ensure compliance with the requirements of this subchapter.

§783.19 Vegetation information.

(a) The permit application shall, if required by the regulatory authority, contain a map that delineates existing vegetative types and a description of the plant communities within the area affected by surface operations and facilities and within any proposed reference area. This description shall include information adequate to predict the potential for reestablishing vegetation.

(b) When a map or aerial photograph is required, sufficient adjacent areas shall be included to allow evaluation of vegetation as important habitat for fish and wildlife for those species of fish and wildlife identified under 30 CFR 784.21.

§783.20 [Reserved]

§783.21 Soil resources information.

(a) The applicant shall provide adequate soil survey information on those portions of the permit area to be affected by surface operations or facilities consisting of the following:

- (1) A map delineating different soils;
- (2) Soil identification;
- (3) Soil description; and
- (4) Present and potential productivity of existing soils.

(b) Where the applicant proposes to use selected overburden materials as a supplement or substitute for topsoil, the application shall provide results of the analyses, trials and tests required under 30 CFR 817.22.

§783.24 Maps: General requirements.

The permit application shall include maps showing:

- (a) All boundaries of lands and names of present owners of record of those lands, both surface and sub-surface, included in or contiguous to the permit area;
- (b) The boundaries of land within the proposed permit area upon which the applicant has the legal right to enter and begin underground mining activities;
- (c) The boundaries of all areas proposed to be affected over the estimated total life of the underground mining activities, with a description of size, sequence and timing of the mining of sub-areas for which it is anticipated that additional permits will be sought;

(d) The location of all buildings in and within 1000 feet of the proposed permit area, with identification of the current use of the buildings;

(e) The location of surface and sub-surface man-made features within, passing through, or passing over the proposed permit area, including, but not limited to, major electric transmission lines, pipelines, and agricultural drainage tile fields;

(f) The location and boundaries of any proposed reference areas for determining the success of revegetation;

(g) The locations of water supply intakes for current users of surface waters flowing into, out of, and within a hydrologic area defined by the regulatory authority, and those surface waters which will receive discharges from affected areas in the proposed permit area;

(h) Each public road located in or within 100 feet of the proposed permit area;

(i) The boundaries of any public park and locations of any cultural or historical resources listed or eligible for listing in the National Register of Historic Places and known archeological sites within the permit and adjacent areas.

(j) Each cemetery that is located in or within 100 feet of the proposed permit area.

(k) Any land within the proposed permit area which is within the boundaries of any units of the National System of Trails or the Wild and Scenic Rivers System, including study rivers designated under section 5(a) of the Wild and Scenic Rivers Act; and

(l) Other relevant information required by the regulatory authority.

§783.25 Cross sections, maps, and plans.

(a) The application shall include cross sections, maps, and plans showing—

(1) Elevations and locations of test borings and core samplings;

(2) Elevations and locations of monitoring stations used to gather data on water quality and quantity, fish and wildlife, and air quality, if required, in preparation of the application.

(3) Nature, depth, and thickness of the coal seams to be mined, any coal or rider seams above the seam to be mined, each stratum of the overburden, and the stratum immediately below the lowest coal seam to be mined;

(4) All coal crop lines and the strike and dip of the coal to be mined within the proposed permit area;

(5) Location and extent of known workings of active, inactive, or abandoned underground mines, including mine openings to the surface within the proposed permit and adjacent areas;

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

(7) Location of surface water bodies such as streams, lakes, ponds, springs, constructed or natural drains, and irrigation ditches within the proposed permit and adjacent areas;

(8) Location and extent of existing or previously surface-mined areas within the proposed permit area;

(9) Location and dimensions of existing areas of spoil, waste, coal development waste, and non-coal waste disposal, dams, embankments, other impoundments, and water treatment and air pollution control facilities within the proposed permit area;

(10) Location, and depth if available, of gas and oil wells within the proposed permit area and water wells in the permit area and adjacent areas;

(b) Cross-sections, maps and plans included in a permit application as required by this section shall be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer, a professional geologist, or in any State which authorizes land surveyors to prepare and certify such cross sections, maps and plans, a qualified, registered, professional, land surveyor, with assistance from experts in related fields such as landscape architecture, and shall be updated as required by the regulatory authority.

9. Revise part 784 to read as follows:

**PART 784—UNDERGROUND MINING PERMIT APPLICATIONS—MINIMUM
REQUIREMENTS FOR RECLAMATION AND OPERATION PLAN**

Sec.

- 784.1 Scope.
- 784.2 Objectives.
- 784.4 Responsibilities.
- 784.10 Information collection.
- 784.11 Operation plan: General requirements.
- 784.12 Operation plan: Existing structures.
- 784.13 Reclamation plan: General requirements.
- 784.14 Hydrologic information.

- 784.15 Reclamation plan: Land use information.
- 784.16 Reclamation plan: Siltation structures, impoundments, banks, dams, and embankments.
- 784.17 Protection of publicly owned parks and historic places.
- 784.18 Relocation or use of public roads.
- 784.19 Underground development waste.
- 784.20 Subsidence control plan.
- 784.21 Fish and wildlife information.
- 784.22 Geologic information.
- 784.23 Operation plan: Maps and plans.
- 784.24 Road systems.
- 784.25 Return of coal processing waste to abandoned underground workings.
- 784.26 Air pollution control plan.
- 784.29 Diversions.
- 784.30 Support facilities.
- 784.200 Interpretive rules related to General Performance Standards.

AUTHORITY: 30 U.S.C. 1201 *et seq.* and 16 U.S.C. 470 *et seq.*

§784.1 Scope.

This part provides the minimum requirements for the Secretary's approval of regulatory program provisions for the mining operations and reclamation plans portions of applications for permits for underground mining activities, except to the extent that different requirements for those plans are established under 30 CFR part 785.

§784.2 Objectives.

The objectives of this part are to ensure that the regulatory authority is provided with comprehensive and reliable information on proposed underground mining activities, and to ensure that those activities are allowed to be conducted only in compliance with the Act, this chapter, and the regulatory program.

§784.4 Responsibilities.

(a) It is the responsibility of the applicant to provide to the regulatory authority all of the information required by this part, except where specifically exempted in this part.

(b) It is the responsibility of State and Federal governmental agencies to provide information to the regulatory authority where specifically required in this part.

§784.10 Information collection.

(a) The collections of information contained in part 784 have been approved by Office of Management and Budget under 44 U.S.C. 3501 *et seq.* and assigned clearance number 1029-0039. The information will be used to meet the requirements of 30 U.S.C. 1211(b), 1251, 1257, 1258, 1266, and 1309a. The obligation to respond is required to obtain a benefit.

(b) Public reporting burden for this information is estimated to average 513 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

§784.11 Operation plan: General requirements.

Each application shall contain a description of the mining operations proposed to be conducted during the life of the mine within the proposed permit area, including, at a minimum, the following:

(a) A narrative description of the type and method of coal mining procedures and proposed engineering techniques, anticipated annual and total production of coal, by tonnage, and the major equipment to be used for all aspects of those operations; and

(b) A narrative explaining the construction, modification, use, maintenance, and removal of the following facilities (unless retention of such facility is necessary for postmining land use as specified in §817.133):

- (1) Dams, embankments, and other impoundments;
- (2) Overburden and topsoil handling and storage areas and structures;
- (3) Coal removal, handling, storage, cleaning, and transportation areas and structures;
- (4) Spoil, coal processing waste, mine development waste, and non-coal waste removal, handling, storage, transportation, and disposal areas and structures;
- (5) Mine facilities; and
- (6) Water pollution control facilities.

§784.12 Operation plan: Existing structures.

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

- (1) Location;
- (2) Plans of the structure which describe its current condition;
- (3) Approximate dates on which construction of the existing structure was begun and completed; and
- (4) A showing, including relevant monitoring data or other evidence, whether the structure meets the performance standards of subchapter K (Permanent Program Standards) of this chapter or, if the structure does not meet the performance standards

of subchapter K of this chapter, a showing whether the structure meets the performance standards of subchapter B (Interim Program Standards) of this chapter.

(b) Each application shall contain a compliance plan for each existing structure proposed to be modified or reconstructed for use in connection with or to facilitate the surface coal mining and reclamation operation. The compliance plan shall include—

(1) Design specifications for the modification or reconstruction of the structure to meet the design and performance standards of subchapter K of this chapter;

(2) A construction schedule which shows dates for beginning and completing interim steps and final reconstruction;

(3) Provisions for monitoring the structure during and after modification or reconstruction to ensure that the performance standards of subchapter K of this chapter are met; and

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

§784.13 Reclamation plan: General requirements.

(a) Each application shall contain a plan for the reclamation of the lands within the proposed permit area, showing how the applicant will comply with sections 515 and 516 of the Act, subchapter K of this chapter, and the environmental protection performance standards of the regulatory program. The plan shall include, at a minimum, all information required under 30 CFR 784.13 through 784.26.

(b) Each plan shall contain the following information for the proposed permit area;

(1) A detailed timetable for the completion of each major step in the reclamation plan;

(2) A detailed estimate of the cost of the reclamation of the proposed operations required to be covered by a performance bond under subchapter J of this chapter, with supporting calculations for the estimates;

(3) A plan for backfilling, soil stabilization, compacting and grading, with contour maps or cross sections that show the anticipated final surface configuration of the proposed permit area, in accordance with 30 CFR 817.102 through 817.107;

(4) A plan for removal, storage, and redistribution of topsoil, subsoil, and other material to meet the requirements of §817.22 of this chapter. A demonstration of the suitability of topsoil substitutes or supplements under §817.22(b) of this chapter shall be based upon analysis of the thickness of soil horizons, total depth, texture, percent coarse fragments, pH, and areal extent of the different kinds of soils. The regulatory authority may require other chemical and physical analyses, field-site trials, or greenhouse tests if determined to be necessary or desirable to demonstrate the suitability of the topsoil substitutes or supplements.

(5) A plan for revegetation as required in 30 CFR 817.111 through 817.116, including, but not limited to, descriptions of the—

(i) Schedule of revegetation;

(ii) Species and amounts per acre of seeds and seedlings to be used;

(iii) Methods to be used in planting and seeding;

(iv) Mulching techniques;

(v) Irrigation, if appropriate, and pest and disease control measures, if any;

(vi) Measures proposed to be used to determine the success of revegetation as required in 30 CFR 817.116; and,

(vii) A soil testing plan for evaluation of the results of topsoil handling and reclamation procedures related to revegetation.

(6) A description of the measures to be used to maximize the use and conservation of the coal resource as required in 30 CFR 817.59;

(7) A description of measures to be employed to ensure that all debris, acid-forming and toxic-forming materials, and materials constituting a fire hazard are disposed of in accordance with 30 CFR 817.89 and 817.102 and a description of the contingency plans which have been developed to preclude sustained combustion of such materials;

(8) A description, including appropriate cross sections and maps, of the measures to be used to seal or manage mine openings, and to plug, case or manage exploration holes, other bore holes, wells and other openings within the proposed permit area, in accordance with 30 CFR 817.13-817.15; and

(9) A description of steps to be taken to comply with the requirements of the Clean Air Act (42 U.S.C. 7401 *et seq.*), the Clean Water Act (33 U.S.C. 1251 *et seq.*), and other applicable air and water quality laws and regulations and health and safety standards.

§784.14 Hydrologic information.

(a) *Sampling and analysis.* All water quality analyses performed to meet the requirements of this section shall be conducted according to the methodology in the

15th edition of “Standard Methods for the Examination of Water and Wastewater,” which is incorporated by reference, or the methodology in 40 CFR parts 136 and 434. Water quality sampling performed to meet the requirements of this section shall be conducted according to either methodology listed above when feasible. “Standard Methods for the Examination of Water and Wastewater,” is a joint publication of the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation and is available from the American Public Health Association, 1015 Fifteenth Street, NW., Washington, DC 20036. This document is also available for inspection at the Office of the OSM Administrative Record, U.S. Department of the Interior, Room 5315, 1100 L Street, NW., Washington, DC; at the OSM Eastern Technical Service Center, U.S. Department of the Interior, Building 10, Parkway Center, Pittsburgh, Pa.; at the OSM Western Technical Service Center, U.S. Department of the Interior, Brooks Tower, 1020 15th Street, Denver, Colo or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html

. This incorporation by reference was approved by the Director of the Federal Register on October 26, 1983. This document is incorporated as it exists on the date of the approval, and a notice of any change in it will be published in the FEDERAL REGISTER.

(b) *Baseline information.* The application shall include the following baseline hydrologic information, and any additional information required by the regulatory authority.

(1) *Ground-water information.* The location and ownership for the permit and adjacent areas of existing wells, springs, and other ground-water resources, seasonal quality and quantity of ground water, and usage. Water quality descriptions shall include, at a minimum, total dissolved solids or specific conductance corrected to 25°C, pH, total iron, and total manganese. Ground-water quantity descriptions shall include, at a minimum, approximate rates of discharge or usage and depth to the water in the coal seam, and each water-bearing stratum above and potentially impacted stratum below the coal seam.

(2) *Surface-water information.* The name, location, ownership and description of all surface-water bodies such as streams, lakes, and impoundments, the location of any discharge into any surface-water body in the proposed permit and adjacent areas, and information on surface-water quality and quantity sufficient to demonstrate seasonal variation and water usage. Water quality descriptions shall include, at a minimum, baseline information on total suspended solids, total dissolved solids or specific conductance corrected to 25°C, pH, total iron, and total manganese. Baseline acidity and alkalinity information shall be provided if there is a potential for acid drainage from the proposed mining operation. Water quantity descriptions shall include, at a minimum, baseline information on seasonal flow rates.

(3) *Supplemental information.* If the determination of the probable hydrologic consequences (PHC) required by paragraph (e) of this section indicates that adverse impacts on or off the proposed permit area may occur to the hydrologic balance, or that acid-forming or toxic-forming material is present that may result in the contamination of ground-water or surface-water supplies, then information supplemental to that required

under paragraphs (b) (1) and (2) of this section shall be provided to evaluate such probable hydrologic consequences and to plan remedial and reclamation activities. Such supplemental information may be based upon drilling, aquifer tests, hydrogeologic analysis of the water-bearing strata, flood flows, or analysis of other water quality or quantity characteristics.

(c) *Baseline cumulative impact area information.* (1) Hydrologic and geologic information for the cumulative impact area necessary to assess the probable cumulative hydrologic impacts of the proposed operation and all anticipated mining on surface- and ground-water systems as required by paragraph (f) of this section shall be provided to the regulatory authority if available from appropriate Federal or State agencies.

(2) If this information is not available from such agencies, then the applicant may gather and submit this information to the regulatory authority as part of the permit application.

(3) The permit shall not be approved until the necessary hydrologic and geologic information is available to the regulatory authority.

(d) *Modeling.* The use of modeling techniques, interpolation or statistical techniques may be included as part of the permit application, but actual surface- and ground-water information may be required by the regulatory authority for each site even when such techniques are used.

(e) *Probable hydrologic consequences determination.* (1) The application shall contain a determination of the probable hydrologic consequences (PHC) of the proposed operation upon the quality and quantity of surface and ground water under seasonal flow conditions for the proposed permit and adjacent areas.

(2) The PHC determination shall be based on baseline hydrologic, geologic, and other information collected for the permit application and may include data statistically representative of the site.

(3) The PHC determination shall include findings on:

(i) Whether adverse impacts may occur to the hydrologic balance;

(ii) Whether acid-forming or toxic-forming materials are present that could result in the contamination of surface or ground water supplies;

(iii) What impact the proposed operation will have on:

(A) Sediment yield from the disturbed area; (B) acidity, total suspended and dissolved solids, and other important water quality parameters of local impact; (C) flooding or streamflow alteration; (D) ground water and surface water availability; and (E) other characteristics as required by the regulatory authority;

(iv) Whether the underground mining activities conducted after October 24, 1992 may result in contamination, diminution or interruption of a well or spring in existence at the time the permit application is submitted and used for domestic, drinking, or residential purposes within the permit or adjacent areas.

(4) An application for a permit revision shall be reviewed by the regulatory authority to determine whether a new or updated PHC shall be required.

(f) *Cumulative hydrologic impact assessment.* (1) The regulatory authority shall provide an assessment of the probable cumulative hydrologic impacts (CHIA) of the proposed operation and all anticipated mining upon surface- and ground-water systems in the cumulative impact area. The CHIA shall be sufficient to determine, for purposes of permit approval, whether the proposed operation has been designed to prevent material

damage to the hydrologic balance outside the permit area. The regulatory authority may allow the applicant to submit data and analyses relevant to the CHIA with the permit application.

(2) An application for a permit revision shall be reviewed by the regulatory authority to determine whether a new or updated CHIA shall be required.

(g) *Hydrologic reclamation plan.* The application shall include a plan, with maps and descriptions, indicating how the relevant requirements of part 817 of this chapter, including §§817.41 to 817.43, will be met. The plan shall be specific to the local hydrologic conditions. It shall contain the steps to be taken during mining and reclamation through bond release to minimize disturbance to the hydrologic balance within the permit and adjacent areas; to prevent material damage outside the permit area; and to meet applicable Federal and State water quality laws and regulations. The plan shall include the measures to be taken to: avoid acid or toxic drainage; prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow; provide water treatment facilities when needed; and control drainage. The plan shall specifically address any potential adverse hydrologic consequences identified in the PHC determination prepared under paragraph (e) of this section and shall include preventive and remedial measures.

(h) *Ground-water monitoring plan.* (1) The application shall include a ground-water monitoring plan based upon the PHC determination required under paragraph (e) of this section and the analysis of all baseline hydrologic, geologic and other information in the permit application. The plan shall provide for the monitoring of parameters that relate to the suitability of the ground water for current and approved postmining land

uses and to the objectives for protection of the hydrologic balance set forth in paragraph (g) of this section. It shall identify the quantity and quality parameters to be monitored, sampling frequency and site locations. It shall describe how the data may be used to determine the impacts of the operation upon the hydrologic balance. At a minimum, total dissolved solids or specific conductance corrected to 25°C, pH, total iron, total manganese, and water levels shall be monitored and data submitted to the regulatory authority at least every 3 months for each monitoring location. The regulatory authority may require additional monitoring.

(2) If an applicant can demonstrate by the use of the PHC determination and other available information that a particular water-bearing stratum in the proposed permit and adjacent areas is not one which serves as an aquifer which significantly ensures the hydrologic balance within the cumulative impact area, then monitoring of that stratum may be waived by the regulatory authority.

(i) *Surface-water monitoring plan.* (1) The application shall include a surface-water monitoring plan based upon the PHC determination required under paragraph (e) of this section and the analysis of all baseline hydrologic, geologic and other information in the permit application. The plan shall provide for the monitoring of parameters that relate to the suitability of the surface water for current and approved postmining land uses and to the objectives for protection of the hydrologic balance as set forth in paragraph (g) of this section as well as the effluent limitations found at 40 CFR part 434.

(2) The plan shall identify the surface-water quantity and quality parameters to be monitored, sampling frequency and site locations. It shall describe how the data may be used to determine the impacts of the operation upon the hydrologic balance.

(i) At all monitoring locations in streams, lakes, and impoundments, that are potentially impacted or into which water will be discharged and at upstream monitoring locations, the total dissolved solids or specific conductance corrected at 25°C, total suspended solids, pH, total iron, total manganese, and flow shall be monitored.

(ii) For point-source discharges, monitoring shall be conducted in accordance with 40 CFR parts 122, 123 and 434 and as required by the National Pollutant Discharge Elimination System permitting authority.

(3) The monitoring reports shall be submitted to the regulatory authority every 3 months. The regulatory authority may require additional monitoring.

§784.15 Reclamation plan: Land use information.

(a) The plan shall contain a statement of the condition, capability, and productivity of the land within the proposed permit area, including:

(1) A map and supporting narrative of the uses of the land existing at the time of the filing of the application. If the premining use of the land was changed within 5 years before the anticipated date of beginning the proposed operations, the historic use of the land shall also be described. In the case of previously mined land, the use of the land prior to any mining shall also be described to the extent such information is available.

(2) A narrative of land capability and productivity, which analyzes the land-use description under paragraph (a) of this section in conjunction with other environmental resources information. The narrative shall provide analyses of:

(i) The capability of the land before any mining to support a variety of uses, giving consideration to soil and foundation characteristics, topography, vegetative cover, and the hydrology of the proposed permit area; and

(ii) The productivity of the proposed permit area before mining, expressed as average yield of food, fiber, forage, or wood products from such lands obtained under high levels of management. The productivity shall be determined by yield data or estimates for similar sites based on current data from the U.S. Department of Agriculture, State agricultural universities, or appropriate State natural resource or agricultural agencies.

(b) Each plan shall contain a detailed description of the proposed use, following reclamation, of the land within the proposed permit area including a discussion of the utility and capacity of the reclaimed land to support a variety of alternative uses, and the relationship of the proposed use to existing land use policies and plans. This description shall explain:

(1) How the proposed postmining land use is to be achieved and the necessary support activities which may be needed to achieve the proposed land use; and

(2) Where a land use different from the premining land use is proposed, all materials needed for approval of the alternative use under 30 CFR 817.133.

(3) The consideration which has been given to making all of the proposed surface mining activities consistent with surface owner plans and applicable State and local land use plans and programs.

(c) The description shall be accompanied by a copy of the comments concerning the proposed use by the legal or equitable owner of record of the surface of the

proposed permit area and the State and local government agencies which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation.

§784.16 Reclamation plan: Siltation structures, impoundments, banks, dams, and embankments.

(a) *General.* Each application shall include a general plan and a detailed design plan for each proposed siltation structure, water impoundment, and coal processing waste bank, dam, or embankment within the proposed permit area.

(1) Each general plan shall—

(i) Be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer, a professional geologist, or in any State which authorizes land surveyors to prepare and certify such plans, a qualified, registered, professional, land surveyor with assistance from experts in related fields such as landscape architecture;

(ii) Contain a description, map, and cross section of the structure and its location;

(iii) Contain preliminary hydrologic and geologic information required to assess the hydrologic impact of the structure;

(iv) Contain a survey describing the potential effect on the structure from subsidence of the subsurface strata resulting from past underground mining operations if underground mining has occurred; and

(v) Contain a certification statement which includes a schedule setting forth the dates when any detailed design plans for structures that are not submitted with the

general plan will be submitted to the regulatory authority. The regulatory authority shall have approved, in writing, the detailed design plan for a structure before construction of the structure begins.

(2) Impoundments meeting the Class B or C criteria for dams in the U.S. Department of Agriculture, Soil Conservation Service Technical Release No. 60 (210-VI-TR60, Oct. 1985), "Earth Dams and Reservoirs," Technical Release No. 60 (TR-60) shall comply with the requirements of this section for structures that meet or exceed the size or other criteria of the Mine Safety and Health Administration (MSHA). The technical release is hereby incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. TR-60 may be viewed or downloaded from OSM's Web site at <http://www.osmre.gov/programs/TDT/damsafety.shtm>. It also is available for inspection at the OSM Headquarters Office, Office of Surface Mining Reclamation and Enforcement, Administrative Record, Room 252, 1951 Constitution Ave. NW., Washington, DC or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. Each detailed design plan for a structure that meets or exceeds the size or other criteria of MSHA, §77.216(a) of this chapter shall:

(i) Be prepared by, or under the direction of, and certified by a qualified registered professional engineer with assistance from experts in related fields such as geology, land surveying, and landscape architecture;

(ii) Include any geotechnical investigation, design, and construction requirements for the structure;

(iii) Describe the operation and maintenance requirements for each structure; and

(iv) Describe the timetable and plans to remove each structure, if appropriate.

(3) Each detailed design plan for structures not included in paragraph (a)(2) of this section shall:

(i) Be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer, or in any State which authorizes land surveyors to prepare and certify such plans, a qualified, registered, professional, land surveyor, except that all coal processing waste dams and embankments covered by §§817.81 through 817.84 of this chapter shall be certified by a qualified, registered, professional engineer;

(ii) Include any design and construction requirements for the structure, including any required geotechnical information;

(iii) Describe the operation and maintenance requirements for each structure; and

(iv) Describe the timetable and plans to remove each structure, if appropriate.

(b) *Siltation structures*. Siltation structures shall be designed in compliance with the requirements of §817.46 of this chapter.

(c) *Permanent and temporary impoundments*. (1) Permanent and temporary impoundments shall be designed to comply with the requirements of §817.49 of this chapter.

(2) Each plan for an impoundment meeting the size of other criteria of the Mine Safety and Health Administration shall comply with the requirements of §§77.216-1 and 77.216-2 of this title. The plan required to be submitted to the District Manager of MSHA under §77.216 of this title shall be submitted to the regulatory authority as part of the permit application in accordance with paragraph (a) of this section.

(3) For impoundments not included in paragraph (a)(2) of this section the regulatory authority may establish through the State program approval process engineering design standards that ensure stability comparable to a 1.3 minimum static safety factor in lieu of engineering tests to establish compliance with the minimum static safety factor of 1.3 specified in §817.49(a)(4)(ii) of this chapter.

(d) *Coal processing waste banks.* Coal processing waste banks shall be designed to comply with the requirements of 30 CFR 817.81 through 817.84.

(e) *Coal processing waste dams and embankments.* Coal processing waste dams and embankments shall be designed to comply with the requirements of 30 CFR 817.81 through 817.84. Each plan shall comply with the requirements of the Mine Safety and Health Administration, 30 CFR 77.216-1 and 77.216-2, and shall contain the results of a geotechnical investigation of the proposed dam or embankment foundation area, to determine the structural competence of the foundation which will support the proposed dam or embankment structure and the impounded material. The geotechnical investigation shall be planned and supervised by an engineer or engineering geologist, according to the following:

(1) The number, location, and depth of borings and test pits shall be determined using current prudent engineering practice for the size of the dam or embankment, quantity of material to be impounded, and subsurface conditions.

(2) The character of the overburden and bedrock, the proposed abutment sites, and any adverse geotechnical conditions which may affect the particular dam, embankment, or reservoir site shall be considered.

(3) All springs, seepage, and ground water flow observed or anticipated during wet periods in the area of the proposed dam or embankment shall be identified on each plan.

(4) Consideration shall be given to the possibility of mudflows, rock-debris falls, or other landslides into the dam, embankment, or impounded material.

(f) If the structure meets the Class B or C criteria for dams in TR-60 or meets the size or other criteria of §77.216(a) of this chapter, each plan under paragraphs (b), (c), and (e) of this section shall include a stability analysis of the structure. The stability analysis shall include, but not be limited to, strength parameters, pore pressures, and long-term seepage conditions. The plan shall also contain a description of each engineering design assumption and calculation with a discussion of each alternative considered in selecting the specific design parameters and construction methods.

§784.17 Protection of publicly owned parks and historic places.

(a) For any publicly owned parks or any places listed on the National Register of Historic Places that may be adversely affected by the proposed operation, each plan shall describe the measures to be used.

(1) To prevent adverse impacts, or

(2) If a person has valid existing rights, as determined under §761.16 of this chapter, or if joint agency approval is to be obtained under §761.17(d) of this chapter, to minimize adverse impacts.

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

§784.18 Relocation or use of public roads.

Each application shall describe, with appropriate maps and cross sections, the measures to be used to ensure that the interests of the public and landowners affected are protected if, under §761.14 of this chapter, the applicant seeks to have the regulatory authority approve—

(a) Conducting the proposed surface coal mining operations within 100 feet of the right-of-way line of any public road, except where mine access or haul roads join that right-of-way; or

(b) Relocating a public road.

§784.19 Underground development waste.

Each plan shall contain descriptions, including appropriate maps and cross section drawings of the proposed disposal methods and sites for placing underground development waste and excess spoil generated at surface areas affected by surface operations and facilities, according to 30 CFR 817.71 through 817.74. Each plan shall describe the geotechnical investigation, design, construction, operation, maintenance and removal, if appropriate, of the structures and be prepared according to 30 CFR 780.35.

§784.20 Subsidence control plan.

(a) *Pre-subsidence survey.* Each application must include:

(1) A map of the permit and adjacent areas at a scale of 1:12,000, or larger if determined necessary by the regulatory authority, showing the location and type of structures and renewable resource lands that subsidence may materially damage or for which the value or reasonably foreseeable use may be diminished by subsidence, and showing the location and type of drinking, domestic, and residential water supplies that could be contaminated, diminished, or interrupted by subsidence.

(2) A narrative indicating whether subsidence, if it occurred, could cause material damage to or diminish the value or reasonably foreseeable use of such structures or renewable resource lands or could contaminate, diminish, or interrupt drinking, domestic, or residential water supplies.

(3) A survey of the condition of all non-commercial buildings or occupied residential dwellings and structures related thereto, that may be materially damaged or for which the reasonably foreseeable use may be diminished by subsidence, within the

area encompassed by the applicable angle of draw; as well as a survey of the quantity and quality of all drinking, domestic, and residential water supplies within the permit area and adjacent area that could be contaminated, diminished, or interrupted by subsidence. If the applicant cannot make this survey because the owner will not allow access to the site, the applicant will notify the owner, in writing, of the effect that denial of access will have as described in §817.121(c)(4) of this chapter. The applicant must pay for any technical assessment or engineering evaluation used to determine the pre-mining condition or value of such non-commercial buildings or occupied residential dwellings and structures related thereto and the quantity and quality of drinking, domestic, or residential water supplies. The applicant must provide copies of the survey and any technical assessment or engineering evaluation to the property owner and regulatory authority. However, the requirements to perform a survey of the condition of all noncommercial buildings or occupied residential dwellings and structures related thereto, that may be materially damaged or for which the reasonably foreseeable use may be diminished by subsidence, within the areas encompassed by the applicable angle of draw is suspended per court order.

(b) *Subsidence control plan.* If the survey conducted under paragraph (a) of this section shows that no structures, or drinking, domestic, or residential water supplies, or renewable resource lands exist, or that no material damage or diminution in value or reasonably foreseeable use of such structures or lands, and no contamination, diminution, or interruption of such water supplies would occur as a result of mine subsidence, and if the regulatory authority agrees with this conclusion, no further information need be provided under this section. If the survey shows that structures,

renewable resource lands, or water supplies exist and that subsidence could cause material damage or diminution in value or reasonably foreseeable use, or contamination, diminution, or interruption of protected water supplies, or if the regulatory authority determines that damage, diminution in value or foreseeable use, or contamination, diminution, or interruption could occur, the application must include a subsidence control plan that contains the following information:

(1) A description of the method of coal removal, such as longwall mining, room-and-pillar removal or hydraulic mining, including the size, sequence and timing of the development of underground workings;

(2) A map of the underground workings that describes the location and extent of the areas in which planned-subsidence mining methods will be used and that identifies all areas where the measures described in paragraphs (b)(4), (b)(5), and (b)(7) of this section will be taken to prevent or minimize subsidence and subsidence-related damage; and, when applicable, to correct subsidence-related material damage;

(3) A description of the physical conditions, such as depth of cover, seam thickness and lithology of overlaying strata, that affect the likelihood or extent of subsidence and subsidence-related damage;

(4) A description of the monitoring, if any, needed to determine the commencement and degree of subsidence so that, when appropriate, other measures can be taken to prevent, reduce or correct material damage in accordance with §817.121(c) of this chapter;

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

- (i) Backstowing or backfilling of voids;
- (ii) Leaving support pillars of coal;
- (iii) Leaving areas in which no coal is removed, including a description of the overlying area to be protected by leaving coal in place; and
- (iv) Taking measures on the surface to prevent or minimize material damage or diminution in value of the surface;

(6) A description of the anticipated effects of planned subsidence, if any;

(7) For those areas where planned subsidence is projected to be used, a description of methods to be employed to minimize damage from planned subsidence to non-commercial buildings and occupied residential dwellings and structures related thereto; or the written consent of the owner of the structure or facility that minimization measures not be taken; or, unless the anticipated damage would constitute a threat to health or safety, a demonstration that the costs of minimizing damage exceed the anticipated costs of repair;

(8) A description of the measures to be taken in accordance with §§817.41(j) and 817.121(c) of this chapter to replace adversely affected protected water supplies or to mitigate or remedy any subsidence-related material damage to the land and protected structures; and

(9) Other information specified by the regulatory authority as necessary to demonstrate that the operation will be conducted in accordance with §817.121 of this chapter.

§784.21 Fish and wildlife information.

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

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

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

(i) Listed or proposed endangered or threatened species of plants or animals or their critical habitats listed by the Secretary under the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*), or those species or habitats protected by similar State statutes;

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

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

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

(1) Be consistent with the requirements of §817.97 of this chapter;

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

(3) Include—

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

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

(c) *Fish and Wildlife Service review.* Upon request, the regulatory authority shall provide the resource information required under paragraph (a) of this section and the protection and enhancement plan required under paragraph (b) of this section to the

U.S. Department of the Interior, Fish and Wildlife Service Regional or Field Office for their review. This information shall be provided within 10 days of receipt of the request from the Service.

§784.22 Geologic information.

(a) *General.* Each application shall include geologic information in sufficient detail to assist in—

(1) Determining the probable hydrologic consequences of the operation upon the quality and quantity of surface and ground water in the permit and adjacent areas, including the extent to which surface- and ground-water monitoring is necessary;

(2) Determining all potentially acid- or toxic-forming strata down to and including the stratum immediately below the coal seam to be mined;

(3) Determining whether reclamation as required by this chapter can be accomplished and whether the proposed operation has been designed to prevent material damage to the hydrologic balance outside the permit area; and

(4) Preparing the subsidence control plan under §784.20.

(b) Geologic information shall include, at a minimum, the following:

(1) A description of the geology of the proposed permit and adjacent areas down to and including the deeper of either the stratum immediately below the lowest coal seam to be mined or any aquifer below the lowest coal seam to be mined which may be adversely impacted by mining. This description shall include the areal and structural geology of the permit and adjacent areas, and other parameters which influence the required reclamation and it shall also show how the areal and structural geology may

affect the occurrence, availability, movement, quantity and quality of potentially impacted surface and ground water. It shall be based on—

- (i) The cross sections, maps, and plans required by §783.25 of this chapter;
- (ii) The information obtained under paragraphs (b)(2), (b)(3), and (c) of this section; and
- (iii) Geologic literature and practices.

(2) For any portion of a permit area in which the strata down to the coal seam to be mined will be removed or are already exposed, samples shall be collected and analyzed from test borings; drill cores; or fresh, unweathered, uncontaminated samples from rock outcrops down to and including the deeper of either the stratum immediately below the lowest coal seam to be mined or any aquifer below the lowest coal seam to be mined which may be adversely impacted by mining. The analyses shall result in the following:

- (i) Logs showing the lithologic characteristics including physical properties and thickness of each stratum and location of ground water where occurring;
- (ii) Chemical analyses identifying those strata that may contain acid- or toxic-forming, or alkalinity-producing materials and to determine their content except that the regulatory authority may find that the analysis for alkalinity-producing material is unnecessary; and
- (iii) Chemical analysis of the coal seam for acid- or toxic-forming materials, including the total sulfur and pyritic sulfur, except that the regulatory authority may find that the analysis of pyritic sulfur content is unnecessary.

(3) For lands within the permit and adjacent areas where the strata above the coal seam to be mined will not be removed, samples shall be collected and analyzed from test borings or drill cores to provide the following data:

(i) Logs of drill holes showing the lithologic characteristics, including physical properties and thickness of each stratum that may be impacted, and location of ground water where occurring;

(ii) Chemical analyses for acid- or toxic-forming or alkalinity-producing materials and their content in the strata immediately above and below the coal seam to be mined;

(iii) Chemical analyses of the coal seam for acid- or toxic-forming materials, including the total sulfur and pyritic sulfur, except that the regulatory authority may find that the analysis of pyrite sulfur content is unnecessary; and

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

(c) If determined to be necessary to protect the hydrologic balance, to minimize or prevent subsidence, or to meet the performance standards of this chapter, the regulatory authority may require the collection, analysis and description of geologic information in addition to that required by paragraph (b) of this section.

(d) An applicant may request the regulatory authority to waive in whole or in part the requirements of paragraphs (b) (2) and (3) of this section. The waiver may be granted only if the regulatory authority finds in writing that the collection and analysis of such data is unnecessary because other information having equal value or effect is available to the regulatory authority in a satisfactory form.

§784.23 Operation plan: Maps and plans.

Each application shall contain maps and plans as follows:

(a) The maps, plans and cross-sections shall show the underground mining activities to be conducted, the lands to be affected throughout the operation, and any change in a facility or feature to be caused by the proposed operations, if the facility or feature was shown under 30 CFR 783.24 and 783.25.

(b) The following shall be shown for the proposed permit area:

(1) Buildings, utility corridors, and facilities to be used;

(2) The area of land to be affected within the proposed permit area, according to the sequence of mining and reclamation;

(3) Each area of land for which a performance bond or other equivalent guarantee will be posted under subchapter J of this chapter;

(4) Each coal storage, cleaning and loading area;

(5) Each topsoil, spoil, coal preparation waste, underground development waste, and non-coal waste storage area;

(6) Each water diversion, collection, conveyance, treatment, storage and discharge facility to be used;

(7) Each source of waste and each waste disposal facility relating to coal processing or pollution control;

(8) Each facility to be used to protect and enhance fish and wildlife related environmental values;

(9) Each explosive storage and handling facility;

(10) Location of each sedimentation pond, permanent water impoundment, coal processing waste bank, and coal processing waste dam and embankment, in accordance with 30 CFR 784.16 and disposal areas for underground development waste and excess spoil, in accordance with 30 CFR 784.19;

(11) Each profile, at cross-sections specified by the regulatory authority, of the anticipated final surface configuration to be achieved for the affected areas;

(12) Location of each water and subsidence monitoring point;

(13) Location of each facility that will remain on the proposed permit area as a permanent feature, after the completion of underground mining activities.

(c) Except as provided in §§784.16(a)(2), 784.16(a)(3), 784.19, 817.71(b), 817.73(c), 817.74(c) and 817.81(c) of this chapter, cross sections, maps and plans required under paragraphs (b)(4), (5), (6), (10) and (11) of this section shall be prepared by, or under the direction of, and certified by a qualified, registered, professional engineer, a professional geologist, or in any State which authorizes land surveyors to prepare and certify such cross sections, maps and plans, a qualified, registered, professional, land surveyor, with assistance from experts in related fields such as landscape architecture.

§784.24 Road systems.

(a) *Plans and drawings.* Each applicant for an underground coal mining and reclamation permit shall submit plans and drawings for each road, as defined in §701.5 of this chapter, to be constructed, used, or maintained within the proposed permit area. The plans and drawings shall—

(1) Include a map, appropriate cross sections, design drawings, and specifications for road widths, gradients, surfacing materials, cuts, fill embankments, culverts, bridges, drainage ditches, low-water crossings, and drainage structures;

(2) Contain the drawings and specifications of each proposed road that is located in the channel of an intermittent or perennial stream, as necessary for approval of the road by the regulatory authority in accordance with §817.150(d)(1) of this chapter;

(3) Contain the drawings and specifications for each proposed ford of perennial or intermittent streams that is used as a temporary route, as necessary for approval of the ford by the regulatory authority in accordance with §817.151(c)(2) of this chapter;

(4) Contain a description of measures to be taken to obtain approval of the regulatory authority for alteration or relocation of a natural stream channel under §817.151(d)(5) of this chapter;

(5) Contain the drawings and specifications for each low-water crossing of perennial or intermittent stream channels so that the regulatory authority can maximize the protection of the stream in accordance with §817.151(d)(6) of this chapter; and

(6) Describe the plans to remove and reclaim each road that would not be retained under an approved postmining land use, and the schedule for this removal and reclamation.

(b) *Primary road certification.* The plans and drawings for each primary road shall be prepared by, or under the direction of, and certified by a qualified registered professional engineer, or in any State which authorizes land surveyors to certify the design of primary roads a qualified registered professional land surveyor, experienced in the design and construction of roads, as meeting the requirements of this chapter;

current, prudent engineering practices; and any design criteria established by the regulatory authority.

(c) *Standard design plans.* The regulatory authority may establish engineering design standards for primary roads through the State program approval process, in lieu of engineering tests, to establish compliance with the minimum static safety factor of 1.3 for all embankments specified in §817.151(b) of this chapter.

§784.25 Return of coal processing waste to abandoned underground workings.

(a) Each plan shall describe the design, operation and maintenance of any proposed coal processing waste disposal facility, including flow diagrams and any other necessary drawings and maps, for the approval of the regulatory authority and the Mine Safety and Health Administration under 30 CFR 817.81(f).

(b) Each plan shall describe the source and quality of waste to be stowed, area to be backfilled, percent of the mine void to be filled, method of constructing underground retaining walls, influence of the backfilling operation on active underground mine operations, surface area to be supported by the backfill, and the anticipated occurrence of surface effects following backfilling.

(c) The applicant shall describe the source of the hydraulic transport mediums, method of dewatering the placed backfill, retainment of water underground, treatment of water if released to surface streams, and the effect on the hydrologic regime.

(d) The plan shall describe each permanent monitoring well to be located in the backfilled area, the stratum underlying the mined coal, and gradient from the backfilled area.

(e) The requirements of paragraphs (a), (b), (c), and (d) of this section shall also apply to pneumatic backfilling operations, except where the operations are exempted by the regulatory authority from requirements specifying hydrologic monitoring.

§784.26 Air pollution control plan.

For all surface operations associated with underground mining activities, the application shall contain an air pollution control plan which includes the following:

(a) An air quality monitoring program, if required by the regulatory authority, to provide sufficient data to evaluate the effectiveness of the fugitive dust control practices, under paragraph (b) of this section to comply with applicable Federal and State air quality standards; and

(b) A plan for fugitive dust control practices, as required under 30 CFR 817.95.

§784.29 Diversions.

Each application shall contain descriptions, including maps and cross sections, of stream channel diversions and other diversions to be constructed within the proposed permit area to achieve compliance with §817.43 of this chapter.

§784.30 Support facilities.

Each applicant for an underground coal mining and reclamation permit shall submit a description, plans, and drawings for each support facility to be constructed, used, or maintained within the proposed permit area. The plans and drawings shall

include a map, appropriate cross sections, design drawings, and specifications sufficient to demonstrate compliance with §817.181 of this chapter for each facility.

§784.200 Interpretive rules related to General Performance Standards.

The following interpretation of rules promulgated in part 784 of this chapter have been adopted by the Office of Surface Mining Reclamation and Enforcement.

(a) *Interpretation of §784.15: Reclamation plan: Postmining land uses.* (1) The requirements of §784.15(a)(2), for approval of an alternative postmining land use, may be met by requesting approval through the permit revision procedures of §774.13 rather than requesting such approval in the original permit application. The original permit application, however, must demonstrate that the land will be returned to its premining land use capability as required by §817.133(a). An application for a permit revision of this type, (i) must be submitted in accordance with the filing deadlines of §774.13, (ii) shall constitute a significant alteration from the mining operations contemplated by the original permit, and (iii) shall be subject to the requirements of 30 CFR parts 773 and 775.

(b) [Reserved]

10. Revise part 785 to read as follows:

PART 785—REQUIREMENTS FOR PERMITS FOR SPECIAL CATEGORIES OF MINING

Sec.

785.1 Scope.

785.2 Objective.

- 785.10 Information collection.
- 785.11 Anthracite surface coal mining and reclamation operations.
- 785.12 Special bituminous surface coal mining and reclamation operations.
- 785.13 Experimental practices mining.
- 785.14 Mountaintop removal mining.
- 785.15 Steep slope mining.
- 785.16 Permits incorporating variances from approximate original contour restoration requirements for steep slope mining.
- 785.17 Prime farmlands.
- 785.18 Variances for delay in contemporaneous reclamation requirement in combined surface and underground mining activities.
- 785.19 Surface coal mining and reclamation operations on areas or adjacent to areas including alluvial valley floors in the arid and semi-arid areas west of the 100th meridian.
- 785.20 Augering.
- 785.21 Coal preparation plants not located within the permit area of a mine.
- 785.22 In situ processing activities.
- 785.25 Lands eligible for remining.

AUTHORITY: 30 U.S.C. 1201 *et seq.* as

§785.1 Scope.

This part establishes the minimum requirements for regulatory program provisions for permits for certain categories of surface coal mining and reclamation operations. These requirements are in addition to the general permit requirements contained in this subchapter G. All of the provisions of subchapter G apply to these operations, unless otherwise specifically provided in this part.

§785.2 Objective.

The objective of this part is to ensure that permits are issued for certain categories of surface coal mining and reclamation operations only after the regulatory authority receives information that shows that these operations will be conducted

according to the applicable requirements of the Act, subchapter K, and applicable regulatory programs.

§785.10 Information collection.

In accordance with 44 U.S.C. 3501 *et seq.*, the Office of Management and Budget (OMB) has approved the information collection requirements of part 785 and assigned it control number 1029-0040. The information is being collected to meet the requirements of sections 507, 508, 510, 515, 701 and 711 of Public Law 95-87, which requires applicants for special types of mining activities to provide descriptions, maps, plans and data of the proposed activity. This information will be used by the regulatory authority in determining if the applicant can meet the applicable performance standards for the special type of mining activity. Persons must respond to obtain a benefit. A Federal agency may not conduct or sponsor, and you are not required to respond to, a collection of information unless it displays a currently valid OMB control number.

§785.11 Anthracite surface coal mining and reclamation operations.

(a) This section applies to any person who conducts or intends to conduct anthracite surface coal mining and reclamation operations in Pennsylvania.

(b) Each person who intends to conduct anthracite surface coal mining and reclamation operations in Pennsylvania shall apply for and obtain a permit in accordance with the requirements of this subchapter. The following standards apply to applications for and issuance of permits:

(1) In lieu of the requirements of 30 CFR parts 816-817, the requirements of 30 CFR part 820 shall apply.

(2) All other requirements of this chapter including the bonding and insurance requirements of 30 CFR 800.70, except the bond limits and the period of revegetation responsibility, to the extent they are required under sections 509 or 510 of the Act, shall apply.

(c) If the Pennsylvania anthracite permanent regulatory program in effect on August 3, 1977, is amended with respect to environmental protection performance standards, the Secretary shall issue additional regulations necessary to meet the purposes of the Act.

§785.12 Special bituminous surface coal mining and reclamation operations.

(a) This section applies to any person who conducts or intends to conduct certain special bituminous coal surface mine operations in Wyoming.

(b) Each application for a permit for a special bituminous coal mine operation shall include, as part of the mining operations and reclamation plan, the detailed descriptions, maps and plans needed to demonstrate that the operations will comply with the requirements of the Act and 30 CFR part 825.

(c) The regulatory authority may issue a permit for a special bituminous coal mine operation for which a complete application has been filed in accordance with this section, if it finds, in writing, that the operation will be conducted in compliance with the Act and 30 CFR part 825.

(d) Upon amendment or revision to the Wyoming regulatory program, regulations, or decisions made thereunder, governing special bituminous coal mines, the Secretary shall issue additional regulations necessary to meet the purposes of the Act.

§785.13 Experimental practices mining.

(a) Experimental practices provide a variance from environmental protection performance standards of the Act, of subchapter K of this chapter, and the regulatory program for experimental or research purposes, or to allow an alternative postmining land use, and may be undertaken if they are approved by the regulatory authority and the Director and if they are incorporated in a permit or permit revision issued in accordance with the requirements of subchapter G of this chapter.

(b) An application for an experimental practice shall contain descriptions, maps, plans, and data which show—

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

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

(3) That the experimental practice—

(i) Is potentially more, or at least as, environmentally protective, during and after mining operations, as would otherwise be required by standards promulgated under subchapter K of this chapter; and

(ii) Will not reduce the protection afforded public health and safety below that provided by the requirements of subchapter K of this chapter; and

(4) That the applicant will conduct monitoring of the effects of the experimental practice. The monitoring program shall ensure the collection, analysis, and reporting of reliable data that are sufficient to enable the regulatory authority and the Director to—

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

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

(c) Applications for experimental practices shall comply with the public notice requirements of §773.6 of this chapter.

(d) No application for an experimental practice under this section shall be approved until the regulatory authority first finds in writing and the Director then concurs that—

(1) The experimental practice encourages advances in mining and reclamation technology or allows a postmining land use for industrial, commercial, residential, or public use (including recreational facilities) on an experimental basis;

(2) The experimental practice is potentially more, or at least as, environmentally protective, during and after mining operations, as would otherwise be required by standards promulgated under subchapter K of this chapter;

(3) The mining operations approved for a particular land-use or other purpose are not larger or more numerous than necessary to determine the effectiveness and economic feasibility of the experimental practice; and

(4) The experimental practice does not reduce the protection afforded public health and safety below that provided by standards promulgated under subchapter K of this chapter.

(e) Experimental practices granting variances from the special environmental protection performance standards of sections 515 and 516 of the Act applicable to prime farmlands shall be approved only after consultation with the U.S. Department of Agriculture, Soil Conservation Service.

(f) Each person undertaking an experimental practice shall conduct the periodic monitoring, recording and reporting program set forth in the application, and shall satisfy such additional requirements as the regulatory authority or the Director may impose to ensure protection of the public health and safety and the environment.

(g) Each experimental practice shall be reviewed by the regulatory authority at a frequency set forth in the approved permit, but no less frequently than every 2½ years. After review, the regulatory authority may require such reasonable modifications of the experimental practice as are necessary to ensure that the activities fully protect the environment and the public health and safety. Copies of the decision of the regulatory authority shall be sent to the permittee and shall be subject to the provisions for administrative and judicial review of part 775 of this chapter.

(h) Revisions or modifications to an experimental practice shall be processed in accordance with the requirements of §774.13 of this chapter and approved by the

regulatory authority. Any revisions which propose significant alterations in the experimental practice shall, at a minimum, be subject to notice, hearing, and public participation requirements of §773.6 of this chapter and concurrence by the Director. Revisions that do not propose significant alterations in the experimental practice shall not require concurrence by the Director.

§785.14 Mountaintop removal mining.

(a) This section applies to any person who conducts or intends to conduct surface mining activities by mountaintop removal mining.

(b) Mountaintop removal mining means surface mining activities, where the mining operation removes an entire coal seam or seams running through the upper fraction of a mountain, ridge, or hill, except as provided for in 30 CFR 824.11(a)(6), by removing substantially all of the overburden off the bench and creating a level plateau or a gently rolling contour, with no highwalls remaining, and capable of supporting postmining land uses in accordance with the requirements of this section.

(c) The regulatory authority may issue a permit for mountaintop removal mining, without regard to the requirements of §§816.102, 816.104, 816.105, and 816.107 of this chapter to restore the lands disturbed by such mining to their approximate original contour, if it first finds, in writing, on the basis of a complete application, that the following requirements are met:

(1) The proposed postmining land use of the lands to be affected will be an industrial, commercial, agricultural, residential, or public facility (including recreational facilities) use and, if—

(i) After consultation with the appropriate land-use planning agencies, if any, the proposed land use is deemed by the regulatory authority to constitute an equal or better economic or public use of the affected land compared with the pre-mining use;

(ii) The applicant demonstrates compliance with the requirements for acceptable alternative postmining land uses of paragraphs (a) through (c) of §816.133 of this chapter;

(iii) The applicant has presented specific plans for the proposed postmining land use and appropriate assurances that such use will be—

(A) Compatible with adjacent land uses;

(B) Obtainable according to data regarding expected need and market;

(C) Assured of investment in necessary public facilities;

(D) Supported by commitments from public agencies where appropriate;

(E) Practicable with respect to private financial capability for completion of the proposed use;

(F) Planned pursuant to a schedule attached to the reclamation plan so as to integrate the mining operation and reclamation with the postmining land use; and

(G) Designed by a registered engineer in conformance with professional standards established to assure the stability, drainage, and configuration necessary for the intended use of the site.

(iv) The proposed use would be consistent with adjacent land use and existing State and local land use plans and programs; and

(v) The regulatory authority has provided, in writing, an opportunity of not more than 60 days to review and comment on such proposed use to the governing body of

general purpose government in whose jurisdiction the land is located and any State or Federal agency which the regulatory authority, in its discretion, determines to have an interest in the proposed use.

(2) The applicant demonstrates that in place of restoration of the land to be affected to the approximate original contour under §§816.102, 816.104, 816.105, and 816.107 of this chapter, the operation will be conducted in compliance with the requirements of part 824 of this chapter.

(3) The requirements of 30 CFR 824 are made a specific condition of the permit.

(4) All other requirements of the Act, this chapter, and the regulatory program are met by the proposed operations.

(5) The permit is clearly identified as being for mountaintop removal mining.

(d)(1) Any permits incorporating a variance issued under this section shall be reviewed by the regulatory authority to evaluate the progress and development of mining activities to establish that the operator is proceeding in accordance with the terms of the variance—

(i) Within the sixth month preceding the third year from the date of its issuance;

(ii) Before each permit renewal; and

(iii) Not later than the middle of each permit term.

(2) Any review required under paragraph (d)(1) of this section need not be held if the permittee has demonstrated and the regulatory authority finds, in writing, within three months before the scheduled review, that all operations under the permit are proceeding and will continue to be conducted in accordance with the terms of the permit and requirements of the Act, this chapter, and the regulatory program.

(3) The terms and conditions of a permit for mountaintop removal mining may be modified at any time by the regulatory authority, if it determines that more stringent measures are necessary to insure that the operation involved is conducted in compliance with the requirements of the Act, this chapter, and the regulatory program.

§785.15 Steep slope mining.

(a) This section applies to any persons who conducts or intends to conduct steep slope surface coal mining and reclamation operations, except—

(1) Where an operator proposes to conduct surface coal mining and reclamation operations on flat or gently rolling terrain, leaving a plain or predominantly flat area, but on which an occasional steep slope is encountered as the mining operation proceeds;

(2) Where a person obtains a permit under the provisions of §785.14; or

(3) To the extent that a person obtains a permit incorporating a variance under §785.16.

(b) Any application for a permit for surface coal mining and reclamation operations covered by this section shall contain sufficient information to establish that the operations will be conducted in accordance with the requirements of §816.107 or §817.107 of this chapter.

(c) No permit shall be issued for any operations covered by this section, unless the regulatory authority finds, in writing, that in addition to meeting all other requirements of this subchapter, the operation will be conducted in accordance with the requirements of §816.107 or §817.107 of this chapter.

§785.16 Permits incorporating variances from approximate original contour restoration requirements for steep slope mining.

(a) The regulatory authority may issue a permit for non-mountaintop removal, steep slope, surface coal mining and reclamation operations which includes a variance from the requirements to restore the disturbed areas to their approximate original contour that are contained in §§816.102, 816.104, 816.105, and 816.107, or §§817.102 and 817.107 of this chapter. The permit may contain such a variance only if the regulatory authority finds, in writing, that the applicant has demonstrated, on the basis of a complete application, that the following requirements are met:

(1) After reclamation, the lands to be affected by the variance within the permit area will be suitable for an industrial, commercial, residential, or public postmining land use (including recreational facilities).

(2) The requirements of §816.133 or §817.133 of this chapter will be met.

(3) The watershed of lands within the proposed permit and adjacent areas will be improved by the operations when compared with the condition of the watershed before mining or with its condition if the approximate original contour were to be restored. The watershed will be deemed improved only if—

(i) The amount of total suspended solids or other pollutants discharged to ground or surface water from the permit area will be reduced, so as to improve the public or private uses or the ecology of such water, or flood hazards within the watershed containing the permit area will be reduced by reduction of the peak flow discharge from precipitation events or thaws;

(ii) The total volume of flow from the proposed permit area, during every season of the year, will not vary in a way that adversely affects the ecology of any surface water or any existing or planned use of surface or ground water; and

(iii) The appropriate State environmental agency approves the plan.

(4) The owner of the surface of the lands within the permit area has knowingly requested, in writing, as part of the application, that a variance be granted. The request shall be made separately from any surface owner consent given for the operations under §778.15 of this chapter and shall show an understanding that the variance could not be granted without the surface owner's request.

(b) If a variance is granted under this section—

(1) The requirements of §816.133(d) or §817.133(d) of this chapter shall be included as a specific condition of the permit; and

(2) The permit shall be specifically marked as containing a variance from approximate original contour.

(c) A permit incorporating a variance under this section shall be reviewed by the regulatory authority at least every 30 months following the issuance of the permit to evaluate the progress and development of the surface coal mining and reclamation operations to establish that the operator is proceeding in accordance with the terms of the variance.

(d) If the permittee demonstrates to the regulatory authority that the operations have been, and continue to be, conducted in compliance with the terms and conditions of the permit, the requirements of the Act, this chapter, and the regulatory program, the review specified in paragraph (c) of this section need not be held.

(e) The terms and conditions of a permit incorporating a variance under this section may be modified at any time by the regulatory authority, if it determines that more stringent measures are necessary to ensure that the operations involved are conducted in compliance with the requirements of the Act, this chapter, and the regulatory program.

(f) The regulatory authority may grant variances in accordance with this section only if it has promulgated specific rules to govern the granting of variances in accordance with the provisions of this section and any necessary, more stringent requirements.

§785.17 Prime farmland.

(a) This section applies to any person who conducts or intends to conduct surface coal mining and reclamation operations on prime farmlands historically used for cropland. This section does not apply to:

(1) Lands on which surface coal mining and reclamation operations are conducted pursuant to any permit issued prior to August 3, 1977; or

(2) Lands on which surface coal mining and reclamation operations are conducted pursuant to any renewal or revision of a permit issued prior to August 3, 1977; or

(3) Lands included in any existing surface coal mining operations for which a permit was issued for all or any part thereof prior to August 3, 1977, provided that:

(i) Such lands are part of a single continuous surface coal mining operation begun under a permit issued before August 3, 1977; and

(ii) The permittee had a legal right to mine the lands prior to August 3, 1977, through ownership, contract, or lease but not including an option to buy, lease, or contract; and

(iii) The lands contain part of a continuous recoverable coal seam that was being mined in a single continuous mining pit (or multiple pits if the lands are proven to be part of a single continuous surface coal mining operation) begun under a permit issued prior to August 3, 1977.

(4) For purposes of this section:

(i) “Renewal” of a permit shall mean a decision by the regulatory authority to extend the time by which the permittee may complete mining within the boundaries of the original permit, and “revision” of the permit shall mean a decision by the regulatory authority to allow changes in the method of mining operations within the original permit area, or the decision of the regulatory authority to allow incidental boundary changes to the original permit;

(ii) A pit shall be deemed to be a single continuous mining pit even if portions of the pit are crossed by a road, pipeline, railroad, or powerline or similar crossing;

(iii) A single continuous surface coal mining operation is presumed to consist only of a single continuous mining pit under a permit issued prior to August 3, 1977, but may include non-contiguous parcels if the operator can prove by clear and convincing evidence that, prior to August 3, 1977, the non-contiguous parcels were part of a single permitted operation. For the purposes of this paragraph, clear and convincing evidence includes, but is not limited to, contracts, leases, deeds or other properly executed legal

documents (not including options) that specifically treat physically separate parcels as one surface coal mining operation.

(b) *Application contents—Reconnaissance inspection.* (1) All permit applications, whether or not prime farmland is present, shall include the results of a reconnaissance inspection of the proposed permit area to indicate whether prime farmland exists. The regulatory authority in consultation with the U.S. Soil Conservation Service shall determine the nature and extent of the required reconnaissance inspection.

(2) If the reconnaissance inspection establishes that no land within the proposed permit area is prime farmland historically used for cropland, the applicant shall submit a statement that no prime farmland is present. The statement shall identify the basis upon which such a conclusion was reached.

(3) If the reconnaissance inspection indicates that land within the proposed permit area may be prime farmland historically used for cropland, the applicant shall determine if a soil survey exists for those lands and whether soil mapping units in the permit area have been designated as prime farmland. If no soil survey exists, the applicant shall have a soil survey made of the lands within the permit area which the reconnaissance inspection indicates could be prime farmland. Soil surveys of the detail used by the U.S. Soil Conservation Service for operational conservation planning shall be used to identify and locate prime farmland soils.

(i) If the soil survey indicates that no prime farmland soils are present within the proposed permit area, paragraph (b)(2) of this section shall apply.

(ii) If the soil survey indicates that prime farmland soils are present within the proposed permit area, paragraph (c) of this section shall apply.

(c) *Application contents—Prime farmland.* All permit applications for areas in which prime farmland has been identified within the proposed permit area shall include the following:

(1) A soil survey of the permit area according to the standards of the National Cooperative Soil Survey and in accordance with the procedures set forth in U.S. Department of Agriculture Handbooks 436 “Soil Taxonomy” (U.S. Soil Conservation Service, 1975) as amended on March 22, 1982 and October 5, 1982, and 18, “Soil Survey Manual” (U.S. Soil Conservation Service, 1951), as amended on December 18, 1979, May 7, 1980, May 9, 1980, September 11, 1980, June 9, 1981, June 29, 1981, November 16, 1982. The U.S. Soil Conservation Service establishes the standards of the National Cooperative Soil Survey and maintains a National Soils Handbook which gives current acceptable procedures for conducting soil surveys. This National Soils Handbook is available for review at area and State SCS offices.

(i) U.S. Department of Agriculture Handbooks 436 and 18 are incorporated by reference as they exist on the date of adoption of this section. Notices of changes made to these publications will be periodically published by OSM in the FEDERAL REGISTER. The handbooks are on file and available for inspection at the OSM Central Office, U.S. Department of the Interior, 1951 Constitution Avenue, NW., Washington, DC, at each OSM Technical Center and Field Office, and at the central office of the applicable State regulatory authority, if any. Copies of these documents are also available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402, Stock Nos. 001-000-02597-0 and 001-000-00688-6, respectively. In addition, these documents are available for inspection at the national, State, and area offices of

the Soil Conservation Service, U.S. Department of Agriculture, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html

. Incorporation by reference provisions were approved by the Director of the Federal Register on June 29, 1981.

(ii) The soil survey shall include a description of soil mapping units and a representative soil profile as determined by the U.S. Soil Conservation Service, including, but not limited to, soil-horizon depths, pH, and the range of soil densities for each prime farmland soil unit within the permit area. Other representative soil-profile descriptions from the locality, prepared according to the standards of the National Cooperative Soil Survey, may be used if their use is approved by the State Conservationist, U.S. Soil Conservation Service. The regulatory authority may request the operator to provide information on other physical and chemical soil properties as needed to make a determination that the operator has the technological capability to restore the prime farmland within the permit area to the soil-reconstruction standards of part 823 of this chapter.

(2) A plan for soil reconstruction, replacement, and stabilization for the purpose of establishing the technological capability of the mine operator to comply with the requirements of part 823 of this chapter.

(3) Scientific data, such as agricultural-school studies, for areas with comparable soils, climate, and management that demonstrate that the proposed method of reclamation, including the use of soil mixtures or substitutes, if any, will achieve, within a

reasonable time, levels of yield equivalent to, or higher than, those of nonmined prime farmland in the surrounding area.

(4) The productivity prior to mining, including the average yield of food, fiber, forage, or wood products obtained under a high level of management.

(d) *Consultation with Secretary of Agriculture.* (1) The Secretary of Agriculture has responsibilities with respect to prime farmland soils and has assigned the prime farmland responsibilities arising under the Act to the Chief of the U.S. Soil Conservation Service. The U.S. Soil Conservation Service shall carry out consultation and review through the State Conservationist located in each State.

(2) The State Conservationist shall provide to the regulatory authority a list of prime farmland soils, their location, physical and chemical characteristics, crop yields, and associated data necessary to support adequate prime farmland soil descriptions.

(3) The State Conservationist shall assist the regulatory authority in describing the nature and extent of the reconnaissance inspection required in paragraph (b)(1) of this section.

(4) Before any permit is issued for areas that include prime farmland, the regulatory authority shall consult with the State Conservationist. The State Conservationist shall provide for the review of, and comment on, the proposed method of soil reconstruction in the plan submitted under paragraph (c) of this section. If the State Conservationist considers those methods to be inadequate, he or she shall suggest revisions to the regulatory authority which result in more complete and adequate reconstruction.

(e) *Issuance of permit.* A permit for the mining and reclamation of prime farmland may be granted by the regulatory authority, if it first finds, in writing, upon the basis of a complete application, that—

(1) The approved proposed postmining land use of these prime farmlands will be cropland;

(2) The permit incorporates as specific conditions the contents of the plan submitted under paragraph (c) of this section, after consideration of any revisions to that plan suggested by the State Conservationist under paragraph (d)(4) of this section;

(3) The applicant has the technological capability to restore the prime farmland, within a reasonable time, to equivalent or higher levels of yield as non-mined prime farmland in the surrounding area under equivalent levels of management; and

(4) The proposed operations will be conducted in compliance with the requirements of 30 CFR part 823 and other environmental protection performance and reclamation standards for mining and reclamation of prime farmland of the regulatory program.

(5) The aggregate total prime farmland acreage shall not be decreased from that which existed prior to mining. Water bodies, if any, to be constructed during mining and reclamation operations must be located within the post-reclamation non-prime farmland portions of the permit area. The creation of any such water bodies must be approved by the regulatory authority and the consent of all affected property owners within the permit area must be obtained.

§785.18 Variances for delay in contemporaneous reclamation requirement in combined surface and underground mining activities.

(a) *Scope.* This section shall apply to any person or persons conducting or intending to conduct combined surface and underground mining activities where a variance is requested from the contemporaneous reclamation requirements of §816.100 of this chapter.

(b) *Application contents for variances.* Any person desiring a variance under this section shall file with the regulatory authority complete applications for both the surface mining activities and underground mining activities which are to be combined. The reclamation and operation plans for these permits shall contain appropriate narratives, maps, and plans, which—

(1) Show why the proposed underground mining activities are necessary or desirable to assure maximum practical recovery of the coal;

(2) Show how multiple future disturbances of surface lands or waters will be avoided;

(3) Identify the specific surface areas for which a variance is sought and the sections of the Act, this chapter, and the regulatory program from which a variance is being sought;

(4) Show how the activities will comply with §816.79 of this chapter and other applicable requirements of the regulatory program;

(5) Show why the variance sought is necessary for the implementation of the proposed underground mining activities;

(6) Provide an assessment of the adverse environmental consequences and damages, if any, that will result if the reclamation of surface mining activities is delayed; and

(7) Show how offsite storage of spoil will be conducted to comply with the requirements of the Act, §§816.71 through 816.74 of this chapter, and the regulatory program.

(c) *Issuance of permit.* A permit incorporating a variance under this section may be issued by the regulatory authority if it first finds, in writing, upon the basis of a complete application filed in accordance with this section, that—

(1) The applicant has presented, as part of the permit application, specific, feasible plans for the proposed underground mining activities;

(2) The proposed underground mining activities are necessary or desirable to assure maximum practical recovery of the mineral resource and will avoid multiple future disturbances of surface land or waters;

(3) The applicant has satisfactorily demonstrated that the applications for the surface mining activities and underground mining activities conform to the requirements of the regulatory program and that all other permits necessary for the underground mining activities have been issued by the appropriate authority;

(4) The surface area of surface mining activities proposed for the variance has been shown by the applicant to be necessary for implementing the proposed underground mining activities;

(5) No substantial adverse environmental damage, either onsite or offsite, will result from the delay in completion of reclamation otherwise required by section 515(b)(16) of the Act, part 816 of this chapter, and the regulatory program;

(6) The operations will, insofar as a variance is authorized, be conducted in compliance with the requirements of §816.79 of this chapter and the regulatory program;

(7) Provisions for offsite storage of spoil will comply with the requirements of section 515(b)(22) of the Act, §§816.71 through 816.74 of this chapter, and the regulatory program;

(8) Liability under the performance bond required to be filed by the applicant with the regulatory authority pursuant to subchapter J of this chapter and the regulatory program will be for the duration of the underground mining activities and until all requirements of subchapter J and the regulatory program have been complied with; and

(9) The permit for the surface mining activities contains specific conditions—

(i) Delineating the particular surface areas for which a variance is authorized;

(ii) Identifying the applicable provisions of section 515(b) of the Act, part 816 of this chapter, and the regulatory program; and

(iii) Providing a detailed schedule for compliance with the provisions of this section.

(d) *Review of permits containing variances.* Variances granted by permits issued under this section shall be reviewed by the regulatory authority no later than 3 years from the dates of issuance of the permit and any permit renewals.

§785.19 Surface coal mining and reclamation operations on areas or adjacent to areas including alluvial valley floors in the arid and semiarid areas west of the 100th meridian.

(a) *Alluvial valley floor determination.* (1) Permit applicants who propose to conduct surface coal mining and reclamation operations within a valley holding a stream or in a location where the permit area or adjacent area includes any stream, in the arid and semiarid regions of the United States, as an initial step in the permit process, may request the regulatory authority to make an alluvial valley floor determination with respect to that valley floor. The applicant shall demonstrate and the regulatory authority shall determine, based on either available data or field studies submitted by the applicant, or a combination of available data and field studies, the presence or absence of an alluvial valley floor. Studies shall include sufficiently detailed geologic, hydrologic, land use, soils, and vegetation data and analysis to demonstrate the probable existence of an alluvial valley floor in the area. The regulatory authority may require additional data collection and analysis or other supporting documents, maps, and illustrations in order to make the determination.

(2) The regulatory authority shall make a written determination as to the extent of any alluvial valley floors within the area. The regulatory authority shall determine that an alluvial valley floor exists if it finds that—

- (i) Unconsolidated streamlaid deposits holding streams are present; and
- (ii) There is sufficient water available to support agricultural activities as evidenced by—
 - (A) The existence of current flood irrigation in the area in question;

(B) The capability of an area to be flood irrigated, based on evaluations of typical regional agricultural practices, historical flood irrigation, streamflow, water quality, soils, and topography; or

(C) Subirrigation of the lands in question derived from the ground-water system of the valley floor.

(3) If the regulatory authority determines in writing that an alluvial valley does not exist pursuant to paragraph (a)(2) of this section, no further consideration of this section is required.

(b) Applicability of statutory exclusions. (1) If an alluvial valley floor is identified pursuant to paragraph (a)(2) of this section and the proposed surface coal mining operation may affect this alluvial valley floor or waters that supply the alluvial valley floor, the applicant may request the regulatory authority, as a preliminary step in the permit application process, to separately determine the applicability of the statutory exclusions set forth in paragraph (b)(2) of this section. The regulatory authority may make such a determination based on the available data, may require additional data collection and analysis in order to make the determination, or may require the applicant to submit a complete permit application and not make the determination until after the complete application is evaluated.

(2) An applicant need not submit the information required in paragraphs (d)(2) (ii) and (iii) of this section and a regulatory authority is not required to make the findings of paragraphs (e)(2) (i) and (ii) of this section when the regulatory authority determines that one of the following circumstances, heretofore called statutory exclusions, exist:

(i) The premining land use is undeveloped rangeland which is not significant to farming;

(ii) Any farming on the alluvial valley floor that would be affected by the surface coal mining operation is of such small acreage as to be of negligible impact on the farm's agricultural production. Negligible impact of the proposed operation on farming will be based on the relative importance of the affected farmland areas of the alluvial valley floor area to the farm's total agricultural production over the life of the mine; or

(iii) The circumstances set forth in §822.12(b) (3) or (4) of this chapter exist.

(3) For the purpose of this section, a farm is one or more land units on which farming is conducted. A farm is generally considered to be the combination of land units with acreage and boundaries in existence prior to August 3, 1977, or if established after August 3, 1977, with those boundaries based on enhancement of the farm's agricultural productivity and not related to surface coal operations.

(c) *Summary denial.* If the regulatory authority determines that the statutory exclusions are not applicable and that any of the required findings of paragraph (e)(2) of this section cannot be made, the regulatory authority may, at the request of the applicant:

(1) Determine that mining is precluded on the proposed permit area and deny the permit without the applicant filing any additional information required by this section; or

(2) Prohibit surface coal mining and reclamation operations in all or parts of the area to be affected by mining.

(d) *Application contents for operations affecting designated alluvial valley floors.*

(1) If land within the permit area or adjacent area is identified as an alluvial valley floor

and the proposed surface coal mining operation may affect an alluvial valley floor or waters supplied to an alluvial valley floor, the applicant shall submit a complete application for the proposed surface coal mining and reclamation operations to be used by the regulatory authority together with other relevant information as a basis for approval or denial of the permit. If an exclusion of paragraph (b)(2) of this section applies, then the applicant need not submit the information required in paragraphs (d)(2)(ii) and (iii) of this section.

(2) The complete application shall include detailed surveys and baseline data required by the regulatory authority for a determination of—

(i) The essential hydrologic functions of the alluvial valley floor which might be affected by the mining and reclamation process. The information required by this subparagraph shall evaluate those factors which contribute to the collecting, storing, regulating and making the natural flow of water available for agricultural activities on the alluvial valley floor and shall include, but are not limited to:

(A) Factors contributing to the function of collecting water, such as amount, rate and frequency of rainfall and runoff, surface roughness, slope and vegetative cover, infiltration, and evapotranspiration, relief, slope and density of drainage channels;

(B) Factors contributing to the function of storing water, such as permeability, infiltration, porosity, depth and direction of ground water flow, and water holding capacity;

(C) Factors contributing to the function of regulating the flow of surface and ground water, such as the longitudinal profile and slope of the valley and channels, the sinuosity and cross-sections of the channels, interchange of water between streams

and associated alluvial and bedrock aquifers, and rates and amount of water supplied by these aquifers; and

(D) Factors contributing to water availability, such as the presence of flood plains and terraces suitable for agricultural activities.

(ii) Whether the operation will avoid during mining and reclamation the interruption, discontinuance, or preclusion of farming on the alluvial valley floor;

(iii) Whether the operation will cause material damage to the quantity or quality of surface or ground waters supplied to the alluvial valley floor;

(iv) Whether the reclamation plan is in compliance with requirements of the Act, this chapter, and regulatory program; and

(v) Whether the proposed monitoring system will provide sufficient information to measure compliance with part 822 of this chapter during and after mining and reclamation operations.

(e) *Findings.* (1) The findings of paragraphs (e)(2) (i) and (ii) of this section are not required with regard to alluvial valley floors to which are applicable any of the exclusions of paragraph (b)(2) of this section.

(2) No permit or permit revision application for surface coal mining and reclamation operations on lands located west of the 100th meridian west longitude shall be approved by the regulatory authority unless the application demonstrates and the regulatory authority finds in writing, on the basis of information set forth in the application, that—

(i) The proposed operations will not interrupt, discontinue, or preclude farming on an alluvial valley floor;

(ii) The proposed operations will not materially damage the quantity or quality of water in surface and underground water systems that supply alluvial valley floors; and

(iii) The proposed operations will comply with part 822 of this chapter and the other applicable requirements of the Act and the regulatory program.

§785.20 Augering.

(a) This section applies to any person who conducts or intends to conduct surface coal mining and reclamation operations utilizing augering operations.

(b) Any application for a permit for operations covered by this section shall contain, in the mining and reclamation plan, a description of the augering methods to be used and the measures to be used to comply with 30 CFR part 819.

(c) No permit shall be issued for any operations covered by this section unless the regulatory authority finds, in writing, that in addition to meeting all other applicable requirements of this subchapter, the operation will be conducted in compliance with 30 CFR part 819.

§785.21 Coal preparation plants not located within the permit area of a mine.

(a) This section applies to any person who operates or intends to operate a coal preparation plant in connection with a coal mine but outside the permit area for a specific mine. Any person who operates such a preparation plant shall obtain a permit from the regulatory authority in accordance with the requirements of this section

(b) Any application for a permit for operations covered by this section shall contain an operation and reclamation plan which specifies plans, including descriptions,

maps, and cross sections, of the construction, operation, maintenance, and removal of the preparation plant and support facilities operated incident thereto or resulting therefrom. The plan shall demonstrate that those operations will be conducted in compliance with part 827 of this chapter.

(c) No permit shall be issued for any operation covered by this section, unless the regulatory authority finds in writing that, in addition to meeting all other applicable requirements of this subchapter, the operations will be conducted in compliance with the requirements of part 827 of this chapter.

(d)(1) Except as provided in paragraph (d)(2) of this section, any person who operates a coal preparation plant beyond May 10, 1986, that was not subject to this chapter before July 6, 1984, shall have applied for a permit no later than November 11, 1985.

(2)(i) State programs that have a statutory or regulatory bar precluding issuance of permits to facilities covered by paragraph (d)(1) of this section shall notify OSMRE not later than November 7, 1985, and shall establish a schedule for actions necessary to allow the permitting of such facilities as soon as practicable. Not later than December 9, 1985, this schedule shall be submitted to OSMRE for approval.

(ii) Any person who operates a coal preparation plant that was not subject to this chapter before July 6, 1984, in a state which submits a schedule in accordance with paragraph (d)(2)(i) of this section shall apply for a permit in accordance with the schedule approved by OSMRE.

(e) Notwithstanding §773.4 of this chapter and except as prohibited by §761.11 of this chapter, any person operating a coal preparation plant that was not subject to

this chapter before July 6, 1984, may continue to operate without a permit until May 10, 1986, and may continue to operate beyond that date if:

- (1) A permit application has been timely filed under paragraph (d)(1) of this section or under a State imposed schedule specified in paragraph (d)(2) of this section,
- (2) The regulatory authority has yet to either issue or deny the permit, and
- (3) The person complies with the applicable performance standards of §827.13 of this chapter.

§785.22 In situ processing activities.

(a) This section applies to any person who conducts or intends to conduct surface coal mining and reclamation operations utilizing in situ processing activities.

(b) Any application for a permit for operations covered by this section shall be made according to all requirements of this subchapter applicable to underground mining activities. In addition, the mining and reclamation operations plan for operations involving in situ processing activities shall contain information establishing how those operations will be conducted in compliance with the requirements of 30 CFR part 828, including—

- (1) Delineation of proposed holes and wells and production zone for approval of the regulatory authority;
- (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 regulatory authority.

(c) No permit shall be issued for operations covered by this section, unless the regulatory authority first finds, in writing, upon the basis of a complete application made in accordance with paragraph (b) of this section, that the operation will be conducted in compliance with all requirements of this subchapter relating to underground mining activities, and 30 CFR parts 817 and 828.

§785.25 Lands eligible for remining.

(a) This section contains permitting requirements to implement §773.13. Any person who submits a permit application to conduct a surface coal mining operation on lands eligible for remining must comply with this section.

(b) Any application for a permit under this section shall be made according to all requirements of this subchapter applicable to surface coal mining and reclamation operations. In addition, the application shall—

(1) To the extent not otherwise addressed in the permit application, identify potential environmental and safety problems related to prior mining activity at the site and that could be reasonably anticipated to occur. This identification shall be based on a due diligence investigation which shall include visual observations at the site, a record review of past mining at the site, and environmental sampling tailored to current site conditions.

(2) With regard to potential environmental and safety problems referred to in paragraph (b)(1) of this section, describe the mitigative measures that will be taken to

ensure that the applicable reclamation requirements of the regulatory program can be met.

11. Revise part 800 to read as follows:

**PART 800—BOND AND INSURANCE REQUIREMENTS FOR SURFACE COAL
MINING AND RECLAMATION OPERATIONS UNDER REGULATORY PROGRAMS**

Sec.

- 800.1 Scope and purpose.
- 800.4 Regulatory authority responsibilities.
- 800.5 Definitions.
- 800.10 Information collection.
- 800.11 Requirement to file a bond.
- 800.12 Form of the performance bond.
- 800.13 Period of liability.
- 800.14 Determination of bond amount.
- 800.15 Adjustment of amount.
- 800.16 General terms and conditions of bond.
- 800.17 Bonding requirements for underground coal mines and long-term coal-related surface facilities and structures.
- 800.20 Surety bonds.
- 800.21 Collateral bonds.
- 800.23 Self-bonding.
- 800.30 Replacement of bonds.
- 800.40 Requirement to release performance bonds.
- 800.50 Forfeiture of bonds.
- 800.60 Terms and conditions for liability insurance.
- 800.70 Bonding for anthracite operations in Pennsylvania.

AUTHORITY: 30 U.S.C. 1201 *et seq.*, as amended; and Pub. L. 100-34.

§800.1 Scope and purpose.

This part sets forth the minimum requirements for filing and maintaining bonds and insurance for surface coal mining and reclamation operations under regulatory programs in accordance with the Act.

§800.4 Regulatory authority responsibilities.

(a) The regulatory authority shall prescribe and furnish forms for filing performance bonds.

(b) The regulatory authority shall prescribe by regulation terms and conditions for performance bonds and insurance.

(c) The regulatory authority shall determine the amount of the bond for each area to be bonded, in accordance with §800.14. The regulatory authority shall also adjust the amount as acreage in the permit area is revised, or when other relevant conditions change according to the requirements of §800.15.

(d) The regulatory authority may accept a self-bond if the permittee meets the requirements of §800.23 and any additional requirements in the State or Federal program.

(e) The regulatory authority shall release liability under a bond or bonds in accordance with §800.40.

(f) If the conditions specified in §800.50 occur, the regulatory authority shall take appropriate action to cause all or part of a bond to be forfeited in accordance with procedures of that section.

(g) The regulatory authority shall require in the permit that adequate bond coverage be in effect at all times. Except as provided in §800.16(e)(2), operating without a bond is a violation of a condition upon which the permit is issued.

§800.5 Definitions.

(a) *Surety bond* means an indemnity agreement in a sum certain payable to the regulatory authority, executed by the permittee as principal and which is supported by the performance guarantee of a corporation licensed to do business as a surety in the State where the operation is located.

(b) *Collateral bond* means an indemnity agreement in a sum certain executed by the permittee as principal which is supported by the deposit with the regulatory authority of one or more of the following:

(1) A cash account, which shall be the deposit of cash in one or more federally-insured or equivalently protected accounts, payable only to the regulatory authority upon demand, or the deposit of cash directly with the regulatory authority;

(2) Negotiable bonds of the United States, a State, or a municipality, endorsed to the order of, and placed in the possession of, the regulatory authority;

(3) Negotiable certificates of deposit, made payable or assigned to the regulatory authority and placed in its possession or held by a federally-insured bank;

(4) An irrevocable letter of credit of any bank organized or authorized to transact business in the United States, payable only to the regulatory authority upon presentation;

(5) A perfected, first-lien security interest in real property in favor of the regulatory authority; or

(6) Other investment-grade rated securities having a rating of AAA, AA, or A or an equivalent rating issued by a nationally recognized securities rating service, endorsed to the order of, and placed in the possession of, the regulatory authority.

(c) *Self-bond* means an indemnity agreement in a sum certain executed by the applicant or by the applicant and any corporate guarantor and made payable to the regulatory authority, with or without separate surety.

§800.10 Information collection.

The collection of information contained in §§800.11, 800.21(c), 800.23(b)(2), 800.23(b)(3), 800.40(a), and 800.60(a) have been approved by the Office of Management and Budget under 44 U.S.C. 3501 *et seq.* and assigned clearance number 1029-0043. The information will be used to determine if reclamation bonds are sufficient to comply with the Act. Response is required to obtain a benefit in accordance with the requirements of 30 U.S.C. 1201 *et seq.* Public reporting burden for this collection of information is estimated to average 28 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the

data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspects of this collection of information, including suggestions for reducing the burden, to the Office of Surface Mining Reclamation and Enforcement, Information Collection Clearance Officer, 1951 Constitution Avenue NW., rm 5415 L, Washington, DC 20240 and the Office of Management and Budget, Paperwork Reduction Project (1029-0043), Washington, DC 20503.

§800.11 Requirement to file a bond.

(a) After a permit application under subchapter G of this chapter has been approved, but before a permit is issued, the applicant shall file with the regulatory authority, on a form prescribed and furnished by the regulatory authority, a bond or bonds for performance made payable to the regulatory authority and conditioned upon the faithful performance of all the requirements of the Act, the regulatory program, the permit, and the reclamation plan.

(b)(1) The bond or bonds shall cover the entire permit area, or an identified increment of land within the permit area upon which the operator will initiate and conduct surface coal mining and reclamation operations during the initial term of the permit.

(2) As surface coal mining and reclamation operations on succeeding increments are initiated and conducted within the permit area, the permittee shall file with the

regulatory authority an additional bond or bonds to cover such increments in accordance with this section.

(3) The operator shall identify the initial and successive areas or increments for bonding on the permit application map submitted for approval as provided in the application (under parts 780 and 784 of this chapter), and shall specify the bond amount to be provided for each area or increment.

(4) Independent increments shall be of sufficient size and configuration to provide for efficient reclamation operations should reclamation by the regulatory authority become necessary pursuant to §800.50.

(c) An operator shall not disturb any surface areas, succeeding increments, or extend any underground shafts, tunnels or operations prior to acceptance by the regulatory authority of the required performance bond.

(d) The applicant shall file, with the approval of the regulatory authority, a bond or bonds under one of the following schemes to cover the bond amounts for the permit area as determined in accordance with §800.14:

(1) A performance bond or bonds for the entire permit area;

(2) A cumulative bond schedule and the performance bond required for full reclamation of the initial area to be disturbed; or

(3) An incremental bond schedule and the performance bond required for the first increment in the schedule.

(e) OSM may approve, as part of a State or Federal program, an alternative bonding system, if it will achieve the following objectives and purposes of the bonding program:

(1) The alternative must assure that the regulatory authority will have available sufficient money to complete the reclamation plan for any areas which may be in default at any time; and

(2) The alternative must provide a substantial economic incentive for the permittee to comply with all reclamation provisions.

§800.12 Form of the performance bond.

The regulatory authority shall prescribe the form of the performance bond. The regulatory authority may allow for:

(a) A surety bond;

(b) A collateral bond;

(c) A self-bond; or

(d) A combination of any of these bonding methods.

§800.13 Period of liability.

(a)(1) Performance bond liability shall be for the duration of the surface coal mining and reclamation operation and for a period which is coincident with the operator's period of extended responsibility for successful revegetation provided in §816.116 or §817.116 of this chapter or until achievement of the reclamation requirements of the Act, regulatory programs, and permit, whichever is later.

(2) With the approval of regulatory authority, a bond may be posted and approved to guarantee specific phases of reclamation within the permit area provided the sum of phase bonds posted equals or exceeds the total amount required under §§800.14 and 800.15. The scope of work to be guaranteed and the liability assumed under each phase bond shall be specified in detail.

(b) Isolated and clearly defined portions of the permit area requiring extended liability may be separated from the original area and bonded separately with the approval of the regulatory authority. Such areas shall be limited in extent and not constitute a scattered, intermittent, or checkerboard pattern of failure. Access to the separated areas for remedial work may be included in the area under extended liability if deemed necessary by the regulatory authority.

(c) If the regulatory authority approves a long-term, intensive agricultural postmining land use, in accordance with §816.133 or §817.133 of this chapter, the applicable 5 or 10 year period of liability shall commence at the date of initial planting for such long-term agricultural use.

(d)(1) The bond liability of the permittee shall include only those actions which he or she is obligated to take under the permit, including completion of the reclamation

plan, so that the land will be capable of supporting the postmining land use approved under §816.133 or §817.133 of this chapter.

(2) Implementation of an alternative postmining land use approved under §§816.133(c) and 817.133(c) which is beyond the control of the permittee, need not be covered by the bond. Bond liability for prime farmland shall be as specified in §800.40(c)(2).

§800.14 Determination of bond amount.

(a) The amount of the bond required for each bonded area shall:

- (1) Be determined by the regulatory authority;
- (2) Depend upon the requirements of the approved permit and reclamation plan;
- (3) Reflect the probable difficulty of reclamation, giving consideration to such factors as topography, geology, hydrology, and revegetation potential; and
- (4) Be based on, but not limited to, the estimated cost submitted by the permit applicant.

(b) The amount of the bond shall be sufficient to assure the completion of the reclamation plan if the work has to be performed by the regulatory authority in the event of forfeiture, and in no case shall the total bond initially posted for the entire area under one permit be less than \$10,000.

(c) An operator's financial responsibility under §817.121(c) of this chapter for repairing material damage resulting from subsidence may be satisfied by the liability insurance policy required under §800.60.

§800.15 Adjustment of amount.

(a) The amount of the bond or deposit required and the terms of the acceptance of the applicant's bond shall be adjusted by the regulatory authority from time to time as the area requiring bond coverage is increased or decreased or where the cost of future reclamation changes. The regulatory authority may specify periodic times or set a schedule for reevaluating and adjusting the bond amount to fulfill this requirement.

(b) The regulatory authority shall—

(1) Notify the permittee, the surety, and any person with a property interest in collateral who has requested notification under §800.21(f) of any proposed adjustment to the bond amount; and

(2) Provide the permittee an opportunity for an informal conference on the adjustment.

(c) A permittee may request reduction of the amount of the performance bond upon submission of evidence to the regulatory authority proving that the permittee's method of operation or other circumstances reduces the estimated cost for the regulatory authority to reclaim the bonded area. Bond adjustments which involve

undisturbed land or revision of the cost estimate of reclamation are not considered bond release subject to procedures of §800.40.

(d) In the event that an approved permit is revised in accordance with subchapter G of this chapter, the regulatory authority shall review the bond for adequacy and, if necessary, shall require adjustment of the bond to conform to the permit as revised.

§800.16 General terms and conditions of bond.

(a) The performance bond shall be in an amount determined by the regulatory authority as provided in §800.14.

(b) The performance bond shall be payable to the regulatory authority.

(c) The performance bond shall be conditioned upon faithful performance of all the requirements of the Act, this chapter, the regulatory program, and the approved permit, including completion of the reclamation plan.

(d) The duration of the bond shall be for the time period provided in §800.13.

(e)(1) The bond shall provide a mechanism for a bank or surety company to give prompt notice to the regulatory authority and the permittee of any action filed alleging the insolvency or bankruptcy of the surety company, the bank, or the permittee, or alleging any violations which would result in suspension or revocation of the surety or bank charter or license to do business.

(2) Upon the incapacity of a bank or surety company by reason of bankruptcy, insolvency, or suspension or revocation of a charter or license, the permittee shall be deemed to be without bond coverage and shall promptly notify the regulatory authority. The regulatory authority, upon notification received through procedures of paragraph (e)(1) of this section or from the permittee, shall, in writing, notify the operator who is without bond coverage and specify a reasonable period, not to exceed 90 days, to replace bond coverage. If an adequate bond is not posted by the end of the period allowed, the operator shall cease coal extraction and shall comply with the provisions of §816.132 or §817.132 of this chapter and shall immediately begin to conduct reclamation operations in accordance with the reclamation plan. Mining operations shall not resume until the regulatory authority has determined that an acceptable bond has been posted.

§800.17 Bonding requirements for underground coal mines and long-term coal-related surface facilities and structures.

(a) *Responsibilities.* The regulatory authority shall require bond coverage, in an amount determined under §800.14, for long-term surface facilities and structures, and for areas disturbed by surface impacts incident to underground mines, for which a permit is required. Specific reclamation techniques required for underground mines and long-term facilities shall be considered in determining the amount of bond to complete the reclamation.

(b) *Long-term period of liability.* (1) The period of liability for every bond covering long-term surface disturbances shall commence with the issuance of a permit, except that to the extent that such disturbances will occur on a succeeding increment to be bonded, such liability will commence upon the posting of the bond for that increment before the initial surface disturbance of that increment. The liability period shall extend until all reclamation, restoration, and abatement work under the permit has been completed and the bond is released under the provisions of §800.40, or until the bond has been replaced or extended in accordance with §800.17(b)(3).

(2) Long-term surface disturbances shall include long-term coal-related surface facilities and structures, and surface impacts incident to underground coal mining, which disturb an area for a period that exceeds 5 years. Long-term surface disturbances include, but are not limited to: surface features of shafts and slope facilities, coal refuse areas, powerlines, bore-holes, ventilation shafts, preparation plants, machine shops, roads, and loading and treatment facilities.

(3) To achieve continuous bond coverage for long-term surface disturbances, the bond shall be conditioned upon extension, replacement, or payment in full, 30 days prior to the expiration of the bond term.

(4) Continuous bond coverage shall apply throughout the period of extended responsibility for successful revegetation and until the provisions of §800.40 have been met.

(c) *Bond forfeiture.* The regulatory authority shall take action to forfeit a bond pursuant to this section, if 30 days prior to bond expiration, the operator has not filed:

(1) A performance bond for a new term as required for continuous coverage, or (2) a performance bond providing coverage for the period of liability, including the period of extended responsibility for successful revegetation.

§800.20 Surety bonds.

(a) A surety bond shall be executed by the operator and a corporate surety licensed to do business in the State where the operation is located.

(b) Surety bonds shall be noncancellable during their terms, except that surety bond coverage for lands not disturbed may be cancelled with the prior consent of the regulatory authority. The regulatory authority shall advise the surety, within 30 days after receipt of a notice to cancel bond, whether the bond may be cancelled on an undisturbed area.

§800.21 Collateral bonds.

(a) Collateral bonds, except for letters of credit, cash accounts, and real property, shall be subject to the following conditions:

(1) The regulatory authority shall keep custody of collateral deposited by the applicant until authorized for release or replacement as provided in this subchapter.

(2) The regulatory authority shall value collateral at its current market value, not at face value.

(3) The regulatory authority shall require that certificates of deposit be made payable to or assigned to the regulatory authority, both in writing and upon the records of the bank issuing the certificates. If assigned, the regulatory authority shall require the banks issuing these certificates to waive all rights of setoff or liens against those certificates.

(4) The regulatory authority shall not accept an individual certificate of deposit in an amount in excess of \$100,000 or the maximum insurable amount as determined by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation.

(b) Letters of credit shall be subject to the following conditions:

(1) The letter may be issued only by a bank organized or authorized to do business in the United States;

(2) Letters of credit shall be irrevocable during their terms. A letter of credit used as security in areas requiring continuous bond coverage shall be forfeited and shall be collected by the regulatory authority if not replaced by other suitable bond or letter of credit at least 30 days before its expiration date.

(3) The letter of credit shall be payable to the regulatory authority upon demand, in part or in full, upon receipt from the regulatory authority of a notice of forfeiture issued in accordance with §800.50.

(c) Real property posted as a collateral bond shall meet the following conditions:

(1) The applicant shall grant the regulatory authority a first mortgage, first deed of trust, or perfected first-lien security interest in real property with a right to sell or otherwise dispose of the property in the event of forfeiture under §800.50.

(2) In order for the regulatory authority to evaluate the adequacy of the real property offered to satisfy collateral requirements, the applicant shall submit a schedule of the real property which shall be mortgaged or pledged to secure the obligations under the indemnity agreement. The list shall include—

(i) A description of the property;

(ii) The fair market value as determined by an independent appraisal conducted by a certified appraiser; and

(iii) Proof of possession and title to the real property.

(3) The property may include land which is part of the permit area; however, land pledged as collateral for a bond under this section shall not be disturbed under any permit while it is serving as security under this section.

(d) Cash accounts shall be subject to the following conditions:

(1) The regulatory authority may authorize the operator to supplement the bond through the establishment of a cash account in one or more federally-insured or equivalently protected accounts made payable upon demand to, or deposited directly with, the regulatory authority. The total bond including the cash account shall not be less than the amount required under terms of performance bonds including any adjustments, less amounts released in accordance with §800.40.

(2) Any interest paid on a cash account shall be retained in the account and applied to the bond value of the account unless the regulatory authority has approved the payment of interest to the operator.

(3) Certificates of deposit may be substituted for a cash account with the approval of the regulatory authority.

(4) The regulatory authority shall not accept an individual cash account in an amount in excess of \$100,000 or the maximum insurable amount as determined by the Federal Deposit Insurance Corporation or the Federal Savings and Loan Insurance Corporation.

(e)(1) The estimated bond value of all collateral posted as assurance under this section shall be subject to a margin which is the ratio of bond value to market value, as determined by the regulatory authority. The margin shall reflect legal and liquidation fees, as well as value depreciation, marketability, and fluctuations which might affect the net cash available to the regulatory authority to complete reclamation.

(2) The bond value of collateral may be evaluated at any time but it shall be evaluated as part of permit renewal and, if necessary, the performance bond amount increased or decreased. In no case shall the bond value of collateral exceed the market value.

(f) Persons with an interest in collateral posted as a bond, and who desire notification of actions pursuant to the bond, shall request the notification in writing to the regulatory authority at the time collateral is offered.

§800.23 Self-bonding.

(a) *Definitions.* For the purposes of this section only:

Current assets means cash or other assets or resources which are reasonably expected to be converted to cash or sold or consumed within one year or within the normal operating cycle of the business.

Current liabilities means obligations which are reasonably expected to be paid or liquidated within one year or within the normal operating cycle of the business.

Fixed assets means plants and equipment, but does not include land or coal in place.

Liabilities means obligations to transfer assets or provide services to other entities in the future as a result of past transactions.

Net worth means total assets minus total liabilities and is equivalent to owners' equity.

Parent corporation means a corporation which owns or controls the applicant.

Tangible net worth means net worth minus intangibles such as goodwill and rights to patents or royalties.

(b) The regulatory authority may accept a self-bond from an applicant for a permit if all of the following conditions are met by the applicant or its parent corporation guarantor:

(1) The applicant designates a suitable agent to receive service of process in the State where the proposed surface coal mining operation is to be conducted.

(2) The applicant has been in continuous operation as a business entity for a period of not less than 5 years. Continuous operation shall mean that business was conducted over a period of 5 years immediately preceding the time of application.

(i) The regulatory authority may allow a joint venture or syndicate with less than 5 years of continuous operation to qualify under this requirement, if each member of the joint venture or syndicate has been in continuous operation for at least 5 years immediately preceding the time of application.

(ii) When calculating the period of continuous operation, the regulatory authority may exclude past periods of interruption to the operation of the business entity that were beyond the applicant's control and that do not affect the applicant's likelihood of remaining in business during the proposed surface coal mining and reclamation operations.

(3) The applicant submits financial information in sufficient detail to show that the applicant meets one of the following criteria:

(i) The applicant has a current rating for its most recent bond issuance of "A" or higher as issued by either Moody's Investor Service or Standard and Poor's Corporation;

(ii) The applicant has a tangible net worth of at least \$10 million, a ratio of total liabilities to net worth of 2.5 times or less, and a ratio of current assets to current liabilities of 1.2 times or greater; or

(iii) The applicant's fixed assets in the United States total at least \$20 million, and the applicant has a ratio of total liabilities to net worth of 2.5 times or less, and a ratio of current assets to current liabilities of 1.2 times or greater.

(4) The applicant submits;

(i) Financial statements for the most recently completed fiscal year accompanied by a report prepared by an independent certified public accountant in conformity with generally accepted accounting principles and containing the accountant's audit opinion or review opinion of the financial statements with no adverse opinion;

(ii) Unaudited financial statements for completed quarters in the current fiscal year; and

(iii) Additional unaudited information as requested by the regulatory authority.

(c)(1) The regulatory authority may accept a written guarantee for an applicant's self-bond from a parent corporation guarantor, if the guarantor meets the conditions of paragraphs (b)(1) through (b)(4) of this section as if it were the applicant. Such a written guarantee shall be referred to as a "corporate guarantee." The terms of the corporate guarantee shall provide for the following:

(i) If the applicant fails to complete the reclamation plan, the guarantor shall do so or the guarantor shall be liable under the indemnity agreement to provide funds to

the regulatory authority sufficient to complete the reclamation plan, but not to exceed the bond amount.

(ii) The corporate guarantee shall remain in force unless the guarantor sends notice of cancellation by certified mail to the applicant and to the regulatory authority at least 90 days in advance of the cancellation date, and the regulatory authority accepts the cancellation.

(iii) The cancellation may be accepted by the regulatory authority if the applicant obtains suitable replacement bond before the cancellation date or if the lands for which the self-bond, or portion thereof, was accepted have not been disturbed.

(2) The regulatory authority may accept a written guarantee for an applicant's self-bond from any corporate guarantor, whenever the applicant meets the conditions of paragraphs (b)(1), (b)(2) and (b)(4) of this section, and the guarantor meets the conditions of paragraphs (b)(1) through (b)(4) of this section. Such a written guarantee shall be referred to as a "non-parent corporate guarantee." The terms of this guarantee shall provide for compliance with the conditions of paragraphs (c)(1)(i) through (c)(1)(iii) of this section. The regulatory authority may require the applicant to submit any information specified in paragraph (b)(3) of this section in order to determine the financial capabilities of the applicant.

(d) For the regulatory authority to accept an applicant's self-bond, the total amount of the outstanding and proposed self-bonds of the applicant for surface coal mining and reclamation operations shall not exceed 25 percent of the applicant's tangible net worth in the United States. For the regulatory authority to accept a

corporate guarantee, the total amount of the parent corporation guarantor's present and proposed self-bonds and guaranteed self-bonds for surface coal mining and reclamation operations shall not exceed 25 percent of the guarantor's tangible net worth in the United States. For the regulatory authority to accept a non-parent corporate guarantee, the total amount of the non-parent corporate guarantor's present and proposed self-bonds and guaranteed self-bonds shall not exceed 25 percent of the guarantor's tangible net worth in the United States.

(e) If the regulatory authority accepts an applicant's self-bond, an indemnity agreement shall be submitted subject to the following requirements:

(1) The indemnity agreement shall be executed by all persons and parties who are to be bound by it, including the parent corporation guarantor, and shall bind each jointly and severally.

(2) Corporations applying for a self-bond, and parent and non-parent corporations guaranteeing an applicant's self-bond shall submit an indemnity agreement signed by two corporate officers who are authorized to bind their corporations. A copy of such authorization shall be provided to the regulatory authority along with an affidavit certifying that such an agreement is valid under all applicable Federal and State laws. In addition, the guarantor shall provide a copy of the corporate authorization demonstrating that the corporation may guarantee the self-bond and execute the indemnity agreement.

(3) If the applicant is a partnership, joint venture or syndicate, the agreement shall bind each partner or party who has a beneficial interest, directly or indirectly, in the applicant.

(4) Pursuant to §800.50, the applicant, parent or non-parent corporate guarantor shall be required to complete the approved reclamation plan for the lands in default or to pay to the regulatory authority an amount necessary to complete the approved reclamation plan, not to exceed the bond amount. If permitted under State law, the indemnity agreement when under forfeiture shall operate as a judgment against those parties liable under the indemnity agreement.

(f) A regulatory authority may require self-bonded applicants, parent and non-parent corporate guarantors to submit an update of the information required under paragraphs (b)(3) and (b)(4) of this section within 90 days after the close of each fiscal year following the issuance of the self-bond or corporate guarantee.

(g) If at any time during the period when a self-bond is posted, the financial conditions of the applicant, parent or non-parent corporate guarantor change so that the criteria of paragraphs (b)(3) and (d) of this section are not satisfied, the permittee shall notify the regulatory authority immediately and shall within 90 days post an alternate form of bond in the same amount as the self-bond. Should the permittee fail to post an adequate substitute bond, the provisions of §800.16(e) shall apply.

§800.30 Replacement of bonds.

(a) The regulatory authority may allow a permittee to replace existing bonds with other bonds that provide equivalent coverage.

(b) The regulatory authority shall not release existing performance bonds until the permittee has submitted, and the regulatory authority has approved, acceptable replacement performance bonds. Replacement of a performance bond pursuant to this section shall not constitute a release of bond under §800.40.

§800.40 Requirement to release performance bonds.

(a) *Bond release application.* (1) The permittee may file an application with the regulatory authority for the release of all or part of a performance bond. Applications may be filed only at times or during seasons authorized by the regulatory authority in order to properly evaluate the completed reclamation operations. The times or seasons appropriate for the evaluation of certain types of reclamation shall be established in the regulatory program or identified in the mining and reclamation plan required in subchapter G of this chapter and approved by the regulatory authority.

(2) Within 30 days after an application for bond release has been filed with the regulatory authority, the permittee shall submit a copy of an advertisement placed at least once a week for four successive weeks in a newspaper of general circulation in the locality of the surface coal mining operation. The advertisement shall be considered part of any bond release application and shall contain the permittee's name, permit number and approval date, notification of the precise location of the land affected, the number of acres, the type and amount of the bond filed and the portion sought to be

released, the type and appropriate dates of reclamation work performed, a description of the results achieved as they relate to the permittee's approved reclamation plan, and the name and address of the regulatory authority to which written comments, objections, or requests for public hearings and informal conferences on the specific bond release may be submitted pursuant to §800.40 (f) and (h). In addition, as part of any bond release application, the permittee shall submit copies of letters which he or she has sent to adjoining property owners, local governmental bodies, planning agencies, sewage and water treatment authorities, and water companies in the locality in which the surface coal mining and reclamation operation took place, notifying them of the intention to seek release from the bond.

(3) The permittee shall include in the application for bond release a notarized statement which certifies that all applicable reclamation activities have been accomplished in accordance with the requirements of the Act, the regulatory program, and the approved reclamation plan. Such certification shall be submitted for each application or phase of bond release.

(b) *Inspection by regulatory authority.* (1) Upon receipt of the bond release application, the regulatory authority shall, within 30 days, or as soon thereafter as weather conditions permit, conduct an inspection and evaluation of the reclamation work involved. The evaluation shall consider, among other factors, the degree of difficulty to complete any remaining reclamation, whether pollution of surface and subsurface water is occurring, the probability of future occurrence of such pollution, and the estimated cost of abating such pollution. The surface owner, agent, or lessee shall be given notice of such inspection and may participate with the regulatory authority in

making the bond release inspection. The regulatory authority may arrange with the permittee to allow access to the permit area, upon request by any person with an interest in bond release, for the purpose of gathering information relevant to the proceeding.

(2) Within 60 days from the filing of the bond release application, if no public hearing is held pursuant to paragraph (f) of this section, or, within 30 days after a public hearing has been held pursuant to paragraph (f) of this section, the regulatory authority shall notify in writing the permittee, the surety or other persons with an interest in bond collateral who have requested notification under §800.21(f), and the persons who either filed objections in writing or objectors who were a party to the hearing proceedings, if any, of its decision to release or not to release all or part of the performance bond.

(c) The regulatory authority may release all or part of the bond for the entire permit area or incremental area if the regulatory authority is satisfied that all the reclamation or a phase of the reclamation covered by the bond or portion thereof has been accomplished in accordance with the following schedules for reclamation of Phases I, II, and III:

(1) At the completion of Phase I, after the operator completes the backfilling, regrading (which may include the replacement of topsoil) and drainage control of a bonded area in accordance with the approved reclamation plan, 60 percent of the bond or collateral for the applicable area.

(2) At the completion of Phase II, after revegetation has been established on the regraded mined lands in accordance with the approved reclamation plan, an additional

amount of bond. When determining the amount of bond to be released after successful revegetation has been established, the regulatory authority shall retain that amount of bond for the revegetated area which would be sufficient to cover the cost of reestablishing revegetation if completed by a third party and for the period specified for operator responsibility in section 515 of the Act for reestablishing revegetation. No part of the bond or deposit shall be released under this paragraph so long as the lands to which the release would be applicable are contributing suspended solids to streamflow or runoff outside the permit area in excess of the requirements set by section 515(b)(10) of the Act and by subchapter K of this chapter or until soil productivity for prime farmlands has returned to the equivalent levels of yield as nonmined land of the same soil type in the surrounding area under equivalent management practices as determined from the soil survey performed pursuant to section 507(b)(16) of the Act and part 823 of this chapter. Where a silt dam is to be retained as a permanent impoundment pursuant to subchapter K of this chapter, the Phase II portion of the bond may be released under this paragraph so long as provisions for sound future maintenance by the operator or the landowner have been made with the regulatory authority.

(3) At the completion of Phase III, after the operator has completed successfully all surface coal mining and reclamation activities, the release of the remaining portion of the bond, but not before the expiration of the period specified for operator responsibility in §816.116 or §817.116 of this chapter. However, no bond shall be fully released under provisions of this section until reclamation requirements of the Act and the permit are fully met.

(d) If the regulatory authority disapproves the application for release of the bond or portion thereof, the regulatory authority shall notify the permittee, the surety, and any person with an interest in collateral as provided for in §800.21(f), in writing, stating the reasons for disapproval and recommending corrective actions necessary to secure the release and allowing an opportunity for a public hearing.

(e) When any application for total or partial bond release is filed with the regulatory authority, the regulatory authority shall notify the municipality in which the surface coal mining operation is located by certified mail at least 30 days prior to the release of all or a portion of the bond.

(f) Any person with a valid legal interest which might be adversely affected by release of the bond, or the responsible officer or head of any Federal, State, or local governmental agency which has jurisdiction by law or special expertise with respect to any environmental, social, or economic impact involved in the operation or which is authorized to develop and enforce environmental standards with respect to such operations, shall have the right to file written objections to the proposed release from bond with the regulatory authority within 30 days after the last publication of the notice required by §800.40(a)(2). If written objections are filed and a hearing is requested, the regulatory authority shall inform all the interested parties of the time and place of the hearing, and shall hold a public hearing within 30 days after receipt of the request for the hearing. The date, time, and location of the public hearing shall be advertised by the regulatory authority in a newspaper of general circulation in the locality for two consecutive weeks. The public hearing shall be held in the locality of the surface coal

mining operation from which bond release is sought, at the location of the regulatory authority office, or at the State capital, at the option of the objector.

(g) For the purpose of the hearing under paragraph (f) of this section, the regulatory authority shall have the authority to administer oaths, subpoena witnesses or written or printed material, compel the attendance of witnesses or the production of materials, and take evidence including, but not limited to, inspection of the land affected and other surface coal mining operations carried on by the applicant in the general vicinity. A verbatim record of each public hearing shall be made, and a transcript shall be made available on the motion of any party or by order of the regulatory authority.

(h) Without prejudice to the right of an objector or the applicant, the regulatory authority may hold an informal conference as provided in section 513(b) of the Act to resolve such written objections. The regulatory authority shall make a record of the informal conference unless waived by all parties, which shall be accessible to all parties. The regulatory authority shall also furnish all parties of the informal conference with a written finding of the regulatory authority based on the informal conference, and the reasons for said finding.

§800.50 Forfeiture of bonds.

(a) If an operator refuses or is unable to conduct reclamation of an unabated violation, if the terms of the permit are not met, or if the operator defaults on the conditions under which the bond was accepted, the regulatory authority shall take the

following action to forfeit all or part of a bond or bonds for any permit area or an increment of a permit area:

(1) Send written notification by certified mail, return receipt requested, to the permittee and the surety on the bond, if any, informing them of the determination to forfeit all or part of the bond, including the reasons for the forfeiture and the amount to be forfeited. The amount shall be based on the estimated total cost of achieving the reclamation plan requirements.

(2) Advise the permittee and surety, if applicable, of the conditions under which forfeiture may be avoided. Such conditions may include, but are not limited to—

(i) Agreement by the permittee or another party to perform reclamation operations in accordance with a compliance schedule which meets the conditions of the permit, the reclamation plan, and the regulatory program and a demonstration that such party has the ability to satisfy the conditions; or

(ii) The regulatory authority may allow a surety to complete the reclamation plan, or the portion of the reclamation plan applicable to the bonded phase or increment, if the surety can demonstrate an ability to complete the reclamation in accordance with the approved reclamation plan. Except where the regulatory authority may approve partial release authorized under §800.40, no surety liability shall be released until successful completion of all reclamation under the terms of the permit, including applicable liability periods of §800.13.

(b) In the event forfeiture of the bond is required by this section, the regulatory authority shall—

(1) Proceed to collect the forfeited amount as provided by applicable laws for the collection of defaulted bonds or other debts if actions to avoid forfeiture have not been taken, or if rights of appeal, if any, have not been exercised within a time established by the regulatory authority, or if such appeal, if taken, is unsuccessful.

(2) Use funds collected from bond forfeiture to complete the reclamation plan, or portion thereof, on the permit area or increment, to which bond coverage applies.

(c) Upon default, the regulatory authority may cause the forfeiture of any and all bonds deposited to complete reclamation for which the bonds were posted. Unless specifically limited, as provided in §800.11(b), bond liability shall extend to the entire permit area under conditions of forfeiture.

(d)(1) In the event the estimated amount forfeited is insufficient to pay for the full cost of reclamation, the operator shall be liable for remaining costs. The regulatory authority may complete, or authorize completion of, reclamation of the bonded area and may recover from the operator all costs of reclamation in excess of the amount forfeited.

(2) In the event the amount of performance bond forfeited was more than the amount necessary to complete reclamation, the unused funds shall be returned by the regulatory authority to the party from whom they were collected.

§800.60 Terms and conditions for liability insurance.

(a) The regulatory authority shall require the applicant to submit as part of its permit application a certificate issued by an insurance company authorized to do

business in the United States certifying that the applicant has a public liability insurance policy in force for the surface coal mining and reclamation operations for which the permit is sought. Such policy shall provide for personal injury and property damage protection in an amount adequate to compensate any persons injured or property damaged as a result of the surface coal mining and reclamation operations, including the use of explosives, and who are entitled to compensation under the applicable provisions of State law. Minimum insurance coverage for bodily injury and property damage shall be \$300,000 for each occurrence and \$500,000 aggregate.

(b) The policy shall be maintained in full force during the life of the permit or any renewal thereof and the liability period necessary to complete all reclamation operations under this Chapter.

(c) The policy shall include a rider requiring that the insurer notify the regulatory authority whenever substantive changes are made in the policy including any termination or failure to renew.

(d) The regulatory authority may accept from the applicant, in lieu of a certificate for a public liability insurance policy, satisfactory evidence from the applicant that it satisfies applicable State self-insurance requirements approved as part of the regulatory program and the requirements of this section.

§800.70 Bonding for anthracite operations in Pennsylvania.

(a) All of the provisions of this subchapter shall apply to bonding and insuring anthracite surface coal mining and reclamation operations in Pennsylvania except that—

(1) Specified bond limits shall be determined by the regulatory authority in accordance with applicable provisions of Pennsylvania statutes, rules and regulations promulgated thereunder, and implementing policies of the Pennsylvania Department of Environmental Resources.

(2) The period of liability for responsibility under each bond shall be established for those operations in accordance with applicable laws of the State of Pennsylvania, rules and regulations promulgated thereunder, and implementing policies of the Pennsylvania Department of Environmental Resources.

(b) Upon amendment of the Pennsylvania permanent regulatory program with respect to specified bond limits and period of revegetation responsibility for anthracite surface coal mining and reclamation operations, any person engaging in or seeking to engage in those operations shall comply with additional regulations the Secretary may issue as are necessary to meet the purposes of the Act.

12. Revise part 816 to read as follows:

PART 816—PERMANENT PROGRAM PERFORMANCE STANDARDS—SURFACE MINING ACTIVITIES

Sec.

- 816.1 Scope.
- 816.2 Objectives.
- 816.10 Information collection.
- 816.11 Signs and markers.
- 816.13 Casing and sealing of drilled holes: General requirements.
- 816.14 Casing and sealing of drilled holes: Temporary.
- 816.15 Casing and sealing of drilled holes: Permanent.
- 816.22 Topsoil and subsoil.
- 816.41 Hydrologic-balance protection.
- 816.42 Hydrologic balance: Water quality standards and effluent limitations.
- 816.43 Diversions.
- 816.45 Hydrologic balance: Sediment control measures.
- 816.46 Hydrologic balance: Siltation structures.
- 816.47 Hydrologic balance: Discharge structures.
- 816.49 Impoundments.
- 816.56 Postmining rehabilitation of sedimentation ponds, diversions, impoundments, and treatment facilities.
- 816.57 Hydrologic balance: Stream buffer zones.
- 816.59 Coal recovery.
- 816.61 Use of explosives: General requirements.
- 816.62 Use of explosives: Preblasting survey.
- 816.64 Use of explosives: Blasting schedule.
- 816.66 Use of explosives: Blasting signs, warnings, and access control.
- 816.67 Use of explosives: Control of adverse effects.
- 816.68 Use of explosives: Records of blasting operations.
- 816.71 Disposal of excess spoil: General requirements.
- 816.72 Disposal of excess spoil: Valley fills/head-of-hollow fills.
- 816.73 Disposal of excess spoil: Durable rock fills.
- 816.74 Disposal of excess spoil: Preexisting benches.
- 816.79 Protection of underground mining.
- 816.81 Coal mine waste: General requirements.
- 816.83 Coal mine waste: Refuse piles.
- 816.84 Coal mine waste: Impounding structures.
- 816.87 Coal mine waste: Burning and burned waste utilization.
- 816.89 Disposal of noncoal mine wastes.
- 816.95 Stabilization of surface areas.
- 816.97 Protection of fish, wildlife, and related environmental values.
- 816.99 Slides and other damage.
- 816.100 Contemporaneous reclamation.
- 816.101 Backfilling and grading: Time and distance requirements.
- 816.102 Backfilling and grading: General grading requirements.
- 816.104 Backfilling and grading: Thin overburden.
- 816.105 Backfilling and grading: Thick overburden.
- 816.106 Backfilling and grading: Previously mined areas.
- 816.107 Backfilling and grading: Steep slopes.
- 816.111 Revegetation: General requirements.

816.113 Revegetation: Timing.
816.114 Revegetation: Mulching and other soil stabilizing practices.
816.116 Revegetation: Standards for success.
816.131 Cessation of operations: Temporary.
816.132 Cessation of operations: Permanent.
816.133 Postmining land use.
816.150 Roads: General.
816.151 Primary roads.
816.180 Utility installations.
816.181 Support facilities.
816.200 Interpretative rules related to general performance standards.

AUTHORITY: 30 U.S.C. 1201 *et seq.*; and sec 115 of Pub. L. 98-146.

§816.1 Scope.

This part sets forth the minimum environmental protection performance standards to be adopted and implemented under regulatory programs for surface mining activities.

§816.2 Objectives.

This part is intended to ensure that all surface mining activities are conducted in a manner which preserves and enhances environmental and other values in accordance with the Act.

§816.10 Information collection.

(a) The collections of information contained in part 816 have been approved by the Office of Management and Budget under 44 U.S.C. 3501 *et seq.* and assigned

clearance number 1029-0047. The information will be used by the regulatory authority to monitor and inspect surface coal mining activities to ensure that they are in compliance with the Surface Mining Control and Reclamation Act. Response is required to obtain a benefit.

(b) Public Reporting Burden for this information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Information Collection Clearance Officer, Office of Surface Mining Reclamation and Enforcement, 1951 Constitution Ave. NW., Room 203, Washington, DC 20240; and the Office of Management and Budget, Paperwork Reduction Project (1029-0047), Washington, DC 20503.

§816.11 Signs and markers.

(a) *Specifications.* Signs and markers required under this part shall—

(1) Be posted and maintained by the person who conducts the surface mining activities;

(2) Be of a uniform design throughout the operation that can be easily seen and read;

(3) Be made of durable material; and

(4) Conform to local ordinances and codes.

(b) *Duration of maintenance.* Signs and markers shall be maintained during the conduct of all activities to which they pertain.

(c) *Mine and permit identification signs.* (1) Identification signs shall be displayed at each point of access to the permit area from public roads.

(2) Signs shall show the name, business address, and telephone number of the person who conducts the surface mining activities and the identification number of the current permit authorizing surface mining activities.

(3) Signs shall be retained and maintained until after the release of all bonds for the permit area.

(d) *Perimeter markers.* The perimeter of a permit area shall be clearly marked before the beginning of surface mining activities.

(e) *Buffer zone markers.* Buffer zones shall be marked along their boundaries as required under §816.57.

(f) *Topsoil markers.* Where topsoil or other vegetation-supporting material is segregated and stockpiled as required under §816.22, the stockpiled material shall be clearly marked.

§816.13 Casing and sealing of drilled holes: General requirements.

Each exploration hole, other drill or borehole, well, or other exposed underground opening shall be cased, sealed, or otherwise managed, as approved by the regulatory authority, to prevent acid or other toxic drainage from entering ground or surface waters, to minimize disturbance to the prevailing hydrologic balance, and to ensure the safety of people, livestock, fish and wildlife, and machinery in the permit area and adjacent area. If these openings are uncovered or exposed by surface mining activities within the permit area they shall be permanently closed, unless approved for water monitoring, or otherwise managed in a manner approved by the regulatory authority. Use of a drilled hole or borehole or monitoring well as a water well must meet the provisions of §816.41 of this part. This section does not apply to holes solely drilled and used for blasting.

§816.14 Casing and sealing of drilled holes: Temporary.

Each exploration hole, other drill or boreholes, wells and other exposed underground openings which have been identified in the approved permit application for use to return coal processing waste or water to underground workings, or to be used to monitor ground water conditions, shall be temporarily sealed before use and protected during use by barricades, or fences, or other protective devices approved by the regulatory authority. These devices shall be periodically inspected and maintained in good operating condition by the person who conducts the surface mining activities.

§816.15 Casing and sealing of drilled holes: Permanent.

When no longer needed for monitoring or other use approved by the regulatory authority upon a finding of no adverse environmental or health and safety effect, or unless approved for transfer as a water well under §816.41, each exploration hole, other drilled hole or borehole, well, and other exposed underground opening shall be capped, sealed, backfilled, or otherwise properly managed, as required by the regulatory authority, under §816.13 and consistent with 30 CFR 75.1711. Permanent closure measures shall be designed to prevent access to the mine workings by people, livestock, fish and wildlife, and machinery, and to keep acid or other toxic drainage from entering ground or surface waters.

§816.22 Topsoil and subsoil.

(a) *Removal.* (1)(i) All topsoil shall be removed as a separate layer from the area to be disturbed, and segregated.

(ii) Where the topsoil is of insufficient quantity or poor quality for sustaining vegetation, the materials approved by the regulatory authority in accordance with paragraph (b) of this section shall be removed as a separate layer from the area to be disturbed, and segregated.

(2) If topsoil is less than 6 inches thick, the operator may remove the topsoil and the unconsolidated materials immediately below the topsoil and treat the mixture as topsoil.

(3) The regulatory authority may choose not to require the removal of topsoil for minor disturbances which—

(i) Occur at the site of small structures, such as power poles, signs, or fence lines; or

(ii) Will not destroy the existing vegetation and will not cause erosion.

(4) *Timing.* All material to be removed under this section shall be removed after the vegetative cover that would interfere with its salvage is cleared from the area to be disturbed, but before any drilling, blasting, mining, or other surface disturbance takes place.

(b) *Substitutes and supplements.* Selected overburden materials may be substituted for, or used as a supplement to topsoil if the operator demonstrates to the regulatory authority that the resulting soil medium is equal to, or more suitable for sustaining vegetation than, the existing topsoil, and the resulting soil medium is the best available in the permit area to support revegetation.

(c) *Storage.* (1) Materials removed under paragraph (a) of this section shall be segregated and stockpiled when it is impractical to redistribute such materials promptly on regraded areas.

(2) Stockpiled materials shall—

(i) Be selectively placed on a stable site within the permit area;

(ii) Be protected from contaminants and unnecessary compaction that would interfere with revegetation;

(iii) Be protected from wind and water erosion through prompt establishment and maintenance of an effective, quick growing vegetative cover or through other measures approved by the regulatory authority; and

(iv) Not be moved until required for redistribution unless approved by the regulatory authority.

(3) Where long-term surface disturbances will result from facilities such as support facilities and preparation plants and where stockpiling of materials removed under paragraph (a)(1) of this section would be detrimental to the quality or quantity of those materials, the regulatory authority may approve the temporary distribution of the soil materials so removed to an approved site within the permit area to enhance the current use of that site until needed for later reclamation, provided that—

(i) Such action will not permanently diminish the capability of the topsoil of the host site; and

(ii) The material will be retained in a condition more suitable for redistribution than if stockpiled.

(d) *Redistribution.* (1) Topsoil materials and topsoil substitutes and supplements removed under paragraphs (a) and (b) of this section shall be redistributed in a manner that—

(i) Achieves an approximately uniform, stable thickness when consistent with the approved postmining land use, contours, and surface-water drainage systems. Soil

thickness may also be varied to the extent such variations help meet the specific revegetation goals identified in the permit;

(ii) Prevents excess compaction of the materials; and

(iii) Protects the materials from wind and water erosion before and after seeding and planting.

(2) Before redistribution of the material removed under paragraph (a) of this section the regraded land shall be treated if necessary to reduce potential slippage of the redistributed material and to promote root penetration. If no harm will be caused to the redistributed material and reestablished vegetation, such treatment may be conducted after such material is replaced.

(3) The regulatory authority may choose not to require the redistribution of topsoil or topsoil substitutes on the approved postmining embankments of permanent impoundments or of roads if it determines that—

(i) Placement of topsoil or topsoil substitutes on such embankments is inconsistent with the requirement to use the best technology currently available to prevent sedimentation, and

(ii) Such embankments will be otherwise stabilized.

(4) *Nutrients and soil amendments.* Nutrients and soil amendments shall be applied to the initially redistributed material when necessary to establish the vegetative cover.

(e) *Subsoil segregation.* The regulatory authority may require that the B horizon, C horizon, or other underlying strata, or portions thereof, be removed and segregated, stockpiled, and redistributed as subsoil in accordance with the requirements of paragraphs (c) and (d) of this section if it finds that such subsoil layers are necessary to comply with the revegetation requirements of §§816.111, 816.113, 816.114, and 816.116 of this chapter.

§816.41 Hydrologic-balance protection.

(a) *General.* All surface mining and reclamation activities shall be conducted to minimize disturbance of the hydrologic balance within the permit and adjacent areas, to prevent material damage to the hydrologic balance outside the permit area, to assure the protection or replacement of water rights, and to support approved postmining land uses in accordance with the terms and conditions of the approved permit and the performance standards of this part. The regulatory authority may require additional preventative, remedial, or monitoring measures to assure that material damage to the hydrologic balance outside the permit area is prevented. Mining and reclamation practices that minimize water pollution and changes in flow shall be used in preference to water treatment.

(b) *Ground-water protection.* In order to protect the hydrologic balance, surface mining activities shall be conducted according to the plan approved under §780.21(h) of this chapter and the following:

(1) Ground-water quality shall be protected by handling earth materials and runoff in a manner that minimizes acidic, toxic, or other harmful infiltration to ground-water systems and by managing excavations and other disturbances to prevent or control the discharge of pollutants into the ground water.

(2) Ground-water quantity shall be protected by handling earth materials and runoff in a manner that will restore the approximate premining recharge capacity of the reclaimed area as a whole, excluding coal mine waste disposal areas and fills, so as to allow the movement of water to the ground-water system.

(c) *Ground-water monitoring.* (1) Ground-water monitoring shall be conducted according to the ground-water monitoring plan approved under §780.21(i) of this chapter. The regulatory authority may require additional monitoring when necessary.

(2) Ground-water monitoring data shall be submitted every 3 months to the regulatory authority or more frequently as prescribed by the regulatory authority. Monitoring reports shall include analytical results from each sample taken during the reporting period. When the analysis of any ground-water sample indicates noncompliance with the permit conditions, then the operator shall promptly notify the regulatory authority and immediately take the actions provided for in §§773.17(e) and 780.21(h) of this chapter.

(3) Ground-water monitoring shall proceed through mining and continue during reclamation until bond release. Consistent with the procedures of §774.13 of this chapter, the regulatory authority may modify the monitoring requirements, including the

parameters covered and the sampling frequency, if the operator demonstrates, using the monitoring data obtained under this paragraph, that—

(i) The operation has minimized disturbance to the hydrologic balance in the permit and adjacent areas and prevented material damage to the hydrologic balance outside the permit area; water quantity and quality are suitable to support approved postmining land uses; and the water rights of other users have been protected or replaced; or

(ii) Monitoring is no longer necessary to achieve the purposes set forth in the monitoring plan approved under §780.21(i) of this chapter.

(4) Equipment, structures, and other devices used in conjunction with monitoring the quality and quantity of ground water onsite and offsite shall be properly installed, maintained, and operated and shall be removed by the operator when no longer needed.

(d) *Surface-water protection.* In order to protect the hydrologic balance, surface mining activities shall be conducted according to the plan approved under §780.21(h) of this chapter, and the following:

(1) Surface-water quality shall be protected by handling earth materials, ground-water discharges, and runoff in a manner that minimizes the formation of acidic or toxic drainage; prevents, to the extent possible using the best technology currently available, additional contribution of suspended solids to streamflow outside the permit area; and otherwise prevents water pollution. If drainage control, restabilization and revegetation of disturbed areas, diversion of runoff, mulching, or other reclamation and remedial

practices are not adequate to meet the requirements of this section and §816.42, the operator shall use and maintain the necessary water-treatment facilities or water quality controls.

(2) Surface-water quality and flow rates shall be protected by handling earth materials and runoff in accordance with the steps outlined in the plan approved under §780.21(h) of this chapter.

(e) *Surface-water monitoring.* (1) Surface-water monitoring shall be conducted according to the surface-water monitoring plan approved under §780.21(j) of this chapter. The regulatory authority may require additional monitoring when necessary.

(2) Surface-water monitoring data shall be submitted every 3 months to the regulatory authority or more frequently as prescribed by the regulatory authority. Monitoring reports shall include analytical results from each sample taken during the reporting period. When the analysis of any surface-water sample indicates noncompliance with the permit conditions, the operator shall promptly notify the regulatory authority and immediately take the actions provided for in §§773.17(e) and 780.21(h) of this chapter. The reporting requirements of this paragraph do not exempt the operator from meeting any National Pollutant Discharge Elimination System (NPDES) reporting requirements.

(3) Surface-water monitoring shall proceed through mining and continue during reclamation until bond release. Consistent with §774.13 of this chapter, the regulatory authority may modify the monitoring requirements, except those required by the NPDES

permitting authority, including the parameters covered and sampling frequency if the operator demonstrates, using the monitoring data obtained under this paragraph, that—

(i) The operation has minimized disturbance to the hydrologic balance in the permit and adjacent areas and prevented material damage to the hydrologic balance outside the permit area; water quantity and quality are suitable to support approved postmining land uses; and the water rights of other users have been protected or replaced; or

(ii) Monitoring is no longer necessary to achieve the purposes set forth in the monitoring plan approved under §780.21(j) of this chapter.

(4) Equipment, structures, and other devices used in conjunction with monitoring the quality and quantity of surface water onsite and offsite shall be properly installed, maintained, and operated and shall be removed by the operator when no longer needed.

(f) *Acid- and toxic-forming materials.* (1) Drainage from acid- and toxic-forming materials into surface water and ground water shall be avoided by—

(i) Identifying and burying and/or treating, when necessary, materials which may adversely affect water quality, or be detrimental to vegetation or to public health and safety if not buried and/or treated, and

(ii) Storing materials in a manner that will protect surface water and ground water by preventing erosion, the formation of polluted runoff, and the infiltration of polluted water. Storage shall be limited to the period until burial and/or treatment first become

feasible, and so long as storage will not result in any risk of water pollution or other environmental damage.

(2) Storage, burial or treatment practices shall be consistent with other material handling and disposal provisions of this chapter.

(g) *Transfer of wells.* Before final release of bond, exploratory or monitoring wells shall be sealed in a safe and environmentally sound manner in accordance with §§816.13 to 816.15. With the prior approval of the regulatory authority, wells may be transferred to another party for further use. At a minimum, the conditions of such transfer shall comply with State and local law and the permittee shall remain responsible for the proper management of the well until bond release in accordance with §§816.13 to 816.15.

(h) *Water rights and replacement.* Any person who conducts surface mining activities shall replace the water supply of an owner of interest in real property who obtains all or part of his or her supply of water for domestic, agricultural, industrial, or other legitimate use from an underground or surface source, where the water supply has been adversely impacted by contamination, diminution, or interruption proximately resulting from the surface mining activities. Baseline hydrologic information required in §§780.21 and 780.22 of this chapter shall be used to determine the extent of the impact of mining upon ground water and surface water.

(i) *Discharges into an underground mine.* (1) Discharges into an underground mine are prohibited, unless specifically approved by the regulatory authority after a demonstration that the discharge will—

(i) Minimize disturbance to the hydrologic balance on the permit area, prevent material damage outside the permit area and otherwise eliminate public hazards resulting from surface mining activities;

(ii) Not result in a violation of applicable water quality standards or effluent limitations;

(iii) Be at a known rate and quality which shall meet the effluent limitations of §816.42 for pH and total suspended solids, except that the pH and total suspended-solids limitations may be exceeded, if approved by the regulatory authority; and

(iv) Meet with the approval of the Mine Safety and Health Administration.

(2) Discharges shall be limited to the following:

(i) Water;

(ii) Coal processing waste;

(iii) Fly ash from a coal-fired facility;

(iv) Sludge from an acid-mine-drainage treatment facility;

(v) Flue-gas desulfurization sludge;

(vi) Inert materials used for stabilizing underground mines; and

(vii) Underground mine development wastes.

§816.42 Hydrologic balance: Water quality standards and effluent limitations.

Discharges of water from areas disturbed by surface mining activities shall be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR part 434.

§816.43 Diversions.

(a) *General requirements.* (1) With the approval of the regulatory authority, any flow from mined areas abandoned before May 3, 1978, and any flow from undisturbed areas or reclaimed areas, after meeting the criteria of §816.46 for siltation structure removal, may be diverted from disturbed areas by means of temporary or permanent diversions. All diversions shall be designed to minimize adverse impacts to the hydrologic balance within the permit and adjacent areas, to prevent material damage outside the permit area and to assure the safety of the public. Diversions shall not be used to divert water into underground mines without approval of the regulatory authority under §816.41(i).

(2) The diversion and its appurtenant structures shall be designed, located, constructed, maintained and used to—

- (i) Be stable;
- (ii) Provide protection against flooding and resultant damage to life and property;
- (iii) Prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow outside the permit area; and

(iv) Comply with all applicable local, State, and Federal laws and regulations.

(3) Temporary diversions shall be removed promptly when no longer needed to achieve the purpose for which they were authorized. The land disturbed by the removal process shall be restored in accordance with this part. Before diversions are removed, downstream water-treatment facilities previously protected by the diversion shall be modified or removed, as necessary, to prevent overtopping or failure of the facilities. This requirement shall not relieve the operator from maintaining water-treatment facilities as otherwise required. A permanent diversion or a stream channel reclaimed after the removal of a temporary diversion shall be designed and constructed so as to restore or approximate the premining characteristics of the original stream channel including the natural riparian vegetation to promote the recovery and the enhancement of the aquatic habitat.

(4) The regulatory authority may specify design criteria for diversions to meet the requirements of this section.

(b) *Diversion of perennial and intermittent streams.* (1) Diversion of perennial and intermittent streams within the permit area may be approved by the regulatory authority after making the finding relating to stream buffer zones that the diversion will not adversely affect the water quantity and quality and related environmental resources of the stream.

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

(3) The requirements of paragraph (a)(2)(ii) of this section shall be met when the temporary and permanent diversions for perennial and intermittent streams are designed so that the combination of channel, bank and flood-plain configuration is adequate to pass safely the peak runoff of a 10-year, 6-hour precipitation event for a temporary diversion and a 100-year, 6-hour precipitation event for a permanent diversion.

(4) The design and construction of all stream channel diversions of perennial and intermittent streams shall be certified by a qualified registered professional engineer as meeting the performance standards of this part and any design criteria set by the regulatory authority.

(c) *Diversion of miscellaneous flows.* (1) Miscellaneous flows, which consist of all flows except for perennial and intermittent streams, may be diverted away from disturbed areas if required or approved by the regulatory authority. Miscellaneous flows shall include ground-water discharges and ephemeral streams.

(2) The design, location, construction, maintenance, and removal of diversions of miscellaneous flows shall meet all of the performance standards set forth in paragraph (a) of this section:

(3) The requirements of paragraph (a)(2)(ii) of this section shall be met when the temporary and permanent diversions for miscellaneous flows are designed so that the combination of channel, bank and flood-plain configuration is adequate to pass safely the peak runoff of a 2-year, 6-hour precipitation event for a temporary diversion and a 10-year, 6-hour precipitation event for a permanent diversion.

§816.45 Hydrologic balance: Sediment control measures.

(a) Appropriate sediment control measures shall be designed, constructed, and maintained using the best technology currently available to:

(1) Prevent, to the extent possible, additional contributions of sediment to streamflow or to runoff outside the permit area,

(2) Meet the more stringent of applicable State or Federal effluent limitations,

(3) Minimize erosion to the extent possible.

(b) Sediment control measures include practices carried out within and adjacent to the disturbed area. The sedimentation storage capacity of practices in and downstream from the disturbed area shall reflect the degree to which successful mining and reclamation techniques are applied to reduce erosion and control sediment. Sediment control measures consist of the utilization of proper mining and reclamation methods and sediment control practices, singly or in combination. Sediment control methods include but are not limited to—

(1) Disturbing the smallest practicable area at any one time during the mining operation through progressive backfilling, grading, and prompt revegetation as required in §816.111(b);

(2) Stabilizing the backfill material to promote a reduction in the rate and volume of runoff, in accordance with the requirements of §816.102;

- (3) Retaining sediment within disturbed areas;
- (4) Diverting runoff away from disturbed areas;
- (5) Diverting runoff using protected channels or pipes through disturbed areas so as not to cause additional erosion;
- (6) Using straw dikes, riprap, check dams, mulches, vegetative sediment filters, dugout ponds, and other measures that reduce overland flow velocity, reduce runoff volume, or trap sediment; and
- (7) Treating with chemicals.

§816.46 Hydrologic balance: Siltation structures.

(a) For the purpose of this section only, *disturbed areas* shall not include those areas—

(1) In which the only surface mining activities include diversion ditches, siltation structures, or roads that are designed constructed and maintained in accordance with this part; and

(2) For which the upstream area is not otherwise disturbed by the operator.

(b) *General requirements.* (1) Additional contributions of suspended solids sediment to streamflow or runoff outside the permit area shall be prevented to the extent possible using the best technology currently available.

(2) All surface drainage from the disturbed area shall be passed through a siltation structure before leaving the permit area, except as provided in paragraph (b)(5) or (e) of this section. The requirements of this paragraph are suspended effective December 22, 1986, per court order.

(3) Siltation structures for an area shall be constructed before beginning any surface mining activities in that area, and upon construction shall be certified by a qualified registered professional engineer, or in any State which authorizes land surveyors to prepare and certify plans in accordance with §780.25(a) of this chapter a qualified registered professional land surveyor, to be constructed as designed and as approved in the reclamation plan.

(4) Any siltation structure which impounds water shall be designed, constructed and maintained in accordance with §816.49 of this chapter.

(5) Siltation structures shall be maintained until removal is authorized by the regulatory authority and the disturbed area has been stabilized and revegetated. In no case shall the structure be removed sooner than 2 years after the last augmented seeding.

(6) When siltation structure is removed, the land on which the siltation structure was located shall be regraded and revegetated in accordance with the reclamation plan and §§816.111 through 816.116 of this chapter. Sedimentation ponds approved by the regulatory authority for retention as permanent impoundments may be exempted from this requirement.

(c) *Sedimentation ponds.* (1) When used, sedimentation ponds shall—

- (i) Be used individually or in series;
- (ii) Be located as near as possible to the disturbed area and out of perennial streams unless approved by the regulatory authority, and
- (iii) Be designed, constructed, and maintained to—
 - (A) Provide adequate sediment storage volume;
 - (B) Provide adequate detention time to allow the effluent from the ponds to meet State and Federal effluent limitations;
 - (C) Contain or treat the 10-year, 24-hour precipitation event (“design event”) unless a lesser design event is approved by the regulatory authority based on terrain, climate, other site-specific conditions and on a demonstration by the operator that the effluent limitations of §816.42 will be met;
 - (D) Provide a nonclogging dewatering device adequate to maintain the detention time required under paragraph (c)(1)(iii)(B) of this section;
 - (E) Minimize, to the extent possible, short circuiting;
 - (F) Provide periodic sediment removal sufficient to maintain adequate volume for the design event;
 - (G) Ensure against excessive settlement;
 - (H) Be free of sod, large roots, frozen soil, and acid- or toxic-forming coal-processing waste; and

(l) Be compacted properly.

(2) *Spillways*. A sedimentation pond shall include either a combination of principal and emergency spillways or single spillway configured as specified in §816.49(a)(9).

(d) *Other treatment facilities*. (1) Other treatment facilities shall be designed to treat the 10-year, 24-hour precipitation event unless a lesser design event is approved by the regulatory authority based on terrain, climate, other site-specific conditions and a demonstration by the operator that the effluent limitations of §816.42 will be met.

(2) Other treatment facilities shall be designed in accordance with the applicable requirements of paragraph (c) of this section.

(e) *Exemptions*. Exemptions to the requirements of this section may be granted if—

(1) The disturbed drainage area within the total disturbed area is small; and

(2) The operator demonstrates that siltation structures and alternate sediment control measures are not necessary for drainage from the disturbed area to meet the effluent limitations under §816.42 and the applicable State and Federal water quality standards for the receiving waters.

§816.47 Hydrologic balance: Discharge structures.

Discharge from sedimentation ponds, permanent and temporary impoundments, coal processing waste dams and embankments, and diversions shall be controlled, by energy dissipators, riprap channels, and other devices, where necessary, 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-design procedures.

§816.49 Impoundments.

(a) *General requirements.* The requirements of this paragraph apply to both temporary and permanent impoundments.

(1) Impoundments meeting the Class B or C criteria for dams in the U.S. Department of Agriculture, Soil Conservation Service Technical Release No. 60 (210-VI-TR60, Oct. 1985), "Earth Dams and Reservoirs," 1985 shall comply with "Minimum Emergency Spillway Hydrologic Criteria" table in TR-60 and the requirements of this section. The technical release is hereby incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, order No. PB 87-157509/AS. Copies can be inspected at the OSM Headquarters Office, Office of Surface Mining Reclamation and Enforcement, Administrative Record, 1951 Constitution Avenue, NW, Washington, DC, or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call

202-741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html

(2) An impoundment meeting the size or other criteria of §77.216(a) of this title shall comply with the requirements of §77.216 of this title and this section.

(3) *Design certification.* The design of impoundments shall be certified in accordance with §780.25(a) of this chapter as designed to meet the requirements of this part using current, prudent, engineering practices and any design criteria established by the regulatory authority. The qualified, registered, professional engineer or qualified, registered, professional, land surveyor shall be experienced in the design and construction of impoundments.

(4) *Stability.* (i) An impoundment meeting the Class B or C criteria for dams in TR-60, or the size or other criteria of §77.216(a) of this title shall have a minimum static safety factor of 1.5 for a normal pool with steady state seepage saturation conditions, and a seismic safety factor of at least 1.2.

(ii) Impoundments not included in paragraph (a)(4)(i) of this section, except for a coal mine waste impounding structure, shall have a minimum static safety factor of 1.3 for a normal pool with steady state seepage saturation conditions or meet the requirements of §780.25(c)(3).

(5) *Freeboard.* Impoundments shall have adequate freeboard to resist overtopping by waves and by sudden increases in storage volume. Impoundments meeting the Class B or C criteria for dams in TR-60 shall comply with the freeboard

hydrograph criteria in the “Minimum Emergency Spillway Hydrologic Criteria” table in TR-60.

(6) *Foundation.* (i) Foundations and abutments for an impounding structure shall be stable during all phases of construction and operation and shall be designed based on adequate and accurate information on the foundation conditions. For an impoundment meeting the Class B or C criteria for dams in TR-60, or the size or other criteria of §77.216(a) of this title, foundation investigation, as well as any necessary laboratory testing of foundation material, shall be performed to determine the design requirements for foundation stability.

(ii) All vegetative and organic materials shall be removed and foundations excavated and prepared to resist failure. Cutoff trenches shall be installed if necessary to ensure stability.

(7) Slope protection shall be provided to protect against surface erosion at the site and protect against sudden drawdown.

(8) Faces of embankments and surrounding areas shall be vegetated, except that faces where water is impounded may be riprapped or otherwise stabilized in accordance with accepted design practices.

(9) *Spillways.* An impoundment shall include either a combination of principal and emergency spillways or a single spillway configured as specified in paragraph (a)(9)(i) of this section, designed and constructed to safely pass the applicable design precipitation event specified in paragraph (a)(9)(ii) of this section, except as set forth in paragraph (c)(2) of this section.

(i) The regulatory authority may approve a single open-channel spillway that is:

(A) Of nonerodible construction and designed to carry sustained flows; or

(B) Earth- or grass-lined and designed to carry short-term, infrequent flows at non-erosive velocities where sustained flows are not expected.

(ii) Except as specified in paragraph (c)(2) of this section, the required design precipitation event for an impoundment meeting the spillway requirements of paragraph (a)(9) of this section is:

(A) For an impoundment meeting the Class B or C criteria for dams in TR-60, the emergency spillway hydrograph criteria in the “Minimum Emergency Spillway Hydrologic Criteria” table in TR-60, or greater event as specified by the regulatory authority.

(B) For an impoundment meeting or exceeding the size or other criteria of §77.216(a) of this title, a 100-year 6-hour event, or greater event as specified by the regulatory authority.

(C) For an impoundment not included in paragraph (a)(9)(ii) (A) and (B) of this section, a 25-year 6-hour or greater event as specified by the regulatory authority.

(10) The vertical portion of any remaining highwall shall be located far enough below the low-water line along the full extent of highwall to provide adequate safety and access for the proposed water users.

(11) *Inspections.* Except as provided in paragraph (a)(11)(iv) of this section, a qualified registered professional engineer or other qualified professional specialist under

the direction of a professional engineer, shall inspect each impoundment as provided in paragraph (a)(11)(i) of this section. The professional engineer or specialist shall be experienced in the construction of impoundments.

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

(ii) The qualified registered professional engineer, or qualified registered professional land surveyor as specified in paragraph (a)(11)(iv) of this section, shall promptly after each inspection required in paragraph (a)(11)(i) of this section provide to the regulatory authority a certified report that the impoundment has been constructed and/or maintained as designed and in accordance with the approved plan and this chapter. The report shall include discussion of any appearance of instability, structural weakness or other hazardous condition, depth and elevation of any impounded waters, existing storage capacity, any existing or required monitoring procedures and instrumentation, and any other aspects of the structure affecting stability.

(iii) A copy of the report shall be retained at or near the minesite.

(iv) In any State which authorizes land surveyors to prepare and certify plans in accordance with §780.25(a) of this chapter, a qualified registered professional land surveyor may inspect any temporary or permanent impoundment that does not meet the SCS Class B or C criteria for dams in TR-60, or the size or other criteria of §77.216(a) of this title and certify and submit the report required by paragraph (a)(11)(ii) of this section, except that all coal mine waste impounding structures covered by §816.84 of

this chapter shall be certified by a qualified registered professional engineer. The professional land surveyor shall be experienced in the construction of impoundments.

(12) Impoundments meeting the SCS Class B or C criteria for dams in TR-60, or the size or other criteria of §77.216 of this title must be examined in accordance with §77.216-3 of this title. Impoundments not meeting the SCS Class B or C criteria for dams in TR-60, or subject to §77.216 of this title, shall be examined at least quarterly. A qualified person designated by the operator shall examine impoundments for the appearance of structural weakness and other hazardous conditions.

(13) *Emergency procedures.* If any examination or inspection discloses that a potential hazard exists, the person who examined the impoundment shall promptly inform the regulatory authority of the finding and of the emergency procedures formulated for public protection and remedial action. If adequate procedures cannot be formulated or implemented, the regulatory authority shall be notified immediately. The regulatory authority shall then notify the appropriate agencies that other emergency procedures are required to protect the public.

(b) *Permanent impoundments.* A permanent impoundment of water may be created, if authorized by the regulatory authority in the approved permit based upon the following demonstration:

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

(2) The quality of impounded water will be suitable on a permanent basis for its intended use and, after reclamation, will meet applicable State and Federal water

quality standards, and discharges from the impoundment will meet applicable effluent limitations and will not degrade the quality of receiving water below applicable State and Federal water quality standards.

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

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

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

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

(c) *Temporary impoundments.* (1) The regulatory authority may authorize the construction of temporary impoundments as part of a surface coal mining operation.

(2) In lieu of meeting the requirements in paragraph (a)(9)(i) of this section, the regulatory authority may approve an impoundment that relies primarily on storage to control the runoff from the design precipitation event when it is demonstrated by the operator and certified by a qualified registered professional engineer or qualified registered professional land surveyor in accordance with §780.25(a) of this chapter that the impoundment will safely control the design precipitation event, the water from which shall be safely removed in accordance with current, prudent, engineering practices.

Such an impoundment shall be located where failure would not be expected to cause loss of life or serious property damage, except where:

(i) Impoundments meeting the SCS Class B or C criteria for dams in TR-60, or the size or other criteria of §77.216(a) of this title shall be designed to control the precipitation of the probable maximum precipitation of a 6-hour event, or greater event specified by the regulatory authority.

(ii) Impoundments not included in paragraph (c)(2)(i) of this section shall be designed to control the precipitation of the 100-year 6-hour event, or greater event specified by the regulatory authority.

§816.56 Postmining rehabilitation of sedimentation ponds, diversions, impoundments, and treatment facilities.

Before abandoning a permit area or seeking bond release, the operator shall ensure that all temporary structures are removed and reclaimed, and that all permanent sedimentation ponds, diversions, impoundments, and treatment facilities meet the requirements of this chapter for permanent structures, have been maintained properly, and meet the requirements of the approved reclamation plan for permanent structures and impoundments. The operator shall renovate such structures if necessary to meet the requirements of this chapter and to conform to the approved reclamation plan.

§816.57 Hydrologic balance: Stream buffer zones.

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

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

(2) If there will be a temporary or permanent stream-channel diversion, it will comply with §816.43.

(b) The area not to be disturbed shall be designated as a buffer zone, and the operator shall mark it as specified in §816.11.

§816.59 Coal recovery.

Surface mining activities shall be conducted so as to maximize the utilization and conservation of the coal, while utilizing the best appropriate technology currently available to maintain environmental integrity, so that reaffected the land in the future through surface coal mining operations is minimized.

§816.61 Use of explosives: General requirements.

(a) Each operator shall comply with all applicable State and Federal laws and regulations in the use of explosives.

(b) Blasts that use more than 5 pounds of explosive or blasting agent shall be conducted according to the schedule required under §816.64.

(c) *Blasters.* (1) No later than 12 months after the blaster certification program for a State required by part 850 of this chapter has been approved under the procedures of subchapter C of this chapter, all blasting operations in that State shall be conducted under the direction of a certified blaster. Before that time, all such blasting operations in that State shall be conducted by competent, experienced persons who understand the hazards involved.

(2) Certificates of blaster certification shall be carried by blasters or shall be on file at the permit area during blasting operations.

(3) A blaster and at least one other person shall be present at the firing of a blast.

(4) Any blaster who is responsible for conducting blasting operations at a blasting site shall:

- (i) Be familiar with the blasting plan and site-specific performance standards; and
- (ii) Give direction and on-the-job training to persons who are not certified and who are assigned to the blasting crew or assist in the use of explosives.

(d) *Blast design.* (1) An anticipated blast design shall be submitted if blasting operations will be conducted within—

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

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

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

(3) The blast design shall contain sketches of the drill patterns, delay periods, and decking and shall indicate the type and amount of explosives to be used, critical dimensions, and the location and general description of structures to be protected, as well as a discussion of design factors to be used, which protect the public and meet the applicable airblast, flyrock, and ground-vibration standards in §816.67.

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

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

§816.62 Use of explosives: Preblasting survey.

(a) At least 30 days before initiation of blasting, the operator shall notify, in writing, all residents or owners of dwellings or other structures located within $\frac{1}{2}$ mile of the permit area how to request a preblasting survey.

(b) A resident or owner of a dwelling or structure within $\frac{1}{2}$ mile of any part of the permit area may request a preblasting survey. This request shall be made, in writing, directly to the operator or to the regulatory authority, who shall promptly notify the

operator. The operator shall promptly conduct a preblasting survey of the dwelling or structure and promptly prepare a written report of the survey. An updated survey of any additions, modifications, or renovations shall be performed by the operator if requested by the resident or owner.

(c) The operator shall determine the condition of the dwelling or structure and shall document any preblasting damage and other physical factors that could reasonably be affected by the blasting. Structures such as pipelines, cables, transmission lines, and cisterns, wells, and other water systems warrant special attention; however, the assessment of these structures may be limited to surface conditions and other readily available data.

(d) The written report of the survey shall be signed by the person who conducted the survey. Copies of the report shall be promptly provided to the regulatory authority and to the person requesting the survey. If the person requesting the survey disagrees with the contents and/or recommendations contained therein, he or she may submit to both the operator and the regulatory authority a detailed description of the specific areas of disagreement.

(e) Any surveys requested more than 10 days before the planned initiation of blasting shall be completed by the operator before the initiation of blasting.

§816.64 Use of explosives: Blasting schedule.

(a) *General requirements.* (1) The operator shall conduct blasting operations at times approved by the regulatory authority and announced in the blasting schedule. The regulatory authority may limit the area covered, timing, and sequence of blasting as listed in the schedule, if such limitations are necessary and reasonable in order to protect the public health and safety or welfare.

(2) All blasting shall be conducted between sunrise and sunset, unless nighttime blasting is approved by the regulatory authority based upon a showing by the operator that the public will be protected from adverse noise and other impacts. The regulatory authority may specify more restrictive time periods for blasting.

(3) Unscheduled blasts may be conducted only where public or operator health and safety so require and for emergency blasting actions. When an operator conducts an unscheduled blast, the operator, using audible signals, shall notify residents within $\frac{1}{2}$ mile of the blasting site and document the reason for the unscheduled blast in accordance with §816.68(p).

(b) *Blasting schedule publication and distribution.* (1) The operator shall publish the blasting schedule in a newspaper of general circulation in the locality of the blasting site at least 10 days, but not more than 30 days, before beginning a blasting program.

(2) The operator shall distribute copies of the schedule to local governments and public utilities and to each local residence within $\frac{1}{2}$ mile of the proposed blasting site described in the schedule.

(3) The operator shall republish and redistribute the schedule at least every 12 months and revise and republish the schedule at least 10 days, but not more than 30

days, before blasting whenever the area covered by the schedule changes or actual time periods for blasting significantly differ from the prior announcement.

(c) *Blasting schedule contents.* The blasting schedule shall contain, at a minimum—

- (1) Name, address, and telephone number of operator;
- (2) Identification of the specific areas in which blasting will take place;
- (3) Dates and time periods when explosives are to be detonated;
- (4) Methods to be used to control access to the blasting area; and
- (5) Type and patterns of audible warning and all-clear signals to be used before and after blasting.

§816.66 Use of explosives: Blasting signs, warnings, and access control.

(a) *Blasting signs.* Blasting signs shall meet the specifications of §816.11. The operator shall—

- (1) Conspicuously place signs reading “Blasting Area” along the edge of any blasting area that comes within 100 feet of any public road right-of-way, and at the point where any other road provides access to the blasting area; and
- (2) At all entrances to the permit area from public roads or highways, place conspicuous signs which state “Warning! Explosives in Use,” which clearly list and

describe the meaning of the audible blast warning and all-clear signals that are in use, and which explain the marking of blasting areas and charged holes awaiting firing within the permit area.

(b) *Warnings.* Warning and all-clear signals of different character or pattern that are audible within a range of $\frac{1}{2}$ mile from the point of the blast shall be given. Each person within the permit area and each person who resides or regularly works within $\frac{1}{2}$ mile of the permit area shall be notified of the meaning of the signals in the blasting schedule.

(c) *Access control.* Access within the blasting area shall be controlled to prevent presence of livestock or unauthorized persons during blasting and until an authorized representative of the operator has reasonably determined that—

(1) No unusual hazards, such as imminent slides or undetonated charges, exist; and

(2) Access to and travel within the blasting area can be safely resumed.

§816.67 Use of explosives: Control of adverse effects.

(a) *General requirements.* Blasting shall be conducted to prevent injury to persons, damage to public or private property outside the permit area, adverse impacts on any underground mine, and change in the course, channel, or availability of surface or ground water outside the permit area.

(b) *Airblast*—(1) *Limits.* (i) Airblast shall not exceed the maximum limits listed below at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area, except as provided in paragraph (e) of this section.

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

¹Only when approved by the regulatory authority.

(ii) If necessary to prevent damage, the regulatory authority shall specify lower maximum allowable airblast levels than those of paragraph (b)(1)(i) of this section for use in the vicinity of a specific blasting operation.

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

(ii) The measuring systems shall have an upper-end flat-frequency response of at least 200 Hz.

(c) *Flyrock.* Flyrock travelling in the air or along the ground shall not be cast from the blasting site—

(1) More than one-half the distance to the nearest dwelling or other occupied structure;

(2) Beyond the area of control required under §816.66(c); or

(3) Beyond the permit boundary.

(d) *Ground vibration*—(1) *General*. In all blasting operations, except as otherwise authorized in paragraph (e) of this section, the maximum ground vibration shall not exceed the values approved in the blasting plan required under §780.13 of this chapter. The maximum ground vibration for protected structures listed in paragraph (d)(2)(i) of this section shall be established in accordance with either the maximum peak-particle-velocity limits of paragraph (d)(2), the scaled-distance equation of paragraph (d)(3), the blasting-level chart of paragraph (d)(4) of this section, or by the regulatory authority under paragraph (d)(5) of this section. All structures in the vicinity of the blasting area, not listed in paragraph (d)(2)(i) of this section, such as water towers, pipelines and other utilities, tunnels, dams, impoundments, and underground mines, shall be protected from damage by establishment of a maximum allowable limit on the ground vibration, submitted by the operator in the blasting plan and approved by the regulatory authority.

(2) *Maximum peak particle velocity*. (i) The maximum ground vibration shall not exceed the following limits at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area:

Distance (D), from the blasting site, in feet	Maximum allowable peak particle velocity (V_{max}) for ground vibration, in	Scaled-distance factor to be applied without seismic monitoring ² (Ds)
---	---	---

	inches/second ¹	
0 to 300	1.25	50
301 to 5,000	1.00	55
5,001 and beyond	0.75	65

¹Ground vibration shall be measured as the particle velocity. Particle velocity shall be recorded in three mutually perpendicular directions. The maximum allowable peak particle velocity shall apply to each of the three measurements.

²Applicable to the scaled-distance equation of paragraph (d)(3)(i) of this section.

(ii) A seismographic record shall be provided for each blast.

(3) *Scale-distance equation.* (i) An operator may use the scaled-distance equation, $W = (D/Ds)^2$, to determine the allowable charge weight of explosives to be detonated in any 8-millisecond period, without seismic monitoring; where W = the maximum weight of explosives, in pounds; D = the distance, in feet, from the blasting site to the nearest protected structure; and Ds = the scaled-distance factor, which may initially be approved by the regulatory authority using the values for scaled-distance factor listed in paragraph (d)(2)(i) of this section.

(ii) The development of a modified scaled-distance factor may be authorized by the regulatory authority on receipt of a written request by the operator, supported by seismographic records of blasting at the minesite. The modified scale-distance factor shall be determined such that the particle velocity of the predicted ground vibration will not exceed the prescribed maximum allowable peak particle velocity of paragraph (d)(2)(i) of this section, at a 95-percent confidence level.

(4) *Blasting-level chart.* (i) An operator may use the ground-vibration limits in Figure 1 to determine the maximum allowable ground vibration.

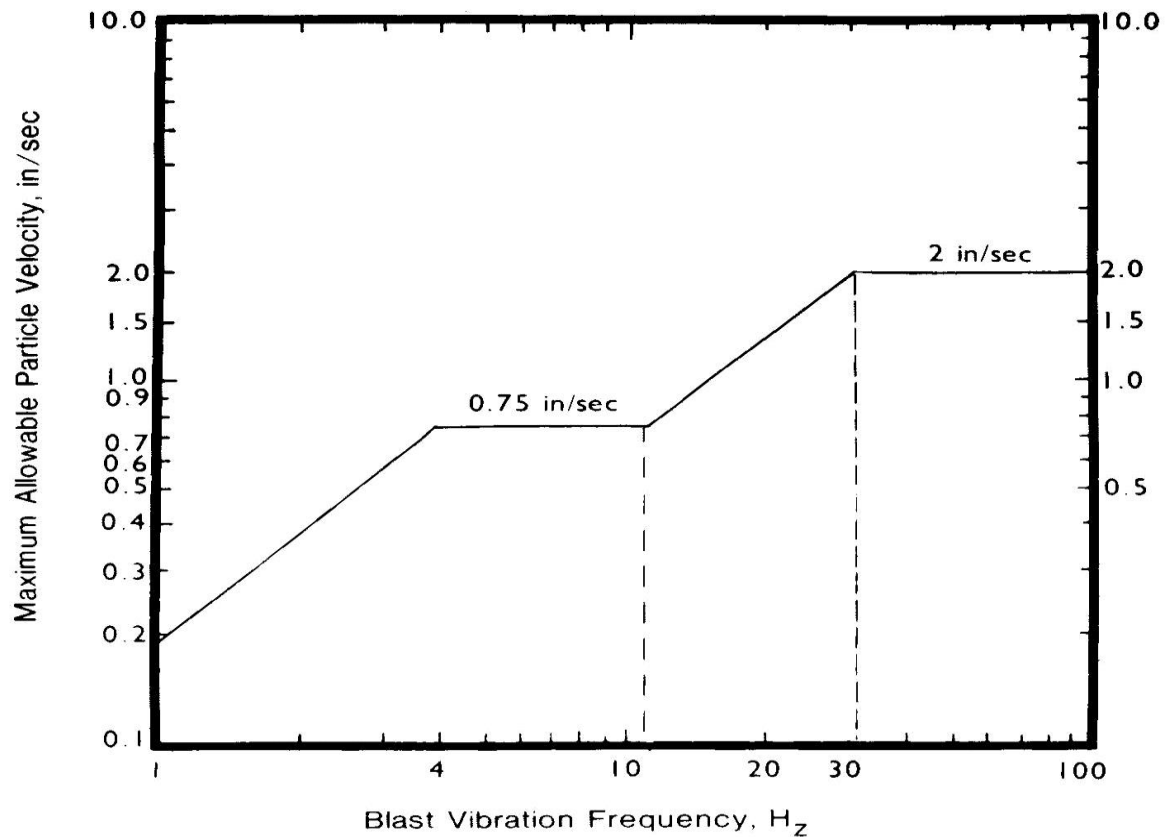


Figure 1. Alternative blasting level criteria.

(Source: Modified from figure B-1, Bureau of Mines R18507)

(ii) If the Figure 1 limits are used, a seismographic record including both particle velocity and vibration-frequency levels shall be provided for each blast. The method for the analysis of the predominant frequency contained in the blasting records shall be approved by the regulatory authority before application of this alternative blasting criterion.

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

(6) The regulatory authority may require an operator to conduct seismic monitoring of any or all blasts or may specify the location at which the measurements are taken and the degree of detail necessary in the measurement.

(e) The maximum airblast and ground-vibration standards of paragraphs (b) and (d) of this section shall not apply at the following locations:

(1) At structures owned by the permittee and not leased to another person.

(2) At structures owned by the permittee and leased to another person, if a written waiver by the lessee is submitted to the regulatory authority before blasting.

§816.68 Use of explosives: Records of blasting operations.

The operator shall retain a record of all blasts for at least 3 years. Upon request, copies of these records shall be made available to the regulatory authority and to the public for inspection. Such records shall contain the following data:

(a) Name of the operator conducting the blast.

(b) Location, date, and time of the blast.

(c) Name, signature, and certification number of the blaster conducting the blast.

(d) Identification, direction, and distance, in feet, from the nearest blast hole to the nearest dwelling, public building, school, church, community or institutional building outside the permit area, except those described in §816.67(e).

(e) Weather conditions, including those which may cause possible adverse blasting effects.

(f) Type of material blasted.

(g) Sketches of the blast pattern including number of holes, burden, spacing, decks, and delay pattern.

(h) Diameter and depth of holes.

(i) Types of explosives used.

(j) Total weight of explosives used per hole.

(k) The maximum weight of explosives detonated in an 8-millisecond period.

(l) Initiation system.

(m) Type and length of stemming.

(n) Mats or other protections used.

(o) Seismographic and airblast records, if required, which shall include—

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

(2) Exact location of instrument and the date, time, and distance from the blast;

(3) Name of the person and firm taking the reading;

(4) Name of the person and firm analyzing the seismographic record; and

(5) The vibration and/or airblast level recorded.

(p) Reasons and conditions for each unscheduled blast.

§816.71 Disposal of excess spoil: General requirements.

(a) *General.* Excess spoil shall be placed in designated disposal areas within the permit area, in a controlled manner to—

(1) Minimize the adverse effects of leachate and surface water runoff from the fill on surface and ground waters;

(2) Ensure mass stability and prevent mass movement during and after construction; and

(3) Ensure that the final fill is suitable for reclamation and revegetation compatible with the natural surroundings and the approved postmining land use.

(b) *Design certification.* (1) The fill and appurtenant structures shall be designed using current, prudent engineering practices and shall meet any design criteria established by the regulatory authority. A qualified registered professional engineer experienced in the design of earth and rock fills shall certify the design of the fill and appurtenant structures.

(2) The fill shall be designed to attain a minimum long-term static safety factor of 1.5. The foundation and abutments of the fill must be stable under all conditions of construction.

(c) *Location.* The disposal area shall be located on the most moderately sloping and naturally stable areas available, as approved by the regulatory authority, and shall be placed, where possible, upon or above a natural terrace, bench, or berm, if such placement provides additional stability and prevents mass movement.

(d) *Foundation.* (1) Sufficient foundation investigations, as well as any necessary laboratory testing of foundation material, shall be performed in order to determine the design requirements for foundation stability. The analyses of foundation conditions shall take into consideration the effect of underground mine workings, if any, upon the stability of the fill and appurtenant structures.

(2) Where the slope in the disposal area is in excess of 2.8h:1v (36 percent), or such lesser slope as may be designated by the regulatory authority based on local conditions, keyway cuts (excavations to stable bedrock) or rock toe buttresses shall be constructed to ensure stability of the fill. Where the toe of the spoil rests on a downslope, stability analyses shall be performed in accordance with §780.35(c) of this chapter to determine the size of rock toe buttresses and keyway cuts.

(e) *Placement of excess spoil.* (1) All vegetative and organic materials shall be removed from the disposal area prior to placement of the excess spoil. Topsoil shall be removed, segregated and stored or redistributed in accordance with §816.22. If approved by the regulatory authority, organic material may be used as mulch or may be included in the topsoil to control erosion, promote growth of vegetation or increase the moisture retention of the soil.

(2) Excess spoil shall be transported and placed in a controlled manner in horizontal lifts not exceeding 4 feet in thickness; concurrently compacted as necessary to ensure mass stability and to prevent mass movement during and after construction; graded so that surface and subsurface drainage is compatible with the natural surroundings; and covered with topsoil or substitute material in accordance with §816.22 of this chapter. The regulatory authority may approve a design which incorporates placement of excess spoil in horizontal lifts other than 4 feet in thickness when it is demonstrated by the operator and certified by a qualified registered professional engineer that the design will ensure the stability of the fill and will meet all other applicable requirements.

(3) The final configuration of the fill shall be suitable for the approved postmining land use. Terraces may be constructed on the outslope of the fill if required for stability, control of erosion, to conserve soil moisture, or to facilitate the approved postmining land use. The grade of the outslope between terrace benches shall not be steeper than 2h: 1v (50 percent).

(4) No permanent impoundments are allowed on the completed fill. Small depressions may be allowed by the regulatory authority if they are needed to retain moisture, minimize erosion, create and enhance wildlife habitat, or assist revegetation; and if they are not incompatible with the stability of the fill.

(5) Excess spoil that is acid- or toxic-forming or combustible shall be adequately covered with nonacid, nontoxic and noncombustible material, or treated, to control the impact on surface and ground water in accordance with §816.41, to prevent sustained

combustion, and to minimize adverse effects on plant growth and the approved postmining land use.

(f) *Drainage control.* (1) If the disposal area contains springs, natural or manmade water courses, or wet weather seeps, the fill design shall include diversions and underdrains as necessary to control erosion, prevent water infiltration into the fill, and ensure stability.

(2) Diversions shall comply with the requirements of §816.43.

(3) Underdrains shall consist of durable rock or pipe, be designed and constructed using current, prudent engineering practices and meet any design criteria established by the regulatory authority. The underdrain system shall be designed to carry the anticipated seepage of water due to rainfall away from the excess spoil fill and from seeps and springs in the foundation of the disposal area and shall be protected from piping and contamination by an adequate filter. Rock underdrains shall be constructed of durable, nonacid-, nontoxic-forming rock (e.g., natural sand and gravel, sandstone, limestone, or other durable rock) that does not slake in water or degrade to soil material, and which is free of coal, clay or other nondurable material. Perforated pipe underdrains shall be corrosion resistant and shall have characteristics consistent with the long-term life of the fill.

(g) *Surface area stabilization.* Slope protection shall be provided to minimize surface erosion at the site. All disturbed areas, including diversion channels that are not riprapped or otherwise protected, shall be revegetated upon completion of construction.

(h) *Inspections.* A qualified registered professional engineer, or other qualified professional specialist under the direction of the professional engineer, shall periodically inspect the fill during construction. The professional engineer or specialist shall be experienced in the construction of earth and rock fills.

(1) Such inspections shall be made at least quarterly throughout construction and during critical construction periods. Critical construction periods shall include at a minimum:

(i) Foundation preparation, including the removal of all organic material and topsoil; (ii) placement of underdrains and protective filter systems; (iii) installation of final surface drainage systems; and (iv) the final graded and revegetated fill. Regular inspections by the engineer or specialist shall also be conducted during placement and compaction of fill materials.

(2) The qualified registered professional engineer shall provide a certified report to the regulatory authority promptly after each inspection that the fill has been constructed and maintained as designed and in accordance with the approved plan and this chapter. The report shall include appearances of instability, structural weakness, and other hazardous conditions.

(3)(i) The certified report on the drainage system and protective filters shall include color photographs taken during and after construction, but before underdrains are covered with excess spoil. If the underdrain system is constructed in phases, each phase shall be certified separately.

(ii) Where excess durable rock spoil is placed in single or multiple lifts such that the underdrain system is constructed simultaneously with excess spoil placement by the natural segregation of dumped materials, in accordance with §816.73, color photographs shall be taken of the underdrain as the underdrain system is being formed.

(iii) The photographs accompanying each certified report shall be taken in adequate size and number with enough terrain or other physical features of the site shown to provide a relative scale to the photographs and to specifically and clearly identify the site.

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

(i) *Coal mine waste.* Coal mine waste may be disposed of in excess spoil fills if approved by the regulatory authority and, if such waste is—

(1) Placed in accordance with §816.83;

(2) Nontoxic and nonacid forming; and

(3) Of the proper characteristics to be consistent with the design stability of the fill.

(j) *Underground disposal.* Excess spoil may be disposed of in underground mine workings, but only in accordance with a plan approved by the regulatory authority and MSHA under §784.25 of this chapter.

§816.72 Disposal of excess spoil: Valley fills/head-of-hollow fills.

Valley fills and head-of-hollow fills shall meet the requirements of §816.71 and the additional requirements of this section.

(a) *Drainage control.* (1) The top surface of the completed fill shall be graded such that the final slope after settlement will be toward properly designed drainage channels. Uncontrolled surface drainage may not be directed over the outslope of the fill.

(2) Runoff from areas above the fill and runoff from the surface of the fill shall be diverted into stabilized diversion channels designed to meet the requirements of §816.43 and, in addition, to safely pass the runoff from a 100-year, 6-hour precipitation event.

(b) *Rock-core chimney drains.* A rock-core chimney drain may be used in a head-of-hollow fill, instead of the underdrain and surface diversion system normally required, as long as the fill is not located in an area containing intermittent or perennial streams. A rock-core chimney drain may be used in a valley fill if the fill does not exceed 250,000 cubic yards of material and upstream drainage is diverted around the fill. The alternative rock-core chimney drain system shall be incorporated into the design and construction of the fill as follows.

(1) The fill shall have, along the vertical projection of the main buried stream channel or rill, a vertical core of durable rock at least 16 feet thick which shall extend from the toe of the fill to the head of the fill, and from the base of the fill to the surface of the fill. A system of lateral rock underdrains shall connect this rock core to each area of potential drainage or seepage in the disposal area. The underdrain system and rock

core shall be designed to carry the anticipated seepage of water due to rainfall away from the excess spoil fill and from seeps and springs in the foundation of the disposal area. Rocks used in the rock core and underdrains shall meet the requirements of §816.71(f).

(2) A filter system to ensure the proper long-term functioning of the rock core shall be designed and constructed using current, prudent engineering practices.

(3) Grading may drain surface water away from the outslope of the fill and toward the rock core. In no case, however, may intermittent or perennial streams be diverted into the rock core. The maximum slope of the top of the fill shall be 33h:1v (3 percent). A drainage pocket may be maintained at the head of the fill during and after construction, to intercept surface runoff and discharge the runoff through or over the rock drain, if stability of the fill is not impaired. In no case shall this pocket or sump have a potential capacity for impounding more than 10,000 cubic feet of water. Terraces on the fill shall be graded with a 3 to 5 percent grade toward the fill and a 1 percent slope toward the rock core.

§816.73 Disposal of excess spoil: Durable rock fills.

The regulatory authority may approve the alternative method of disposal of excess durable rock spoil by gravity placement in single or multiple lifts, provided the following conditions are met:

(a) Except as provided in this section, the requirements of §816.71 are met.

(b) The excess spoil consists of at least 80 percent, by volume, durable, nonacid- and nontoxic-forming rock (e.g., sandstone or limestone) that does not slake in water and will not degrade to soil material. Where used, noncemented clay shale, clay spoil, soil or other nondurable excess spoil materials shall be mixed with excess durable rock spoil in a controlled manner such that no more than 20 percent of the fill volume, as determined by tests performed by a registered engineer and approved by the regulatory authority, is not durable rock.

(c) A qualified registered professional engineer certifies that the design will ensure the stability of the fill and meet all other applicable requirements.

(d) The fill is designed to attain a minimum long-term static safety factor of 1.5, and an earthquake safety factor of 1.1.

(e) The underdrain system may be constructed simultaneously with excess spoil placement by the natural segregation of dumped materials, provided the resulting underdrain system is capable of carrying anticipated seepage of water due to rainfall away from the excess spoil fill and from seeps and springs in the foundation of the disposal area and the other requirements for drainage control are met.

(f) Surface water runoff from areas adjacent to and above the fill is not allowed to flow onto the fill and is diverted into stabilized diversion channels designed to meet the requirements of §816.43 and to safely pass the runoff from a 100-year, 6-hour precipitation event.

§816.74 Disposal of excess spoil: Preexisting benches.

(a) The regulatory authority may approve the disposal of excess spoil through placement on a preexisting bench if the affected portion of the preexisting bench is permitted and the standards set forth in §§816.102(c), (e) through (h), and (j), and the requirements of this section are met.

(b) All vegetation and organic materials shall be removed from the affected portion of the preexisting bench prior to placement of the excess spoil. Any available topsoil on the bench shall be removed, stored and redistributed in accordance with §816.22 of this part. Substitute or supplemental materials may be used in accordance with §816.22(b) of this part.

(c) The fill shall be designed and constructed using current, prudent engineering practices. The design will be certified by a registered professional engineer. The spoil shall be placed on the solid portion of the bench in a controlled manner and concurrently compacted as necessary to attain a long term static safety factor of 1.3 for all portions of the fill. Any spoil deposited on any fill portion of the bench will be treated as excess spoil fill under §816.71.

(d) The preexisting bench shall be backfilled and graded to—

(1) Achieve the most moderate slope possible which does not exceed the angle of repose;

(2) Eliminate the highwall to the maximum extent technically practical;

(3) Minimize erosion and water pollution both on and off the site; and

(4) If the disposal area contains springs, natural or manmade water courses, or wet weather seeps, the fill design shall include diversions and underdrains as necessary to control erosion, prevent water infiltration into the fill, and ensure stability.

(e) All disturbed areas, including diversion channels that are not riprapped or otherwise protected, shall be revegetated upon completion of construction.

(f) Permanent impoundments may not be constructed on preexisting benches backfilled with excess spoil under this regulation.

(g) Final configuration of the backfill must be compatible with the natural drainage patterns and the surrounding area, and support the approved postmining land use.

(h) Disposal of excess spoil from an upper actively mined bench to a lower preexisting bench by means of gravity transport may be approved by the regulatory authority provided that—

(1) The gravity transport courses are determined on a site-specific basis by the operator as part of the permit application and approved by the regulatory authority to minimize hazards to health and safety and to ensure that damage will be minimized between the benches, outside the set course, and downslope of the lower bench should excess spoil accidentally move;

(2) All gravity transported excess spoil, including that excess spoil immediately below the gravity transport courses and any preexisting spoil that is disturbed, is rehandled and placed in horizontal lifts in a controlled manner, concurrently compacted as necessary to ensure mass stability and to prevent mass movement, and graded to

allow surface and subsurface drainage to be compatible with the natural surroundings and to ensure a minimum long-term static safety factor of 1.3. Excess spoil on the bench prior to the current mining operation that is not disturbed need not be rehandled except where necessary to ensure stability of the fill;

(3) A safety berm is constructed on the solid portion of the lower bench prior to gravity transport of the excess spoil. Where there is insufficient material on the lower bench to construct a safety berm, only that amount of excess spoil necessary for the construction of the berm may be gravity transported to the lower bench prior to construction of the berm.

(4) Excess spoil shall not be allowed on the downslope below the upper bench except on designated gravity transport courses properly prepared according to §816.22. Upon completion of the fill, no excess spoil shall be allowed to remain on the designated gravity transport course between the two benches and each transport course shall be reclaimed in accordance with the requirements of this part.

§816.79 Protection of underground mining.

No surface mining activities shall be conducted closer than 500 feet to any point of either an active or abandoned underground mine, except to the extent that—

(a) The activities result in improved resource recovery, abatement of water pollution, or elimination of hazards to the health and safety of the public; and

(b) The nature, timing, and sequence of the activities that propose to mine closer than 500 feet to an active underground mine are jointly approved by the regulatory authority, the Mine Safety and Health Administration, and the State agency, if any, responsible for the safety of underground mine workers.

§816.81 Coal mine waste: General requirements.

(a) *General.* All coal mine waste disposed of in an area other than the mine workings or excavations shall be placed in new or existing disposal areas within a permit area, which are approved by the regulatory authority for this purpose. Coal mine waste shall be hauled or conveyed and placed for final placement in a controlled manner to—

(1) Minimize adverse effects of leachate and surface-water runoff on surface and ground water quality and quantity;

(2) Ensure mass stability and prevent mass movement during and after construction;

(3) Ensure that the final disposal facility is suitable for reclamation and revegetation compatible with the natural surroundings and the approved postmining land use;

(4) Not create a public hazard; and

(5) Prevent combustion.

(b) Coal mine waste material from activities located outside a permit area may be disposed of in the permit area only if approved by the regulatory authority. Approval shall be based upon a showing that such disposal will be in accordance with the standards of this section.

(c) *Design certification.* (1) The disposal facility shall be designed using current, prudent engineering practices and shall meet any design criteria established by the regulatory authority. A qualified registered professional engineer, experienced in the design of similar earth and waste structures, shall certify the design of the disposal facility.

(2) The disposal facility shall be designed to attain a minimum long-term static safety factor of 1.5. The foundation and abutments must be stable under all conditions of construction.

(d) *Foundation.* Sufficient foundation investigations, as well as any necessary laboratory testing of foundation material, shall be performed in order to determine the design requirements for foundation stability. The analyses of the foundation conditions shall take into consideration the effect of underground mine workings, if any, upon the stability of the disposal facility.

(e) *Emergency procedures.* If any examination or inspection discloses that a potential hazard exists, the regulatory authority shall be informed promptly of the finding and of the emergency procedures formulated for public protection and remedial action. If adequate procedures cannot be formulated or implemented, the regulatory authority

shall be notified immediately. The regulatory authority shall then notify the appropriate agencies that other emergency procedures are required to protect the public.

(f) *Underground disposal.* Coal mine waste may be disposed of in underground mine workings, but only in accordance with a plan approved by the regulatory authority and MSHA under §784.25 of this chapter.

§816.83 Coal mine waste: Refuse piles.

Refuse piles shall meet the requirements of §816.81, the additional requirements of this section, and the requirements of §§77.214 and 77.215 of this title.

(a) *Drainage control.* (1) If the disposal area contains springs, natural or manmade water courses, or wet weather seeps, the design shall include diversions and underdrains as necessary to control erosion, prevent water infiltration into the disposal facility and ensure stability.

(2) Uncontrolled surface drainage may not be diverted over the outslope of the refuse piles. Runoff from the areas above the refuse pile and runoff from the surface of the refuse pile shall be diverted into stabilized diversion channels designed to meet the requirements of §816.43 to safely pass the runoff from a 100-year, 6-hour precipitation event. Runoff diverted from undisturbed areas need not be commingled with runoff from the surface of the refuse pile.

(3) Underdrains shall comply with the requirements of §816.71(f)(3).

(b) *Surface area stabilization.* Slope protection shall be provided to minimize surface erosion at the site. All disturbed areas, including diversion channels that are not riprapped or otherwise protected, shall be revegetated upon completion of construction.

(c) *Placement.* (1) All vegetative and organic materials shall be removed from the disposal area prior to placement of coal mine waste. Topsoil shall be removed, segregated and stored or redistributed in accordance with §816.22. If approved by the regulatory authority, organic material may be used as mulch, or may be included in the topsoil to control erosion, promote growth of vegetation or increase the moisture retention of the soil.

(2) The final configuration of the refuse pile shall be suitable for the approved postmining land use. Terraces may be constructed on the outslope of the refuse pile if required for stability, control or erosion, conservation of soil moisture, or facilitation of the approved postmining land use. The grade of the outslope between terrace benches shall not be steeper than 2h:1v (50 percent).

(3) No permanent impoundments shall be allowed on the completed refuse pile. Small depressions may be allowed by the regulatory authority if they are needed to retain moisture, minimize erosion, create and enhance wildlife habitat, or assist revegetation, and if they are not incompatible with stability of the refuse pile.

(4) Following final grading of the refuse pile, the coal mine waste shall be covered with a minimum of 4 feet of the best available, nontoxic and noncombustible material, in a manner that does not impede drainage from the underdrains. The regulatory authority may allow less than 4 feet of cover material based on physical and

chemical analyses which show that the requirements of §§816.111 through 816.116 will be met.

(d) *Inspections.* A qualified registered professional engineer, or other qualified professional specialist under the direction of the professional engineer, shall inspect the refuse pile during construction. The professional engineer or specialist shall be experienced in the construction of similar earth and waste structures.

(1) Such inspections shall be made at least quarterly throughout construction and during critical construction periods. Critical construction periods shall include at a minimum:

(i) Foundation preparation including the removal of all organic material and topsoil; (ii) placement of underdrains and protective filter systems; (iii) installation of final surface drainage systems; and (iv) the final graded and revegetated facility. Regular inspections by the engineer or specialist shall also be conducted during placement and compaction of coal mine waste materials. More frequent inspections shall be conducted if a danger of harm exists to the public health and safety or the environment.

Inspections shall continue until the refuse pile has been finally graded and revegetated or until a later time as required by the regulatory authority.

(2) The qualified registered professional engineer shall provide a certified report to the regulatory authority promptly after each inspection that the refuse pile has been constructed and maintained as designed and in accordance with the approved plan and this chapter. The report shall include appearances of instability, structural weakness, and other hazardous conditions.

(3) The certified report on the drainage system and protective filters shall include color photographs taken during and after construction, but before underdrains are covered with coal mine waste. If the underdrain system is constructed in phases, each phase shall be certified separately. The photographs accompanying each certified report shall be taken in adequate size and number with enough terrain or other physical features of the site shown to provide a relative scale to the photographs and to specifically and clearly identify the site.

(4) A copy of each inspection report shall be retained at or near the minesite.

§816.84 Coal mine waste: Impounding structures.

New and existing impounding structures constructed of coal mine waste or intended to impound coal mine waste shall meet the requirements of §816.81.

(a) Coal mine waste shall not be used for construction of impounding structures unless it has been demonstrated to the regulatory authority that the stability of such a structure conforms to the requirements of this part and the use of coal mine waste will not have a detrimental effect on downstream water quality or the environment due to acid seepage through the impounding structure. The stability of the structure and the potential impact of acid mine seepage through the impounding structure shall be discussed in detail in the design plan submitted to the regulatory authority in accordance with §780.25 of this chapter.

(b)(1) Each impounding structure constructed of coal mine waste or intended to impound coal mine waste shall be designed, constructed and maintained in accordance with §816.49 (a) and (c). Such structures may not be retained permanently as part of the approved postmining land use.

(2) Each impounding structure constructed of coal mine waste or intended to impound coal mine waste that meets the criteria of §77.216(a) of this title shall have sufficient spillway capacity to safely pass, adequate storage capacity to safely contain, or a combination of storage capacity and spillway capacity to safely control, the probable maximum precipitation of a 6-hour precipitation event, or greater event as specified by the regulatory authority.

(c) Spillways and outlet works shall be designed to provide adequate protection against erosion and corrosion. Inlets shall be protected against blockage.

(d) *Drainage control.* Runoff from areas above the disposal facility or runoff from surface of the facility that may cause instability or erosion of the impounding structure shall be diverted into stabilized diversion channels designed to meet the requirements of §816.43 and designed to safely pass the runoff from a 100-year, 6-hour design precipitation event.

(e) Impounding structures constructed of or impounding coal mine waste shall be designed so that at least 90 percent of the water stored during the design precipitation event can be removed within a 10-day period.

(f) For an impounding structure constructed of or impounding coal mine waste, at least 90 percent of the water stored during the design precipitation event shall be removed within the 10-day period following the design precipitation event.

§816.87 Coal mine waste: Burning and burned waste utilization.

(a) Coal mine waste fires shall be extinguished by the person who conducts the surface mining activities, in accordance with a plan approved by the regulatory authority and the Mine Safety and Health Administration. The plan shall contain, at a minimum, provisions to ensure that only those persons authorized by the operator, and who have an understanding of the procedures to be used, shall be involved in the extinguishing operations.

(b) No burning or burned coal mine waste shall be removed from a permitted disposal area without a removal plan approved by the regulatory authority. Consideration shall be given to potential hazards to persons working or living in the vicinity of the structure.

§816.89 Disposal of noncoal mine wastes.

(a) Noncoal mine wastes including, but not limited to grease, lubricants, paints, flammable liquids, garbage, abandoned mining machinery, lumber and other combustible materials generated during mining activities shall be placed and stored in a controlled manner in a designated portion of the permit area. Placement and storage

shall ensure that leachate and surface runoff do not degrade surface or ground water, that fires are prevented, and that the area remains stable and suitable for reclamation and revegetation compatible with the natural surroundings.

(b) Final disposal of noncoal mine wastes shall be in a designated disposal site in the permit area or a State-approved solid waste disposal area. Disposal sites in the permit area shall be designed and constructed to ensure that leachate and drainage from the noncoal mine waste area does not degrade surface or underground water. Wastes shall be routinely compacted and covered to prevent combustion and wind-borne waste. When the disposal is completed, a minimum of 2 feet of soil cover shall be placed over the site, slopes stabilized, and revegetation accomplished in accordance with §§816.111 through 816.116. Operation of the disposal site shall be conducted in accordance with all local, State and Federal requirements.

(c) At no time shall any noncoal mine waste be deposited in a refuse pile or impounding structure, nor shall an excavation for a noncoal mine waste disposal site be located within 8 feet of any coal outcrop or coal storage area.

§816.95 Stabilization of surface areas.

(a) All exposed surface areas shall be protected and stabilized to effectively control erosion and air pollution attendant to erosion.

(b) 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 streams shall be filled, regraded, or otherwise stabilized; topsoil shall be replaced; and the areas shall be reseeded or replanted.

§816.97 Protection of fish, wildlife, and related environmental values.

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

(b) *Endangered and threatened species.* No surface mining activity shall be conducted which is likely to jeopardize the continued existence of endangered or threatened species listed by the Secretary or which is likely to result in the destruction or adverse modification of designated critical habitats of such species in violation of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*). The operator shall promptly report to the regulatory authority any State- or federally-listed endangered or threatened species within the permit area of which the operator becomes aware. Upon notification, the regulatory authority shall consult with appropriate State and Federal fish and wildlife agencies and, after consultation, shall identify whether, and under what conditions, the operator may proceed.

(c) *Bald and golden eagles.* No surface mining activity shall be conducted in a manner which would result in the unlawful taking of a bald or golden eagle, its nest, or any of its eggs. The operator shall promptly report to the regulatory authority any golden

or bald eagle nest within the permit area of which the operator becomes aware. Upon notification, the regulatory authority shall consult with the U.S. Fish and Wildlife Service and also, where appropriate, the State fish and wildlife agency and, after consultation, shall identify whether, and under what conditions, the operator may proceed.

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

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

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

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

(3) Design fences, overland conveyors, and other potential barriers to permit passage for large mammals, except where the regulatory authority determines that such requirements are unnecessary; and

(4) Fence, cover, or use other appropriate methods to exclude wildlife from ponds which contain hazardous concentrations of toxic-forming materials.

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

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

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

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

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

(h) 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, 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.

(i) 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.

§816.99 Slides and other damage.

(a) An undisturbed natural barrier shall be provided beginning at the elevation of the lowest coal seam to be mined and extending from the outslope for such distance as may be determined by the regulatory authority as is needed to assure stability. The barrier shall be retained in place to prevent slides and erosion.

(b) At any time a slide occurs which may have a potential adverse affect on public property, health, safety, or the environment, the person who conducts the surface mining activities shall notify the regulatory authority by the fastest available means and comply with any remedial measures required by the regulatory authority.

§816.100 Contemporaneous reclamation.

Reclamation efforts, including but not limited to backfilling, grading, topsoil replacement, and revegetation, on all land that is disturbed by surface mining activities shall occur as contemporaneously as practicable with mining operations, except when such mining operations are conducted in accordance with a variance for concurrent surface and underground mining activities issued under §785.18 of this chapter.

§816.101 Backfilling and grading: Time and distance requirements.

(a) Except as provided in paragraph (b) of this section, rough backfilling and grading for surface mining activities shall be completed according to one of the following schedules:

(1) Contour mining. Within 60 days or 1,500 linear feet following coal removal;

(2) Area mining. Within 180 days following coal removal, and not more than four spoil ridges behind the pit being worked, the spoil from the active pit constituting the first ridge; or

(3) Other surface mining methods. In accordance with the schedule established by the regulatory authority. For States with approved State programs, schedules are subject to the State program approval process.

(b) The regulatory authority may extend the time allowed for rough backfilling and grading for the entire permit area or for a specified portion of the permit area if the permittee demonstrates in accordance with §780.18(b)(3) of this chapter that additional time is necessary.

§816.102 Backfilling and grading: General requirements.

(a) Disturbed areas shall be backfilled and graded to—

(1) Achieve the approximate original contour, except as provided in paragraph (k) of this section;

(2) Eliminate all highwalls, spoil piles, and depressions, except as provided in paragraph (h) (small depressions) and in paragraph (k)(3)(iii) (previously mined highwalls) of this section;

(3) 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 to prevent slides;

(4) Minimize erosion and water pollution both on and off the site; and

(5) Support the approved postmining land use.

(b) Spoil, except excess spoil disposed of in accordance with §§816.71 through 816.74, shall be returned to the mined-out area.

(c) Spoil and waste materials shall be compacted where advisable to ensure stability or to prevent leaching of toxic materials.

(d) Spoil may be placed on the area outside the mined-out area in nonsteep slope areas to restore the approximate original contour by blending the spoil into the surrounding terrain if the following requirements are met:

(1) All vegetative and organic material shall be removed from the area.

(2) The topsoil on the area shall be removed, segregated, stored, and redistributed in accordance with §816.22.

(3) The spoil shall be backfilled and graded on the area in accordance with the requirements of this section.

(e) Disposal of coal processing waste and underground development waste in the mined-out area shall be in accordance with §§816.81 and 816.83, except that a long-term static safety factor of 1.3 shall be achieved.

(f) Exposed coal seams, acid- and toxic-forming materials, and combustible materials exposed, used, or produced during mining shall be adequately covered with nontoxic and noncombustible material, or treated, to control the impact on surface and ground water in accordance with §816.41, to prevent sustained combustion, and to minimize adverse effects on plant growth and the approved postmining land use.

(g) Cut-and-fill terraces may be allowed by the regulatory authority where—

(1) Needed to conserve soil moisture, ensure stability, and control erosion on final-graded slopes, if the terraces are compatible with the approved postmining land use; or

(2) Specialized grading, foundation conditions, or roads are required for the approved postmining land use, in which case the final grading may include a terrace of adequate width to ensure the safety, stability, and erosion control necessary to implement the postmining land-use plan.

(h) Small depressions may be constructed if they are needed to retain moisture, minimize erosion, create and enhance wildlife habitat, or assist revegetation.

(i) Permanent impoundments may be approved if they meet the requirements of §§816.49 and 816.56 and if they are suitable for the approved postmining land use.

(j) Preparation of final-graded surfaces shall be conducted in a manner that minimizes erosion and provides a surface for replacement of topsoil that will minimize slippage.

(k) The postmining slope may vary from the approximate original contour when—

(1) The standards for thin overburden in §816.104 are met;

(2) The standards for thick overburden in §816.105 are met; or

(3) Approval is obtained from the regulatory authority for—

(i) Mountaintop removal operations in accordance with §785.14 of this chapter;

(ii) A variance from approximate original contour requirements in accordance with §785.16 of this chapter; or

(iii) Incomplete elimination of highwalls in previously mined areas in accordance with §816.106.

§816.104 Backfilling and grading: Thin overburden.

(a) *Definition.* Thin overburden means insufficient spoil and other waste materials available from the entire permit area to restore the disturbed area to its approximate original contour. Insufficient spoil and other waste materials occur where the overburden

thickness times the swell factor, plus the thickness of other available waste materials, is less than the combined thickness of the overburden and coal bed prior to removing the coal, so that after backfilling and grading the surface configuration of the reclaimed area would not:

(1) Closely resemble the surface configuration of the land prior to mining; or

(2) Blend into and complement the drainage pattern of the surrounding terrain.

(b) *Performance standards.* Where thin overburden occurs within the permit area, the permittee at a minimum shall:

(1) Use all spoil and other waste materials available from the entire permit area to attain the lowest practicable grade, but not more than the angle of repose; and

(2) Meet the requirements of §§816.102(a)(2) through (j) of this part.

§816.105 Backfilling and grading: Thick overburden.

(a) *Definition.* Thick overburden means more than sufficient spoil and other waste materials available from the entire permit area to restore the disturbed area to its approximate original contour. More than sufficient spoil and other waste materials occur where the overburden thickness times the swell factor exceeds the combined thickness of the overburden and coal bed prior to removing the coal, so that after backfilling and grading the surface configuration of the reclaimed area would not:

(1) Closely resemble the surface configuration of the land prior to mining; or

(2) Blend into and complement the drainage pattern of the surrounding terrain.

(b) *Performance standards.* Where thick overburden occurs within the permit area, the permittee at a minimum shall:

(1) Restore the approximate original contour and then use the remaining spoil and other waste materials to attain the lowest practicable grade, but not more than the angle of repose;

(2) Meet the requirements of §§816.102 (a)(2) through (j) of this part; and

(3) Dispose of any excess spoil in accordance with §§816.71 through 816.74 of this part.

§816.106 Backfilling and grading: Previously mined areas.

(a) Remining operations on previously mined areas that contain a preexisting highwall shall comply with the requirements of §§816.102 through 816.107 of this chapter, except as provided in this section.

(b) The requirements of §816.102(a) (1) and (2) requiring the elimination of highwalls shall not apply to remining operations where the volume of all reasonably available spoil is demonstrated in writing to the regulatory authority to be insufficient to completely backfill the reaffected or enlarged highwall. The highwall shall be eliminated to the maximum extent technically practical in accordance with the following criteria:

(1) All spoil generated by the remining operation and any other reasonably available spoil shall be used to backfill the area. Reasonably available spoil in the immediate vicinity of the remining operation shall be included within the permit area.

(2) The backfill shall be graded to a slope which is compatible with the approved postmining land use and which provides adequate drainage and long-term stability.

(3) Any highwall remnant shall be stable and not pose a hazard to the public health and safety or to the environment. The operator shall demonstrate, to the satisfaction of the regulatory authority, that the highwall remnant is stable.

(4) 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.

§816.107 Backfilling and grading: Steep slopes.

(a) Surface mining activities on steep slopes shall be conducted so as to meet the requirements of §§816.102-816.106, and the requirements of this section except where mining is conducted on flat or gently rolling terrain with an occasional steep slope through which the mining proceeds and leaves a plain or predominantly flat area or where operations are conducted in accordance with part 824 of this chapter.

(b) The following materials shall not be placed on the downslope:

(1) Spoil.

(2) Waste materials of any type.

(3) Debris, including that from clearing and grubbing.

(4) Abandoned or disabled equipment.

(c) Land above the highwall shall not be disturbed unless the regulatory authority finds that this disturbance will facilitate compliance with the environmental protection standards of this subchapter and the disturbance is limited to that necessary to facilitate compliance.

(d) Woody materials shall not be buried in the backfilled area unless the regulatory authority determines that the proposed method for placing woody material within the backfill will not deteriorate the stable condition of the backfilled area.

§816.111 Revegetation: General requirements.

(a) The permittee shall establish on regraded areas and on all other disturbed areas except water areas and surface areas of roads that are approved as part of the postmining land use, a vegetative cover that is in accordance with the approved permit and reclamation plan and that is—

(1) Diverse, effective, and permanent;

(2) Comprised of species native to the area, or of introduced species where desirable and necessary to achieve the approved postmining land use and approved by the regulatory authority;

(3) At least equal in extent of cover to the natural vegetation of the area; and

(4) Capable of stabilizing the soil surface from erosion.

(b) The reestablished plant species shall—

(1) Be compatible with the approved postmining land use;

(2) Have the same seasonal characteristics of growth as the original vegetation;

(3) Be capable of self-regeneration and plant succession;

(4) Be compatible with the plant and animal species of the area; and

(5) Meet the requirements of applicable State and Federal seed, poisonous and noxious plant, and introduced species laws or regulations.

(c) The regulatory authority may grant exception to the requirements of paragraphs (b) (2) and (3) of this section when the species are necessary to achieve a quick-growing, temporary, stabilizing cover, and measures to establish permanent vegetation are included in the approved permit and reclamation plan.

(d) When the regulatory authority approves a cropland postmining land use, the regulatory authority may grant exception to the requirements of paragraphs (a) (1), (3), (b) (2), and (3) of this section. The requirements of part 823 of this chapter apply to areas identified as prime farmland.

§816.113 Revegetation: Timing.

Disturbed areas shall be planted during the first normal period for favorable planting conditions after replacement of the plant-growth medium. The normal period for favorable planting is that planting time generally accepted locally for the type of plant materials selected.

§816.114 Revegetation: Mulching and other soil stabilizing practices.

Suitable mulch and other soil stabilizing practices shall be used on all areas that have been regraded and covered by topsoil or topsoil substitutes. The regulatory authority may waive this requirement if seasonal, soil, or slope factors result in a condition where mulch and other soil stabilizing practices are not necessary to control erosion and to promptly establish an effective vegetative cover.

§816.116 Revegetation: Standards for success.

(a) Success of revegetation shall be judged on the effectiveness of the vegetation for the approved postmining land use, the extent of cover compared to the cover occurring in natural vegetation of the area, and the general requirements of §816.111.

(1) Standards for success and statistically valid sampling techniques for measuring success shall be selected by the regulatory authority, described in writing, and made available to the public.

(2) Standards for success shall include criteria representative of unmined lands in the area being reclaimed to evaluate the appropriate vegetation parameters of ground cover, production, or stocking. Ground cover, production, or stocking shall be considered equal to the approved success standard when they are not less than 90 percent of the success standard. The sampling techniques for measuring success shall use a 90-percent statistical confidence interval (i.e., one-sided test with a 0.10 alpha error).

(b) Standards for success shall be applied in accordance with the approved postmining land use and, at a minimum, the following conditions:

(1) For areas developed for use as grazing land or pasture land, the ground cover and production of living plants on the revegetated area shall be at least equal to that of a reference area or such other success standards approved by the regulatory authority.

(2) For areas developed for use as cropland, crop production on the revegetated area shall be at least equal to that of a reference area or such other success standards approved by the regulatory authority.

(3) For areas to be developed for fish and wildlife habitat, recreation, undeveloped land, or forest products, success of vegetation shall be determined on the basis of tree and shrub stocking and vegetative ground cover. Such parameters are described as follows:

(i) Minimum stocking and planting arrangements shall be specified by the regulatory authority on the basis of local and regional conditions and after consultation

with and approval by the State agencies responsible for the administration of forestry and wildlife programs. Consultation and approval may occur on either a programwide or a permit-specific basis.

(ii) Trees and shrubs that will be used in determining the success of stocking and the adequacy of the plant arrangement shall have utility for the approved postmining land use. Trees and shrubs counted in determining such success shall be healthy and have been in place for not less than two growing seasons. At the time of bond release, at least 80 percent of the trees and shrubs used to determine such success shall have been in place for 60 percent of the applicable minimum period of responsibility. The requirements of this section apply to trees and shrubs that have been seeded or transplanted and can be met when records of woody vegetation planted show that no woody plants were planted during the last two growing seasons of the responsibility period and, if any replanting of woody plants took place during the responsibility period, the total number planted during the last 60 percent of that period is less than 20 percent of the total number of woody plants required. Any replanting must be by means of transplants to allow for adequate accounting of plant stocking. This final accounting may include volunteer trees and shrubs of approved species. Volunteer trees and shrubs of approved species shall be deemed equivalent to planted specimens two years of age or older and can be counted towards success. Suckers on shrubby vegetation can be counted as volunteer plants when it is evident the shrub community is vigorous and expanding.

(iii) Vegetative ground cover shall not be less than that required to achieve the approved postmining land use.

(4) For areas to be developed for industrial, commercial, or residential use less than 2 years after regrading is completed, the vegetative ground cover shall not be less than that required to control erosion.

(5) For areas previously disturbed by mining that were not reclaimed to the requirements of this subchapter and that are remined or otherwise redisturbed by surface coal mining operations, as a minimum, the vegetative ground cover shall be not less than the ground cover existing before redisturbance and shall be adequate to control erosion.

(c)(1) The period of extended responsibility for successful revegetation shall begin after the last year of augmented seeding, fertilizing, irrigation, or other work, excluding husbandry practices that are approved by the regulatory authority in accordance with paragraph (c)(4) of this section.

(2) In areas of more than 26.0 inches of annual average precipitation, the period of responsibility shall continue for a period of not less than:

(i) Five full years, except as provided in paragraph (c)(2)(ii) of this section. The vegetation parameters identified in paragraph (b) of this section for grazing land, pasture land, or cropland shall equal or exceed the approved success standard during the growing season of any 2 years of the responsibility period, except the first year. Areas approved for the other uses identified in paragraph (b) of this section shall equal or exceed the applicable success standard during the growing season of the last year of the responsibility period.

(ii) Two full years for lands eligible for remining included in a permit for which a finding has been made under §773.15(m) of this chapter. To the extent that the success standards are established by paragraph (b)(5) of this section, the lands must equal or exceed the standards during the growing season of the last year of the responsibility period.

(3) In areas of 26.0 inches or less average annual precipitation, the period of responsibility shall continue for a period of not less than:

(i) Ten full years, except as provided in paragraph (c)(3)(ii) in this section. The vegetation parameters identified in paragraph (b) of this section for grazing land, pasture land, or cropland shall equal or exceed the approved success standard during the growing season of any two years after year six of the responsibility period. Areas approved for the other uses identified in paragraph (b) of this section shall equal or exceed the applicable success standard during the growing season of the last year of the responsibility period.

(ii) Five full years for lands eligible for remining included in a permit for which a finding has been made under §773.15(m) of this chapter. To the extent that the success standards are established by paragraph (b)(5) of this section, the lands must equal or exceed the standards during the growing seasons of the last two consecutive years of the responsibility period.

(4) The regulatory authority may approve selective husbandry practices, excluding augmented seeding, fertilization, or irrigation, provided it obtains prior approval from the Director in accordance with §732.17 of this chapter that the practices

are normal husbandry practices, without extending the period of responsibility for revegetation success and bond liability, if such practices can be expected to continue as part of the postmining land use or if discontinuance of the practices after the liability period expires will not reduce the probability of permanent revegetation success.

Approved practices shall be normal husbandry practices within the region for unmined lands having land uses similar to the approved postmining land use of the disturbed area, including such practices as disease, pest, and vermin control; and any pruning, reseeding, and transplanting specifically necessitated by such actions.

§816.131 Cessation of operations: Temporary.

(a) Each person who conducts surface mining activities shall effectively secure surface facilities in areas in which there are no current operations, but in which operations are to be resumed under an approved permit. Temporary abandonment shall not relieve a person of their obligation to comply with any provisions of the approved permit.

(b) Before temporary cessation of mining and reclamation operations for a period of thirty days or more, or as soon as it is known that a temporary cessation will extend beyond 30 days, persons who conduct surface mining activities shall submit to the regulatory authority a notice of intention to cease or abandon mining and reclamation operations. This notice shall include a statement of the exact number of acres which will have been affected in the permit area, prior to such temporary cessation, the extent and kind of reclamation of those areas which will have been accomplished, and identification

of the backfilling, regrading, revegetation, environmental monitoring, and water treatment activities that will continue during the temporary cessation.

§816.132 Cessation of operations: Permanent.

(a) Persons who cease surface mining activities permanently shall close or backfill or otherwise permanently reclaim all affected areas, in accordance with this chapter and the permit approved by the regulatory authority.

(b) All underground openings, equipment, structures, or other facilities not required for monitoring, unless approved by the regulatory authority as suitable for the postmining land use or environmental monitoring, shall be removed and the affected land reclaimed.

§816.133 Postmining land use.

(a) *General.* All disturbed areas shall be restored in a timely manner to conditions that are capable of supporting—

(1) The uses they were capable of supporting before any mining; or

(2) Higher or better uses.

(b) *Determining premining uses 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 has not been previously mined and has 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 because of the previously mined condition, 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.

(c) *Criteria for alternative postmining land uses.* Higher or better uses may be approved by the regulatory authority as alternative postmining land uses after consultation with the landowner or the land management agency having jurisdiction over the lands, if the proposed uses meet the following criteria:

- (1) There is a reasonable likelihood for achievement of the use.
- (2) The use does not present any actual or probable hazard to public health or safety, or threat of water diminution or pollution.
- (3) The use will not—
 - (i) Be impractical or unreasonable;
 - (ii) Be inconsistent with applicable land use policies or plans;
 - (iii) Involve unreasonable delay in implementation; or
 - (iv) Cause or contribute to violation of Federal, State, or local law.

(d) *Approximate original contour: Criteria for variance.* Surface coal mining operations that meet the requirements of this paragraph may be conducted under a variance from the requirement to restore disturbed areas to their approximate original contour, if the following requirements are satisfied:

(1) The regulatory authority grants the variance under a permit issued in accordance with §785.16 of this chapter.

(2) The alternative postmining land use requirements of paragraph (c) of this section are met.

(3) All applicable requirements of the Act and the regulatory program, other than the requirement to restore disturbed areas to their approximate original contour, are met.

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

(5) The proposed use is designed and certified by a qualified registered professional engineer in conformance with professional standards established to assure the stability, drainage, and configuration necessary for the intended use of the site.

(6) After approval, where required, of the appropriate State environmental agencies, the watershed of the permit and adjacent areas is shown to be improved.

(7) The highwall is completely backfilled with spoil material, in a manner which results in a static factor of safety of at least 1.3, using standard geotechnical analysis.

(8) Only the amount of spoil as is necessary to achieve the postmining land use, ensure the stability of spoil retained on the bench, and meet all other requirements of the Act and this chapter is placed off the mine bench. All spoil not retained on the bench shall be placed in accordance with §§816.71-816.74 of this chapter.

(9) The surface landowner of the permit area has knowingly requested, in writing, that a variance be granted, so as to render the land, after reclamation, suitable for an industrial, commercial, residential, or public use (including recreational facilities).

(10) Federal, State, and local government agencies with an interest in the proposed land use have an adequate period in which to review and comment on the proposed use.

§816.150 Roads: general.

(a) *Road classification system.* (1) Each road, as defined in §701.5 of this chapter, shall be classified as either a primary road or an ancillary road.

(2) A primary road is any road which is—

(i) Used for transporting coal or spoil;

(ii) Frequently used for access or other purposes for a period in excess of six months; or

(iii) To be retained for an approved postmining land use.

(3) An ancillary road is any road not classified as a primary road.

(b) *Performance standards.* Each road shall be located, designed, constructed, reconstructed, used, maintained, and reclaimed so as to:

(1) Control or prevent erosion, siltation, and the air pollution attendant to erosion, including road dust as well as dust occurring on other exposed surfaces, by measures such as vegetating, watering, using chemical or other dust suppressants, or otherwise stabilizing all exposed surfaces in accordance with current, prudent engineering practices;

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

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

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

(5) Refrain from seriously altering the normal flow of water in streambeds or drainage channels;

(6) Prevent or control damage to public or private property, including the prevention or mitigation of adverse effects on lands within the boundaries of units of the National Park System, the National Wildlife Refuge System, the National System of Trails, the National Wilderness Preservation System, the Wild and Scenic Rivers System, including designated study rivers, and National Recreation Areas designated by Act of Congress;

(7) Use nonacid- and nontoxic-forming substances in road surfacing.

(c) *Design and construction limits and establishment of design criteria.* To ensure environmental protection appropriate for their planned duration and use, including consideration of the type and size of equipment used, the design and construction or reconstruction of roads shall incorporate appropriate limits for grade, width, surface materials, surface drainage control, culvert placement, and culvert size, in accordance with current, prudent engineering practices, and any necessary design criteria established by the regulatory authority.

(d) *Location.* (1) No part of any road shall be located in the channel of an intermittent or perennial stream unless specifically approved by the regulatory authority in accordance with applicable §§816.41 through 816.43 and 816.57 of this chapter.

(2) Roads shall be located to minimize downstream sedimentation and flooding.

(e) *Maintenance.* (1) A road shall be maintained to meet the performance standards of this part and any additional criteria specified by the regulatory authority.

(2) A road damaged by a catastrophic event, such as a flood or earthquake, shall be repaired as soon as is practicable after the damage has occurred.

(f) *Reclamation.* A road not to be retained under an approved postmining land use shall be reclaimed in accordance with the approved reclamation plan as soon as practicable after it is no longer needed for mining and reclamation operations. This reclamation shall include:

(1) Closing the road to traffic;

(2) Removing all bridges and culverts unless approved as part of the postmining land use;

(3) Removing or otherwise disposing of road-surfacing materials that are incompatible with the postmining land use and revegetation requirements;

(4) Reshaping cut and fill slopes as necessary to be compatible with the postmining land use and to complement the natural drainage pattern of the surrounding terrain;

(5) Protecting the natural drainage patterns by installing dikes or cross drains as necessary to control surface runoff and erosion; and

(6) Scarifying or ripping the roadbed; replacing topsoil or substitute material, and revegetating disturbed surfaces in accordance with §§816.22 and 816.111 through 816.116 of this chapter.

§816.151 Primary roads.

Primary roads shall meet the requirements of section 816.150 and the additional requirements of this section.

(a) *Certification.* The construction or reconstruction of primary roads shall be certified in a report to the regulatory authority by a qualified registered professional engineer, or in any State which authorizes land surveyors to certify the construction or reconstruction of primary roads, a qualified registered professional land surveyor with experience in the design and construction of roads. The report shall indicate that the

primary road has been constructed or reconstructed as designed and in accordance with the approved plan.

(b) *Safety Factor*. Each primary road embankment shall have a minimum static factor of 1.3 or meet the requirements established under §780.37(c) of this chapter.

(c) *Location*. (1) To minimize erosion, a primary road shall be located, insofar as is practicable, on the most stable available surface.

(2) Fords or perennial or intermittent streams by primary roads are prohibited unless they are specifically approved by the regulatory authority as temporary routes during periods of road construction.

(d) *Drainage control*. In accordance with the approved plan—

(1) Each primary road shall be constructed or reconstructed, and maintained to have adequate drainage control, using structures such as, but not limited to bridges, ditches, cross drains, and ditch relief drains. The drainage control system shall be designed to safely pass the peak runoff from a 10-year, 6-hour precipitation event, or greater event as specified by the regulatory authority;

(2) Drainage pipes and culverts shall be installed as designed, and maintained in a free and operating condition and to prevent or control erosion at inlets and outlets;

(3) Drainage ditches shall be constructed and maintained to prevent uncontrolled drainage over the road surface and embankment;

(4) Culverts shall be installed and maintained to sustain the vertical soil pressure, the passive resistance of the foundation, and the weight of vehicles using the road;

(5) Natural stream channels shall not be altered or relocated without the prior approval of the regulatory authority in accordance with applicable §816.41 through 816.43 and 816.57 of this chapter; and

(6) Except as provided in paragraph (c)(2) of this section, structures for perennial or intermittent stream channel crossings shall be made using bridges, culverts, low-water crossings, or other structures designed, constructed, and maintained using current, prudent engineering practices. The regulatory authority shall ensure that low-water crossings are designed, constructed, and maintained to prevent erosion of the structure or streambed and additional contributions of suspended solids to streamflow.

(e) *Surfacing*. Primary roads shall be surfaced with material approved by the regulatory authority as being sufficiently durable for the anticipated volume of traffic and the weight and speed of vehicles using the road.

§816.180 Utility installations.

All surface coal mining operations shall be conducted in a manner which minimizes damage, destruction, or disruption of services provided by oil, gas, and water wells; oil, gas, and coal-slurry pipelines; railroads; electric and telephone lines; and water and sewage lines which pass over, under, or through the permit area, unless otherwise approved by the owner of those facilities and the regulatory authority.

§816.181 Support facilities.

(a) Support facilities shall be operated in accordance with a permit issued for the mine or coal preparation operation to which it is incident or from which its operation results.

(b) In addition to the other provisions of this part, support facilities shall be located, maintained, and used in a manner that—

(1) Prevents or controls erosion and siltation, water pollution, and damage to public or private property; and

(2) To the extent possible using the best technology currently available—

(i) Minimizes damage to fish, wildlife, and related environmental values; and

(ii) Minimizes additional contributions of suspended solids to streamflow or runoff outside the permit area. Any such contributions shall not be in excess of limitations of State or Federal law.

§816.200 Interpretative rules related to general performance standards.

The following interpretations of rules promulgated in part 816 of this chapter have been adopted by the Office of Surface Mining Reclamation and Enforcement.

(a)-(b) [Reserved]

(c) *Interpretation of §816.22(e)—Topsoil Removal.* (1) Results of physical and chemical analyses of overburden and topsoil to demonstrate that the resulting soil medium is equal to or more suitable for sustaining revegetation than the available

topsoil, provided that trials, and tests are certified by an approved laboratory in accordance with 30 CFR 816.22(e)(1)(ii), may be obtained from any one or a combination of the following sources:

(i) U.S. Department of Agriculture Soil Conservation Service published data based on established soil series;

(ii) U.S. Department of Agriculture Soil Conservation Service Technical Guides;

(iii) State agricultural agency, university, Tennessee Valley Authority, Bureau of Land Management or U.S. Department of Agriculture Forest Service published data based on soil series properties and behavior, or

(iv) Results of physical and chemical analyses, field site trials, or greenhouse tests of the topsoil and overburden materials (soil series) from the permit area.

(2) If the operator demonstrates through soil survey or other data that the topsoil and unconsolidated material are insufficient and substitute materials will be used, only the substitute materials must be analyzed in accordance with 30 CFR 816.22(e)(1)(i).

13. Revise part 817 to read as follows:

**PART 817—PERMANENT PROGRAM PERFORMANCE STANDARDS—
UNDERGROUND MINING ACTIVITIES**

Sec.

817.1 Scope.
817.2 Objectives.
817.10 Information collection.

- 817.11 Signs and markers.
- 817.13 Casing and sealing of exposed underground openings: General requirements.
- 817.14 Casing and sealing of underground openings: Temporary.
- 817.15 Casing and sealing of underground openings: Permanent.
- 817.22 Topsoil and subsoil.
- 817.41 Hydrologic-balance protection.
- 817.42 Hydrologic balance: Water quality standards and effluent limitations.
- 817.43 Diversions.
- 817.45 Hydrologic balance: Sediment control measures.
- 817.46 Hydrologic balance: Siltation structures.
- 817.47 Hydrologic balance: Discharge structures.
- 817.49 Impoundments.
- 817.56 Postmining rehabilitation of sedimentation ponds, diversions, impoundments, and treatment facilities.
- 817.57 Hydrologic balance: Stream buffer zones.
- 817.59 Coal recovery.
- 817.61 Use of explosives: General requirements.
- 817.62 Use of explosives: Preblasting survey.
- 817.64 Use of explosives: General performance standards.
- 817.66 Use of explosives: Blasting signs, warnings, and access controls.
- 817.67 Use of explosives: Control of adverse effects.
- 817.68 Use of explosives: Records of blasting operations.
- 817.71 Disposal of excess spoil: General requirements.
- 817.72 Disposal of excess spoil: Valley fill/head-of-hollow fills.
- 817.73 Disposal of excess spoil: Durable rock fills.
- 817.74 Disposal of excess spoil: Preexisting benches.
- 817.81 Coal mine waste: General requirements.
- 817.83 Coal mine waste: Refuse piles.
- 817.84 Coal mine waste: Impounding structures.
- 817.87 Coal mine waste: Burning and burned waste utilization.
- 817.89 Disposal of noncoal mine wastes.
- 817.95 Stabilization of surface areas.
- 817.97 Protection of fish, wildlife and related environmental values.
- 817.99 Slides and other damage.
- 817.100 Contemporaneous reclamation.
- 817.102 Backfilling and grading: General requirements.
- 817.106 Backfilling and grading: Previously mined areas.
- 817.107 Backfilling and grading: Steep slopes.
- 817.111 Revegetation: General requirements.
- 817.113 Revegetation: Timing.
- 817.114 Revegetation: Mulching and other soil stabilizing practices.
- 817.116 Revegetation: Standards for success.
- 817.121 Subsidence control.
- 817.122 Subsidence control: Public notice.
- 817.131 Cessation of operations: Temporary.
- 817.132 Cessation of operations: Permanent.

817.133 Postmining land use.
817.150 Roads: General.
817.151 Primary roads.
817.180 Utility installations.
817.181 Support facilities.
817.200 Interpretative rules related to general performance standards.

AUTHORITY: 30 U.S.C. 1201 *et seq.*

§817.1 Scope.

This part sets forth the minimum environmental protection performance standards to be adopted and implemented under regulatory programs for underground mining activities.

§817.2 Objectives.

This part is intended to ensure that all underground mining activities are conducted in a manner which preserves and enhances environmental and other values in accordance with the Act.

§817.10 Information collection.

(a) The collections of information contained in part 817 have been approved by Office of Management and Budget under 44 U.S.C. 3501 *et seq.* and assigned clearance number 1029-0048. The information will be used to meet the requirements of 30 U.S.C. 1211, 1251, 1266, and 1309a which provide, among other things, that

permittees conducting underground coal mining operations will meet the applicable performance standards of the Act. This information will be used by the regulatory authority in monitoring and inspecting underground mining activities. The obligation to respond is required to obtain a benefit.

(b) Public reporting burden for this information is estimated to average 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

§817.11 Signs and markers.

(a) *Specifications.* Signs and markers required under this part shall—

(1) Be posted, maintained, and removed by the person who conducts the underground mining activities;

(2) Be of a uniform design throughout the activities that can be easily seen and read;

(3) Be made of durable material; and

(4) Conform to local laws and regulations.

(b) *Duration of maintenance.* Signs and markers shall be maintained during all activities to which they pertain.

(c) *Mine and permit identification signs.* (1) Identification signs shall be displayed at each point of access from public roads to areas of surface operations and facilities on permit areas for underground mining activities.

(2) Signs will show the name, business address, and telephone number of the person who conducts underground mining activities and the identification number of the current regulatory program permit authorizing underground mining activities.

(3) Signs shall be retained and maintained until after the release of all bonds for the permit area.

(d) *Perimeter markers.* Each person who conducts underground mining activities shall clearly mark the perimeter of all areas affected by surface operations or facilities before beginning mining activities.

(e) *Buffer zone markers.* Buffer zones required by §817.57 shall be clearly marked to prevent disturbance by surface operations and facilities.

(f) *Topsoil markers.* Where topsoil or other vegetation-supporting material is segregated and stockpiled as required under §817.22, the stockpiled material shall be clearly marked.

§817.13 Casing and sealing of exposed underground openings: General requirements.

Each exploration hole, other drillhole or borehole, shaft, well, or other exposed underground opening shall be cased, lined, or otherwise managed as approved by the

regulatory authority to prevent acid or other toxic drainage from entering ground and surface waters, to minimize disturbance to the prevailing hydrologic balance and to ensure the safety of people, livestock, fish and wildlife, and machinery in the permit area and adjacent area. Each exploration hole, drill hole or borehole or well that is uncovered or exposed by mining activities within the permit area shall be permanently closed, unless approved for water monitoring or otherwise managed in a manner approved by the regulatory authority. Use of a drilled hole or monitoring well as a water well must meet the provisions of §817.41 of this part. This section does not apply to holes drilled and used for blasting, in the area affected by surface operations.

§817.14 Casing and sealing of underground openings: Temporary.

(a) Each mine entry which is temporarily inactive, but has a further projected useful service under the approved permit application, shall be protected by barricades or other covering devices, fenced, and posted with signs, to prevent access into the entry and to identify the hazardous nature of the opening. These devices shall be periodically inspected and maintained in good operating condition by the person who conducts the underground mining activities.

(b) Each exploration hole, other drill hole or borehole, shaft, well, and other exposed underground opening which has been identified in the approved permit application for use to return underground development waste, coal processing waste or water to underground workings, or to be used to monitor ground water conditions, shall be temporarily sealed until actual use.

§817.15 Casing and sealing of underground openings: Permanent.

When no longer needed for monitoring or other use approved by the regulatory authority upon a finding of no adverse environmental or health and safety effects, or unless approved for transfer as a water well under §817.41, each shaft, drift, adit, tunnel, exploratory hole, entryway or other opening to the surface from underground shall be capped, sealed, backfilled, or otherwise properly managed, as required by the regulatory authority in accordance with §817.13 and consistent with 30 CFR 75.1711. Permanent closure measures shall be designed to prevent access to the mine workings by people, livestock, fish and wildlife, machinery and to keep acid or other toxic drainage from entering ground or surface waters.

§817.22 Topsoil and subsoil.

(a) *Removal.* (1)(i) All topsoil shall be removed as a separate layer from the area to be disturbed, and segregated.

(ii) Where the topsoil is of insufficient quantity or of poor quality for sustaining vegetation, the materials approved by the regulatory authority in accordance with paragraph (b) of this section shall be removed as a separate layer from the area to be disturbed, and segregated.

(2) If topsoil is less than 6 inches thick, the operator may remove the topsoil and the unconsolidated materials immediately below the topsoil and treat the mixture as topsoil.

(3) The regulatory authority may choose not to require the removal of topsoil for minor disturbances which—

(i) Occur at the site of small structures, such as power poles, signs, or fence lines; or

(ii) Will not destroy the existing vegetation and will not cause erosion.

(4) *Timing.* All materials to be removed under this section shall be removed after the vegetative cover that would interfere with its salvage is cleared from the area to be disturbed, but before any drilling, blasting, mining, or other surface disturbance takes place.

(b) *Substitutes and supplements.* Selected overburden materials may be substituted for, or used as a supplement to, topsoil if the operator demonstrates to the regulatory authority that the resulting soil medium is equal to, or more suitable for sustaining vegetation than, the existing topsoil, and the resulting soil medium is the best available in the permit area to support revegetation.

(c) *Storage.* (1) Materials removed under Paragraph (a) of this section shall be segregated and stockpiled when it is impractical to redistribute such materials promptly on regraded areas.

(2) Stockpiled materials shall—

(i) Be selectively placed on a stable site within the permit area;

(ii) Be protected from contaminants and unnecessary compaction that would interfere with revegetation;

(iii) Be protected from wind and water erosion through prompt establishment and maintenance of an effective, quick growing vegetative cover or through other measures approved by the regulatory authority; and

(iv) Not be moved until required for redistribution unless approved by the regulatory authority.

(3) Where long-term surface disturbances will result from facilities such as support facilities and preparation plants and where stockpiling of materials removed under paragraph (a)(1) of this section would be detrimental to the quality or quantity of those materials, the regulatory authority may approve the temporary distribution of the soil materials so removed to an approved site within the permit area to enhance the current use of that site until needed for later reclamation, provided that—

(i) Such action will not permanently diminish the capability of the topsoil of the host site; and

(ii) The material will be retained in a condition more suitable for redistribution than if stockpiled.

(d) *Redistribution.* (1) Topsoil materials and topsoil substitutes and supplements removed under paragraphs (a) and (b) of this section shall be redistributed in a manner that—

(i) Achieves an approximately uniform, stable thickness when consistent with the approved postmining land use, contours, and surface-water drainage systems. Soil thickness may also be varied to the extent such variations help meet the specific revegetation goals identified in the permit;

(ii) Prevents excess compaction of the materials; and

(iii) Protects the materials from wind and water erosion before and after seeding and planting.

(2) Before redistribution of the material removed under paragraph (a) of this section, the regraded land shall be treated if necessary to reduce potential slippage of the redistributed material and to promote root penetration. If no harm will be caused to the redistributed material and reestablished vegetation, such treatment may be conducted after such material is replaced.

(3) The regulatory authority may choose not to require the redistribution of topsoil or topsoil substitutes on the approved postmining embankments of permanent impoundments or of roads if it determines that—

(i) Placement of topsoil or topsoil substitutes on such embankments is inconsistent with the requirement to use the best technology currently available to prevent sedimentation, and

(ii) Such embankments will be otherwise stabilized.

(4) *Nutrients and soil amendments.* Nutrients and soil amendments shall be applied to the initially redistributed material when necessary to establish the vegetative cover.

(e) *Subsoil segregation.* The regulatory authority may require that the B horizon, C horizon, or other underlying strata, or portions thereof, be removed and segregated, stockpiled, and redistributed as subsoil in accordance with the requirements of paragraphs (c) and (d) of this section if it finds that such subsoil layers are necessary to comply with the revegetation requirements of §§817.111, 817.113, 817.114, and 817.116 of this chapter.

§817.41 Hydrologic-balance protection.

(a) *General.* All underground mining and reclamation activities shall be conducted to minimize disturbance of the hydrologic balance within the permit and adjacent areas, to prevent material damage to the hydrologic balance outside the permit area, and to support approved postmining land uses in accordance with the terms and conditions of the approved permit and the performance standards of this part. The regulatory authority may require additional preventative, remedial, or monitoring measures to assure that material damage to the hydrologic balance outside the permit area is prevented. Mining and reclamation practices that minimize water pollution and changes in flow shall be used in preference to water treatment.

(b) *Ground-water protection.* In order to protect the hydrologic balance underground mining activities shall be conducted according to the plan approved under §784.14(g) of this chapter and the following.

(1) Ground-water quality shall be protected by handling earth materials and runoff in a manner that minimizes acidic, toxic, or other harmful infiltration to ground-water systems and by managing excavations and other disturbances to prevent or control the discharge of pollutants into the ground water.

(c) *Ground-water monitoring.* (1) Ground-water monitoring shall be conducted according to the ground-water monitoring plan approved under §784.14(h) of this chapter. The regulatory authority may require additional monitoring when necessary.

(2) Ground-water monitoring data shall be submitted every 3 months to the regulatory authority or more frequently as prescribed by the regulatory authority. Monitoring reports shall include analytical results from each sample taken during the reporting period. When the analysis of any ground-water sample indicates noncompliance with the permit conditions, then the operator shall promptly notify the regulatory authority and immediately take the actions provided for in §§773.17(e) and 784.14(g) of this chapter.

(3) Ground-water monitoring shall proceed through mining and continue during reclamation until bond release. Consistent with the procedures of §774.13 of this chapter, the regulatory authority may modify the monitoring requirements including the parameters covered and the sampling frequency if the operator demonstrates, using the monitoring data obtained under this paragraph, that—

(i) The operation has minimized disturbance to the prevailing hydrologic balance in the permit and adjacent areas and prevented material damage to the hydrologic balance outside the permit area; water quantity and quality are suitable to support approved postmining land uses; or

(ii) Monitoring is no longer necessary to achieve the purposes set forth in the monitoring plan approved under §784.14(h) of this chapter.

(4) Equipment, structures, and other devices used in conjunction with monitoring the quality and quantity of ground water onsite and offsite shall be properly installed, maintained, and operated and shall be removed by the operator when no longer needed.

(d) *Surface-water protection.* In order to protect the hydrologic balance, underground mining activities shall be conducted according to the plan approved under §784.14(g) of this chapter, and the following:

(1) Surface-water quality shall be protected by handling earth materials, ground-water discharges, and runoff in a manner that minimizes the formation of acidic or toxic drainage; prevents, to the extent possible using the best technology currently available, additional contribution of suspended solids to streamflow outside the permit area; and otherwise prevent water pollution. If drainage control, restabilization and revegetation of disturbed areas, diversion of runoff, mulching, or other reclamation and remedial practices are not adequate to meet the requirements of this section and §817.42, the operator shall use and maintain the necessary water-treatment facilities or water quality controls.

(2) Surface-water quantity and flow rates shall be protected by handling earth materials and runoff in accordance with the steps outlined in the plan approved under §784.14(g) of this chapter.

(e) *Surface-water monitoring.* (1) Surface-water monitoring shall be conducted according to the surface-water monitoring plan approved under §784.14(i) of this chapter. The regulatory authority may require additional monitoring when necessary.

(2) Surface-water monitoring data shall be submitted every 3 months to the regulatory authority or more frequently as prescribed by the regulatory authority. Monitoring reports shall include analytical results from each sample taken during the reporting period. When the analysis of any surface-water sample indicates noncompliance with the permit conditions, the operator shall promptly notify the regulatory authority and immediately take the actions provided for in §§773.17(e) and 784.14(g) of this chapter. The reporting requirements of this paragraph do not exempt the operator from meeting any National Pollutant Discharge Elimination System (NPDES) reporting requirements.

(3) Surface-water monitoring shall proceed through mining and continue during reclamation until bond release. Consistent with §774.13 of this chapter, the regulatory authority may modify the monitoring requirements, except those required by the NPDES permitting authority, including the parameters covered and sampling frequency if the operator demonstrates, using the monitoring data obtained under this paragraph, that—

(i) The operation has minimized disturbance to the hydrologic balance in the permit and adjacent areas and prevented material damage to the hydrologic balance

outside the permit area; water quantity and quality are suitable to support approved postmining land uses; and

(ii) Monitoring is no longer necessary to achieve the purposes set forth in the monitoring plan approved under §784.14(i) of this chapter.

(4) Equipment, structures, and other devices used in conjunction with monitoring the quality and quantity of surface water onsite and offsite shall be properly installed, maintained, and operated and shall be removed by the operator when no longer needed.

(f) *Acid- and toxic-forming materials.* (1) Drainage from acid- and toxic-forming materials and underground development waste into surface water and ground water shall be avoided by—

(i) Identifying and burying and/or treating, when necessary, materials which may adversely affect water quality, or be detrimental to vegetation or to public health and safety if not buried and/or treated, and

(ii) Storing materials in a manner that will protect surface water and ground water by preventing erosion, the formation of polluted runoff, and the infiltration of polluted water. Storage shall be limited to the period until burial and/or treatment first become feasible, and so long as storage will not result in any risk of water pollution or other environmental damage.

(2) Storage, burial or treatment practices shall be consistent with other material handling and disposal provisions of this chapter.

(g) *Transfer of wells.* Before final release of bond, exploratory or monitoring wells shall be sealed in a safe and environmentally sound manner in accordance with §§817.13 and 817.15. With the prior approval of the regulatory authority, wells may be transferred to another party for further use. However, at a minimum, the conditions of such transfer shall comply with State and local laws and the permittee shall remain responsible for the proper management of the well until bond release in accordance with §§817.13 to 817.15.

(h) *Discharges into an underground mine.* (1) Discharges into an underground mine are prohibited, unless specifically approved by the regulatory authority after a demonstration that the discharge will—

(i) Minimize disturbance to the hydrologic balance on the permit area, prevent material damage outside the permit area and otherwise eliminate public hazards resulting from underground mining activities;

(ii) Not result in a violation of applicable water quality standards or effluent limitations;

(iii) Be at a known rate and quality which shall meet the effluent limitations of §817.42 for pH and total suspended solids, except that the pH and total suspended solids limitations may be exceeded, if approved by the regulatory authority; and

(iv) Meet with the approval of the Mine Safety and Health Administration.

(2) Discharges shall be limited to the following:

(i) water;

- (ii) Coal-processing waste;
- (iii) Fly ash from a coal-fired facility;
- (iv) Sludge from an acid-mine-drainage treatment facility;
- (v) Flue-gas desulfurization sludge;
- (vi) Inert materials used for stabilizing underground mines; and
- (vii) Underground mine development wastes.

(3) Water from one underground mine may be diverted into other underground workings according to the requirements of this section.

(i) *Gravity discharges from underground mines.* (1) Surface entries and accesses to underground workings shall be located and managed to prevent or control gravity discharge of water from the mine. Gravity discharges of water from an underground mine, other than a drift mine subject to paragraph (i)(2) of this section, may be allowed by the regulatory authority if it is demonstrated that the untreated or treated discharge complies with the performance standards of this part and any additional NPDES permit requirements.

(2) Notwithstanding anything to the contrary in paragraph (i)(1) of this section, the surface entries and accesses of drift mines first used after the implementation of a State, Federal, or Federal Lands Program and located in acid-producing or iron-producing coal seams shall be located in such a manner as to prevent any gravity discharge from the mine.

(j) *Drinking, domestic or residential water supply.* The permittee must promptly replace any drinking, domestic or residential water supply that is contaminated, diminished or interrupted by underground mining activities conducted after October 24, 1992, if the affected well or spring was in existence before the date the regulatory authority received the permit application for the activities causing the loss, contamination or interruption. The baseline hydrologic information required in §§780.21 and 784.14 of this chapter and the geologic information concerning baseline hydrologic conditions required in §§780.21 and 784.22 of this chapter will be used to determine the impact of mining activities upon the water supply.

§817.42 Hydrologic balance: Water quality standards and effluent limitations.

Discharges of water from areas disturbed by underground mining activities shall be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR part 434.

§817.43 Diversions.

(a) *General requirements.* (1) With the approval of the regulatory authority, any flow from mined areas abandoned before May 3, 1978, and any flow from undisturbed areas or reclaimed areas, after meeting the criteria of §817.46 for siltation structure removal, may be diverted from disturbed areas by means of temporary or permanent

diversions. All diversions shall be designed to minimize adverse impacts to the hydrologic balance within the permit and adjacent areas, to prevent material damage outside the permit area and to assure the safety of the public. Diversions shall not be used to divert water into underground mines without approval of the regulatory authority in accordance with §817.41(h).

(2) The diversion and its appurtenant structures shall be designed, located, constructed, and maintained to—

- (i) Be stable;
- (ii) Provide protection against flooding and resultant damage to life and property;
- (iii) Prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow outside the permit area; and
- (iv) Comply with all applicable local, State, and Federal laws and regulations.

(3) Temporary diversions shall be removed promptly when no longer needed to achieve the purpose for which they were authorized. The land disturbed by the removal process shall be restored in accordance with this part. Before diversions are removed, downstream water-treatment facilities previously protected by the diversion shall be modified or removed, as necessary, to prevent overtopping or failure of the facilities. This requirement shall not relieve the operator from maintaining water-treatment facilities as otherwise required. A permanent diversion or a stream channel reclaimed after the removal of a temporary diversion shall be designed and constructed so as to restore or approximate the premining characteristics of the original stream channel

including the natural riparian vegetation to promote the recovery and the enhancement of the aquatic habitat.

(4) The regulatory authority may specify additional design criteria for diversions to meet the requirements of this section.

(b) *Diversion of perennial and intermittent streams.* (1) Diversion of perennial and intermittent streams within the permit area may be approved by the regulatory authority after making the finding relating to stream buffer zones called for in 30 CFR 817.57 that the diversions will not adversely affect the water quantity and quality and related environmental resources of the stream.

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

(3) The requirements of paragraph (a)(2)(ii) of this section shall be met when the temporary and permanent diversions for perennial and intermittent streams are designed so that the combination of channel, bank and flood-plain configuration is adequate to pass safely the peak runoff of a 10-year, 6-hour precipitation event for a temporary diversion and a 100-year, 6-hour precipitation event for a permanent diversion.

(4) The design and construction of all stream channel diversions of perennial and intermittent streams shall be certified by a qualified registered professional engineer as meeting the performance standards of this part and any design criteria set by the regulatory authority.

(c) *Diversion of miscellaneous flows.* (1) Miscellaneous flows, which consist of all flows except for perennial and intermittent streams, may be diverted away from disturbed areas if required or approved by the regulatory authority. Miscellaneous flows shall include ground-water discharges and ephemeral streams.

(2) The design, location, construction, maintenance, and removal of diversions of miscellaneous flows shall meet all of the performance standards set forth in paragraph (a) of this section.

(3) The requirements of paragraph (a)(2)(ii) of this section shall be met when the temporary and permanent diversions for miscellaneous flows are designed so that the combination of channel, bank and flood-plain configuration is adequate to pass safely the peak runoff of a 2-year, 6-hour precipitation event for a temporary diversion and a 10-year, 6-hour precipitation event for a permanent diversion.

§817.45 Hydrologic balance: Sediment control measures.

(a) Appropriate sediment control measures shall be designed, constructed, and maintained using the best technology currently available to:

(1) Prevent, to the extent possible, additional contributions of sediment to stream flow or to runoff outside the permit area,

(2) Meet the more stringent of applicable State or Federal effluent limitations,

(3) Minimize erosion to the extent possible.

(b) Sediment control measures include practices carried out within and adjacent to the disturbed area. The sedimentation storage capacity of practices in and downstream from the disturbed areas shall reflect the degree to which successful mining and reclamation techniques are applied to reduce erosion and control sediment. Sediment control measures consist of the utilization of proper mining and reclamation methods and sediment control practices, singly or in combination. Sediment control methods include but are not limited to—

(1) Disturbing the smallest practicable area at any one time during the mining operation through progressive backfilling, grading, and prompt revegetation as required in §817.111(b);

(2) Stabilizing the backfilled material to promote a reduction of the rate and volume of runoff in accordance with the requirements of §817.102;

(3) Retaining sediment within disturbed areas;

(4) Diverting runoff away from disturbed areas;

(5) Diverting runoff using protected channels or pipes through disturbed areas so as not to cause additional erosion;

(6) Using straw dikes, riprap, check dams, mulches, vegetative sediment filters, dugout ponds, and other measures that reduce overland flow velocity, reduce runoff volume, or trap sediment;

(7) Treating with chemicals; and

(8) Treating mine drainage in underground sumps.

§817.46 Hydrologic balance: Siltation structures.

(a) For the purposes of this section only, *disturbed areas* shall not include those areas—

(1) In which the only surface mining activities include diversion ditches, siltation structures, or roads that are designed, constructed and maintained in accordance with this part; and

(2) For which the upstream area is not otherwise distributed by the operator.

(b) *General requirements.* (1) Additional contributions of suspended solids and sediment to streamflow or runoff outside the permit area shall be prevented to the extent possible using the best technology currently available.

(2) All surface drainage from the disturbed area shall be passed through a siltation structure before leaving the permit area, except as provided in paragraph (b)(5) or (e) of this section. The requirements of this paragraph are suspended effective December 22, 1986, per court order.

(3) Siltation structures for an area shall be constructed before beginning any underground mining activities in that area, and upon construction shall be certified by a qualified registered professional engineer, or, in any State which authorizes land surveyors to prepare and certify plans in accordance with §784.16(a) of this chapter, a qualified registered professional land surveyor, to be constructed as designed and as approved in the reclamation plan.

(4) Any siltation structure which impounds water shall be designed, constructed and maintained in accordance with §817.49 of this chapter.

(5) Siltation structures shall be maintained until removal is authorized by the regulatory authority and the disturbed area has been stabilized and revegetated. In no case shall the structure be removed sooner than 2 years after the last augmented seeding.

(6) When the siltation structure is removed, the land on which the siltation structure was located shall be regraded and revegetated in accordance with the reclamation plan and §§817.111 through 817.116 of this chapter. Sedimentation ponds approved by the regulatory authority for retention as permanent impoundments may be exempted from this requirement.

(7) Any point-source discharge of water from underground workings to surface waters which does not meet the effluent limitations of §817.42 shall be passed through a siltation structure before leaving the permit area.

(c) *Sedimentation ponds.* (1) Sedimentation ponds, when used, shall—

(i) Be used individually or in series;

(ii) Be located as near as possible to the disturbed area and out of perennial streams unless approved by the regulatory authority; and

(iii) Be designed, constructed, and maintained to—

(A) Provide adequate sediment storage volume;

(B) Provide adequate detention time to allow the effluent from the ponds to meet State and Federal effluent limitations;

(C) Contain or treat the 10-year, 24-hour precipitation event ("design event") unless a lesser design event is approved by the regulatory authority based on terrain, climate, other site-specific conditions and on a demonstration by the operator that the effluent limitations of §817.42 will be met;

(D) Provide a nonclogging dewatering device adequate to maintain the detention time required under paragraph (c)(1)(iii)(B) of this section;

(E) Minimize, to the extent possible, short circuiting;

(F) Provide periodic sediment removal sufficient to maintain adequate volume for the design event;

(G) Ensure against excessive settlement;

(H) Be free of sod, large roots, frozen soil, and acid- or toxic-forming coal-processing waste; and

(I) Be compacted properly.

(2) *Spillways.* A sedimentation pond shall include either a combination of principal and emergency spillways or single spillway configured as specified in §817.49(a)(9).

(d) *Other treatment facilities.* (1) Other treatment facilities shall be designed to treat the 10-year, 24-hour precipitation even unless a lesser design event is approved

by the regulatory authority based on terrain, climate, other site-specific conditions and a demonstration by the operator that the effluent limitations of §817.42 will met.

(2) Other treatment facilities shall be designed in accordance with the applicable requirements of paragraph (c) of this section.

(e) *Exemptions.* Exemptions to the requirements of this section may be granted if—

(1) The disturbed drainage area within the total disturbed area is small; and

(2) The operator demonstrates that siltation structures and alternate sediment control measures are not necessary for drainage from the disturbed drainage areas to meet the effluent limitations under §817.42 and the applicable State and Federal water quality standards for the receiving waters.

§817.47 Hydrologic balance: Discharge structures.

Discharge from sedimentation ponds, permanent and temporary impoundments, coal processing waste dams and embankments, and diversions shall be controlled, by energy dissipators, riprap channels, and other devices, where necessary, 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 design procedures.

§817.49 Impoundments.

(a) *General requirements.* The requirements of this paragraph apply to both temporary and permanent impoundments.

(1) Impoundments meeting the Class B or C criteria for dams in the U.S. Department of Agriculture, Soil Conservation Service Technical Release No. 60 (210-VI-TR60, Oct. 1985), "Earth Dams and Reservoirs," shall comply with the, "Minimum Emergency Spillway Hydrologic Criteria," table in TR-60 and the requirements of this section. The technical release is hereby incorporated by reference. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22161, order No. PB 87-157509-AS. Copies can be inspected at the OSM Headquarters Office, Office of Surface Mining Reclamation and Enforcement, Administrative Record, 1951 Constitution Avenue, NW, Washington, DC or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html

(2) An impoundment meeting the size or other criteria of §77.216(a) of this title shall comply with the requirements of §77.216 of this title and this section.

(3) *Design certification.* The design of impoundments shall be certified in accordance with §784.16(a) of this chapter as designed to meet the requirements of this

part using current, prudent, engineering practices and any design criteria established by the regulatory authority. The qualified, registered, professional engineer or qualified, registered, professional, land surveyor shall be experienced in the design and construction or impoundments.

(4) *Stability.* (i) An Impoundment meeting the SCS Class B or C criteria for dams in TR-60, or the size or other criteria of §77.216(a) of this title shall have a minimum static safety factor of 1.5 for a normal pool with steady state seepage saturation conditions, and a seismic safety factor of at least 1.2.

(ii) Impoundments not included in paragraph (a)(4)(i) of this section, except for a coal mine waste impounding structure, shall have a minimum static safety factor of 1.3 for a normal pool with steady state seepage saturation conditions or meet the requirements of §784.16(c)(3).

(5) *Freeboard.* Impoundments shall have adequate freeboard to resist overtopping by waves and by sudden increases in storage volume. Impoundments meeting the SCS Class B or C criteria for dams in TR-60 shall comply with the freeboard hydrograph criteria in the “Minimum Emergency Spillway Hydrologic Criteria” table in TR-60.

(6) *Foundation.* (i) Foundations and abutments for an impounding structure shall be stable during all phases of construction and operation and shall be designed based on adequate and accurate information on the foundation conditions. For an impoundment meeting the SCS Class B or C criteria for dams in TR-60, or the size or other criteria of §77.216(a) of this title, foundation investigation, as well as any

necessary laboratory testing of foundation material, shall be performed to determine the design requirements for foundation stability.

(ii) All vegetative and organic materials shall be removed and foundations excavated and prepared to resist failure. Cutoff trenches shall be installed if necessary to ensure stability.

(7) Slope protection shall be provided to protect against surface erosion at the site and protect against sudden drawdown.

(8) Faces of embankments and surrounding areas shall be vegetated, except that faces where water is impounded may be riprapped or otherwise stabilized in accordance with accepted design practices.

(9) *Spillways*. An impoundment shall include either a combination of principal and emergency spillways or a single spillway configured as specified in paragraph (a)(9)(i) of this section, designed and constructed to safely pass the applicable design precipitation event specified in paragraph (a)(9)(ii) of this section, except as set forth in paragraph (c)(2) of this section.

(i) The regulatory authority may approve a single open-channel spillway that is:

(A) Of nonerodible construction and designed to carry sustained flows; or

(B) Earth- or grass-lined and designed to carry short-term, infrequent flows at non-erosive velocities where sustained flows are not expected.

(ii) Except as specified in paragraph (c)(2) of this section, the required design precipitation event for an impoundment meeting the spillway requirements of paragraph (a)(9) of this section is:

(A) For an impoundment meeting the SCS Class B or C criteria for dams in TR-60, the emergency spillway hydrograph criteria in the “Minimum Emergency Spillway Hydrologic Criteria” table in TR-60, or greater event as specified by the regulatory authority.

(B) For an impoundment meeting or exceeding the size or other criteria of §77.216(a) of this title, a 100-year 6-hour event, or greater event as specified by the regulatory authority.

(C) For an impoundment not included in paragraph (a)(9)(ii) (A) and (B) of this section, a 25-year 6-hour event, or greater event as specified by the regulatory authority.

(10) The vertical portion of any remaining highwall shall be located far enough below the low-water line along the full extent of highwall to provide adequate safety and access for the proposed water users.

(11) *Inspections.* Except as provided in paragraph (a)(11)(iv) of this section, a qualified registered professional engineer or other qualified professional specialist under the direction of a professional engineer, shall inspect each impoundment as provided in paragraph (a)(11)(i) of this section. The professional engineer or specialist shall be experienced in the construction of impoundments.

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

(ii) The qualified registered professional engineer, or qualified registered professional land surveyor as specified in paragraph (a)(11)(iv) of this section, shall promptly after each inspection required in paragraph (a)(11)(i) of this section provide to the regulatory authority a certified report that the impoundment has been constructed and/or maintained as designed and in accordance with the approved plan and this chapter. The report shall include discussion of any appearance of instability, structural weakness or other hazardous condition, depth and elevation of any impounded waters, existing storage capacity, any existing or required monitoring procedures and instrumentation, and any other aspects of the structure affecting stability.

(iii) A copy of the report shall be retained at or near the minesite.

(iv) In any State which authorizes land surveyors to prepare and certify plans in accordance with §784.16(a) of this chapter, a qualified registered professional land surveyor may inspect any temporary or permanent impoundment that does not meet the SCS Class B or C criteria for dams in TR-60, or the size or other criteria of §77.216(a) of this title and certify and submit the report required by paragraph (a)(11)(ii) of this section, except that all coal mine waste impounding structures covered by §817.84 of this chapter shall be certified by a qualified registered professional engineer. The professional land surveyor shall be experienced in the construction of impoundments.

(12) Impoundments meeting the SCS Class B or C criteria for dams in TR-60, or the size or other criteria of §77.216 of this title must be examined in accordance with §77.216-3 of this title. Impoundments not meeting the SCS Class B or C Criteria for dams in TR-60, or subject to §77.216 of this title, shall be examined at least quarterly. A qualified person designated by the operator shall examine impoundments for the appearance of structural weakness and other hazardous conditions.

(13) *Emergency procedures.* If any examination or inspection discloses that a potential hazard exists, the person who examined the impoundment shall promptly inform the regulatory authority of the finding and of the emergency procedures formulated for public protection and remedial action. If adequate procedures cannot be formulated or implemented, the regulatory authority shall be notified immediately. The regulatory authority shall then notify the appropriate agencies that other emergency procedures are required to protect the public.

(b) *Permanent impoundments.* A permanent impoundment of water may be created, if authorized by the regulatory authority in the approved permit based upon the following demonstration:

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

(2) The quality of impounded water will be suitable on a permanent basis for its intended use and, after reclamation, will meet applicable State and Federal water quality standards, and discharges from the impoundment will meet applicable effluent

limitations and will not degrade the quality of receiving water below applicable State and Federal water quality standards.

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

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

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

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

(c) *Temporary impoundments.* (1) The regulatory authority may authorize the construction of temporary impoundments as part of underground mining activities.

(2) In lieu of meeting the requirements in paragraph (a)(9)(i) of this section, the regulatory authority may approve an impoundment that relies primarily on storage to control the runoff from the design precipitation event when it is demonstrated by the operator and certified by a qualified registered professional engineer or qualified registered professional land surveyor in accordance with §784.16(a) of this chapter that the impoundment will safely control the design precipitation event, the water from which shall be safely removed in accordance with current, prudent, engineering practices. Such an impoundment shall be located where failure would not be expected to cause loss of life or serious property damage, except where:

(i) Impoundments meeting the SCS Class B or C criteria for dams in TR-60, or the size or other criteria of §77.216(a) of this title shall be designed to control the precipitation of the probable maximum precipitation of a 6-hour event, or greater event specified by the regulatory authority.

(ii) Impoundments not included in paragraph (c)(2)(i) of this section shall be designed to control the precipitation of the 100-year 6-hour event, or greater event specified by the regulatory authority.

§817.56 Postmining rehabilitation of sedimentation ponds, diversions, impoundments, and treatment facilities.

Before abandoning a permit area or seeking bond release, the operator shall ensure that all temporary structures are removed and reclaimed, and that all permanent sedimentation ponds, diversions, impoundments, and treatment facilities meet the requirements of this chapter for permanent structures, have been maintained properly, and meet the requirements of the approved reclamation plan for permanent structures and impoundments. The operator shall renovate such structures if necessary to meet the requirements of this chapter and to conform to the approved reclamation plan.

§817.57 Hydrologic balance: Stream buffer zones.

(a) No land within 100 feet of a perennial stream or an intermittent stream shall be disturbed by underground mining activities, unless the regulatory authority

specifically authorizes underground mining activities closer to, or through, such a stream. The regulatory authority may authorize such activities only upon finding that—

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

(2) If there will be a temporary or permanent stream-channel diversion, it will comply with §817.43.

(b) The area not to be disturbed shall be designated as a buffer zone, and the operator shall mark it as specified in §817.11.

§817.59 Coal recovery.

Underground mining activities shall be conducted so as to maximize the utilization and conservation of the coal, while utilizing the best technology currently available to maintain environmental integrity, so that reaffected the land in the future through surface coal mining operations is minimized.

§817.61 Use of explosives: General requirements.

(a) Sections 817.61-817.68 apply to surface blasting activities incident to underground coal mining, including, but not limited to, initial rounds of slopes and shafts.

(b) Each operator shall comply with all applicable State and Federal laws and regulations in the use of explosives.

(c) *Blasters.* (1) No later than 12 months after the blaster certification program for a State required by part 850 of this chapter has been approved under the procedures of subchapter C of this chapter, all surface blasting operations incident to underground mining in that State shall be conducted under the direction of a certified blaster. Before that time, all such blasting operations in that State shall be conducted by competent, experienced persons who understand the hazards involved.

(2) Certificates of blaster certification shall be carried by blasters or shall be on file at the permit area during blasting operations.

(3) A blaster and at least one other person shall be present at the firing of a blast.

(4) Any blaster who is responsible for conducting blasting operations at a blasting site shall:

(i) Be familiar with the site-specific performance standards; and

(ii) Give direction and on-the-job training to persons who are not certified and who are assigned to the blasting crew or assist in the use of explosives.

(d) *Blast design.* (1) An anticipated blast design shall be submitted if blasting operations will be conducted within—

(i) 1,000 feet of any building used as a dwelling, public building, school, church or community or institutional building; or

(ii) 500 feet of active or abandoned underground mines.

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

(3) The blast design shall contain sketches of the drill patterns, delay periods, and decking and shall indicate the type and amount of explosives to be used, critical dimensions, and the location and general description of structures to be protected, as well as a discussion of design factors to be used, which protect the public and meet the applicable airblast, flyrock, and ground-vibration standards in §817.67.

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

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

§817.62 Use of explosives: Preblasting survey.

(a) At least 30 days before initiation of blasting, the operator shall notify, in writing, all residents or owners of dwellings or other structures located within $\frac{1}{2}$ mile of the permit area how to request a preblasting survey.

(b) A resident or owner of a dwelling or structure within $\frac{1}{2}$ mile of any part of the permit area may request a preblasting survey. This request shall be made, in writing, directly to the operator or to the regulatory authority, who shall promptly notify the operator. The operator shall promptly conduct a preblasting survey of the dwelling or structure and promptly prepare a written report of the survey. An updated survey of any

additions, modifications, or renovations shall be performed by the operator if requested by the resident or owner.

(c) The operator shall determine the condition of the dwelling or structure and shall document any preblasting damage and other physical factors that could reasonably be affected by the blasting. Structures such as pipelines, cables, transmission lines, and cisterns, wells, and other water systems warrant special attention; however, the assessment of these structures may be limited to surface conditions and other readily available data.

(d) The written report of the survey shall be signed by the person who conducted the survey. Copies of the report shall be promptly provided to the regulatory authority and to the person requesting the survey. If the person requesting the survey disagrees with the contents and/or recommendations contained therein, he or she may submit to both the operator and the regulatory authority a detailed description of the specific areas of disagreement.

(e) Any surveys requested more than 10 days before the planned initiation of blasting shall be completed by the operator before the initiation of blasting.

§817.64 Use of explosives: General performance standards.

(a) The operator shall notify, in writing, residents within $\frac{1}{2}$ mile of the blasting site and local governments of the proposed times and locations of blasting operations. Such

notice of times that blasting is to be conducted may be announced weekly, but in no case less than 24 hours before blasting will occur.

(b) Unscheduled blasts may be conducted only where public or operator health and safety so requires and for emergency blasting actions. When an operator conducts an unscheduled surface blast incidental to underground coal mining operations, the operator, using audible signals, shall notify residents within $\frac{1}{2}$ mile of the blasting site and document the reason in accordance with §817.68(p).

(c) All blasting shall be conducted between sunrise and sunset unless nighttime blasting is approved by the regulatory authority based upon a showing by the operator that the public will be protected from adverse noise and other impacts. The regulatory authority may specify more restrictive time periods for blasting.

§817.66 Use of explosives: Blasting signs, warnings, and access control.

(a) *Blasting signs.* Blasting signs shall meet the specifications of §817.11. The operator shall—

(1) Conspicuously place signs reading “Blasting Area” along the edge of any blasting area that comes within 100 feet of any public-road right-of-way, and at the point where any other road provides access to the blasting area; and

(2) At all entrances to the permit area from public roads or highways, place conspicuous signs which state “Warning! Explosives in Use,” which clearly list and describe the meaning of the audible blast warning and all-clear signals that are in use,

and which explain the marking of blasting areas and charged holes awaiting firing within the permit area.

(b) *Warnings.* Warning and all-clear signals of different character or pattern that are audible within a range of $\frac{1}{2}$ mile from the point of the blast shall be given. Each person within the permit area and each person who resides or regularly works within $\frac{1}{2}$ mile of the permit area shall be notified of the meaning of the signals in the blasting notification required in §817.64(a).

(c) *Access control.* Access within the blasting areas shall be controlled to prevent presence of livestock or unauthorized persons during blasting and until an authorized representative of the operator has reasonably determined that—

(1) No unusual hazards, such as imminent slides or undetonated charges, exist; and

(2) Access to and travel within the blasting area can be safely resumed.

§817.67 Use of explosives: Control of adverse effects.

(a) *General requirements.* Blasting shall be conducted to prevent injury to persons, damage to public or private property outside the permit area, adverse impacts on any underground mine, and change in the course, channel, or availability of surface or ground water outside the permit area.

(b) *Airblast—(1) Limits.* (i) Airblast shall not exceed the maximum limits listed below at the location of any dwelling, public building, school, church, or community or

institutional building outside the permit area, except as provided in paragraph (e) of this section.

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

¹Only when approved by the regulatory authority.

(ii) If necessary to prevent damage, the regulatory authority may specify lower maximum allowable airblast levels than those of paragraph (b)(1)(i) of this section for use in the vicinity of a specific blasting operation.

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

(ii) The measuring systems used shall have an upper-end flat-frequency response of at least 200 Hz.

(c) *Flyrock.* Flyrock travelling in the air or along the ground shall not be cast from the blasting site—

(1) More than one-half the distance to the nearest dwelling or other occupied structure;

(2) Beyond the area of control required under §817.66(c); or

(3) Beyond the permit boundary.

(d) *Ground vibration*—(1) *General*. In all blasting operations, except as otherwise authorized in paragraph (e) of this section, the maximum ground vibration shall not exceed the values approved by the regulatory authority. The maximum ground vibration for protected structures listed in paragraph (d)(2)(i) of this section shall be established in accordance with either the maximum peak-particle-velocity limits of paragraph (d)(2), the scaled-distance equation of paragraph (d)(3), the blasting-level chart of paragraph (d)(4) of this section, or by the regulatory authority under paragraph (d)(5) of this section. All structures in the vicinity of the blasting area, not listed in paragraph (d)(2)(i) of this section, such as water towers, pipelines and other utilities, tunnels, dams, impoundments, and underground mines shall be protected from damage by establishment of a maximum allowable limit on the ground vibration, submitted by the operator and approved by the regulatory authority before the initiation of blasting.

(2) *Maximum peak-particle velocity*. (i) The maximum ground vibration shall not exceed the following limits at the location of any dwelling, public building, school, church, or community or institutional building outside the permit area:

Distance (<i>D</i>), from the blasting site, in feet	Maximum allowable peak particle velocity (<i>V</i> max) for ground vibration, in inches/second ¹	Scaled-distance factor to be applied without seismic monitoring ² (<i>Ds</i>)
0 to 300	1.25	50
301 to 5,000	1.00	55
5,001 and beyond	0.75	65

¹Ground vibration shall be measured as the particle velocity. Particle velocity shall be recorded in three mutually perpendicular directions. The maximum allowable peak particle velocity shall apply to each of the three measurements.

²Applicable to the scaled-distance equation of Paragraph (d)(3)(i) of this section.

(ii) A seismographic record shall be provided for each blast.

(3) *Scaled-distance equation.* (i) An operator may use the scaled-distance equation, $W = (D/D_s)^2$, to determine the allowable charge weight of explosives to be detonated in any 8-millisecond period, without seismic monitoring; where W = the maximum weight of explosives, in pounds; D = the distance, in feet, from the blasting site to the nearest protected structure; and D_s = the scaled-distance factor, which may initially be approved by the regulatory authority using the values for scaled-distance factor listed in paragraph (d)(2)(i) of this section.

(ii) The development of a modified scaled-distance factor may be authorized by the regulatory authority on receipt of a written request by the operator, supported by seismographic records of blasting at the minesite. The modified scaled-distance factor shall be determined such that the particle velocity of the predicted ground vibration will not exceed the prescribed maximum allowable peak particle velocity of paragraph (d)(2)(i) of this section, at a 95-percent confidence level.

(4) *Blasting-level chart.* (i) An operator may use the ground-vibration limits in Figure 1 to determine the maximum allowable ground vibration.

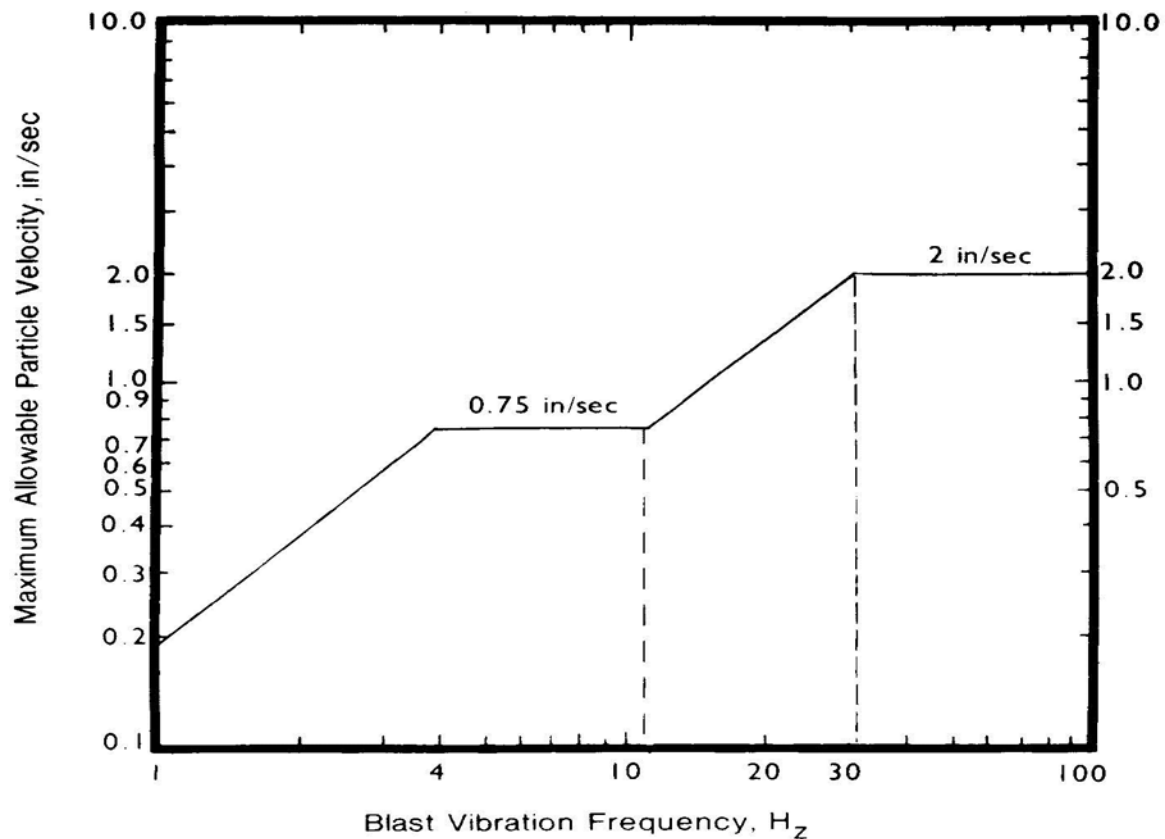


Figure 1. Alternative blasting level criteria.

(Source: Modified from figure B-1, Bureau of Mines RI8507)

(ii) If the Figure 1 limits are used, a seismographic record including both particle velocity and vibration-frequency levels shall be provided for each blast. The method for the analysis of the predominant frequency contained in the blasting records shall be approved by the regulatory authority before application of this alternative blasting criterion.

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

(6) The regulatory authority may require an operator to conduct seismic monitoring of any or all blasts and may specify the location at which the measurements are taken and the degree of detail necessary in the measurement.

(e) The maximum airblast and ground-vibration standards of paragraphs (b) and (d) of this section shall not apply at the following locations:

(1) At structures owned by the permittee and not leased to another person,

(2) At structures owned by the permittee and leased to another person, if a written waiver by the lessee is submitted to the regulatory authority before blasting.

§817.68 Use of explosives: Records of blasting operations.

The operator shall retain a record of all blasts for at least 3 years. Upon request, copies of these records shall be made available to the regulatory authority and to the public for inspection. Such records shall contain the following data:

(a) Name of the operator conducting the blast.

(b) Location, date, and time of the blast.

(c) Name, signature, and certification number of the blaster conducting the blast.

(d) Identification, direction, and distance, in feet, from the nearest blast hole to the nearest dwelling, public building, school, church, community or institutional building outside the permit area, except those described in §817.67 (e).

(e) Weather conditions, including those which may cause possible adverse blasting effects.

(f) Type of material blasted.

(g) Sketches of the blast pattern including number of holes, burden, spacing, decks, and delay pattern.

(h) Diameter and depth of holes.

(i) Types of explosives used.

(j) Total weight of explosives used per hole.

(k) The maximum weight of explosives detonated in an 8-millisecond period.

(l) Initiation system.

(m) Type and length of stemming.

(n) Mats or other protections used.

(o) Seismographic and airblast records, if required, which shall include—

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

(2) Exact location of instrument and the date, time, and distance from the blast;

(3) Name of the person and firm taking the reading;

(4) Name of the person and firm analyzing the seismographic record; and

(5) The vibration and/or airblast level recorded.

(p) Reasons and conditions for each unscheduled blast.

§817.71 Disposal of excess spoil: General requirements.

(a) *General.* Excess spoil shall be placed in designated disposal areas within the permit area, in a controlled manner to—

(1) Minimize the adverse effects of leachate and surface water runoff from the fill on surface and ground waters;

(2) Ensure mass stability and prevent mass movement during and after construction; and

(3) Ensure that the final fill is suitable for reclamation and revegetation compatible with the natural surroundings and the approved postmining land use.

(b) *Design certification.* (1) The fill and appurtenant structures shall be designed using current, prudent engineering practices and shall meet any design criteria established by the regulatory authority. A qualified registered professional engineer experienced in the design of earth and rock fills shall certify the design of the fill and appurtenant structures.

(2) The fill shall be designed to attain a minimum long-term static safety factor of 1.5. The foundation and abutments of the fill must be stable under all conditions of construction.

(c) *Location.* The disposal area shall be located on the most moderately sloping and naturally stable areas available, as approved by the regulatory authority, and shall be placed, where possible, upon or above a natural terrace, bench, or berm, if such placement provides additional stability and prevents mass movement.

(d) *Foundation.* (1) Sufficient foundation investigations, as well as any necessary laboratory testing of foundation material, shall be performed in order to determine the design requirements for foundation stability. The analyses of foundation conditions shall take into consideration the effect of underground mine workings, if any, upon the stability of the fill and appurtenant structures.

(2) When the slope in the disposal area is in excess of 2.8h:lv (36 percent), or such lesser slope as may be designated by the regulatory authority based on local conditions, keyway cuts (excavations to stable bedrock) or rock toe buttresses shall be constructed to ensure stability of the fill. Where the toe of the spoil rests on a downslope, stability analyses shall be performed in accordance with §784.19 of this chapter to determine the size of rock toe buttresses and keyway cuts.

(e) *Placement of excess spoil.* (1) All vegetative and organic materials shall be removed from the disposal area prior to placement of excess spoil. Topsoil shall be removed, segregated and stored or redistributed in accordance with §817.22. If approved by the regulatory authority, organic material may be used as mulch or may be included in the topsoil to control erosion, promote growth of vegetation or increase the moisture retention of the soil.

(2) Excess spoil shall be transported and placed in a controlled manner in horizontal lifts not exceeding 4 feet in thickness; concurrently compacted as necessary to ensure mass stability and to prevent mass movement during and after construction; graded so that surface and subsurface drainage is compatible with the natural surroundings; and covered with topsoil or substitute material in accordance with §817.22 of this chapter. The regulatory authority may approve a design which incorporates placement of excess spoil in horizontal lifts other than 4 feet in thickness when it is demonstrated by the operator and certified by a qualified registered professional engineer that the design will ensure the stability of the fill and will meet all other applicable requirements.

(3) The final configuration of the fill shall be suitable for the approved postmining land use. Terraces may be constructed on the outslope of the fill if required for stability, control of erosion, to conserve soil moisture, or to facilitate the approved postmining land use. The grade of the outslope between terrace benches shall not be steeper than 2h:lv (50 percent).

(4) No permanent impoundments are allowed on the completed fill. Small depressions may be allowed by the regulatory authority if they are needed to retain moisture, minimize erosion, create and enhance wildlife habitat, or assist revegetation; and if they are not incompatible with the stability of the fill.

(5) Excess spoil that is acid- or toxic-forming or combustible shall be adequately covered with nonacid, nontoxic and noncombustible material, or treated, to control the impact on surface and ground water in accordance with §817.41, to prevent sustained

combustion, and to minimize adverse effects on plant growth and the approved postmining land use.

(f) *Drainage control.* (1) If the disposal area contains springs, natural or manmade water courses, or wet weather seeps, the fill design shall include diversions and underdrains as necessary to control erosion, prevent water infiltration into the fill, and ensure stability.

(2) Diversions shall comply with the requirements of §817.43.

(3) Underdrains shall consist of durable rock or pipe, be designed and constructed using current, prudent engineering practices and meet any design criteria established by the regulatory authority. The underdrain system shall be designed to carry the anticipated seepage of water due to rainfall away from the excess spoil fill and from seeps and springs in the foundation of the disposal area and shall be protected from piping and contamination by an adequate filter. Rock underdrains shall be constructed of durable, nonacid-, nontoxic-forming rock (e.g., natural sand and gravel, sandstone, limestone, or other durable rock) that does not slake in water or degrade to soil materials, and which is free of coal, clay or other nondurable material. Perforated pipe underdrains shall be corrosion resistant and shall have characteristics consistent with the long-term life of the fill.

(g) *Surface area stabilization.* Slope protection shall be provided to minimize surface erosion at the site. All disturbed areas, including diversion channels that are not riprapped or otherwise protected, shall be revegetated upon completion of construction.

(h) *Inspections.* A qualified registered professional engineer or other qualified professional specialist under the direction of the professional engineer, shall periodically inspect the fill during construction. The professional engineer or specialist shall be experienced in the construction of earth and rock fills.

(1) Such inspections shall be made at least quarterly throughout construction and during critical construction periods. Critical construction periods shall include at a minimum: (i) Foundation preparation, including the removal of all organic material and topsoil; (ii) placement of underdrains and protective filter systems; (iii) installation of final surface drainage systems; and (iv) the final graded and revegetated fill. Regular inspections by the engineer or specialist shall also be conducted during placement and compaction of fill materials.

(2) The qualified registered professional engineer shall provide a certified report to the regulatory authority promptly after each inspection that the fill has been constructed and maintained as designed and in accordance with the approved plan and this chapter. The report shall include appearances of instability, structural weakness, and other hazardous conditions.

(3)(i) The certified report on the drainage system and protective filters shall include color photographs taken during and after construction, but before underdrains are covered with excess spoil. If the underdrain system is constructed in phases, each phase shall be certified separately.

(ii) Where excess durable rock spoil is placed in single or multiple lifts such that the underdrain system is constructed simultaneously with excess spoil placement by the

natural segregation of dumped materials, in accordance with §817.73, color photographs shall be taken of the underdrain as the underdrain system is being formed.

(iii) The photographs accompanying each certified report shall be taken in adequate size and number with enough terrain or other physical features of the site shown to provide a relative scale to the photographs and to specifically and clearly identify the site.

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

(i) *Coal mine waste.* Coal mine waste may be disposed of in excess spoil fills if approved by the regulatory authority and, if such waste is—

(1) Placed in accordance with §817.83;

(2) Nontoxic and nonacid forming; and

(3) Of the proper characteristics to be consistent with the design stability of the fill.

(j) *Underground disposal.* Excess spoil may be disposed of in underground mine workings, but only in accordance with a plan approved by the regulatory authority and MSHA under §784.25 of this chapter.

(k) *Face-up operations.* Spoil resulting from face-up operations for underground coal mine development may be placed at drift entries as part of a cut and fill structure, if the structure is less than 400 feet in horizontal length, and designed in accordance with §817.71.

§817.72 Disposal of excess spoil: Valley fill/head-of-hollow fills.

Valley fills and head-of-hollow fills shall meet the requirements of §817.71 and the additional requirements of this section.

(a) *Drainage control.* (1) The top surface of the completed fill shall be graded such that the final slope after settlement will be toward properly designed drainage channels. Uncontrolled surface drainage may not be directed over the outslope of the fill.

(2) Runoff from areas above the fill and runoff from the surface of the fill shall be diverted into stabilized diversion channels designed to meet the requirements of §817.43 and to safely pass the runoff from a 100-year, 6-hour precipitation event.

(b) *Rock-core chimney drains.* A rock-core chimney drain may be used in a head-of-hollow fill, instead of the underdrain and surface diversion system normally required, as long as the fill is not located in an area containing intermittent or perennial streams. A rock-core chimney drain may be used in a valley fill if the fill does not exceed 250,000 cubic yards of material and upstream drainage is diverted around the fill. The alternative rock-core chimney drain system shall be incorporated into the design and construction of the fill as follows:

(1) The fill shall have, along the vertical projection of the main buried stream channel or rill, a vertical core of durable rock at least 16 feet thick which shall extend from the toe of the fill to the head of the fill, and from the base of the fill to the surface of

the fill. A system of lateral rock underdrains shall connect this rock core to each area of potential drainage or seepage in the disposal area. The underdrain system and rock core shall be designed to carry the anticipated seepage of water due to rainfall away from the excess spoil fill and from seeps and springs in the foundation of the disposal area. Rocks used in the rock core and underdrains shall meet the requirements of §817.71(f).

(2) A filter system to ensure the proper long-term functioning of the rock core shall be designed and constructed using current, prudent engineering practices.

(3) Grading may drain surface water away from the outslope of the fill and toward the rock core. In no case, however, may intermittent or perennial streams be diverted into the rock core. The maximum slope of the top of the fill shall be 33h:lv (3 percent). A drainage pocket may be maintained at the head of the fill during and after construction, to intercept surface runoff and discharge the runoff through or over the rock drain, if stability of the fill is not impaired. In no case shall this pocket or sump have a potential capacity for impounding more than 10,000 cubic feet of water. Terraces on the fill shall be graded with a 3 to 5 percent grade toward the fill and a 1 percent slope toward the rock core.

§817.73 Disposal of excess spoil: Durable rock fills.

The regulatory authority may approve the alternative method of disposal of excess durable rock spoil by gravity placement in single or multiple lifts, provided the following conditions are met:

(a) Except as provided in this section, the requirements of §817.71 are met.

(b) The excess spoil consists of at least 80 percent, by volume, durable, nonacid- and nontoxic-forming rock (*e.g.*, sandstone or limestone) that does not slake in water and will not degrade to soil material. Where used, noncemented clay shale, clay spoil, soil or other nondurable excess spoil material shall be mixed with excess durable rock spoil in a controlled manner such that no more than 20 percent of the fill volume, as determined by tests performed by a registered engineer and approved by the regulatory authority, is not durable rock.

(c) A qualified registered professional engineer certifies that the design will ensure the stability of the fill and meet all other applicable requirements.

(d) The fill is designed to attain a minimum long-term static safety factor of 1.5, and an earthquake safety factor of 1.1.

(e) The underdrain system may be constructed simultaneously with excess spoil placement by the natural segregation of dumped materials, provided the resulting underdrain system is capable of carrying anticipated seepage of water due to rainfall away from the excess spoil fill and from seeps and springs in the foundation of the disposal area and the other requirements for drainage control are met.

(f) Surface water runoff from areas adjacent to and above the fill is not allowed to flow onto the fill and is diverted into stabilized diversion channels designed to meet the requirements of §817.43 and to safely pass the runoff from a 100-year, 6-hour precipitation event.

§817.74 Disposal of excess spoil: Preexisting benches.

(a) The regulatory authority may approve the disposal of excess spoil through placement on a preexisting bench if the affected portion of the preexisting bench is permitted and the standards set forth in §817.102 (c), (e) through (h), and (j), and the requirements of this section are met.

(b) All vegetation and organic materials shall be removed from the affected portion of the preexisting bench prior to placement of the excess spoil. Any available topsoil on the bench shall be removed, stored and redistributed in accordance with §817.22 of this part. Substitute or supplemental materials may be used in accordance with §817.22(b) of this part.

(c) The fill shall be designed and constructed using current, prudent engineering practices. The design will be certified by a registered professional engineer. The spoil shall be placed on the solid portion of the bench in a controlled manner and concurrently compacted as necessary to attain a long term static safety factor of 1.3 for all portions of the fill. Any spoil deposited on any fill portion of the bench will be treated as excess spoil fill under §817.71.

(d) The preexisting bench shall be backfilled and graded to—

(1) Achieve the most moderate slope possible which does not exceed the angle of repose;

(2) Eliminate the highwall to the maximum extent technically practical;

(3) Minimize erosion and water pollution both on and off the site; and

(4) If the disposal area contains springs, natural or manmade water courses, or wet weather seeps, the fill design shall include diversions and underdrains as necessary to control erosion, prevent water infiltration into the fill, and ensure stability.

(e) All disturbed areas, including diversion channels that are not riprapped or otherwise protected, shall be revegetated upon completion of construction.

(f) Permanent impoundments may not be constructed on preexisting benches backfilled with excess spoil under this regulation.

(g) Final configuration of the backfill must be compatible with the natural drainage patterns and the surrounding area, and support the approved postmining land use.

(h) Disposal of excess spoil from an upper actively mined bench to a lower preexisting bench by means of gravity transport may be approved by the regulatory authority provided that—

(1) The gravity transport courses are determined on a site-specific basis by the operator as part of the permit application and approved by the regulatory authority to minimize hazards to health and safety and to ensure that damage will be minimized between the benches, outside the set course, and downslope of the lower bench should excess spoil accidentally move;

(2) All gravity transported excess spoil, including that excess spoil immediately below the gravity transport courses and any preexisting spoil that is disturbed, is rehandled and placed in horizontal lifts in a controlled manner, concurrently compacted

as necessary to ensure mass stability and to prevent mass movement, and graded to allow surface and subsurface drainage to be compatible with the natural surroundings and to ensure a minimum long-term static safety factor of 1.3. Excess spoil on the bench prior to the current mining operation that is not disturbed need not be rehandled except where necessary to ensure stability of the fill;

(3) A safety berm is constructed on the solid portion of the lower bench prior to gravity transport of the excess spoil. Where there is insufficient material on the lower bench to construct a safety berm, only that amount of excess spoil necessary for the construction of the berm may be gravity transported to the lower bench prior to construction of the berm;

(4) Excess spoil shall not be allowed on the downslope below the upper bench except on designated gravity transport courses properly prepared according to §817.22. Upon completion of the fill, no excess spoil shall be allowed to remain on the designated gravity transport course between the two benches and each transport course shall be reclaimed in accordance with the requirements of this part.

§817.81 Coal mine waste: General requirements.

(a) *General.* All coal mine waste disposed of in an area other than the mine workings or excavations shall be placed in new or existing disposal areas within a permit area, which are approved by the regulatory authority for this purpose. Coal mine waste shall be hauled or conveyed and placed for final placement in a controlled manner to—

(1) Minimize adverse effects of leachate and surface-water runoff on surface and ground water quality and quantity;

(2) Ensure mass stability and prevent mass movement during and after construction;

(3) Ensure that the final disposal facility is suitable for reclamation and revegetation compatible with the natural surroundings and the approved postmining land use;

(4) Not create a public hazard; and

(5) Prevent combustion.

(b) Coal mine waste materials from activities located outside a permit area may be disposed of in the permit area only if approved by the regulatory authority. Approval shall be based upon a showing that such disposal will be in accordance with the standards of this section.

(c) *Design certification.* (1) The disposal facility shall be designed using current, prudent engineering practices and shall meet any design criteria established by the regulatory authority. A qualified registered professional engineer, experienced in the design of similar earth and waste structures, shall certify the design of the disposal facility.

(2) The disposal facility shall be designed to attain a minimum long-term static safety factor of 1.5. The foundation and abutments must be stable under all conditions of construction.

(d) *Foundation.* Sufficient foundation investigations, as well as any necessary laboratory testing of foundation material, shall be performed in order to determine the design requirements for foundation stability. The analyses of the foundation conditions shall take into consideration the effect of underground mine workings, if any, upon the stability of the disposal facility.

(e) *Emergency procedures.* If any examination or inspection discloses that a potential hazard exists, the regulatory authority shall be informed promptly of the finding and of the emergency procedures formulated for public protection and remedial action. If adequate procedures cannot be formulated or implemented, the regulatory authority shall be notified immediately. The regulatory authority shall then notify the appropriate agencies that other emergency procedures are required to protect the public.

(f) *Underground disposal.* Coal mine waste may be disposed of in underground mine workings, but only in accordance with a plan approved by the regulatory authority and MSHA under §784.25 of this chapter.

§817.83 Coal mine waste: Refuse piles.

Refuse piles shall meet the requirements of §817.81, the additional requirements of this section, and the requirements of §§77.214 and 77.215 of this title.

(a) *Drainage control.* (1) If the disposal area contains springs, natural or manmade water courses, or wet weather seeps, the design shall include diversions and

underdrains as necessary to control erosion, prevent water infiltration into the disposal facility and ensure stability.

(2) Uncontrolled surface drainage may not be diverted over the outslope of the refuse pile. Runoff from areas above the refuse pile and runoff from the surface of the refuse pile shall be diverted into stabilized diversion channels designed to meet the requirements of §817.43 to safely pass the runoff from a 100-year, 6-hour precipitation event. Runoff diverted from undisturbed areas need not be commingled with runoff from the surface of the refuse pile.

(3) Underdrains shall comply with the requirements of §817.71(f)(3).

(b) *Surface area stabilization.* Slope protection shall be provided to minimize surface erosion at the site. All disturbed areas, including diversion channels that are not riprapped or otherwise protected, shall be revegetated upon completion of construction.

(c) *Placement.* (1) All vegetative and organic materials shall be removed from the disposal area prior to placement of coal mine waste. Topsoil shall be removed, segregated and stored or redistributed in accordance with §817.22. If approved by the regulatory authority, organic material may be used as mulch or may be included in the topsoil to control erosion, promote growth of vegetation or increase the moisture retention of the soil.

(2) The final configuration of the refuse pile shall be suitable for the approved postmining land use. Terraces may be constructed on the outslope of the refuse pile if required for stability, control of erosion, conservation of soil moisture, or facilitation of

the approved postmining land use. The grade of the outslope between terrace benches shall not be steeper than 2h:1v (50 percent).

(3) No permanent impoundments shall be allowed on the completed refuse pile. Small depressions may be allowed by the regulatory authority if they are needed to retain moisture, minimize erosion, create and enhance wildlife habitat, or assist revegetation, and if they are not incompatible with stability of the refuse pile.

(4) Following final grading of the refuse pile, the coal mine waste shall be covered with a minimum of 4 feet of the best available, nontoxic and noncombustible material, in a manner that does not impede drainage from the underdrains. The regulatory authority may allow less than 4 feet of cover material based on physical and chemical analyses which show that the requirements of §§817.111 through 817.116 will be met.

(d) *Inspections.* A qualified registered professional engineer, or other qualified professional specialist under the direction of the professional engineer, shall inspect the refuse pile during construction. The professional engineer or specialist shall be experienced in the construction of similar earth and waste structures.

(1) Such inspection shall be made at least quarterly throughout construction and during critical construction periods. Critical construction periods shall include at a minimum: (i) Foundation preparation including the removal of all organic material and topsoil; (ii) placement of underdrains and protective filter systems; (iii) installation of final surface drainage systems; and (iv) the final graded and revegetated facility. Regular inspections by the engineer or specialist shall also be conducted during placement and

compaction of coal mine waste materials. More frequent inspections shall be conducted if a danger of harm exists to the public health and safety or the environment.

Inspections shall continue until the refuse pile has been finally graded and revegetated or until a later time as required by the regulatory authority.

(2) The qualified registered professional engineer shall provide a certified report to the regulatory authority promptly after each inspection that the refuse pile has been constructed and maintained as designed and in accordance with the approved plan and this chapter. The report shall include appearances of instability, structural weakness, and other hazardous conditions.

(3) The certified report on the drainage system and protective filters shall include color photographs taken during and after construction, but before underdrains are covered with coal mine waste. If the underdrain system is constructed in phases, each phase shall be certified separately. The photographs accompanying each certified report shall be taken in adequate size and number with enough terrain or other physical features of the site shown to provide a relative scale to the photographs and to specifically and clearly identify the site.

(4) A copy of each inspection report shall be retained at or near the minesite.

§817.84 Coal mine waste: Impounding structures.

New and existing impounding structures constructed of coal mine waste or intended to impound coal mine waste shall meet the requirements of §817.81.

(a) Coal mine waste shall not be used for construction of impounding structures unless it has been demonstrated to the regulatory authority that the stability of such a structure conforms to the requirements of this part and the use of coal mine waste will not have a detrimental effect on downstream water quality or the environment due to acid seepage through the impounding structure. The stability of the structure and the potential impact of acid mine seepage through the impounding structure and shall be discussed in detail in the design plan submitted to the regulatory authority in accordance with §780.25 of this chapter.

(b)(1) Each impounding structure constructed of coal mine waste or intended to impound coal mine waste shall be designed, constructed and maintained in accordance with §817.49 (a) and (c). Such structures may not be retained permanently as part of the approved postmining land use.

(2) Each impounding structure constructed of coal mine waste or intended to impound coal mine waste that meets the criteria of §77.216(a) of this title shall have sufficient spillway capacity to safely pass, adequate storage capacity to safely contain, or a combination of storage capacity and spillway capacity to safely control, the probable maximum precipitation of a 6-hour precipitation event, or greater event as specified by the regulatory authority.

(c) Spillways and outlet works shall be designed to provide adequate protection against erosion and corrosion. Inlets shall be protected against blockage.

(d) *Drainage control.* Runoff from areas above the disposal facility or runoff from the surface of the facility that may cause instability or erosion of the impounding

structure shall be diverted into stabilized diversion channels designed to meet the requirements of §817.43 and designed to safely pass the runoff from a 100-year, 6-hour design precipitation event.

(e) Impounding structures constructed of or impounding coal mine waste shall be designed so that at least 90 percent of the water stored during the design precipitation event can be removed within a 10-day period.

(f) For an impounding structure constructed of or impounding coal mine waste, at least 90 percent of the water stored during the design precipitation event shall be removed within the 10-day period following the design precipitation event.

§817.87 Coal mine waste: Burning and burned waste utilization.

(a) Coal mine waste fires shall be extinguished by the person who conducts the surface mining activities, in accordance with a plan approved by the regulatory authority and the Mine Safety and Health Administration. The plan shall contain, at a minimum, provisions to ensure that only those persons authorized by the operator, and who have an understanding of the procedures to be used, shall be involved in the extinguishing operations.

(b) No burning or unburned coal mine waste shall be removed from a permitted disposal area without a removal plan approved by the regulatory authority.

Consideration shall be given to potential hazards to persons working or living in the vicinity of the structure.

§817.89 Disposal of noncoal mine wastes.

(a) Noncoal mine wastes including, but not limited to grease, lubricants, paints, flammable liquids, garbage, abandoned mining machinery, lumber and other combustible materials generated during mining activities shall be placed and stored in a controlled manner in a designated portion of the permit area. Placement and storage shall ensure that leachate and surface runoff do not degrade surface or ground water, that fires are prevented, and that the area remains stable and suitable for reclamation and revegetation compatible with the natural surroundings.

(b) Final disposal of noncoal mine wastes shall be in a designated disposal site in the permit area or a State-approved solid waste disposal area. Disposal sites in the permit area shall be designed and constructed to ensure that leachate and drainage from the noncoal mine waste area does not degrade surface or underground water. Wastes shall be routinely compacted and covered to prevent combustion and wind-borne waste. When the disposal is completed, a minimum of 2 feet of soil cover shall be placed over the site, slopes stabilized, and revegetation accomplished in accordance with §§817.111 through 817.116. Operation of the disposal site shall be conducted in accordance with all local, State, and Federal requirements.

(c) At no time shall any noncoal mine waste be deposited in a refuse pile or impounding structure, nor shall any excavation for a noncoal mine waste disposal site be located within 8 feet of any coal outcrop or coal storage area.

§817.95 Stabilization of surface areas.

(a) All exposed surface areas shall be protected and stabilized to effectively control erosion and air pollution attendant to erosion.

(b) 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 streams; shall be filled, regraded, or otherwise stabilized; topsoil shall be replaced; and the areas shall be reseeded or replanted.

§817.97 Protection of fish, wildlife, and related environmental values.

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

(b) *Endangered and threatened species.* No underground mining activity shall be conducted which is likely to jeopardize the continued existence of endangered or threatened species listed by the Secretary or which is likely to result in the destruction or adverse modification of designated critical habitats of such species in violation of the Endangered Species Act of 1973, as amended (16 U.S.C. 1531 *et seq.*). The operator shall promptly report to the regulatory authority any State- or federally-listed endangered or threatened species within the permit area of which the operator

becomes aware. Upon notification, the regulatory authority shall consult with appropriate State and Federal fish and wildlife agencies and, after consultation, shall identify whether, and under what conditions, the operator may proceed.

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

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

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

(1) Ensure that electric powerlines and other transmission facilities used for, or incidental to, underground mining activities on the permit area are designed and constructed to minimize electrocution hazards to raptors, except where the regulatory authority determines that such requirements are unnecessary;

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

(3) Design fences, overland conveyors, and other potential barriers to permit passage for large mammals except where the regulatory authority determines that such requirements are unnecessary; and

(4) Fence, cover, or use other appropriate methods to exclude wildlife from ponds which contain hazardous concentrations of toxic-forming materials.

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

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

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

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

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

(h) 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, 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.

(i) 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.

§817.99 Slides and other damage.

At any time a slide occurs which may have a potential adverse effect on public, property, health, safety, or the environment, the person who conducts the underground mining activities shall notify the regulatory authority by the fastest available means and comply with any remedial measures required by the regulatory authority.

§817.100 Contemporaneous reclamation.

Reclamation efforts, including but not limited to backfilling, grading, topsoil replacement, and revegetation, on all areas affected by surface impacts incident to an underground coal mine shall occur as contemporaneously as practicable with mining operations, except when such mining operations are conducted in accordance with a variance for concurrent surface and underground mining activities issued under §785.18 of this chapter. The regulatory authority may establish schedules that define contemporaneous reclamation.

§817.102 Backfilling and grading: General requirements.

(a) Disturbed areas shall be backfilled and graded to—

(1) Achieve the approximate original contour, except as provided in paragraph (k) of this section;

(2) Eliminate all highwalls, spoil piles, and depressions, except as provided in paragraph (h) (small depressions) and in paragraph (k)(2) (previously mined highwalls) of this section;

(3) 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 to prevent slides;

(4) Minimize erosion and water pollution both on and off the site; and

(5) Support the approved postmining land use.

(b) Spoil, except as provided in paragraph (l) of this section, and except excess spoil disposed of in accordance with §§817.71 through 817.74, shall be returned to the mined-out surface area.

(c) Spoil and waste materials shall be compacted where advisable to ensure stability or to prevent leaching of toxic materials.

(d) Spoil may be placed on the area outside the mined-out surface area in nonsteep slope areas to restore the approximate original contour by blending the spoil into the surrounding terrain if the following requirements are met:

(1) All vegetative and organic material shall be removed from the area.

(2) The topsoil on the area shall be removed, segregated, stored, and redistributed in accordance with §817.22.

(3) The spoil shall be backfilled and graded on the area in accordance with the requirements of this section.

(e) Disposal of coal processing waste and underground development waste in the mined-out surface area shall be in accordance with §§817.81 and 817.83, except that a long-term static safety factor of 1.3 shall be achieved.

(f) Exposed coal seams, acid- and toxic-forming materials, and combustible materials exposed, used, or produced during mining shall be adequately covered with nontoxic and noncombustible materials, or treated, to control the impact on surface and ground water in accordance with §817.41, to prevent sustained combustion, and to minimize adverse effects on plant growth and the approved postmining land use.

(g) Cut-and-fill terraces may be allowed by the regulatory authority where—

(1) Needed to conserve soil moisture, ensure stability, and control erosion on final-graded slopes, if the terraces are compatible with the approved postmining land use; or

(2) Specialized grading, foundation conditions, or roads are required for the approved postmining land use, in which case the final grading may include a terrace of adequate width to ensure the safety, stability, and erosion control necessary to implement the postmining land-use plan.

(h) Small depressions may be constructed if they are needed to retain moisture, minimize erosion, create and enhance wildlife habitat, or assist revegetation.

(i) Permanent impoundments may be approved if they meet the requirements of §§817.49 and 817.56 and if they are suitable for the approved postmining land use.

(j) Preparation of final-graded surfaces shall be conducted in a manner that minimizes erosion and provides a surface for replacement of topsoil that will minimize slippage.

(k) The postmining slope may vary from the approximate original contour when approval is obtained from the regulatory authority for—

(1) A variance from approximate original contour requirements in accordance with §785.16 of this chapter; or

(2) Incomplete elimination of highwalls in previously mined areas in accordance with §817.106.

(l) Regrading of settled and revegetated fills to achieve approximate original contour at the conclusion of underground mining activities shall not be required if the conditions of paragraph (l)(1) or (l)(2) of this section are met.

(1)(i) Settled and revegetated fills shall be composed of spoil or non-acid- or non-toxic-forming underground development waste.

(ii) The spoil or underground development waste shall not be located so as to be detrimental to the environment, to the health and safety of the public, or to the approved postmining land use.

(iii) Stability of the spoil or underground development waste shall be demonstrated through standard geotechnical analysis to be consistent with backfilling and grading requirements for material on the solid bench (1.3 static safety factor) or excess spoil requirements for material not placed on a solid bench (1.5 static safety factor).

(iv) The surface of the spoil or underground development waste shall be vegetated according to §817.116, and surface runoff shall be controlled in accordance with §817.43.

(2) If it is determined by the regulatory authority that disturbance of the existing spoil or underground development waste would increase environmental harm or adversely affect the health and safety of the public, the regulatory authority may allow the existing spoil or underground development waste pile to remain in place. The regulatory authority may require stabilization of such spoil or underground development waste in accordance with the requirements of paragraphs (l)(1)(i) through (l)(1)(iv) of this section.

§817.106 Backfilling and grading: Previously mined areas.

(a) Remining operations on previously mined areas that contain a preexisting highwall shall comply with the requirements of §§817.102 through 817.107 of this chapter, except as provided in this section.

(b) The requirements of §817.102(a) (1) and (2) requiring that elimination of highwalls shall not apply to remining operations where the volume of all reasonably available spoil is demonstrated in writing to the regulatory authority to be insufficient to completely backfill the reaffected or enlarged highwall. The highwall shall be eliminated to the maximum extent technically practical in accordance with the following criteria:

(1) All spoil generated by the remining operation and any other reasonably available spoil shall be used to backfill the area. Reasonably available spoil in the immediate vicinity of the remining operation shall be included within the permit area.

(2) The backfill shall be graded to a slope which is compatible with the approved postmining land use and which provides adequate drainage and long-term stability.

(3) Any highwall remnant shall be stable and not pose a hazard to the public health and safety or to the environment. The operator shall demonstrate, to the satisfaction of the regulatory authority, that the highwall remnant is stable.

(4) 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.

§817.107 Backfilling and grading: Steep slopes.

(a) Underground mining activities on steep slopes shall be conducted so as to meet the requirements of §§817.102-817.106 and the requirements of this section.

(b) The following materials shall not be placed on the downslope:

(1) Spoil.

(2) Waste materials of any type.

(3) Debris, including that from clearing and grubbing.

(4) Abandoned or disabled equipment.

(c) Land above the highwall shall not be disturbed unless the regulatory authority finds that this disturbance will facilitate compliance with the environmental protection standards of this subchapter and the disturbance is limited to that necessary to facilitate compliance.

(d) Woody materials shall not be buried in the backfilled area unless the regulatory authority determines that the proposed method for placing woody material within the backfill will not deteriorate the stable condition of the backfilled area.

§817.111 Revegetation: General requirements.

(a) The permittee shall establish on regraded areas and on all other disturbed areas except water areas and surface areas of roads that are approved as part of the

postmining land use, as vegetative cover that is in accordance with the approved permit and reclamation plan and that is—

(1) Diverse, effective, and permanent;

(2) Comprised of species native to the area, or of introduced species where desirable and necessary to achieve the approved postmining land use and approved by the regulatory authority;

(3) At least equal in extent of cover to the natural vegetation of the area; and

(4) Capable of stabilizing the soil surface from erosion.

(b) The reestablished plant species shall—

(1) Be compatible with the approved postmining land use;

(2) Have the same seasonal characteristics of growth as the original vegetation;

(3) Be capable of self-regeneration and plant succession;

(4) Be compatible with the plant and animal species of the area; and

(5) Meet the requirements of applicable State and Federal seed, poisonous and noxious plant, and introduced species laws or regulations.

(c) The regulatory authority may grant exception to the requirements of paragraphs (b) (2) and (3) of this section when the species are necessary to achieve a quick-growing, temporary, stabilizing cover, and measures to establish permanent vegetation are included in the approved permit and reclamation plan.

(d) When the regulatory authority approves a cropland postmining land use, the regulatory authority may grant exceptions to the requirements of paragraphs (a) (1), (3), (b) (2), and (3) of this section. The requirements of part 823 of this chapter apply to areas identified as prime farmland.

§817.113 Revegetation: Timing.

Disturbed areas shall be planted during the first normal period for favorable planting conditions after replacement of the plant-growth medium. The normal period for favorable planting is that planting time generally accepted locally for the type of plant materials selected.

§817.114 Revegetation: Mulching and other soil stabilizing practices.

Suitable mulch and other soil stabilizing practices shall be used on all areas that have been regraded and covered by topsoil or topsoil substitutes. The regulatory authority may waive this requirement if seasonal, soil, or slope factors result in a condition where mulch and other soil stabilizing practices are not necessary to control erosion and to promptly establish an effective vegetative cover.

§817.116 Revegetation: Standards for success.

(a) Success of revegetation shall be judged on the effectiveness of the vegetation for the approved postmining land use, the extent of cover compared to the cover occurring in natural vegetation of the area, and the general requirements of §817.111.

(1) Standards for success and statistically valid sampling techniques for measuring success shall be selected by the regulatory authority, described in writing, and made available to the public.

(2) Standards for success shall include criteria representative of unmined lands in the area being reclaimed to evaluate the appropriate vegetation parameters of ground cover, production, or stocking. Ground cover, production, or stocking shall be considered equal to the approved success standard when they are not less than 90 percent of the success standard. The sampling techniques for measuring success shall use a 90-percent statistical confidence interval (i.e., a one-sided test with a 0.10 alpha error).

(b) Standards for success shall be applied in accordance with the approved postmining land use and, at a minimum, the following conditions:

(1) For areas developed for use as grazing land or pasture land, the ground cover and production of living plants on the revegetated area shall be at least equal to that of a reference area or such other success standards approved by the regulatory authority.

(2) For areas developed for use as cropland, crop production on the revegetated area shall be at least equal to that of a reference area or such other success standards approved by the regulatory authority.

(3) For areas to be developed for fish and wildlife habitat, recreation, undeveloped land, or forest products, success of vegetation shall be determined on the basis of tree and shrub stocking and vegetative ground cover. Such parameters are described as follows:

(i) Minimum stocking and planting arrangements shall be specified by the regulatory authority on the basis of local and regional conditions and after consultation with and approval by the State agencies responsible for the administration of forestry and wildlife programs. Consultation and approval may occur on either a programwide or a permit-specific basis.

(ii) Trees and shrubs that will be used in determining the success of stocking and the adequacy of the plant arrangement shall have utility for the approved postmining land use. Trees and shrubs counted in determining such success shall be healthy and have been in place for not less than two growing seasons. At the time of bond release, at least 80 percent of the trees and shrubs used to determine such success shall have been in place for 60 percent of the applicable minimum period of responsibility. The requirements of this section apply to trees and shrubs that have been seeded or transplanted and can be met when records of woody vegetation planted show that no woody plants were planted during the last two growing seasons of the responsibility period and, if any replanting of woody plants took place during the responsibility period,

the total number planted during the last 60 percent of that period is less than 20 percent of the total number of woody plants required. Any replanting must be by means of transplants to allow for adequate accounting of plant stocking. This final accounting may include volunteer trees and shrubs of approved species. Volunteer trees and shrubs of approved species shall be deemed equivalent to planted specimens two years of age or older and can be counted towards success. Suckers on shrubby vegetation can be counted as volunteer plants when it is evident the shrub community is vigorous and expanding.

(iii) Vegetative ground cover shall not be less than that required to achieve the approved postmining land use.

(4) For areas to be developed for industrial, commercial, or residential use less than 2 years after regrading is completed, the vegetative ground cover shall not be less than that required to control erosion.

(5) For areas previously disturbed by mining that were not reclaimed to the requirements of this subchapter and that are remined or otherwise redisturbed by surface coal mining operations, as a minimum, the vegetative ground cover shall be not less than the ground cover existing before redisturbance and shall be adequate to control erosion.

(c)(1) The period of extended responsibility for successful revegetation shall begin after the last year of augmented seeding, fertilizing, irrigation, or other work, excluding husbandry practices that are approved by the regulatory authority in accordance with paragraph (c)(4) of this section.

(2) In areas of more than 26.0 inches of annual average precipitation, the period of responsibility shall continue for a period of not less than:

(i) Five full years, except as provided in paragraph (c)(2)(ii) of this section. The vegetation parameters identified in paragraph (b) of this section for grazing land, pasture land, or cropland shall equal or exceed the approved success standard during the growing season of any 2 years of the responsibility period, except the first year. Areas approved for the other uses identified in paragraph (b) of this section shall equal or exceed the applicable success standard during the growing season of the last year of the responsibility period.

(ii) Two full years for lands eligible for remining included in a permit for which a finding has been made under §773.15(m) of this chapter. To the extent that the success standards are established by paragraph (b)(5) of this section, the lands must equal or exceed the standards during the growing season of the last year of the responsibility period.

(3) In areas of 26.0 inches or less average annual precipitation, the period of responsibility shall continue for a period of not less than:

(i) Ten full years, except as provided in paragraph (c)(3)(ii) in this section. The vegetation parameters identified in paragraph (b) of this section for grazing land, pasture land, or cropland shall equal or exceed the approved success standard during the growing season of any two years after year six of the responsibility period. Areas approved for the other uses identified in paragraph (b) of this section shall equal or

exceed the applicable success standard during the growing season of the last year of the responsibility period.

(ii) Five full years for lands eligible for remining included in a permit for which a finding has been made under §773.15(m) of this chapter. To the extent that the success standards are established by paragraph (b)(5) of this section, the lands must equal or exceed the standards during the growing seasons of the last two consecutive years of the responsibility period.

(4) The regulatory authority may approve selective husbandry practices, excluding augmented seeding, fertilization, or irrigation, provided it obtains prior approval from the Director in accordance with §732.17 of this chapter that the practices are normal husbandry practices, without extending the period of responsibility for revegetation success and bond liability, if such practices can be expected to continue as part of the postmining land use or if discontinuance of the practices after the liability period expires will not reduce the probability of permanent revegetation success. Approved practices shall be normal husbandry practices within the region for unmined lands having land uses similar to the approved postmining land use of the disturbed area, including such practices as disease, pest, and vermin control; and any pruning, reseeding, and transplanting specifically necessitated by such actions.

§817.121 Subsidence control.

(a) *Measures to prevent or minimize damage.* (1) The permittee must either adopt measures consistent with known technology that prevent subsidence from

causing material damage to the extent technologically and economically feasible, maximize mine stability, and maintain the value and reasonably foreseeable use of surface lands or adopt mining technology that provides for planned subsidence in a predictable and controlled manner.

(2) If a permittee employs mining technology that provides for planned subsidence in a predictable and controlled manner, the permittee must take necessary and prudent measures, consistent with the mining method employed, to minimize material damage to the extent technologically and economically feasible to non-commercial buildings and occupied residential dwellings and structures related thereto except that measures required to minimize material damage to such structures are not required if:

(i) The permittee has the written consent of their owners or

(ii) Unless the anticipated damage would constitute a threat to health or safety, the costs of such measures exceed the anticipated costs of repair.

(3) Nothing in this part prohibits the standard method of room-and-pillar mining.

(b) The operator shall comply with all provisions of the approved subsidence control plan prepared pursuant to §784.20 of this chapter.

(c) *Repair of damage*—(1) *Repair of damage to surface lands*. The permittee must correct any material damage resulting from subsidence caused to surface lands, to the extent technologically and economically feasible, by restoring the land to a

condition capable of maintaining the value and reasonably foreseeable uses that it was capable of supporting before subsidence damage.

(2) *Repair or compensation for damage to non-commercial buildings and dwellings and related structures.* The permittee must promptly repair, or compensate the owner for, material damage resulting from subsidence caused to any non-commercial building or occupied residential dwelling or structure related thereto that existed at the time of mining. If repair option is selected, the permittee must fully rehabilitate, restore or replace the damaged structure. If compensation is selected, the permittee must compensate the owner of the damaged structure for the full amount of the decrease in value resulting from the subsidence-related damage. The permittee may provide compensation by the purchase, before mining, of a non-cancelable premium-prepaid insurance policy. The requirements of this paragraph apply only to subsidence-related damage caused by underground mining activities conducted after October 24, 1992.

(3) *Repair or compensation for damage to other structures.* The permittee must, to the extent required under applicable provisions of State law, either correct material damage resulting from subsidence caused to any structures or facilities not protected by paragraph (c)(2) of this section by repairing the damage or compensate the owner of the structures or facilities for the full amount of the decrease in value resulting from the subsidence. Repair of damage includes rehabilitation, restoration, or replacement of damaged structures or facilities. Compensation may be accomplished by the purchase before mining of a non-cancelable premium-prepaid insurance policy.

(4) *Rebuttable presumption of causation by subsidence—(i) Rebuttable presumption of causation for damage within angle of draw.* If damage to any non-commercial building or occupied residential dwelling or structure related thereto occurs as a result of earth movement within an area determined by projecting a specified angle of draw from the outermost boundary of any underground mine workings to the surface of the land, a rebuttable presumption exists that the permittee caused the damage. The presumption will normally apply to a 30-degree angle of draw. A State regulatory authority may amend its program to apply the presumption to a different angle of draw if the regulatory authority shows in writing that the angle has a more reasonable basis than the 30-degree angle of draw, based on geotechnical analysis of the factors affecting potential surface impacts of underground coal mining operations in the State.

(ii) *Approval of site-specific angle of draw.* A permittee or permit applicant may request that the presumption apply to an angle of draw different from that established in the regulatory program. The regulatory authority may approve application of the presumption to a site-specific angle of draw different than that contained in the State or Federal program based on a site-specific analysis submitted by an applicant. To establish a site-specific angle of draw, an applicant must demonstrate and the regulatory authority must determine in writing that the proposed angle of draw has a more reasonable basis than the standard set forth in the State or Federal program, based on a site-specific geotechnical analysis of the potential surface impacts of the mining operation.

(iii) *No presumption where access for pre-subsidence survey is denied.* If the permittee was denied access to the land or property for the purpose of conducting the

pre-subsidence survey in accordance with §784.20(a) of this chapter, no rebuttable presumption will exist.

(iv) *Rebuttal of presumption.* The presumption will be rebutted if, for example, the evidence establishes that: The damage predated the mining in question; the damage was proximately caused by some other factor or factors and was not proximately caused by subsidence; or the damage occurred outside the surface area within which subsidence was actually caused by the mining in question.

(v) *Information to be considered in determination of causation.* In any determination whether damage to protected structures was caused by subsidence from underground mining, all relevant and reasonably available information will be considered by the regulatory authority.

(5) *Adjustment of bond amount for subsidence damage.* When subsidence-related material damage to land, structures or facilities protected under paragraphs (c)(1) through (c)(3) of this section occurs, or when contamination, diminution, or interruption to a water supply protected under §817.41 (j) occurs, the regulatory authority must require the permittee to obtain additional performance bond in the amount of the estimated cost of the repairs if the permittee will be repairing, or in the amount of the decrease in value if the permittee will be compensating the owner, or in the amount of the estimated cost to replace the protected water supply if the permittee will be replacing the water supply, until the repair, compensation, or replacement is completed. If repair, compensation, or replacement is completed within 90 days of the occurrence of damage, no additional bond is required. The regulatory authority may

extend the 90-day time frame, but not to exceed one year, if the permittee demonstrates and the regulatory authority finds in writing that subsidence is not complete, that not all probable subsidence-related material damage has occurred to lands or protected structures, or that not all reasonably anticipated changes have occurred affecting the protected water supply, and that therefore it would be unreasonable to complete within 90 days the repair of the subsidence-related material damage to lands or protected structures, or the replacement of protected water supply.

(d) Underground mining activities shall not be conducted beneath or adjacent to (1) public buildings and facilities; (2) churches, schools, and hospitals; or (3) impoundments with a storage capacity of 20 acre-feet or more or bodies of water with a volume of 20 acre-feet or more, unless the subsidence control plan demonstrates that subsidence will not cause material damage to, or reduce the reasonably foreseeable use of, such features or facilities. If the regulatory authority determines that it is necessary in order to minimize the potential for material damage to the features or facilities described above or to any aquifer or body of water that serves as a significant water source for any public water supply system, it may limit the percentage of coal extracted under or adjacent thereto.

(e) If subsidence causes material damage to any of the features or facilities covered by paragraph (d) of this section, the regulatory authority may suspend mining under or adjacent to such features or facilities until the subsidence control plan is modified to ensure prevention of further material damage to such features or facilities.

(f) The regulatory authority shall suspend underground mining activities under urbanized areas, cities, towns, and communities, and adjacent to industrial or commercial buildings, major impoundments, or perennial streams, if imminent danger is found to inhabitants of the urbanized areas, cities, towns, or communities.

(g) Within a schedule approved by the regulatory authority, the operator shall submit a detailed plan of the underground workings. The detailed plan shall include maps and descriptions, as appropriate, of significant features of the underground mine, including the size, configuration, and approximate location of pillars and entries, extraction ratios, measure taken to prevent or minimize subsidence and related damage, areas of full extraction, and other information required by the regulatory authority. Upon request of the operator, information submitted with the detailed plan may be held as confidential, in accordance with the requirements of §773.6(d) of this chapter.

§817.122 Subsidence control: Public notice.

At least 6 months prior to mining, or within that period if approved by the regulatory authority, the underground mine operator shall mail a notification to all owners and occupants of surface property and structures above the underground workings. The notification shall include, at a minimum, identification of specific areas in which mining will take place, dates that specific areas will be undermined, and the location or locations where the operator's subsidence control plan may be examined.

§817.131 Cessation of operations: Temporary.

(a) Each person who conducts underground mining activities shall effectively support and maintain all surface access openings to underground operations, and secure surface facilities in areas in which there are no current operations, but operations are to be resumed under an approved permit. Temporary abandonment shall not relieve a person of his or her obligation to comply with any provisions of the approved permit.

(b) Before temporary cessation of mining and reclamation operations for a period of thirty days or more, or as soon as it is known that a temporary cessation will extend beyond 30 days, each person who conducts underground mining activities shall submit to the regulatory authority a notice of intention to cease or abandon operations. This notice shall include a statement of the exact number of surface acres and the horizontal and vertical extent of sub-surface strata which have been in the permit area prior to cessation or abandonment, the extent and kind of reclamation of surface area which will have been accomplished, and identification of the backfilling, regrading, revegetation, environmental monitoring, underground opening closures and water treatment activities that will continue during the temporary cessation.

§817.132 Cessation of operations: Permanent.

(a) The person who conducts underground mining activities shall close or backfill or otherwise permanently reclaim all affected areas, in accordance with this chapter and according to the permit approved by the regulatory authority.

(b) All surface equipment, structures, or other facilities not required for continued underground mining activities and monitoring, unless approved as suitable for the postmining land use or environmental monitoring, shall be removed and the affected lands reclaimed.

§817.133 Postmining land use.

(a) *General.* All disturbed areas shall be restored in a timely manner to conditions that are capable of supporting—

(1) The uses they were capable of supporting before any mining; or

(2) Higher or better uses.

(b) *Determining premining uses 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 has not been previously mined and has 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 because of the previously mined condition, 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.

(c) *Criteria for alternative postmining land uses.* Higher or better uses may be approved by the regulatory authority as alternative postmining land uses after consultation with the landowner or the land management agency having jurisdiction over the lands, if the proposed uses meet the following criteria:

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

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

(3) The use will not—

(i) Be impractical or unreasonable;

(ii) Be inconsistent with applicable land use policies or plans;

(iii) Involve unreasonable delay in implementation; or

(iv) Cause or contribute to violation of Federal, State, or local law.

(d) *Approximate original contour: Criteria for variance.* Surface coal mining operations that meet the requirements of this paragraph may be conducted under a variance from the requirement to restore disturbed areas to their approximate original contour, if the following requirements are satisfied:

(1) The regulatory authority grants the variance under a permit issued in accordance with §785.16 of this chapter.

(2) The alternative postmining land use requirements of paragraph (c) of this section are met.

(3) All applicable requirements of the Act and the regulatory program, other than the requirement to restore disturbed areas to their approximate original contour, are met.

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

(5) The proposed use is designed and certified by a qualified registered professional engineer in conformance with professional standards established to assure the stability, drainage, and configuration necessary for the intended use of the site.

(6) After approval, where required, of the appropriate State environmental agencies, the watershed of the permit and adjacent areas is shown to be improved.

(7) The highwall is completely backfilled with spoil material, in a manner which results in a static factor of safety of at least 1.3, using standard geotechnical analysis.

(8) Only the amount of spoil as is necessary to achieve the postmining land use, ensure the stability of spoil retained on the bench, and meet all other requirements of the Act and this chapter is placed off the mine bench. All spoil not retained on the bench shall be placed in accordance with §§817.71 through 817.74 of this chapter.

(9) The surface landowner of the permit area has knowingly requested, in writing, that a variance be granted, so as to render the land, after reclamation, suitable for an industrial, commercial, residential, or public use (including recreational facilities).

(10) Federal, State, and local government agencies with an interest in the proposed land use have an adequate period in which to review and comment on the proposed use.

§817.150 Roads: General.

(a) *Road classification system.* (1) Each road, as defined in §701.5 of this chapter, shall be classified as either a primary road or an ancillary road.

(2) A primary road is any road which is—

(i) Used for transporting coal or spoil;

(ii) Frequently used for access or other purposes for a period in excess of six months; or

(iii) To be retained for an approval postmining land use.

(3) An ancillary road is any road not classified as a primary road

(b) *Performance standards.* Each road shall be located, designed, constructed, reconstructed, used, maintained, and reclaimed so as to:

(1) Control or prevent erosion, siltation, and the air pollution attendant to erosion, including road dust and dust occurring on other exposed surfaces, by measures such as vegetating, watering, using chemical or other dust suppressants, or otherwise stabilizing all exposed surfaces in accordance with current, prudent engineering practices;

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

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

(4) Neither cause nor contribute to, directly or indirectly, the violation of State or Federal water quality standard applicable to receiving waters;

(5) Refrain from seriously altering the normal flow of water in streambeds or drainage channels;

(6) Prevent or control damage to public or private property, including the prevention or mitigation of adverse effects on lands within the boundaries of units of the National Park System, the National Wildlife Refuge System, the National System of Trails, the National Wilderness Preservation System, the Wild and Scenic Rivers System, including designated study rivers, and National Recreation Areas designated by Act of Congress; and

(7) Use nonacid- and nontoxic-forming substances in road surfacing.

(c) *Design and construction limits and establishment of design criteria.* To ensure environmental protection appropriate for their planned duration and use, including consideration of the type and size of equipment used, the design and construction or reconstruction of roads shall incorporate appropriate limits for grade, width, surface materials, surface drainage control, culvert placement, and culvert size, in accordance

with current, prudent engineering practices, and any necessary design criteria established by the regulatory authority.

(d) *Location.* (1) No part of any road shall be located in the channel of an intermittent or perennial stream unless specifically approved by the regulatory authority in accordance with applicable §§817.41 through 817.43 and 817.57 of this chapter.

(2) Roads shall be located to minimize downstream sedimentation and flooding.

(e) *Maintenance.* (1) A road shall be maintained to meet the performance standards of this part and any additional criteria specified by the regulatory authority;

(2) A road damaged by a catastrophic event, such as a flood or earthquake, shall be repaired as soon as is practicable after the damage has occurred.

(f) *Reclamation.* A road not to be retained under an approved postmining land use shall be reclaimed in accordance with the approved reclamation plan as soon as practicable after it is no longer needed for mining and reclamation operations. This reclamation shall include:

(1) Closing the road to traffic;

(2) Removing all bridges and culverts unless approved as part of the postmining land use;

(3) Removing or otherwise disposing of road-surfacing materials that are incompatible with the postmining land use and revegetation requirements;

(4) Reshaping cut and fill slopes as necessary to be compatible with the postmining land use and to complement the natural drainage pattern of the surrounding terrain;

(5) Protecting the natural drainage patterns by installing dikes or cross drains as necessary to control surface runoff and erosion; and

(6) Scarifying or ripping the roadbed, replacing topsoil or substitute material and revegetating disturbed surfaces in accordance with §§817.22 and 817.111 through 817.116 of this chapter.

§817.151 Primary roads.

Primary roads shall meet the requirements of §817.150 and the additional requirements of this section.

(a) *Certification.* The construction or reconstruction of primary roads shall be certified in a report to the regulatory authority by a qualified registered professional engineer, or in any State which authorizes land surveyors to certify the construction or reconstruction of primary roads, a qualified registered professional land surveyor, with experience in the design and construction of roads. The report shall indicate that the primary road has been constructed or reconstructed as designed and in accordance with the approved plan.

(b) *Safety factor.* Each primary road embankment shall have a minimum static factor of 1.3 or meet the requirements established under §784.24(c).

(c) *Location.* (1) To minimize erosion, a primary road shall be located, insofar as is practicable, on the most stable available surface.

(2) Fords of perennial or intermittent streams by primary roads are prohibited unless they are specifically approved by the regulatory authority as temporary routes during periods of road construction.

(d) *Drainage control.* In accordance with the approved plan—

(1) Each primary road shall be constructed or reconstructed, and maintained to have adequate drainage control, using structures such as, but not limited to bridges, ditches, cross drains, and ditch relief drains. The drainage control system shall be designed to safely pass the peak runoff from a 10-year, 6-hour precipitation event, or greater event as specified by the regulatory authority;

(2) Drainage pipes and culverts shall be installed as designed, and maintained in a free and operating condition and to prevent or control erosion at inlets and outlets;

(3) Drainage ditches shall be constructed and maintained to prevent uncontrolled drainage over the road surface and embankment;

(4) Culverts shall be installed and maintained to sustain the vertical soil pressure, the passive resistance of the foundation, and the weight of vehicles using the road;

(5) Natural stream channels shall not be altered or relocated without the prior approval of the regulatory authority in accordance with applicable §§816.41 through 816.43 and 816.57 of this chapter; and

(6) Except as provided in paragraph (c)(2) of this section, structures for perennial or intermittent stream channel crossings shall be made using bridges, culverts, low-water crossings, or other structures designed, constructed, and maintained using current, prudent engineering practices. The regulatory authority shall ensure that low-water crossings are designed, constructed, and maintained to prevent erosion of the structure or streambed and additional contributions of suspended solids to streamflow.

(e) *Surfacing.* Primary roads shall be surfaced with material approved by the regulatory authority as being sufficiently durable for the anticipated volume of traffic and the weight and speed of vehicles using the road.

§817.180 Utility installations.

All underground mining activities shall be conducted in a manner which minimizes damage, destruction, or disruption of services provided by oil, gas, and water wells; oil, gas, and coal-slurry pipelines, railroads; electric and telephone lines; and water and sewage lines which pass over, under, or through the permit area, unless otherwise approved by the owner of those facilities and the regulatory authority.

§817.181 Support facilities.

(a) Support facilities shall be operated in accordance with a permit issued for the mine or coal preparation plant to which it is incident or from which its operation results.

(b) In addition to the other provisions of this part, support facilities shall be located, maintained, and used in a manner that—

(1) Prevents or controls erosion and siltation, water pollution, and damage to public or private property; and

(2) To the extent possible using the best technology currently available—

(i) Minimizes damage to fish, wildlife, and related environmental values; and

(ii) Minimizes additional contributions of suspended solids to streamflow or runoff outside the permit area. Any such contributions shall not be in excess of limitations of State or Federal law.

§817.200 Interpretative rules related to general performance standards.

The following interpretations of rules promulgated in part 817 of this chapter have been adopted by the Office of Surface Mining Reclamation and Enforcement.

(a)-(b) [Reserved]

(c) *Interpretation of §816.22(e)—Topsoil Removal.* (1) Results of physical and chemical analyses of overburden and topsoil to demonstrate that the resulting soil medium is equal to or more suitable for sustaining revegetation than the available topsoil, provided that trials, and tests are certified by an approved laboratory in accordance with 30 CFR 816.22(e)(1)(ii), may be obtained from any one or a combination of the following sources:

(i) U.S. Department of Agriculture Soil Conservation Service published data based on established soil series;

(ii) U.S. Department of Agriculture Soil Conservation Service Technical Guides;

(iii) State agricultural agency, university, Tennessee Valley Authority, Bureau of Land Management or U.S. Department of Agriculture Forest Service published data based on soil series properties and behavior, or

(iv) Results of physical and chemical analyses, field site trials, or greenhouse tests of the topsoil and overburden materials (soil series) from the permit area.

(2) If the operator demonstrates through soil survey or other data that the topsoil and unconsolidated material are insufficient and substitute materials will be used, only the substitute materials must be analyzed in accordance with 30 CFR 816.22(e)(1)(i).

(d) *Interpretation of §817.133: Postmining land use.* (1) The requirements of 30 CFR 784.15(a)(2), for approval of an alternative postmining land use, may be met by requesting approval through the permit revision procedures of 30 CFR 774.13 rather than requesting such approval through the permit application. The original permit application, however, must demonstrate that the land will be returned to its premining land use capability as required by 30 CFR 817.133(a).

An application for a permit revision of this type, (i) must be submitted in accordance with the filing deadlines of 30 CFR 774.13, (ii) shall constitute a significant alteration from the mining operations contemplated by the original permit, and (iii) shall be subject to the requirements of 30 CFR part 773 and 775.

(2) [Reserved]

14. Revise part 824 to read as follows:

**PART 824—SPECIAL PERMANENT PROGRAM PERFORMANCE STANDARDS—
MOUNTAINTOP REMOVAL**

Sec.

824.1 Scope.

824.2 Objectives.

824.11 Mountaintop removal: Performance standards.

AUTHORITY: Secs. 102, 201, 501, 503, 504, 506, 508, 510, 515, 517, 701 Pub. L. 95-87, 91 Stat. 448, 449, 467, 470, 471, 474, 478, 480, 486, 498, 516 (30 U.S.C. 1202, 1211, 1251, 1253, 1254, 1256, 1258, 1260, 1265, 1267, 1291).

§824.1 Scope.

This part sets forth special environmental protection performance, reclamation, and design standards for surface coal mining activities constituting mountaintop removal mining.

§824.2 Objectives.

The objectives of this part are to—

- (a) Enhance coal recovery;
- (b) Reclaim the land to equal or higher postmining use; and
- (c) Protect and enhance environmental and other values protected under the Act and this chapter.

§824.11 Mountaintop removal: Performance standards.

(a) Under an approved regulatory program, surface coal mining activities may be conducted under a variance from the requirement of this subchapter for restoring affected areas to their approximate original contour, if—

(1) The regulatory authority grants the variance under a permit, in accordance with 30 CFR 785.14;

(2) The activities involve the mining of an entire coal seam running through the upper fraction of a mountain, ridge, or hill, by removing all of the overburden and creating a level plateau or gently rolling contour with no highwalls remaining;

(3) An industrial, commercial, agricultural, residential, or public facility (including recreational facilities) use is proposed and approved for the affected land;

(4) The alternative land use requirements of §816.133(a) through (c) of this chapter are met;

(5) All applicable requirements of this subchapter and the regulatory program, other than the requirement to restore affected areas to their approximate original contour, are met;

(6) An outcrop barrier of sufficient width, consisting of the toe of the lowest coal seam, and its associated overburden, are retained to prevent slides and erosion, except that the regulatory authority may permit an exemption to the retention of the coal barrier requirement if the following conditions are satisfied:

(i) The proposed mine site was mined prior to May 3, 1978, and the toe of the lowest seam has been removed; or

(ii) A coal barrier adjacent to a head-of-hollow fill may be removed after the elevation of a head-of-hollow fill attains the elevation of the coal barrier if the head-of-hollow fill provides the stability otherwise ensured by the retention of a coal barrier;

(7) The final graded slopes on the mined area are less than 1 v:5h, so as to create a level plateau or gently rolling configuration, and the outslopes of the plateau do not exceed 1 v:2h except where engineering data substantiates, and the regulatory authority finds, in writing, and includes in the permit under 30 CFR 785.14, that a minimum static safety factor of 1.5 will be attained;

(8) The resulting level or gently rolling contour is graded to drain inward from the outslope, except at specified points where it drains over the outslope in stable and protected channels. The drainage shall not be through or over a valley or head-of-hollow fill.

(9) Natural watercourses below the lowest coal seam mined are not damaged;

(10) All waste and acid-forming or toxic-forming materials, including the strata immediately below the coal seam, are covered with non-toxic spoil to prevent pollution and achieve the approved postmining land use; and

(11) Spoil is placed on the mountaintop bench as necessary to achieve the postmining land use approved under paragraphs (a)(3) and (a)(4) of this section. All excess spoil material not retained on the mountaintop shall be placed in accordance with 30 CFR 816.41 and 816.43 and 816.71 through 816.74.

15. Revise part 827 to read as follows:

**PART 827—PERMANENT PROGRAM PERFORMANCE STANDARDS—COAL
PREPARATION PLANTS NOT LOCATED WITHIN THE PERMIT AREA OF A MINE**

Sec.

827.1 Scope.

827.11 General requirements.

827.12 Coal preparation plants: Performance standards.

827.13 Coal preparation plants: Interim performance standards.

AUTHORITY: 30 U.S.C. 1201 *et seq.*, and Pub. L. 100-34.

§827.1 Scope.

This part sets forth requirements for coal preparation plants operated in connection with a coal mine but outside the permit area for a specific mine.

§827.11 General requirements.

Each person who operates a coal preparation plant subject to this part shall obtain a permit in accordance with §785.21 of this chapter, obtain a bond in accordance with subchapter J of this chapter, and operate that plant in accordance with the requirements of this part.

§827.12 Coal preparation plants: Performance standards.

Except as provided in §827.13 of this part, the construction, operation, maintenance, modification, reclamation, and removal activities at coal preparation plants shall comply with the following:

(a) Signs and markers for the coal preparation plant, coal processing waste disposal area, and water-treatment facilities shall comply with §816.11 of this chapter.

(b) Any stream channel diversion shall comply with §816.43 of this chapter.

(c) Drainage from any disturbed area related to the coal preparation plant shall comply with §§816.45 through 816.47 of this chapter, and all discharges from these areas shall meet the requirements of §§816.41 and 816.42 of this chapter and any other applicable State or Federal law.

(d) Permanent impoundments associated with coal preparation plants shall meet the requirements of §§816.49 and 816.56 of this chapter. Dams constructed of, or impounding, coal processing waste shall comply with §816.84 of this chapter.

(e) Disposal of coal processing waste, noncoal mine waste, and excess spoil shall comply with §§816.81, 816.83, 816.84, 816.87, 816.89, and 816.71 through 816.74 of this chapter, respectively.

(f) Fish, wildlife, and related environmental values shall be protection in accordance with §816.97 of this chapter.

(g) Support facilities related to the coal preparation plant shall comply with §816.181 of this chapter.

(h) Roads shall comply with §§816.150 and 816.151 of this chapter.

(i) Cessation of operations shall be in accordance with §§816.131 and 816.132 of this chapter.

(j) Erosion and air pollution attendant to erosion shall be controlled in accordance with §816.95 of this chapter.

(k) Adverse effects upon, or resulting from, nearby underground coal mining activities shall be minimized by appropriate measures including, but not limited to, compliance with §816.79 of this chapter.

(l) Reclamation shall follow proper topsoil handling, backfilling and grading, revegetation, and postmining land use procedures in accordance with §§816.22,

816.100, 816.102, 816.104, 816.106, 816.111, 816.113, 816.114, 816.116, and 816.133 of this chapter, respectively.

§827.13 Coal preparation plants: Interim performance standards.

(a) Persons operating or who have operated coal preparation plants after July 6, 1984, which were not subject to this chapter before July 6, 1984, shall comply with the applicable interim or permanent program performance standards of the State in which such plants are located, as follows:

(1) If located in a State in which either interim or permanent program performance standards apply to such plants, the applicable program standards of the State program shall apply;

(2) If located in a State with a State program which must be amended in order to regulate such plants, the interim program performance standards in subchapter B of this chapter shall apply; and

(3) If located in a State with a Federal program, all such plants shall be subject to the interim program performance standards in subchapter B of this chapter.

(b) After a person described in paragraph (a) of this section obtains a permit to operate a coal preparation plant, the performance standards specified in §827.12 shall be applicable to the operation of that plant instead of those specified in paragraph (a) of this section.

Dated: October 26, 2017.

Katharine S. MacGregor,

Acting Assistant Secretary, Land and Minerals Management

[FR Doc. 2017-24307 Filed: 11/16/2017 8:45 am; Publication Date: 11/17/2017]