

Annex A

TITLE 25. ENVIRONMENTAL PROTECTION

PART I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

Subpart C. PROTECTION OF NATURAL RESOURCES

ARTICLE I. LAND RESOURCES

CHAPTER 86. SURFACE AND UNDERGROUND COAL MINING: GENERAL

Subchapter A. GENERAL PROVISIONS

§ 86.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

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Surface mining activities—[Activities whereby coal is extracted from the earth or from waste or stock piles or from pits or banks by removing the strata or material which overlies or is above or between the coal or otherwise exposing and retrieving the coal from the surface, including, but not limited to, strip, auger mining, dredging, quarrying and leaching, and surface activity connected with surface or underground mining, including, but not limited to, exploration, site preparation, entry, tunnel, slope, shaft, drift and borehole drilling and construction, and activities related thereto. The term does not include portions of mining operations carried out beneath the surface by means of shafts, tunnels or other underground mine openings. The term includes activities in which the land surface has been or is disturbed as a result of, or incidental to, surface mining operations of the operator, including, but not limited to, private ways and roads appurtenant to a surface mining operation, land excavations, workings, refuse banks, spoil banks, culm banks, tailings, repair areas, storage areas, processing areas, shipping areas and areas in which facilities, equipment, machines, tools or other materials or property which result from, or are used in, surface mining activities are situated. The term includes the construction of a road or similar disturbance for any purpose related to a surface mining activity, including that of moving or “walking” a dragline or other equipment, or for the assembly or disassembly or staging of equipment.] Any activities meeting the definition of “surface mining activities” as it is defined at 30 CFR 701.5, which is ADOPTED IN ITS ENTIRETY AND incorporated herein by reference.

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Subchapter B. PERMITS

**REVIEW, PUBLIC PARTICIPATION AND APPROVAL, DISAPPROVAL
OF PERMIT APPLICATIONS AND PERMIT TERMS AND
CONDITIONS**

§ 86.31. Public notices of filing of permit applications.

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(c) Upon receipt of a complete application, the Department will publish notice of the proposed activities in the *Pennsylvania Bulletin* and send **WRITTEN** notice to the following:

(1) ~~[By registered mail, the THE city, borough, incorporated town or township]~~the municipality in which the activities are located.

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PERMIT REVIEWS, RENEWALS, REVISIONS AND TRANSFERS

§ 86.51. Reviews of active permits.

(a) The Department will review each permit issued and outstanding during the term of the permit. This review shall occur at the discretion of the Department during the permit term except as required by § 87.175 (relating to variance to contouring). For permits of longer than 5-year terms, a review of the permit shall be no less frequent than the permit midterm ~~[of]~~ or every 5 years, whichever is more frequent.

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§ 86.54. Public notice of permit revision.

A permit revision request shall be subject to the notice requirements of § 86.31 (relating to public notices of filing of permit applications) under the following circumstances:

(1) For surface mining activities:

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(iii) The addition of coal refuse disposal, ~~[fly ash disposal or sewage sludge]~~ beneficial use of coal ash or biosolids, OR RESIDENTIAL SEPTAGE for land reclamation to the operation.

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**MINIMUM REQUIREMENTS FOR LEGAL FINANCIAL COMPLIANCE AND
RELATED INFORMATION**

86.62. Identification of interests.

(a) *Application information.* An application shall contain the following information, except that the submission of a social security number is voluntary:

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(3) The name of the proposed mine and the Mine Safety and Health Administration (MSHA) Identification Number[, **with the date of issuance,**] for the mine and all mine-associated structures that require MSHA approval.

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Subchapter C. SMALL OPERATORS ASSISTANCE PROGRAM

§ 86.84. Applications for assistance.

(a) An application for assistance shall contain the following information:

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(3) A schedule of the estimated total production of coal from the proposed permit area and all other locations from which production is attributed to the applicant under this section. For each location, the schedule shall include:

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(ii) The permit number and [**Mining Enforcement and Safety**] **Mine Safety and Health** Administration identification number, if available.

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Subchapter F. BONDING AND INSURANCE REQUIREMENTS

AMOUNT AND DURATION OF LIABILITY

§ 86.151. Period of liability.

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(d) The extended period of liability which begins upon completion of augmenting seeding, fertilization, irrigation or other work necessary to achieve permanent revegetation of the permit area shall include additional time taken by the permittee to

repeat augmented seeding, fertilization, irrigation or other work under a requirement by the Department but may not include selective husbandry practices approved by the Department, such as pest and vermin control, pruning, repair of rills and gullies or reseeding or transplanting, or both, which constitute normal conservation practices within the region for other land with similar land uses. **[Augmented seeding] Seeding,** fertilization, irrigation and repair of rills and gullies performed at levels or degrees of management which exceed those normally applied in maintaining use or productivity of comparable unmined land in the surrounding area, would necessitate extending the period of liability.

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FORM, TERMS AND CONDITIONS OF BONDS AND INSURANCE

§ 86.158. Special terms and conditions for collateral bonds.

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(b) Collateral bonds pledging negotiable government securities are subject to the following conditions:

(1) The Department **[may]will** determine the current market value of government securities for the purpose of establishing the value of the securities for bond deposit.

(2) The current market value, **less any legal and liquidation costs,** is at least equal to the amount of the required bond amount.

(3) The Department may periodically revalue the securities and may require additional amounts if the current market value is insufficient to satisfy the bond amount requirements for the facility. **At a minimum, the Department shall require any necessary additional amounts with each permit renewal.**

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§ 86.162a. Anthracite [Deep] Mine Operators Emergency Bond Fund.

(a) For permitted anthracite **[deep]** mine operators required to post a bond under § 86.143 (relating to requirements to file a bond), and who can demonstrate to the Department that they are unable to post a conventional surety or collateral bond as described in § 86.156 (relating to the form of the bond), and do not meet the requirements of § 86.161 (relating to phased deposits of collateral), may apply to the Department for an Anthracite **[Deep] Mine Operator's** Emergency Bond Loan. The purpose of this loan is to guarantee a collateral bond posted by the operator.

(b) Permitted anthracite **[deep]** mine operators who wish to use the anthracite **[deep]** mine emergency bond loan program shall demonstrate one of the following:

(c) The Department and the qualified operator shall enter into a written loan agreement, on forms provided by the Department, which shall contain at a minimum, the following provisions:

(d) The Department will deposit appropriations and moneys collected under this section into the Anthracite [**Deep Mine Emergency Bond Loan Fund**] **Mine Operators Emergency Bond Fund**.

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BOND FORFEITURE

§ 86.189. Reclamation of bond forfeiture sites.

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(b) The Department will provide for reclamation of bond forfeiture sites through one of the following:

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(4) Under cooperative agreements among the Department, the State Conservation Commission and the County [**Soil**] Conservation District in which the bond forfeiture site is located, the District may enter into a contract with the landowner of the bond forfeiture site to reclaim the site.

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Subchapter G. CIVIL PENALTIES FOR COAL MINING ACTIVITIES

GENERAL PROVISIONS

§ 86.193. Assessment of penalty.

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(b) The Department will assess a civil penalty for each violation if the violation is assessable in an amount [**of \$1,100 or more**] **consistent with 30 CFR 723.12(b) and 723.14** under the system for assessment described in § 86.194 (relating to system for assessment of penalties).

(c) The Department may assess a penalty for each violation which is assessable in an amount [**less than \$1,100**] **consistent with 30 CFR 723.12(c) and 723.14** under the system for assessment described in § 86.194.

Subchapter I. EMPLOYEE CONFLICT OF INTEREST

§ 86.232. Definitions.

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise:

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Department—The Department of Environmental **[Resources] Protection**.

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§ 86.238. What to report.

(a) Each employe shall report information required on the statement of employment and financial interests of the employe, the employe spouse, minor children or other relatives who are full-time residents of the employe home. The report shall be on OSM Form **[705-1] 23** as provided by the Department. The statement consists of three major parts:

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Subchapter J. REMINING AND RECLAMATION INCENTIVES

BONDING INCENTIVES

§ 86.281. Financial guarantees to insure reclamation—general.

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(b) The financial guarantee applies to a permit with remining areas approved by the Department. Operators who wish to participate in this program shall demonstrate, for each permit, their eligibility under §§ 86.253 and 86.282 (relating to operator and project qualification; and participation requirements). **The amount will be the estimated cost for the Department to reclaim the remining area, subject to the limitations established in subsection (d).**

(c) **[For each approved permit of an eligible operator for a remining area, the] The** Department will designate a specified amount of the financial guarantees special account in the Remining Financial Assurance Fund to financially assure reclamation obligations on the **[permit] permits** with an approved remining area. **[The specific amount designated will be the estimated cost for the Department to reclaim the remining area.]**

(d) The Department may not issue financial guarantees on a permit in excess of 10% of the then current **designated** amount in the special account in the Remining Financial

Assurance Fund. The Department will not issue financial guarantees to a mine operator if the aggregate amount of financial guarantees on permits issued to the operator will exceed 30% of the then current **designated** amount in the special account in the Remining Financial Assurance Fund. The Department will not issue additional financial guarantees when the aggregate amount of outstanding financial guarantees exceeds that amount resulting from dividing the current **designated** amount in the special account in the Remining Financial Assurance Fund by the historical rate of bond forfeiture under § 86.181 (relating to general) with a margin of safety determined by the Department.

(e) Upon declaration of forfeiture, the specified amount of the financial guarantee from the financial guarantee special account will be used with other bonds forfeited on the permit by the Department to complete reclamation of the mine site in accordance with the procedures and criteria in §§ 86.187—86.190. If the actual cost of reclamation by the Department exceeds the specified amount of the financial guarantee, additional funds from the Remining Financial Assurance Fund may be used to complete reclamation.

(f) The Department will hold in reserve in the remining financial assurance fund funds that are not designated to underwrite remining financial guarantees. The Department will use funds held in reserve in the remining financial assurance fund to assure the availability of funds to cover reclamation liabilities when there is a mine operator bond forfeiture under § 86.181 (relating to general).

§ 86.282. Participation requirements.

(a) Upon completion of the technical review of a permit application and receipt of a request for bond, an operator may apply to participate in the financial guarantees program for a remining area if the requirements of § 86.253 (relating to operator and project qualification) are met. To participate in this program, an operator shall demonstrate to the Department's satisfaction one of the following:

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(4) The operator has previously participated in the remining financial guarantee program and met its reclamation obligations and made timely payments. **An operator will be eligible under this subsection if it has not been cited through a notice of violation under § 86.165(a) (relating to failure to maintain proper bond) within the previous 3 years prior to the request for a remining financial guarantee.**

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§ 86.284. Forfeiture.

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(d) The financial guarantees program [**will**] **may** be discontinued immediately and notice published in the *Pennsylvania Bulletin*, if 25% or greater of the total outstanding

financial guarantees are [**declared forfeit**] **subject to forfeiture**. If the financial guarantees program is discontinued, no additional financial guarantees may be approved. Outstanding financial guarantees will remain in effect until released under §§ 86.170—86.175.

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CHAPTER 87. SURFACE MINING OF COAL

Subchapter A. GENERAL PROVISIONS

§ 87.1. Definitions.

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Surface mining activities—[Activities whereby coal is extracted from the earth or from waste or stock piles or from pits or banks by removing the strata or material which overlies or is above or between the coal or otherwise exposing and retrieving the coal from the surface, including, but not limited to, strip and auger mining, dredging, quarrying and leaching, and surface activity connected with surface or underground mining, including, but not limited to, exploration, site preparation, entry, tunnel, slope, shaft, drift and borehole drilling and construction and activities related thereto. The term does not include portions of mining operations carried out beneath the surface by means of shafts, tunnels or other underground mine openings. The term includes activities in which the land surface has been disturbed as a result of or incidental to surface mining operations of the operator, including, but not limited to, private ways and roads appurtenant to a surface mining operation, land excavations, workings, refuse banks, spoil banks, culm banks, tailings, repair areas, storage areas, processing areas, shipping areas and areas in which facilities, equipment, machines, tools or other materials or property which result from, or are used in, surface mining activities are situated in. The term includes the construction of a road or similar disturbance for any purpose related to a surface mining activity, including that of moving or walking a dragline or other equipment, or for the assembly or disassembly or staging of equipment.] Any activities meeting the definition of “surface mining activities” as it is defined at 30 CFR 701.5, which is ADOPTED IN ITS ENTIRETY AND incorporated herein by reference.

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Subchapter C. SURFACE COAL MINES: MINIMUM REQUIREMENTS FOR INFORMATION ON ENVIRONMENTAL RESOURCES

§ 87.53. Prime farmland investigation.

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(b) Land will not be considered prime farmland if the applicant can demonstrate one of the following:

(1) The land has not been historically used as cropland.

(2) Other factors exist, such as a very rocky surface, or the land is frequently flooded during the growing season, more often than once in 2 years, and the flooding has reduced crop yields.

(3) On the basis of a soil survey of lands within the permit area, there are no soil map units that have been designated prime farmland by the United States **[Soil] Natural Resources** Conservation Service.

(c) If the investigation establishes that the lands are not prime farmland, the applicant shall submit with the permit application a request for a negative determination which shows that the land for which the negative determination is sought meets one of the criteria of subsection (b).

(d) If the investigation indicates that lands within the proposed permit area may be prime farmlands, the applicant shall contact the United States **[Soil] Natural Resources** Conservation Service to determine if a soil survey exists for those lands and whether the applicable soil map units have been designated as prime farmlands. If no soil survey has been made for the lands within the proposed permit area, the applicant shall cause a survey to be made.

(1) When a soil survey, as required in this subsection, contains soil map units which have been designated as prime farmlands, the applicant shall submit a soil survey of the proposed permit area according to the standards of the National Cooperative Soil Survey and in accordance with the procedures in the *United States Department of Agriculture Handbooks 436* (Soil Taxonomy, 1975) and 18 (Soil Survey Manual, 1951) as amended. The soil survey shall include a map unit and representative soil profile description as determined by the United States **[Soil] Natural Resources** Conservation Service for each prime farmland within the proposed permit area unless other representative descriptions from the locality, prepared in conjunction with the National Cooperative Soil Survey, are available and their use is approved by the State Conservationist, United States **[Soil] Natural Resources** Conservation Service.

(2) When a soil survey, as required in this subsection, contains soil map units which have not been designated as prime farmland after review by the United States **[Soil] Natural Resources** Conservation Service, the applicant shall submit a request for negative determination for nondesignated land with the permit soil survey establishing compliance with subsection (b).

**Subchapter E. SURFACE COAL MINES: MINIMUM ENVIRONMENTAL
PROTECTION PERFORMANCE STANDARDS**

§ 87.100. Topsoil: nutrients and soil amendments.

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(d) The use of [**fly ash and sewage sludge**] **coal ash, biosolids, and residential septage** as soil amendments may be approved by the Department if demonstrated to be a suitable soil amendment and the requirements of Subpart D, Articles VIII and IX (relating to municipal waste; and residual waste management) are met.

§ 87.102. Hydrologic balance: effluent standards.

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(f) In addition to the requirements of subsections (a)—(e), the discharge of water from areas disturbed by mining activities shall comply with this title, including Chapters 91—93, 95, **96**, 97 (reserved) and 102.

§ 87.103. Precipitation event exemption.

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(b) [The 10-year, 24-hour precipitation event for specific areas in this Commonwealth are listed as follows:

<i>County</i>	<i>Rainfall (inches)</i>
Allegheny	3.9
Armstrong	3.9
Beaver	3.8
Bedford	4.5
Blair	4.7
Bradford	4.2
Butler	3.8
Cambria	4.2
Cameron	4.0
Centre	4.3
Clarion	3.7
Clearfield	4.0
Clinton	4.2
Crawford	3.6

Elk	3.9
Fayette	4.1
Forest	3.8
Franklin	4.8
Fulton	4.6
Greene	3.9
Huntingdon	4.6
Indiana	4.0
Jefferson	3.9
Lawrence	3.7
Lycoming	4.3
McKean	3.9
Mercer	3.7
Potter	4.0
Somerset	4.3
Sullivan	4.2
Tioga	4.2
Venango	3.7
Warren	3.8
Washington	3.9
Westmoreland	4.0]

The 10-year, 24-hour precipitation event for specific areas in this Commonwealth shall be determined by reference to data provided by the National Oceanic Atmospheric Administration or equivalent resources.

(c) For the permittee to demonstrate that the **10-year, 24-hour precipitation** event [listed in subsection (b)] has for the permittee’s mine area been exceeded or that dry weather flow conditions did not exist, the permittee shall do one of the following:

* * * * *

(3) Prepare an analysis identifying the runoff area tributary to the treatment facility, and compare the actual runoff as measured and depicted by the flow measuring device with the runoff expected from the 10-year, 24-hour precipitation event specified for the mine area[**in subsection (b)**].

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§ 87.112. Hydrologic balance: dams, ponds, embankments and impoundments—design, construction and maintenance.

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(b) The design, construction and maintenance of dams, ponds, embankments and impoundments shall achieve the minimum design criteria contained in the United States **[Soil] Natural Resources** Conservation Service’s Pennsylvania Field Office Technical Guide, Section IV, Standards 350, “Sediment Basin,” and 378, “Pond,” as amended, or United States **[Soil] Natural Resources** Conservation Service’s Technical Release No. 60, Earth Dams and Reservoirs, whichever is applicable. The standards contained therein are incorporated by reference. In addition to the requirements in “Sediment Basin,” a minimum static safety factor of 1.3 is required. These structures shall also meet the following requirements:

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§ 87.117. Hydrologic balance: surface water monitoring.

(a) In addition to the monitoring and reporting requirements established by the Department under Chapter **[92] 92a** (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance), surface water shall be monitored to accurately measure and record the water quantity and quality of the discharges from the permit area and the effect of the discharge on the receiving waters. Surface water shall be monitored for 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 § 87.69 (relating to protection of hydrologic balance). At a minimum, total dissolved solids or specific conductance corrected to 25°C, total suspended solids, pH, acidity, alkalinity, total iron, total manganese, sulfates and flow shall be monitored and reported to the Department at least every 3 months for each monitoring location.

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§ 87.155. Revegetation: standards for successful revegetation.

(a) When the approved postmining land use is cropland, or as provided in subsection (c):

(1) The standards for successful revegetation shall be based upon crop productivity or yield.

(2) The approved standards shall be the average yields per acre for the crop and soil type as specified in the Soil Surveys of the United States Department of Agriculture **[Soil] Natural Resources** Conservation Service.

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§ 87.157. Cessation of operations: temporary.

[(a) As soon as it is known that the operation will temporarily cease for more than 30 days, the operator shall submit a notice of intention in writing to temporarily cease the operation. The notice shall include a statement of the exact number of acres that will have been affected in the permit area, the extent and kind of reclamation of the areas and identification of the backfilling, regrading, vegetation, monitoring and water treatment activities which will continue during the temporary cessation.

(b) Temporary cessation of an operation may not exceed 90 days unless the Department approves a longer period not to exceed 180 days or unless the Department approves a longer period.

(c) Temporary cessation does not relieve the operator of the obligations to comply with the permit.]

- (a) Before temporary cessation status of operations for a period of 30 days or more, an operator shall submit to the Department a notice of intention to temporarily cease operations. The notice shall include a statement of the exact number of acres affected in the permit area, the extent and kind of reclamation of the areas and identification of the backfilling, regrading, revegetation, environmental monitoring, and water treatment activities that will continue during the temporary cessation status.**
- (b) Temporary cessation status of operations does not relieve the operator of the obligations to comply with the acts as defined in § 86.1, chapters 86-90, or the approved permit, including the obligation to submit an application for permit renewal at least 180 days before the expiration of the existing permit. The Department may enforce these obligations during the temporary cessation status of operations.**
- (c) Temporary cessation status will end with the resumption of coal extraction. Any subsequent notices of temporary cessation status must include updated information outlined in paragraph (a).**
- (d) Temporary cessation status will terminate where the Department finds a failure to comply with the acts as defined in § 86.1, chapters 86-90, or the approved permit. Termination of temporary cessation status due to failure to comply with the acts as defined in § 86.1, chapters 86-90, or the approved permit will place the mining operation in permanent cessation status, subject to the provisions of § 87.158 (cessation of operations: permanent).**

§ 87.177. Prime farmland: special requirements.

(a) When the surface mining activities are being conducted on prime farmland historically used for cropland, a permit for the mining and reclamation operation may be granted by the Department if it first finds, in writing, and after consultation with the [Soil] Natural Resources Conservation Service, that the applicant has demonstrated that:

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(b) If a permit is granted under this section, the permit shall be specifically conditioned as containing the plan submitted under § 87.83 (relating to prime farmlands), including any revisions to that plan suggested by the [Soil] Natural Resources Conservation Service.

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§ 87.181. Prime farmland: revegetation.

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(c) Standards for determining success of restoration on prime farmlands soils shall be based upon the soil surveys and soil interpretations and the latest yield data available from the United States Department of Agriculture [Soil] Natural Resources Conservation Service.

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CHAPTER 88. ANTHRACITE COAL

Subchapter A. GENERAL PROVISIONS

PRELIMINARY PROVISIONS

§ 88.1. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

* * * * *

Haul road—Roads that are planned, designed, located, constructed, reconstructed or improved, utilized and maintained for the transportation of equipment, fuel, personnel, coal, spoil and other operating resources from a public road to points within the surface mine or between principal operations on the mine site or both, but not including roads

within the pit or on unreclaimed spoil areas. **The term includes public roads that are used as an integral part of the coal mining activity.**

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Road—A surface right-of-way for purposes of travel by land vehicles used in coal exploration **[of] or** surface coal mining and reclamation operations. A road consists of the entire area within the right-of-way, including the roadbed shoulders, parking and side area, approaches, structures, ditches, surface and such contiguous appendages as are necessary for the total structure. The term includes access and haul roads constructed, used, reconstructed, improved or maintained for use in coal exploration or surface coal mining activities, including use by coal-hauling vehicles leading to transfer, processing or

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**ANTHRACITE COAL MINING ACTIVITIES: APPLICATION
REQUIREMENTS AND PREMINING RESOURCES**

§ 88.32. Prime farmland investigation.

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(b) Land may not be considered prime farmland if the applicant can demonstrate one of the following:

(1) The land has not been historically used for cropland.

(2) The slope of the land is 10% or greater.

(3) There are no soil map units that have been designated prime farmland by the United States Department of Agriculture **[Soil] Natural Resources** Conservation Service, on the basis of a soil survey of lands within the permit area.

* * * * *

(d) If the investigation indicates that lands within the proposed permit area may be prime farmlands, the applicant shall contact the United States Department of Agriculture **[Soil] Natural Resources** Conservation Service to determine if a soil survey exists for those lands and whether the applicable soil map units have been designated as prime farmlands. If no soil survey has been made for the lands within the proposed permit area, the applicant shall cause a survey to be made.

(e) When a soil survey as required in subsection (d) includes soil map units that have been designated as prime farmlands, the applicant shall submit with the permit application a soil survey of the proposed permit area according to the standards of the National Cooperative Soil Survey and the procedures in the *United States Department of*

Agriculture Handbooks 436 (Soil Taxonomy, 1975) and 18 (Soil Survey Manual, 1951), as amended. The soil survey shall include a map unit and representative soil profile description as determined by the United States [Soil] **Natural Resources** Conservation Service for each prime farmland soil within the proposed permit area unless other representative descriptions from the locality, prepared in conjunction with the National Cooperative Soil Survey, are available and their use is approved by the State Conservationist, United States [Soil] **Natural Resources** Conservation Service.

(f) When a soil survey as required in subsection (d) includes map units that have not been designated as prime farmland after review by the United States Department of Agriculture [Soil] **Natural Resources** Conservation Service, the applicant shall submit with the permit application a request for negative determination for nondesignated land establishing compliance with subsection (b).

Subchapter B. SURFACE ANTHRACITE COAL MINES: MINIMUM ENVIRONMENTAL PROTECTION PERFORMANCE STANDARDS

§ 88.92. Hydrologic balance: effluent standards.

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(f) In addition to the requirements of subsections (a)—(e), the discharge of water from areas disturbed by mining activities shall comply with Chapters 91—93, 95, **96**, 97 (reserved) and 102.

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§ 88.93. Hydrologic balance: precipitation event exemption.

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(b) [The 10-year, 24-hour precipitation event for specific areas in this Commonwealth are listed as follows:

<i>County</i>	<i>Rainfall (inches) 10 Yr.</i>
Bradford	4.2
Carbon	4.8
Columbia	4.6
Dauphin	4.8
Lackawanna	4.7
Lebanon	4.8
Luzerne	4.7
Northumberland	4.6

The 10-year, 24-hour precipitation event for specific areas in this Commonwealth shall be determined by reference to data provided by the National Oceanic Atmospheric Administration or equivalent resources.

(c) For the permittee to demonstrate that the **10-year, 24-hour precipitation** event [listed in subsection (b)] has for his mine area been exceeded, or that dry weather flow conditions did not exist, the permittee shall do one of the following:

* * * * *

(3) Prepare an analysis identifying the runoff area tributary to the treatment facility, and compare the actual runoff as measured and depicted by the flow measuring device with the runoff expected from the 10-year, 24-hour precipitation event [specified] for the mine area[in subsection (a)].

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§ 88.102. Hydrologic balance: dams, ponds, embankments and impoundments— design, construction and maintenance.

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(b) The design, construction and maintenance of dams, ponds, embankments and impoundments that are not of the class of subsection (a) shall achieve the minimum design criteria contained in United States [Soil] **Natural Resources** Conservation Service’s Pennsylvania Field Office Technical Guide, Section IV, Standards 350 “Sediment Basin” and 378, “Pond” as amended. In addition to the requirements in “Sediment Basin,” a minimum static safety factor of 1.3 is required.

§ 88.103. Hydrologic balance: coal processing waste dams and embankments.

A dam and embankment constructed of coal processing waste or intended to impound coal processing waste, shall meet the requirement criteria established by Chapter 105 (relating to dam safety and waterway management) and the United States [Soil] **Natural Resources** Service’s *Pennsylvania Field Office Technical Guide, Section IV, Standard 378, “Pond”* as applicable.

§ 88.106. Hydrologic balance: surface water monitoring.

(a) In addition to the monitoring and reporting requirements established by the Department under Chapter [92] **92a** (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance), surface water shall be monitored to measure and record accurately the water quantity and quality of the

discharges from the permit area and the effect of the discharge on the receiving waters. Surface water shall be monitored for 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 88.49 (relating to protection of hydrologic balance). At a minimum, total dissolved solids or specific conductance corrected to 25°C, total suspended solids, pH, acidity, alkalinity, total iron, total manganese, sulfates and flow shall be monitored and reported to the Department every 3 months for each monitoring location.

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§ 88.107. Hydrologic balance: water rights and replacement.

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(g) *Operator cost recovery.* A surface mine operator or mine owner who appeals a Department order, provides a successful defense during the appeal to the presumptions of liability and is not otherwise held responsible for the pollution or diminution is entitled to recovery of reasonable costs incurred, including, but not limited to, the costs of temporary water supply, design, construction, restoration or replacement costs, **attorney fees and expert witness fees** from the Department.

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§ 88.129. Revegetation: standards for successful revegetation.

* * * * *

(e) When the approved postmining land use is cropland, the approved standard shall be the average yields per acre for the crop and soil type as specified in the Soil Surveys of the United States Department of Agriculture [**Soil**] **Natural Resources** Conservation Service. The productivity or yield of the mined area shall be equal to or greater than the approved standard for the last two consecutive growing seasons of the extended period of responsibility established in § 86.151 (relating to period of liability). Productivity or yield shall be considered equal if production or yield is at least 90% of the approved standard.

(f) Standards for determining success of restoration on prime farmlands soils shall be based upon the soil surveys and soil interpretations and the latest yield data available from the United States Department of Agriculture [**Soil**] **Natural Resources** Conservation Service.

* * * * *

§ 88.131. Cessation of operations: temporary.

[(a) Operations that are temporarily ceased but are to be resumed under the permit, shall be effectively secured. Temporary abandonment, including such factors as equipment removal from the site for reasons of security or maintenance, does not relieve the operator of the obligations to comply with any provision of the permit. Temporary cessation of an operation may not exceed 90 days unless approved by the Department.]

(b) As soon as it is known that the operation will temporarily cease for more than 30 days, the operator shall submit a notice of intention to temporarily cease the operation. The notice shall include a statement of the exact number of acres which will have been affected in the permit area, the extent and kind of reclamation of those areas, and identification of the backfilling, regrading, revegetation, monitoring and water treatment activities that will continue during the temporary cessation.]

- (a) Before temporary cessation status of operations for a period of 30 days or more, an operator shall submit to the Department a notice of intention to temporarily cease operations. The notice shall include a statement of the exact number of acres affected in the permit area, the extent and kind of reclamation of the areas and identification of the backfilling, regrading, revegetation, environmental monitoring, and water treatment activities that will continue during the temporary cessation status.**
- (b) Temporary cessation status of operations does not relieve the operator of the obligations to comply with the acts as defined in § 86.1, chapters 86-90, or the approved permit, including the obligation to submit an application for permit renewal at least 180 days before the expiration of the existing permit. The Department may enforce these obligations during the temporary cessation status of operations.**
- (c) Temporary cessation status will end with the resumption of coal extraction. Any subsequent notices of temporary cessation status must include updated information outlined in paragraph (a).**
- (d) Temporary cessation status will terminate where the Department finds a failure to comply with the acts as defined in § 86.1, chapters 86-90, or the approved permit. Termination of temporary cessation status due to failure to comply with the acts as defined in § 86.1, chapters 86-90, or the approved permit will place the mining operation in permanent cessation status, subject to the provisions of § 88.132 (cessation of operations: permanent).**

**Subchapter C. ANTHRACITE BANK REMOVAL AND RECLAMATION:
MINIMUM ENVIRONMENTAL PROTECTION PERFORMANCE STANDARDS**

§ 88.187. Hydrologic balance: effluent standards.

* * * * *

(f) In addition to the requirements of subsections (a)—(e), the discharge of water from areas disturbed by mining activities shall comply with Chapters 91—93, 95, 96, 97 (reserved) and 102.

* * * * *

§ 88.188. Hydrologic balance: precipitation event exemption.

* * * * *

(b) [The 10-year, 24-hour precipitation event for specific areas in this Commonwealth are listed as follows:

<i>County</i>	<i>Rainfall (inches) 10 Yr.</i>
Bradford	4.2
Carbon	4.8
Columbia	4.6
Dauphin	4.8
Lackawanna	4.7
Lebanon	4.8
Luzerne	4.7
Northumberland	4.6
Schuylkill	4.7]

The 10-year, 24-hour precipitation event for specific areas in this Commonwealth shall be determined by reference to data provided by the National Oceanic Atmospheric Administration or equivalent resources.

(c) For the permittee to demonstrate that the **10-year, 24-hour precipitation** event [listed in subsection (b)] has for [his] **the** mine area been exceeded, or that dry weather flow conditions did not exist, the permittee shall do one of the following:

* * * * *

(4) Prepare an analysis identifying the runoff area tributary to the treatment facility and compare the actual runoff as measured and depicted by the flow measuring device with

the runoff expected from the 10-year, 24-hour precipitation event specified for the mine area [in subsection (b)].

* * * * *

§ 88.193. Hydrologic balance: collection ponds within disturbed areas.

* * * * *

(b) The ponds or collection areas shall be capable of treating the runoff. Runoff shall be calculated using the [Soil]Natural Resources Conservation Service methods.

* * * * *

§ 88.197. Hydrologic balance: ponds, embankments and impoundments—design, construction and maintenance.

* * * * *

(b) The design, construction and maintenance of dams, ponds, embankments and impoundments that are not of the class of subsection (a) shall achieve the minimum design criteria contained in United States [Soil] Natural Resources Conservation Service’s Pennsylvania Field Office Technical Guide, Section IV, Standards 350 “Sediment Basin” and Standard 378, “Pond,” as amended. In addition to the requirements in “Sediment Basin,” a minimum static safety factor of 1.3 is required.

§ 88.198. Hydrologic balance: coal processing waste dams and embankments.

A dam and embankment constructed of coal processing waste or intended to impound coal processing waste, shall meet the criteria established by Chapter 105 (relating to dam safety and waterway management) and the United States [Soil] Natural Resources Conservation Service’s *Pennsylvania Field Office Technical Guide, Section IV, and Standard 378 ‘Pond,’* as applicable.

§ 88.202. Hydrologic balance: surface water monitoring.

(a) In addition to the monitoring and reporting requirements established by the Department under Chapter [92] 92a (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance), surface water shall be monitored to measure and record accurately the water quantity and quality of the discharges from the permit area and the effect of the discharge on the receiving waters. Surface water shall be monitored for 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 § 88.49 (relating to protection of hydrologic balance). At a minimum, total dissolved solids or specific conductance corrected to 25°C, total

suspended solids, pH, acidity, alkalinity, total iron, total manganese, sulfates and flow shall be monitored and reported to the Department every 3 months for each monitoring location.

* * * * *

§ 88.217. Vegetation: standards for successful vegetation.

* * * * *

(e) When the approved postmining land use is cropland, the approved standard shall be the average yields per acre for the crop and soil type as specified in the Soil Surveys of the United States Department of Agriculture **[Soil] Natural Resources** Conservation Service. The productivity or yield of the mined area shall be equal to or greater than the approved standard for the last two consecutive growing seasons of the extended period of responsibility established in § 86.151 (relating to period of liability). Productivity or yield shall be considered equal if production or yield is at least 90% of the approved standard.

(f) Standards for determining success of restoration on prime farmlands soils shall be based upon the soil surveys and soil interpretations and the latest yield data available from the United States Department of Agriculture **[Soil] Natural Resources** Conservation Service.

* * * * *

§ 88.219. Cessation of operations: temporary.

[(a) Operations that are temporarily ceased but are to be resumed under the permit, shall be effectively secured. Temporary abandonment, including factors such as equipment removal from the site for reasons of security or maintenance, does not relieve the operator of the obligations to comply with any provision of the permit. Temporary cessation of an operation may not exceed 90 days unless approved by the Department.]

(b) As soon as it is known that the operation will temporarily cease for more than 30 days, the operator shall submit a notice of intention to temporarily cease the operation. The notice shall include a statement of the exact number of acres which will have been affected in the permit area; the extent and kind of reclamation of those areas; and identification of the backfilling, regrading, revegetation, monitoring and water treatment activities that will continue during the temporary cessation.]

(a) Before temporary cessation status of operations for a period of 30 days or more, an operator shall submit to the Department a notice of intention to temporarily cease operations. The notice shall include a statement of the exact number of acres affected in the permit area, the extent and kind of reclamation of the areas and

identification of the backfilling, regrading, revegetation, environmental monitoring, and water treatment activities that will continue during the temporary cessation status.

- (b) Temporary cessation status of operations does not relieve the operator of the obligations to comply with the acts as defined in § 86.1, chapters 86-90, or the approved permit, including the obligation to submit an application for permit renewal at least 180 days before the expiration of the existing permit. The Department may enforce these obligations during the temporary cessation status of operations.
- (c) Temporary cessation status will end with the resumption of coal extraction. Any subsequent notices of temporary cessation status must include updated information outlined in paragraph (a).
- (d) Temporary cessation status will terminate where the Department finds a failure to comply with the acts as defined in § 86.1, chapters 86-90, or the approved permit. Termination of temporary cessation status due to failure to comply with the acts as defined in § 86.1, chapters 86-90, or the approved permit will place the mining operation in permanent cessation status, subject to the provisions of § 88.220 (cessation of operations: permanent).

Subchapter D. ANTHRACITE REFUSE DISPOSAL: MINIMUM ENVIRONMENTAL PROTECTION PERFORMANCE STANDARDS

§ 88.292. Hydrologic balance: effluent standards.

* * * * *

(f) In addition to the requirements of subsections (a)—(e), the discharge of water from areas disturbed by mining activities shall comply with this title, including Chapters 91—93, 95, 96, 97 (reserved) and 102.

§ 88.293. Hydrologic balance: precipitation event exemption.

* * * * *

(b) [The 1-year and 10-year; 24-hour precipitation events for specific areas in this Commonwealth are listed as follows:

<i>County</i>	<i>Rainfall (inches)</i>	
	<i>1-Year</i>	<i>10 Year</i>
Bradford	2.3	4.2
Carbon	2.5	4.8
Columbia	2.4	4.6
Dauphin	2.5	4.8
Lackawanna	2.4	4.7
Lebanon	2.5	4.8
Luzerne	2.4	4.7
Northumberland	2.4	4.6
Schuylkill	2.5	4.7]

The 1-year and 10-year; 24-hour precipitation events for specific areas in this Commonwealth shall be determined by reference to data provided by the National Oceanic Atmospheric Administration or equivalent resources.

(c) For the permittee to demonstrate that the [10-year, 24-hour precipitation] event [listed in subsection (b)] has for [his] the mine area been exceeded, or that dry weather flow conditions did not exist, the permittee shall comply with one of the following:

- (1) Collect 24-hour rainfall information from official United States Weather Bureau Stations within a 25-mile distance—radius—of the site.
- (2) Calculate the estimated rainfall event for the site, by appropriate interpolation of the data collected under paragraph (1). Appropriate interpolation shall be accomplished by the following:
 - (i) Preparing a verified copy of the chart or readout from a Department approved flow measuring device which continuously records the influent to the permitted treatment facility. The device shall be approved by the Department in writing prior to the rainfall event for which the exemption is sought and shall be secured to prevent tampering and acts of third parties.
 - (ii) Preparing an analysis identifying the runoff area tributary to the treatment facility, and compare the actual runoff as measured and depicted by the flow measuring device with the runoff expected from the 1-year or 10-year, 24-hour rainfall event specified for the mine area[**in subsection (b)**].

* * * * *

(4) Prepare an analysis identifying the runoff area tributary to the treatment facility, and compare the actual runoff as measured and depicted by the flow measuring device with the runoff expected from the 1-year or 10-year, 24-hour rainfall event specified for the mine area[**in subsection (b)**].

* * * * *

**§ 88.302. Hydrologic balance: dams, ponds, embankments and impoundments—
design, construction and maintenance.**

* * * * *

(b) The design, construction and maintenance of dams, ponds, embankments and impoundments that are not of the class of subsection (a) shall achieve the minimum design criteria contained in United States **[Soil] Natural Resources** Conservation Service’s Pennsylvania Field Office Technical Guide, Section IV, Standards 350 “Sediment Basin” and 378, “Pond,” as amended. In addition to the requirements in “Sediment Basin,” a minimum static safety factor of 1.3 is required.

§ 88.303. Hydrologic balance: coal processing waste dams and embankments.

A dam and embankment constructed of coal processing waste or intended to impound coal processing waste, shall meet the requirement criteria established under Chapter 105 (relating to dam safety and waterway management) and the United States **[Soil] Natural Resources** Conservation Service’s *Pennsylvania Field Office Technical Guide, Section IV, Standard 378, “Pond”*, as applicable.

§ 88.306. Hydrologic balance: surface water monitoring.

(a) In addition to the monitoring and reporting requirements established by the Department under Chapter **[92] 92a** (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance), surface water shall be monitored to measure and record accurately the water quantity and quality of the discharges from the permit area and the effect of the discharge on the receiving waters. Surface water shall be monitored for 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 § 88.49 (relating to protection of hydrologic balance). At a minimum, total dissolved solids or specific conductance corrected to 25°C, total suspended solids, pH, acidity, alkalinity, total iron, total manganese, sulfates and flow shall be monitored and reported to the Department every 3 months for each monitoring location.

* * * * *

§ 88.330. Revegetation: standards for successful revegetation.

* * * * *

(e) When the approved postmining land use is cropland, the approved standard shall be the average yields per acre for the crop and soil type as specified in the Soil Surveys of

the United States Department of Agriculture, [**Soil**] **Natural Resources** Conservation Service. The productivity or yield of the mined area shall be equal to or greater than the approved standard for the last two consecutive growing seasons of the extended period of responsibility established in § 86.151 (relating to period of liability). Productivity or yield shall be considered equal if production or yield is at least 90% of the approved standard.

(f) Standards for determining success of restoration on prime farmlands soils shall be based upon the soil surveys and soil interpretations and the latest yield data available from the United States Department of Agriculture [**Soil**] **Natural Resources** Conservation Service.

* * * * *

§ 88.332. Cessation of operations: temporary.

{(a) As soon as it is known that the operation will temporarily cease for more than 30 days, the operator shall submit a notice of intention, in writing, to temporarily cease the operation. The notice shall include a statement of the exact number of acres which will have been affected in the permit area, the extent and kind of reclamation of those areas, and identification of the backfilling, regrading, revegetation, monitoring and water treatment activities that will continue during the temporary cessation. The system for preventing precipitation from contacting the coal refuse shall be installed when the temporary cessation exceeds 90 days. The Department may approve a longer period, not to exceed 1 year, ~~under subsection (b)~~ CONSISTENT WITH SECTION 6.1(i) OF THE COAL REFUSE DISPOSAL CONTROL ACT, 52 P.S. § 30.56a(i).

(b) Temporary cessation of an operation may not exceed 90 days unless the Department approves a longer period for reasons of seasonal shutdown or labor strike.

(c) Temporary cessation does not relieve the operator of the obligation to comply with any provisions of the permit.}

~~(a) Before temporary cessation status of operations for a period of 30 days or more, an operator shall submit to the Department a notice of intention to temporarily cease operations. The notice shall include a statement of the exact number of acres affected in the permit area, the extent and kind of reclamation of the areas and identification of the backfilling, regrading, revegetation, environmental monitoring, and water treatment activities that will continue during the temporary cessation status.~~

~~(b) Temporary cessation status of operations does not relieve the operator of the obligations to comply with the acts as defined in § 86.1, chapters 86-90, or the approved permit, including the obligation to submit an application for permit renewal at least 180 days before the expiration of the existing permit. The~~

~~**Department may enforce these obligations during the temporary cessation status of operations.**~~

~~**(e) Temporary cessation status will end with the resumption of coal extraction. Any subsequent notices of temporary cessation status must include updated information outlined in paragraph (a).**~~

~~**(d) Temporary cessation status will terminate where the Department finds a failure to comply with the acts as defined in § 86.1, chapters 86-90, or the approved permit. Termination of temporary cessation status due to failure to comply with the acts as defined in § 86.1, chapters 86-90, or the approved permit will place the mining operation in permanent cessation status, subject to the provisions of § 87.158 (cessation of operations: permanent).**~~

Subchapter F. ANTHRACITE UNDERGROUND MINES

§ 88.491. Minimum requirements for information on environmental resources.

* * * * *

(k) *Preapplication investigation.* The applicant shall conduct a preapplication investigation of the proposed permit area to determine whether lands within the area may be prime farmland.

(1) Land will not be considered prime farmland if the applicant can demonstrate one of the following:

(i) The land has not been historically used for cropland.

(ii) The slope of the land is 10% or greater.

(iii) There are no soil map units that have been designated prime farmland by the United States Department of Agriculture [**Soil**] **Natural Resources** Conservation Service, on the basis of a soil survey of lands within the permit area.

(iv) The area of prime farmland is minimal in size—less than 5 acres—and has been or will be in use for an extended period of time—more than 10 years.

(2) If the applicant determines after investigation that all or part of the lands in the proposed permit area are not prime farmland, the applicant shall submit with the permit application a request for a negative determination showing that the lands meet one of the criteria of paragraph (1).

(3) If the investigation indicates that lands within the proposed permit area may be prime farmlands, the applicant shall contact the United States Department of Agriculture

[Soil] Natural Resources Conservation Service to determine if a soil survey exists for those lands and whether the applicable soil map units have been designated as prime farmlands. If no soil survey has been made for the lands within the proposed area, the applicant shall cause a survey to be made.

(4) When a soil survey as required in paragraph (3) includes soil map units that have been designated as prime farmlands, the applicant shall submit with the permit application a soil survey of the proposed permit area according to the standards of the National Cooperative Soil Survey and in accordance with the procedures set forth in the United States Department of Agriculture Handbooks 436 (Soil Taxonomy, 1975) and 18 (Soil Survey Manual, 1951) as amended. The soil survey shall include a map unit and representative soil profile description as determined by the United States **[Soil] Natural Resources** Conservation Service for each prime farmland soil within the proposed permit area unless other representative descriptions from the locality, prepared in conjunction with the National Cooperative Soil Survey are available and their use is approved by the State Conservationist, United States **[Soil] Natural Resources** Conservation Service.

(5) When a soil survey as required in paragraph (3) includes soil map units that have not been designated as prime farmland after review by the United States Department of Agriculture **[Soil] Natural Resources** Conservation Service, the applicant shall submit with the permit application a request for negative determination for nondesignated land establishing compliance with paragraph (1).

§ 88.493. Minimum environmental protection performance standards.

A person who conducts underground mining activities shall comply with the performance standards and design requirements of this section. The following performance standards shall be met:

* * * * *

(8) Standards for determining success of restoration on prime farmland soils shall be based upon the soil surveys and soil interpretations and the latest yield data available from the United States Department of Agriculture **[Soil] Natural Resources** Conservation Service. Soil productivity for prime farmland shall be returned to 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 under § 88.491(k) (relating to minimum requirements for information on environmental resources).

* * * * *

Subchapter G. ANTHRACITE SURFACE MINING ACTIVITIES AND ANTHRACITE BANK REMOVAL AND RECLAMATION ACTIVITIES: MINIMUM REQUIREMENTS FOR REMINING AREAS WITH POLLUTION DISCAHRGES

§ 88.502. Definitions.

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise:

* * * * *

Encountered discharge—

(i) A pre-existing discharge intercepted in the course of active surface mining activities, including, but not limited to, overburden removal, coal extraction and backfilling, or that occurs in the pit, any mining-related conveyance, sedimentation pond or treatment pond.

(ii) The term does not include diversions of surface water and shallow groundwater flow from areas undisturbed by the implementation of the pollution abatement plan which would otherwise drain into the affected area so long as they are designed, operated and maintained in accordance with § 88.95(b)—(g), § 88.190(b)—(g) or [~~§ 88.295(b)—(g)~~] ~~§ 88.295(b)—(i)~~ (relating to hydrologic balance: diversions; hydrologic balance: diversions; and hydrologic balance: diversions and conveyances), as applicable.

* * * * *

§ 88.507. Treatment of discharges.

* * * * *

(c) For purposes of subsections (a) and (b), the term "encountered" may not be construed to mean diversions of surface water and shallow groundwater flow from areas undisturbed by the implementation of the pollution abatement plan which would otherwise drain into the affected area, so long as the diversions are designed, operated and maintained under [~~§§ 88.95(b), 88.190(b) and 88.295(b)~~] ~~§§ 88.95(b)—(g), 88.190(b)—(g) and 88.295(b)—(i)~~ (relating to hydrologic balance: diversions; hydrologic balance: diversions; and hydrologic balance: diversions and conveyances).

* * * * *

§ 88.508. Request for bond release.

Sections 86.172(c) and 88.509 (relating to criteria for release of bond; and criteria and schedule for release of bonds on pollution abatement areas) apply to the release of bonds for pollutional abatement areas authorized by this subchapter. Section [~~86.172(a), (b) and (d)~~] ~~86.172(a) and (b)~~ shall be inapplicable to the release of bonds.

CHAPTER 89. UNDERGROUND MINING OF COAL AND COAL PREPARATION FACILITIES

Subchapter B. OPERATIONS

PERFORMANCE STANDARDS

§ 89.52. Water quality standards, effluent limitations and best management practices.

* * * * *

(f) Postmining polluttional discharges.

(1) If a postmining polluttional discharge occurs, the discharger shall immediately provide interim treatment to comply with the Group A effluent requirements in subsection (a), including modifications authorized or required under subsection (e), (g) or (h). The discharger shall also take whatever measures are necessary and available to abate the discharge, including modifying the operation and reclamation plan for the mining activity.

(2) If the discharge continues to exist, after implementation of the abatement measures required under paragraph (1), the discharger shall make provisions for sound future treatment of the discharge to achieve the Group A effluent requirements in subsection (c), including modifications authorized or required under subsection (e) or (h). If the untreated discharge can be adequately treated using a passive treatment system, **[paragraph (3) applies in lieu of the Group A effluent requirements of subsection (a). Discharges which can be adequately treated using a passive treatment system include, but are not limited to:**

(i) Discharges with a pH which is always greater than 6.0 and an alkalinity which always exceeds the acidity.

(ii) Discharges with an acidity which is always less than 100 milligrams per liter, an iron content which is always less than 10 milligrams per liter, a manganese content which is always less than 18 milligrams per liter and a flow rate which is always less than 3 gallons per minute.

(iii) Discharges with a net acidity always less than 300 milligrams per liter which is calculated by subtracting the alkalinity of the discharge from its acidity.

(3) A passive treatment system authorized under paragraph (2) shall comply with the following effluent requirements:

(i) The system shall reduce the iron concentration by at least 90% or by that percentage necessary to achieve the Group A effluent requirements in subsection (c), whichever percentage is less.

(ii) The system shall produce an effluent alkalinity which exceeds effluent acidity.

(4) In addition to achieving the effluent requirements [of paragraphs (2) and (3)], the passive treatment system shall be designed and constructed to accomplish the following:

(i) Prevent discharge of mine drainage into the groundwater.

(ii) Prevent extraneous sources of groundwater and surface water runoff from entering the treatment system.

(iii) Hydraulically handle the highest average monthly flow rate which occurs during a 12-month period.

(iv) Have inlet and outlet structures which will allow for flow measurement and water sampling.

(v) Prevent to the maximum extent practicable physical damage, and associated loss of effectiveness, due to wildlife and vandalism.

(vi) Be of a capacity so that it will operate effectively and achieve the required effluent quality for 15 to 25 years before needing to be replaced.

~~(5)~~ (3) [The] Any passive treatment system shall be designed by, and constructed under the supervision of, a qualified professional knowledgeable in the subject of passive treatment of mine drainage.

* * * * *

(h) *Additional requirements.* In addition to the requirements of subsections (c)—(g), the discharge of water from the permit area shall comply with this title, including Chapters 91—93, 95, 96, 97 (reserved) and 102.

* * * * *

§ 89.53. Precipitation event exemption.

* * * * *

(b) [The 10-year, 24-hour rainfall events for specific areas in this Commonwealth are as follows, in inches:

<i>County</i>	<i>Inches 10 yr</i>
Allegheny	3.9
Armstrong	3.9
Beaver	3.8
Bedford	4.5
Blair	4.7
Bradford	4.2
Butler	3.8
Cambria	4.21
Cameron	4.0
Centre	4.3
Clarion	3.7
Clearfield	4.0
Clinton	4.2
Crawford	3.6
Elk	3.9
Fayette	4.1
Forest	3.8
Franklin	4.8
Fulton	4.6
Greene	3.9
Huntingdon	4.6
Indiana	4.0
Jefferson	3.9
Lawrence	3.7
Lycoming	4.3
McKean	3.9
Mercer	3.7
Potter	4.0
Somerset	4.3
Tioga	4.2
Venango	3.7
Warren	3.8
Washington	3.9
Westmoreland	4.0
Bradford	4.2

Carbon	4.8
Columbia	4.6
Dauphin	4.8
Lackawanna	4.7
Lebanon	4.8
Luzerne	4.7

<i>County</i>	<i>Inches</i>
	<i>10 yr</i>
Northumberland	4.6
Schuylkill	4.7
Sullivan	4.2]

The 10-year, 24-hour rainfall events for specific areas in this Commonwealth shall be determined by reference to data provided by the National Oceanic Atmospheric Administration or equivalent resources.

(c) For the permittee to demonstrate that the **10-year, 24-hour** event [listed in **subsection (b)**] has for [his] **the** mine area been exceeded, or that dry weather flow conditions did not exist, the permittee shall comply with one of the following:

* * * * *

(2) The permittee shall comply with the following:

(i) Prepare a verified copy of the chart or readout from a Department-approved flow measuring device which continuously records the influent to the permitted treatment facility. The device shall be approved by the Department in writing prior to the rainfall event for which the exemption is sought and shall be secured to prevent tampering and acts of third parties.

(ii) Prepare an analysis identifying the runoff area tributary to the treatment facility, and compare the actual runoff as measured and depicted by the flow measuring device with the runoff expected from the 10-year, 24-hour rainfall event specified for the mine area[**in subsection (b)**].

* * * * *

§ 89.59. Surface water and groundwater monitoring.

(a) Surface water and groundwater monitoring shall be conducted under § 89.34 (relating to hydrology) and with the monitoring plan contained in the permit. At a

minimum, surface water and groundwater monitoring shall include the following conditions:

* * * * *

(3) In addition to the monitoring and reporting requirements in Chapter [92] 92a (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance), surface water shall be monitored accurately to measure and record the water quantity and quality of discharges from the permit area and the effect of the discharges on the receiving waters. Surface water shall be monitored for 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 § 89.36 (relating to protection of hydrologic balance). At a minimum, total dissolved solids or specific conductance corrected to 25°C, total suspended solids, total iron, total manganese, acidity, alkalinity, pH, sulfates and flow shall be monitored and reported to the Department at least every 3 months for each monitoring location.

* * * * *

Subchapter C. RECLAMATION
PERFORMANCE STANDARDS

§ 89.86. Revegetation.

* * * * *

(e) Standards for successful revegetation shall be as follows:

(1) When the approved postmining land use is cropland:

(i) The standards for successful revegetation shall be based upon crop productivity, yield or soil tests.

(ii) The approved standard shall be the average yield per acre for the crop and soil type as specified in the Soil Surveys of the United States Department of Agriculture [**Soil**] **Natural Resources** Conservation Service.

(iii) The productivity or yield of the mined area shall be equal to or greater than the approved standard for the last 2 consecutive growing seasons of the 5-year responsibility period established in this section. Productivity or yield shall be considered equal if production or yield is at least 90% of the approved standard.

* * * * *

Subchapter D. STRUCTURAL REQUIREMENTS FOR IMPOUNDMENT

PERFORMANCE STANDARDS

§ 89.112. Impoundments.

An impoundment shall be designed in accordance with the United States [soil] Natural Resources Conservation Service’s Pennsylvania Field Office Technical Guide, Section IV, Standards 350, “Sediment Basin,” and 378, “Pond,” or United States [Soil] Natural Resources Conservation Service Technical Release No. 60, “Earth Dams and Reservoirs,” whichever is applicable. The standards are incorporated by reference. In addition to the requirements in “Sediment Basin,” a minimum static safety factor of 1.3 is required. Each impoundment shall be certified that it has been constructed and is being maintained as designed and in accordance with the approved plan and all applicable performance standards. These structures shall also meet the following requirements:

* * * * *

Subchapter E. PRIME FARMLANDS

INFORMATION REQUIREMENTS

§ 89.121. Prime farmland investigation.

(a) The applicant shall contact the county office of the [Soil] Natural Resources Conservation Service to determine whether lands within the area may be prime farmland.

(b) Land shall not be considered prime farmland when the applicant can demonstrate one or more of the following:

* * * * *

(5) On the basis of a soil survey of the lands proposed to be affected by surface operations or facilities, there are no soil map units that have been designated prime farmland by the United States [Soil] Natural Resources Conservation Service; or

* * * * *

(d) The applicant shall submit the results of the investigation along with certification by the [Soil] Natural Resources Conservation Service that the conclusions are correct.

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§ 89.122. Prime farmlands.

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(b) A person who conducts or intends to conduct underground mining activities on prime farmlands historically used for cropland, except those persons exempted under subsection (a), shall submit a plan as part of the permit application for the mining and restoration of the land. A plan shall contain, at a minimum, 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 in *United States Department of Agriculture Handbooks 436 (Soil Taxonomy, 1975) and 18 (Soil Survey Manual, 1951)*. The soil survey shall include a map unit and representative soil profile description as determined by the United States **[Soil] Natural Resources** Conservation Service for each prime farmland soil within the permit area unless other representative descriptions from the locality, prepared in conjunction with the National Cooperative Soil Survey, are available and their use is approved by the State Conservationist, United States **[Soil] Natural Resources** Conservation Service. The soil profile description shall include, but not be limited to, soil horizon depths, pH and range of soil densities for each prime farmland soil unit within the proposed permit area. The Department may require the applicant 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 § § 89.131—89.133 (relating to soil removal; soil stockpiling; and soil replacement).

* * * * *

(8) Standards for determining success of revegetation on prime farmland soils shall be based upon the soil surveys and soil interpretations and the latest yield data available from the United States Department of Agriculture **[Soil] Natural Resources** Conservation Service. The current estimated yields under equivalent levels of management for each soil map unit and for each crop shall be used by the Department as the predetermined target level for determining success of revegetation. The target yields may be adjusted by the Department in consultation with the Secretary of Agriculture before approval of the permit application.

(c) Before a permit is issued for areas that include prime farmlands, the Department will consult the **[Soil] Natural Resources** Conservation Service. The **[Soil] Natural Resources** Conservation Service shall have the opportunity for review and comment of the proposed method of soil reconstruction in the plan submitted under subsection (b).

(d) When the underground mining activities are being conducted on prime farmland, a permit for the mining and reclamation operation may be granted by the Department, if it first finds, in writing, that:

* * * * *

(4) The permit incorporates as specific conditions the contents of the plan submitted under subsection (b), after consideration of any revisions to the plan suggested by the **[Soil] Natural Resources** Conservation Service under subsection (c).

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PERFORMANCE STANDARDS

§ 89.134. Revegetation.

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(c) Standards for determining success of restoration on prime farmlands soils shall be based upon the soil surveys and soil interpretations and the latest yield data available from the United States Department of Agriculture [**Soil**] **Natural Resources** Conservation Service.

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CHAPTER 90. COAL REFUSE DISPOSAL

**Subchapter B. MINIMUM ENVIRONMENTAL RESOURCES INFORMATION
REQUIRED IN PERMIT APPLICATIONS FOR COAL REFUSE DISPOSAL**

§ 90.22. Prime farmland investigation.

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(b) Land will not be considered prime farmland when the applicant can demonstrate one or more of the following:

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(5) There are no soil map units that have been designated prime farmland by the United States [**Soil**] **Natural Resources** Conservation Service, on the basis of a soil survey of the lands proposed to be affected by coal refuse disposal activities.

* * * * *

(d) If the investigation indicates that lands within the proposed area to be affected by coal refuse disposal activities may be prime farmlands, the applicant shall contact the United States [**Soil**] **Natural Resources** Conservation Service to determine if these lands have a soil survey and whether the applicable soil map units have been designated prime farmlands. If a soil survey has not been made for these lands, the applicant shall cause a survey to be made.

(1) When a soil survey as required in this subsection contains soil map units which have been designated as prime farmlands, the applicant shall submit a soil survey of the proposed permit area according to the standards of the National Cooperative Soil Survey and in accordance with the procedures in the *United States Department of Agriculture*

Handbooks 436 (Soil Taxonomy, 1975) and 18 (Soil Survey Manual, 1951). The soil survey shall include a map unit and representative soil profile description as determined by the United States [Soil] Natural Resources Conservation Service for each prime farmland soil within the proposed permit area, unless other representative descriptions from the locality, prepared in conjunction with the National Cooperative Soil Survey, are available and their use is approved by the State Conservationist, United States [Soil] Natural Resources Conservation Service.

(2) When a soil survey as required in this subsection contains soil map units which have not been designated, after review by the United States [Soil] Natural Resources Conservation Service, as prime farmland, the applicant shall submit a request for negative determination for nondesignated land with the permit application establishing compliance with subsection (b).

Subchapter D. PERFORMANCE STANDARD FOR COAL REFUSE DISPOSAL

§ 90.102. Hydrologic balance: water quality standards, effluent limitations and best management practices.

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(f) *Additional requirements.* In addition to the requirements of subsections (a)—(e), the discharge of water from coal refuse disposal activities shall comply with this title, including Chapters 91—93, 95, 96, 97 (reserved) and 102.

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§ 90.103. Precipitation event exemption.

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(b) [The 1-year and 10-year 24-hour rainfall events for specific areas in this Commonwealth are listed as follows:

<i>County</i>	<i>Rainfall (inches)</i>	
	<i>1-Year</i>	<i>10 Year</i>
Allegheny	2.3	3.9
Armstrong	2.3	3.9
Beaver	2.3	3.8
Bedford	2.4	4.5
Blair	2.4	4.7
Bradford	2.3	4.2

Butler	2.3	3.8
Cambria	2.4	4.2
Cameron	2.3	4.0
Centre	2.3	4.3
Clarion	2.2	3.7
Clearfield	2.3	4.0
Clinton	2.3	4.2
Crawford	2.2	3.6
Elk	2.3	3.9
Fayette	2.4	4.1
Forest	2.2	3.8
Franklin	2.4	4.8
Fulton	2.4	4.6
Greene	2.3	3.9
Huntingdon	2.4	4.6
Indiana	2.3	4.0
Jefferson	2.3	3.9
Lawrence	2.2	3.7
Lycoming	2.4	4.3
McKean	2.2	3.9
Mercer	2.2	3.7
Potter	2.3	4.0
Somerset	2.4	4.3
Sullivan	2.4	4.2
Tioga	2.3	4.2
Venango	2.2	3.7
Warren	2.2	3.8
Washington	2.3	3.9
Westmoreland	2.3	4.0]

The 1-year and 10-year 24-hour rainfall events for specific areas in this Commonwealth shall be determined by reference to data provided by the National Oceanic Atmospheric Administration or equivalent resources.

(c) For the coal refuse disposal permittee to demonstrate that the event [listed in subsection (b)] has for [his] the mine area been exceeded, or that dry weather flow conditions did not exist, the permittee shall comply with paragraph (1), (2) or (3).

* * * * *

(2) Complying with the following:

(i) Prepare a verified copy of the chart or readout from a Department-approved flow measuring device which continuously records the influent to the permitted treatment facility. The device shall be approved by the Department in writing prior to the event for which the exemption is sought and shall be secure to prevent tampering and acts of third parties.

(ii) Prepare an analysis identifying the runoff area tributary to the treatment facility, and compare the actual runoff as measured and depicted by the flow measuring device with the runoff expected from the 1-year or 10-year, 24-hour precipitation event specified for the mine area[**in subsection (b)**].

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**§ 90.112. Hydrologic balance: dams, ponds, embankments and impoundments—
design, construction and maintenance.**

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(b) The design, construction and maintenance of dams, ponds, embankments and impoundments shall achieve the minimum design criteria contained in the United States **[Soil] Natural Resources** Conservation Service’s *Pennsylvania Field Office Technical Guide, Section IV, Standards 350 “Sediment Basin” and 378, “Pond,”* or United States **[Soil] Natural Resources** Conservation Service’s Technical Release No. 60, *Earth Dams and Reservoirs*, whichever is applicable. The standards are incorporated by reference. In addition to the requirements in “Sediment Basin,” a minimum static safety factor of 1.3 is required. These structures shall meet the following requirements:

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§ 90.113. Hydrologic balance: coal processing waste dams and embankments.

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(c) The design freeboard between the lowest point on the embankment crest and the maximum water elevation shall be at least 3 feet. The maximum water elevation shall be that determined by the freeboard hydrograph criteria contained in the United States **[Soil] Natural Resources** Conservation Service’s Technical Release No. 60, “*Earth Dams and Reservoirs.*” The standards contained therein are hereby incorporated by reference.

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§ 90.116. Hydrologic balance: surface water monitoring.

(a) In addition to the monitoring and reporting requirements established by the Department under Chapter [92] 92a (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance), surface water shall be monitored to accurately measure and record the water quantity and quality of the discharges from the permit area and the effect of the discharge on the receiving waters. Surface water shall be monitored for 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 § 90.35 (relating to protection of hydrologic balance). At a minimum, total dissolved solids or specific conductance corrected to 25°C, total suspended solids, pH, acidity, alkalinity, total iron, total manganese, sulfates and flow shall be monitored and reported to the Department at least every 3 months for each monitoring location.

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§ 90.159. Revegetation: standards for successful revegetation.

(a) When the approved postdisposal land use is cropland or as provided in subsection (c), the following apply:

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(2) The approved standard shall be the average yields per acre for the crop and soil type as specified in the soil surveys of the United States Department of Agriculture [**Soil**] **Natural Resources** Conservation Service.

* * * * *

§ 90.161. Prime farmland: special requirements.

(a) When the coal refuse disposal activities are being conducted on prime farmland historically used for cropland, a permit for the mining and reclamation operation may be granted by the Department if it first finds, in writing and after consultation with the [**Soil**] **Natural Resources** Conservation Service, that the applicant has demonstrated that:

* * * * *

(b) If a permit is granted under this section, the permit shall be specifically conditioned as containing the plan submitted under § 90.33 (relating to reclamation plan), including any revisions to that plan suggested by the United States [**Soil**] **Natural Resources** Conservation Service.

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§ 90.165. Prime farmland: revegetation.

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(c) Standards for determining success of restoration on prime farmland soils shall be based upon the soil surveys and soil interpretations and the latest yield data available from the United States Department of Agriculture [Soil] Natural Resources Conservation Service.

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Subchapter E. SITE SELECTION

§ 90.201. Definitions.

The following words and terms, when used in this subchapter, have the following meanings, unless the context clearly indicates otherwise:

Preferred site—A watershed polluted by acid mine drainage; a watershed containing an unreclaimed surface mine but which has no mining discharge; a watershed containing an unreclaimed surface mine with discharges that could be improved by the proposed coal refuse disposal operation; unreclaimed coal refuse disposal piles that could be improved by the proposed coal refuse disposal operation; [or] other unreclaimed areas previously affected by mining activities; or an area adjacent to or an expansion of an existing coal refuse disposal site.

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Subchapter F. COAL REFUSE DISPOSAL ACTIVITIES ON AREAS WITH PRE-EXISTING POLLUTIONAL DISCHARGES

§ 90.308. Request for bond release.

Sections 86.172(c) and 90.309 (relating to criteria for release of bond; and criteria and schedule for release of bonds on pollution abatement areas) apply to the release of bonds for pollutional abatement areas authorized by this subchapter. Section [86.172(a), (b) and (d)] 86.172(a) and (b) shall be inapplicable to the release of bonds.