

RULES AND REGULATIONS

Title 25—ENVIRONMENTAL PROTECTION

ENVIRONMENTAL QUALITY BOARD

[25 PA. CODE CHS. 86—90]

Coal Mine Permitting and Performance Standards

The Environmental Quality Board (Board) by this order adopts amendments to Chapters 86—90. The amendments address coal mine permitting requirements and various performance standards relating to coal mining.

This order was adopted by the Board at its meeting of January 20, 1998.

A. Effective Date

These amendments will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

B. Contact Persons

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C. Statutory Authority

These amendments are adopted under the rulemaking authority of section 4.2(a) of the Surface Mining Conservation and Reclamation Act (SMCRA) (52 P. S. § 1396.4b(a)); section 5(b) of The Clean Streams Law (CSL) (35 P. S. § 691.5(b)); section 3.2(a) of the Coal Refuse Disposal Control Act (CRDCA) (52 P. S. § 30.53b(a)); and section 1920-A of The Administrative Code of 1929 (71 P. S. § 510-20) which authorizes the Board to adopt regulations necessary for the Department to perform its work.

D. Background and Summary

This final-form rulemaking amends existing provisions relating to permitting and performance standards for surface coal mining, underground coal mining and coal refuse disposal operations. The permitting provisions being amended include modifying the criteria for permit approval; expanding upon circumstances when permit terms may be extended; expanding right of entry requirements to address circumstances where the mineral estate has been severed from the surface estate; revising a permit applicant's proof of publication requirement and adding an additional land use category. Performance standards being amended relate to coal exploration, casing and sealing drill holes, oil and gas well operator approval of mining activities within 125 feet (38.1 meters) of an oil or gas well, topsoil removal, general hydrology and effluent limits, use of explosives, grading, postmining land use, haul roads and access roads and auger mining. The amendments also modify the regulatory scope of Chapters 86—90 and amend provisions relating to bond

release after revegetation and bond release for remining areas with preexisting pollutional discharges.

This final-form rulemaking is the result of the Department's Regulatory Basics Initiative (RBI) which was initiated in August 1995 and Governor Ridge's Executive Order 1996-1, titled "Regulatory Review and Promulgation," dated February 6, 1996. Under the RBI, the Department solicited public input concerning existing regulations in the August 19, 1995, *Pennsylvania Bulletin*. Comments received by the Department and the Department's own review of the regulations under the RBI and Executive Order 1996-1 have identified the sections in this rulemaking which are more stringent than corresponding Federal requirements without a compelling and articulable State interest, imposing disproportionate economic costs, being too prescriptive or technology specific or lacking clarity. Additionally, the Department has inserted, when appropriate, measures in equivalent standard international units.

These regulatory changes were reviewed and discussed with the Mining and Reclamation Advisory Board (MRAB) which is the Department's advisory body for regulations pertaining to the surface mining of coal. A draft of the final-form rulemaking was reviewed and discussed with the MRAB's Regulation, Legislation and Technical Committee on October 23, 1997, and with the full MRAB on October 24, 1997. The MRAB concurred with the final rulemaking at a special meeting of the MRAB on November 7, 1997.

The following summary identifies the section of the regulations being amended along with a description of the specific change. Since most of the changes are being made so as to be no more stringent than Federal requirements, the corresponding Federal regulation for each section is also listed.

§ 86.2. Scope.

30 CFR 700.11

Subsection (a) is modified to correct grammatical errors. Subsection (b) was proposed to reflect exemptions from the definition of surface mining activities in the SMCRA. The Office of Surface Mining Reclamation and Enforcement (OSM) indicated subsection (b) is based upon SMCRA provisions which have not been approved by OSM and raised various issues with the SMCRA provisions. Consequently, subsection (b) is deleted.

§ 86.37(a)(4). Criteria for permit approval or denial/hydrologic balance.

30 CFR 773.15(c)(5)

The criterion relating to the probable cumulative impacts of mining on the hydrologic balance is revised to require that the mining be designed to prevent "material" damage to the hydrologic balance "outside" the proposed permit area. The current regulation does not include the term "material" and includes the term "within" the proposed permit area. This change is made to conform with the language of the corresponding Federal regulation and is not intended to lessen the requirements under the CSL and SMCRA for prevention of pollution to streams and other waters of this Commonwealth.

§ 86.31. Public notices of filing of permit applications.

30 CFR 713.13(a)

This section is amended by adding subsection (e) to provide for mine operator notification to oil and gas well owners when surface mining activities are proposed

within 125 feet (38.1 meters) of their oil or gas well. This provision is added on final rulemaking in response to comments on the proposed changes to §§ 87.93, 88.83, 88.283 and 90.93. The changes to §§ 87.93, 88.83, 88.283 and 90.93 are discussed within this section and Section E of this Preamble.

§ 86.32. Opportunity for submission of written comments or objections on the permit application. 30 CFR 773.13(b)

Subsection (a) is amended to provide the opportunity for oil and gas well owners (who receive notification under § 86.31(e)) to submit to the Department a description of measures the well owner believes are necessary to minimize damage, destruction or disruption of services provided by the oil or gas well which may be caused by the proposed surface mining activities. Subsection (a) is amended on final rulemaking in response to comments on the proposed changes to §§ 87.93, 88.83, 88.283 and 90.93. The changes to §§ 87.93, 88.83, 88.283 and 90.93 are discussed within this section and Section E of this Preamble.

§ 86.34. Informal conferences. 30 CFR 773.13(c)

Subsection (a) is amended to provide for oil and gas well owners (who receive notification under § 86.31(e)) to request informal conferences on permit applications. Subsection (a) is amended on final rulemaking in response to comments on the proposed changes to §§ 87.93, 88.83, 88.283 and 90.93. The changes to §§ 87.93, 88.83, 88.283 and 90.93 are discussed within this section and Section E of this Preamble.

§ 86.37(a)(6). Criteria for permit approval or denial/historic resources. 30 CFR 761.11(c) and 773.15(c)

The criterion that permit applicants demonstrate that mining activities will not adversely affect historic resources is modified to apply only to historic places actually listed on the National Register of Historic Places. The Department must still take into account the effect of the proposed mining activities on properties listed on or eligible for listing on the National Register of Historic Places. In addition, the Department's consideration must be documented in writing and may be supported by appropriate permit conditions or operational plan changes to protect historic resources or a documented decision that no additional protective measures are necessary. This amendment conforms with the corresponding Federal regulations.

§ 86.40(b). Permit term. 30 CFR 773.19(e)(2)(ii)

This subsection requires operators to begin mining activities within 3 years of issuance of a permit unless the operator shows that additional time is needed because of litigation. This amendment expands the reasons for extending the start of mining activities to include conditions which are beyond the control of the operator. This change matches similar provisions in the corresponding Federal regulation.

§ 86.64. Right of entry. 30 CFR 778.15

The requirement for permit applicants to demonstrate right of entry to conduct coal mining activities is amended to address circumstances where the mineral estate has been severed from the surface estate. Also, language is added to clarify the requirements for describing the documents which provide the applicant's legal right to enter and conduct coal mining activities. The corresponding Federal regulation contains the same requirements. The amendment also clearly states that the

Federal requirements for right of entry are in addition to those State law requirements arising under section 4 of SMCRA (52 P. S. § 1396.4).

§ 86.70. Proof of publication. 30 CFR 778.21

These amendments allow a permit applicant to demonstrate its intent to publish a notice in a local newspaper instead of submitting a statement from the newspaper. Additionally, the applicant may submit a copy of each weekly newspaper advertisement (that is, 4 copies) as an alternative to submitting a notarized proof of publication. These changes conform to the corresponding Federal regulation.

§ 86.132. Definitions (relating to coal exploration). 30 CFR 701.5

The definition of "substantially disturb," in the context of coal exploration, is modified to apply to significant impacts upon land, air or water resources. The current language refers to any impacts. The amended language is consistent with the Federal definition of "substantially disturb."

§ 86.133. General requirements. 30 CFR 772.11(a) and 772.12(a)

The limit for coal removal during coal exploration is changed from less than 250 tons (226 metric tons) of coal to 250 tons (226 metric tons) or less as found in Federal regulations.

§ 86.134. Coal exploration performance and design standards. 30 CFR 815.15

Requirements for measuring environmental characteristics during coal exploration, specifying who has responsibility for revegetating lands disturbed during exploration activities and placing limitations on vehicular travel on land where coal exploration occurs are deleted. These deletions eliminate overly prescriptive requirements.

§ 86.174(b). Standards for release of bonds. 30 CFR 800.40(c)(2)

This subsection is revised to clarify the standards for Stage 2 reclamation bond release. The current wording of this section has the potential for being misinterpreted relative to application of the standards for successful revegetation associated with Stage 2 bond release. This amendment applies a more general standard to be consistent with section 4(b)(2) of SMCRA and the corresponding Federal regulations.

§§ 87.1, 88.1 and 90.1. Definitions. 30 CFR 701.5

A category of "unmanaged natural habitat" is added to the list of recognized land uses included in the definition of "land use." This category is equivalent to the Federal land use definition for "undeveloped land or no current use or land management." This change provides a land use category which allows permit applicants to more realistically identify lands which remain in a basically unmanaged natural state. The change will provide more flexibility in approving land use changes.

§§ 87.62, 88.42 and 90.31. Operational information. 30 CFR 780.11

New paragraphs (that is, paragraph (4) for § 87.62 and paragraph (5) for §§ 88.42 and 90.31) are added which requires that the operation plan of a mining application demonstrate the notification requirements of § 86.31(e) have been satisfied. These paragraphs are added on final rulemaking in response to comments on the proposed changes to §§ 87.93, 88.83, 88.283 and 90.93. The

changes to §§ 87.93, 88.83, 88.283 and 90.93 are discussed within this section and Section E of this Preamble.

§§ 87.77(a), 88.56(a), 88.492(f)(1), 30 CFR 780.31(a)
89.38(b) and 90.40(a) Protection and 784.17(a)
of parks and historic places.

The requirement for a permit application to contain a description of measures for preventing or minimizing adverse impacts to public parks or historic places is changed to apply only to publicly owned parks. There are no changes made to the protections afforded historic places actually listed on the National Register of Historic Places. However, consistent with Federal regulations, the Department retains the authority to require the applicant to protect places eligible for listing on the National Register of Historic Places. These amendments are made so as to be no more restrictive than the corresponding Federal regulations.

§§ 87.93, 88.83, 88.283 and 90.93. 30 CFR 816.13
Casing and sealing of drill holes. and 817.13

The wording within §§ 87.93(a)(2) and 88.83(a)(2) for protection of the hydrologic balance is changed from "prevent to the maximum extent possible" to "minimize" disturbance to the prevailing hydrologic balance. These changes are not intended to lessen the requirements under the CSL and SMCRA for prevention of pollution to streams and other waters of this Commonwealth. The changes are made solely for purposes of having these sections conform with the current language in §§ 88.283 and 90.93 and the language of the corresponding Federal regulations.

The requirement in §§ 87.93(e), 88.83(e), 88.283(e) and 90.93(e) for having oil and gas well operators agree in writing to mining activities closer than 125 feet (38.1 meters) to a well was proposed to be deleted with no replacement language. Replacement language to these sections as well as changes to §§ 86.31, 86.32, 86.34, 87.62, 88.42 and 90.31 have been added at final rule-making and are discussed in Section E of this Preamble. The corresponding Federal regulations do not contain this requirement. Further, the reference in § 90.93(d) to the act regulating oil and gas well operations is being corrected.

§§ 87.97 and 90.97. Topsoil removal. 30 CFR 816.22
and 817.22

The provisions which allow for supplementing or substituting other materials for subsoil are changed to apply to topsoil in keeping with the corresponding Federal regulations.

§§ 87.101(a), 88.91(a), 88.291(a) and 30 CFR 816.41(a)
90.101(a). Hydrologic balance/ and 817.41(a)
general requirements.

The wording that calls for mining activities to be planned and conducted to protect the hydrologic balance is being amended. The phrase "prevent to the maximum extent possible" has been replaced with "minimize" as it concerns disturbances to the prevailing hydrologic balance within the permit area and adjacent area. Also, requirements are added for preventing material damage to the hydrologic balance outside the permit area and for the Department requiring measures to assure that the material damage is prevented. These amendments are made solely to conform with the language of the corresponding Federal regulations and are not intended to lessen the requirements under the CSL and SMCRA for prevention of pollution to streams and other waters of this Commonwealth.

§§ 87.102(a), 88.92(a), 88.187(a), 30 CFR 816.42
88.292(a), 89.52(c) and 90.102(a). and 817.42
Hydrologic balance/effluent and 40 CFR Part 434
standards.

The effluent limit for manganese is deleted for surface water runoff from storm events of less than or equal to a 10-year, 24-hour storm to be consistent with the corresponding Federal regulations.

§§ 87.106, 88.96, 88.191, 88.296 30 CFR 816.45
and 90.106. Hydrologic balance/ and 817.45
sediment control measures.

The wording which provides for the design, construction and maintenance of sediment control measures is changed from "prevent erosion to the maximum extent possible" to "minimize erosion to the extent possible," and from "prevent to the maximum extent possible" to "prevent to the extent possible" contributions of sediment to stream flow or runoff outside the affected area. These changes are made solely to conform with the language of the corresponding Federal regulations and are not intended to lessen the requirements under the CSL and SMCRA for prevention of pollution to streams and other waters of this Commonwealth.

§ 87.126(a)(1). Use of explosives/ 30 CFR 816.64(b)(1)
public notice of blasting schedule.

The requirement for the blasting schedule to be published in a newspaper is changed from not more than 20 days to not more than 30 days before beginning blasting. This amendment is made so as to be no more restrictive than the corresponding Federal regulations.

§ 87.127. Use of explosives/ 30 CFR 816.67(c)
surface blasting requirements. and 817.67(c)

The standard for fly rock from blasting is changed from no fly rock beyond the "line of property owned or leased by the permittee" to no fly rock beyond the "permit boundary." This change conforms with Federal requirements.

§§ 87.138, 89.65, 89.82 and 90.150. 30 CFR 816.9,
Protection of fish, wildlife and 816.97 and 817.97
related environmental values.

The language concerning protection of fish, wildlife and related environmental values is amended by replacing the word "prevent" disturbances and adverse impacts with the term "minimize to the extent possible" relative to disturbances and adverse impacts on these protected resources. Additional wording changes provide for roads to be located and operated to "avoid or minimize" instead of "prevent" impacts on fish and wildlife, and to "avoid and enhance where practicable or restore" instead of "prevent" disturbances to habitats of unusually high value to fish and wildlife. The new terminology is intended solely to track the language of the corresponding Federal regulations.

§§ 87.144 and 88.118. Backfilling 30 CFR 816.102
and grading/final slopes. and 817.102

Performance standards for construction of terraces and for final grading are deleted. These deletions eliminate unnecessarily prescriptive requirements.

§§ 87.146 and 89.87. Regrading 30 CFR 816.95
or stabilizing rills and gullies. and 817.95

The requirement to fill, grade or otherwise stabilize rills and gullies deeper than 9 inches (23 centimeters) is

more prescriptive than Federal requirements. The language of this section is rewritten to require that any rill or gully which is disruptive to the postmining land use or causing or contributing to a violation of water quality standards be filled, regraded or otherwise stabilized.

§§ 87.159, 88.133, 88.221, 88.334, 30 CFR 816.133.
89.88 and 90.166. *Postmining land use* and 817.133

The requirements to consider premining land management practices and historic use of the land when comparing premining to postmining land use, and to have plans for the postmining land use designed by a registered engineer are more stringent than the Federal regulations and are deleted.

§§ 87.160(a), 88.138(a), 88.231(a), 30 CFR 816.150(b)
88.335(a), 89.90(a) and 90.134(a). and 817.150(b)
Haul roads and access roads.

The phrase "prevent to the maximum extent possible" erosion and other pollution or damage is replaced with the Federal language to "control or prevent" erosion or other pollution or damage. These amendments are not intended to lessen the requirements under the CSL and SMCRA for prevention of pollution to streams and other waters of this Commonwealth.

§§ 87.166, 88.144, 88.237, 88.341 30 CFR 816.150(c)—(f)
and 90.140. *Haul road and access road/restoration.*

The time period for meeting various haul road and access road restoration standards is changed from "immediately" to "as soon as practicable" after the road is no longer needed for the mining activities. Also, the standard for restoration is being changed from "ripping, plowing and scarifying" the roadbed to "ripping or scarifying" the roadbed. These changes are being made so that the language of this section would be no more stringent than the corresponding Federal regulations.

§§ 87.173(a), 89.67(a) and 90.147(a). 30 CFR 816.181
Support facilities and utility installations.

These amendments delete the phrase "designed, constructed, maintained and used to prevent to the extent possible" which pertains to damage to fish, wildlife and related environmental values. The wording requires support facilities to be "located, maintained and used to minimize damage" to these resources. The language is equivalent to the terminology in the corresponding Federal regulations.

§ 87.174. *Steep slope operations.* 30 CFR 816.107
and 817.107

The requirement prohibiting unlined or unprotected drainage channels on backfilled areas with steep slopes unless approved by the Department is deleted. This requirement is unnecessarily prescriptive and is not found in the Federal regulations dealing with steep slope operations.

§ 87.176. *Auger mining.* 30 CFR 819.15

Existing subsection (d), which prohibits auger mining to the rise of the coal unless the mine operator demonstrates the augering will not pose a threat of water pollution, is deleted since it is redundant with the provisions of subsection (e). The amendment eliminates a technology specific requirement and imposes the obligation to make certain demonstrations with respect to adverse water quality impacts, fill stability, resource recovery and subsidence on persons conducting surface mining activities.

§§ 87.209 and 88.509. *Criteria and schedule for bond release on pollution abatement areas. No equivalent Federal regulation*

These sections relate to bond release on areas with preexisting pollutional discharges when remining was authorized under Chapter 87, Subchapter F and Chapter 88, Subchapter G. The maximum bond amount which may be released for completing backfilling, regrading and drainage control on pollution abatement areas is changed from 50% to 60%. Also, the maximum of 35% of the bond amount which may be released for completing revegetation is replaced with a requirement that the Department retain an amount of bond sufficient to reestablish vegetation. The modified bond release amounts are equivalent to the standard Stage 1 and Stage 2 bond releases. Other modifications deal with the time period for demonstrating that the required standards for pollution loads have been achieved. In addition, the requirement relating to the 5-year period of liability on the bond is clarified. These amendments are made to reduce requirements which impose disproportionate economic costs, to provide clarification and to conform with the 1996 amendments (Act 43) to SMCRA.

E. *Summary of Comments and Responses on the Proposed Rulemaking*

Notice of proposed rulemaking was published at 27 Pa.B. 2255 (May 3, 1997). The proposal set forth a 60-day public comment period. Public hearings on the proposed rulemaking were held by the Board on June 10, 1997, in Greensburg, PA and on June 12, 1997, in Pottsville, PA. The public comment period expired on July 2, 1997.

This section contains a summary of comments received by the Board during the public comment period. It also addresses comments from the Independent Regulatory Review Commission (IRRC). Comments were received from five commentators in addition to IRRC. The Department has completed a review of the comments and has prepared a comment and response document that addresses each comment on the proposed amendments. The Department's Comment and Response Document is available from the Bureau of Mining and Reclamation at the address shown in Section B of this Preamble.

The Department submitted the proposed rulemaking to the OSM on May 13, 1997, for their informal review as an amendment to the Commonwealth's Federally-approved mining regulatory program. The OSM's comments were received subsequent to the close of the public comment period, but were considered by the Board and are discussed in this section of the Preamble.

A summary of the comments and responses on the proposed rulemaking is presented as follows.

§ 86.2. *Scope.*

Proposed § 86.2(b) has been withdrawn. The OSM indicated that the proposed § 86.2(b) was based on statutory provisions which had not been approved by the OSM. The OSM also indicated that approval of the statutory provisions was a prerequisite to approval of § 86.2(b) and raised various issues with the statutory provisions. Consequently, proposed § 86.2(b) has been withdrawn from this final-form rulemaking.

§ 86.37. *Criteria for permit approval or denial.*

A commentator objected to the change to § 86.37(a)(4) to add the word "material" before the term "damage to the hydrologic balance." The commentator noted that under the existing regulations permit applicants must affirmatively demonstrate that their mining activities

were designed to prevent any damage to the hydrologic balance, whereas, under this change to the regulations, permit applicants shall demonstrate that their activities are designed to prevent material damage to the hydrologic balance. The commentator stated there is no definition of the modifier "material," but the obvious purpose is to make the permit applicant's burden lighter, and therefore to allow some damage to the hydrologic balance. Two commentators objected to deleting the words "within and" after the term "damage to the hydrologic balance." One of the two commentators noted this change requires the permit applicant to demonstrate that mining activities are designed to prevent material damage to the hydrologic balance only outside the proposed permit area, which lessens the burden for the operator by restricting the geographic area within which it must demonstrate that its activities will not materially damage the hydrologic balance. The commentator further noted that based upon the definition of "hydrologic balance" in the regulations, the focus should be upon hydrologic units, not the permit boundary line.

The changes to § 86.37(a)(4) were made to conform with the corresponding Federal regulations at 30 CFR 773.15(c)(5). A permit applicant must continue to provide a plan in accordance with §§ 87.69, 88.49, 89.36 and 90.35 for ensuring the protection of the quality and quantity of surface and groundwater both within the proposed permit area and the adjacent area. "Adjacent area" is defined in the regulations as land outside the permit area where air, surface or groundwater, fish, wildlife, vegetation or other resources may be adversely affected by mining activities. The change to § 86.37(a)(4) does not restrict the geographic area within which a permit applicant must determine hydrologic impacts of mining. In addition, § 86.37(a)(4) continues to require an assessment by the Department of the probable cumulative impacts of all anticipated coal mining in the general area on the hydrologic balance. The "general area" is defined in the regulations as the topographic and groundwater basin (with respect to hydrology) surrounding a permit area which is of sufficient size to allow assessment of the probable cumulative impacts of mining on the quality and quantity of surface water and groundwaters. In addition to these regulations, which continue to require protection of the hydrologic balance, § 86.37(a)(3) requires a permit applicant to demonstrate that there is no presumptive evidence of potential pollution to the waters of this Commonwealth.

The MRAB discussed § 86.37(a)(4) and suggested that the word "material" needed to be properly defined. The Department provided the MRAB with a copy of its existing technical guidance (DEP Document ID 563-2112-219) titled "Cumulative Hydrologic Impact Assessments." This technical guidance defines "material damage to the hydrologic balance." The Department indicated to the MRAB that since the OSM had not defined material damage in the context used in the federal regulation corresponding to § 86.37(a)(4) (that is, 30 CFR 773.15(c)(5)), the Department's recommended approach was to rely upon the technical guidance for providing definition to the term "material damage."

The proposed deletion of the words "or eligible for inclusion on" (relating to listing historic resources on the National Register of Historic Places) from § 86.37(a)(6) was objected to by two commentators. They indicated that protection of historic resources is weakened by deleting the requirement that a permit applicant demonstrate that the proposed mining activities will not adversely affect places eligible for inclusion on the National Register of

Historic Places. One commentator noted that a site eligible for listing on the National Register of Historic Places may not actually be listed for many months during which time the site could be ruined by mining activities. The commentator noted that only those places actually included on the National Register of Historic Places would be protected.

The changes to § 86.37(a)(6) do not result in protection being afforded to only those places actually included on the National Register of Historic Places. Sections 87.42(2), 88.22(2), 88.491(a)(1)(ii), 89.38(a) and 90.11(a)(3) of existing regulations require applicants for coal mining permits to provide information on historic resources eligible for listing on the National Register of Historic Places. These sections of the regulations also provide the Department with the authority to require the applicants to identify and evaluate important historic resources that may be eligible for listing on the National Register of Historic Places. In addition, Department procedures require permit applicants to notify the Pennsylvania Historical and Museum Commission when proposing mining activities. No change was made to § 86.37(a)(6) based upon these comments. However, based upon discussions at the February 18, 1997, Board meeting, the order of the first and second sentence in § 86.37(a)(6) has been reversed for clarity.

§ 87.77(a), 88.56(a), 88.492(f)(1), 89.38(b) and 90.40(a). Protection of parks and historic places.

Two commentators opposed changing "public parks" to "publicly-owned parks." A commentator noted there is no discussion about the effects of the change nor mention of the definition of the terms. The commentator further notes that: the corresponding Federal regulation (that is, 30 CFR 780.31) refers to "public parks" in the title of the regulation and to "publicly-owned parks" in the body of the regulation; and Pennsylvania regulations already have a definition of "public parks," so the effect of the change will be to remove from protection certain facilities that are now protected.

The Board agrees with the commentator that "public park" should not be changed to "publicly-owned park" in the heading to §§ 87.77, 88.56 and 88.492(f), since these sections continue to have applicability to "public parks" as a result of the references to Chapter 86, Subchapter D. The heading to these sections has been changed to retain the current wording. Chapter 86, Subchapter D continues to afford protection to publicly-owned parks as well as public parks.

§ 87.93, 88.83, 88.283 and 90.93. Casing and sealing of drill holes.

Four commentators provided responses to the changes to §§ 87.93(e), 88.83(e), 88.283(e) and 90.93(e) for deleting the requirement that oil and gas well operators agree in writing to mining activities closer than 125 feet (38.1 meters) to an oil or gas well. The Pennsylvania Oil and Gas Association noted that deletion of the requirement to obtain the written consent of the well operator to allow mining activity within 125 feet (38.1 meters) of an operating or inactive oil or gas well creates serious potential public safety problems and disrupts the foundation for communication and cooperation between private parties who share common interests in real property.

The Pennsylvania Coal Association supported the proposed change and suggested that § 87.93(e)(2) be clarified to mimic Federal intent; that is, if the mine operator provides access to the well at all times and the integrity of the well is maintained, the Department should auto-

matically grant a variance to allow mining at a distance less than 125 feet (38.1 meters) from the oil or gas well.

The Pennsylvania Mining Professionals (PMP) suggested that no regulation is needed for a 125-foot (38.1-meter) barrier to an oil or gas well as long as access to the well and integrity of the well is maintained. The PMP noted that elimination of the requirement for well operator written approval would give the Department total discretion for allowing a lesser distance.

IRRC stated that the Independent Oil and Gas Association of Pennsylvania, in addition to the Pennsylvania Oil and Gas Association, opposed the proposed change while the Pennsylvania Coal Association supported the proposed change. IRRC indicated that with the proposed change, well operators will no longer be able to dictate what must be done to prevent damage to their wells. IRRC acknowledges that § 87.173(b), regarding mining activities minimizing damage, destruction or disruption of services provided by oil and gas wells and pipelines unless otherwise approved by the owner of those facilities, still provides protection. In addition, IRRC indicated that if the requirement for well operator written approval is deleted, subsection (e)(2)(iii) of §§ 87.93, 88.83, 88.283 and 90.93 should be further amended to require a coal operator to provide written notification to the operator of an existing operating well when proposing mining activities within 125 feet (38.1 meters) of the well. In addition, the notice should be provided to the well operator no later than contemporaneously with the coal operator's variance request to the Department.

IRRC identified several portions of the Department's coal mine permit application which address protection of oil and gas wells during mining and suggested these provisions be added to §§ 87.173(b), 89.73(b) and 90.147(b). These provisions of the mining permit application already have a basis in regulations. Chapter 209 (relating to coal mines) contains safety provisions for coal mining and § 209.34 (relating to pipelines and wells) prohibits excavation during coal mining within 100 feet (30.5 meters) of any pipelines or active or inactive oil or gas wells until precautions have been taken to ensure and prevent inadvertent rupturing of the lines or wells. Section 209.60(c) (relating to protection of persons and property) requires a coal operator to notify the owner of a pipeline when intending to blast within 200 feet (61.0 meters) of the pipeline and provide the owner with a description of the precautionary measures which will be taken.

The MRAB held extensive discussions on the issue of mining near oil and gas wells—first at its October 23, 1997, meeting of its Regulation, Legislation and Technical Subcommittee and then at its full Board meeting on October 24. Representatives of the coal industry, the oil and gas industry and a representative of the Oil and Gas Technical Advisory Board attended and provided input at both meetings. These discussions helped clarify the concerns of the oil and gas industry and the coal industry regarding mining activities within 125 feet (38.1 meters) of an oil or gas well. After these MRAB meetings, the Department and representatives of this Commonwealth's oil and gas and coal industries met. The parties negotiated regulatory changes which are acceptable to both industries and the Department. The negotiated language provides for a more balanced comprehensive approach for mining within 125 feet (38.1 meters) of an oil or gas well. The negotiated language establishes notification requirements with more focus placed upon the mine operator identifying what measures would be taken to minimize

adverse impacts on an oil or gas well and the services provided by the wells. The agreed upon regulatory provisions are reflected in modifications of §§ 86.31, 86.32, 86.34, 87.62, 87.93, 88.42, 88.83, 88.283, 90.31 and 90.93.

§§ 87.101(a), 88.91(a), 88.291(a) and 90.101(a). Hydrologic balance/general requirements.

One commentator indicated the proposed changes will weaken protection of the hydrologic balance by allowing mine operators to merely "minimize" instead of "prevent to the maximum extent possible" disturbances to the prevailing hydrologic balance. In addition, the commentator states that the present regulation requiring disturbances to the prevailing hydrologic balance be "prevented in the permit and adjacent areas" would be weakened by the proposed requirement to "prevent material damage to the hydrologic balance outside the permit area." The changes to these sections were made to conform with the corresponding Federal regulations in 30 CFR 816.41 and 817.41 regarding protection of the hydrologic balance. However, upon further analysis of these Federal regulations, there are additional Federal requirements for protection of the hydrologic balance which relate to and contribute towards implementation of the regulations proposed for change. These additional Federal requirements have been added to §§ 87.101, 88.91, 88.291 and 90.101 to the extent authorized by the CSL.

§§ 87.102(a), 88.92(a), 88.187(a), 88.292(a), 89.52(c) and 90.102(a). Hydrologic balance/effluent standards.

The Department has proposed the deletion of manganese from the effluent standards for surface water runoff when a precipitation event is greater than a 10-year 24-hour storm event. One commentator has suggested that this change should not be made. The change makes the Commonwealth's effluent standards for manganese consistent with the corresponding Federal requirements of 40 CFR Part 434. Manganese continues to be an effluent standard for discharges of mine pit water and other discharges during dry weather flow conditions. No change has been made in response to this comment.

§§ 87.106, 88.96, 88.191, 88.296 and 90.106. Hydrologic balance/sediment control measures.

One commentator indicated the proposed changes weaken the requirements for protection of the hydrologic balance by weakening the requirements for erosion and sedimentation control measures.

Another commentator suggested maintaining the language "prevent to the maximum extent possible contributions of sediment to stream flow or to runoff outside the affected area" in §§ 88.96(1), 88.191(1), 88.296(1) and 90.106(a)(1) and the language "prevent erosion to the maximum extent possible" in §§ 87.106(3), 88.96(3), 88.191(3) and 90.106(a)(3).

The changes to these sections were made to conform with the corresponding Federal regulations in 30 CFR 816.45 and 817.45. These sections require sediment control measures to be designed, constructed and maintained using the best technology currently available. The term "best technology currently available" is defined in §§ 87.1, 88.1 and 90.1 in part as "equipment devices, systems, methods or techniques which will 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." The proposed changes along with applying the term "best technology currently available" provide protection of the

hydrologic balance consistent with State law. In addition, §§ 87.70, 88.96(4) and 90.37 require that sediment control measures comply with the requirements of Chapter 102 (relating to erosion control). No change has been made in response to these comments.

§§ 87.138, 89.65, 89.82 and 90.150. *Protection of fish, wildlife and related environmental values.*

One commentator indicated that the proposed changes to these sections reduce protection available to fish, wildlife and other environmental values. The commentator noted that the regulations currently in effect require the mine operator to prevent disturbance to the habitat of unusually high value to fish and wildlife while the proposed amendments allow the mine operator to avoid disturbance to the habitats, enhance where practical, or restore the habitats. Another commentator suggested maintaining the language "Prevent disturbances and adverse impacts on fish, wildlife and related environmental values . . ." in §§ 87.138(a)(1), 89.65(a), 89.82(a) and 90.150(a)(1); maintaining the language "Locate and operate haul and access roads to prevent impacts to fish and wildlife . . ." in §§ 87.138(a)(2), 89.65(d)(1) and 90.150(a)(2); and maintaining the language "Prevent disturbance to . . ." in §§ 87.138(a)(3), 89.65(d)(2) and 90.150(a)(3). The Game Commission expressed objections to IRRC on the proposed deletion of the wording "prevent to the maximum extent possible" and replacing the wording with "minimize to the extent possible" under §§ 87.138, 89.65, 89.82 and 90.150.

These sections were proposed for change to track the language in the corresponding Federal regulations of 30 CFR 816.97 and 817.97. These sections currently require the protection of fish, wildlife and related environmental values using best technology currently available. The term "best technology currently available" is defined in §§ 87.1, 88.1, 89.1 and 90.1 and in Federal regulations in part as "equipment, devices, systems, methods or techniques which will minimize, to the extent possible, disturbances and adverse impacts on fish, wildlife and related environmental values, and achieve enhancement of those resources when practicable." The proposed changes are consistent with Federal regulations and with application of the term "best technology currently available." No change has been made based upon these comments.

§§ 87.159, 88.133, 88.221, 88.334, 89.88 and 90.166. *Postmining land use.*

The MRAB at its October 23, 1997, subcommittee meeting, discussed the proposed revisions to these sections for deleting the requirement that the landowner provide a written statement approving alternative land uses proposed by mine operators. This revision had been proposed because there was no corresponding provision in Federal regulations. The MRAB and the Department feel it is in the best interests of all parties (that is, industry, the Department and the landowner) that this requirement be retained to ensure that the landowner and mine operators are in agreement on the postmining land use and to minimize litigation involving disputes as to the land use to which the mined site was restored following mining. Consequently, these sections have been modified to retain the requirement for landowner approval.

§§ 87.160, 88.231 and 88.335. *Haul roads and access roads.*

One commentator suggested maintaining the language in subsection (a) that haul roads and access roads shall be designed, constructed and maintained "to prevent, to the maximum extent possible," erosion and contributions

of sediment. The language "to prevent, to the maximum extent possible," has been changed to "control or prevent" to conform with corresponding Federal regulations in 30 CFR 816.150(b) and 817.150(b). Coal operators must still design, construct and maintain haul roads and access roads in a manner that controls erosion and sedimentation and prevents pollution to streams and other waters. In addition, §§ 87.70 and 88.96, which are not affected by this rulemaking, require that sediment control measures comply with Chapter 102. No change has been made based upon the comment.

§§ 87.173, 89.67 and 90.147. *Support facilities and utility installations.*

One commentator suggested adding the word "maximum" to § 87.173(a)(2)(ii) to read "to the maximum extent possible . . ." The commentator suggested maintaining all of the language that is proposed to be deleted from § 89.67(a) and keeping the proposed additions to reinforce environmental protection. In addition, a recommendation was made by the commentator to maintain the current language of § 90.147 when the word "prevent" is used so that prevention to the maximum extent possible will be provided for the protection of fish, wildlife and related environmental issues.

These sections were proposed for change to track language in the corresponding Federal regulations in 30 CFR 816.181 and 817.181. These sections currently require the protection of fish, wildlife and related environmental values using best technology currently available. The term "best technology currently available" is defined in §§ 87.1, 89.1 and 90.1 and in Federal regulations. The proposed changes are consistent with Federal regulations and with application of the term "best technology currently available." It should be recognized that these sections apply to locating, maintaining and using support facilities (such as, mine buildings and loading facilities) when conducting the mining operation. No change has been made based upon the comment.

F. *Benefits, Costs and Compliance*

Executive Order 1996-1 requires a cost/benefit analysis of the final-form regulations.

Benefits

These amendments were proposed for purposes of making the regulations no more stringent than Federal requirements and to modify regulations imposing disproportionate economic costs, lacking clarity or being too prescriptive or technology specific. The coal mining industry, the Department and local governments will benefit from these amendments.

The benefit to the regulated community will be a potential cost savings of approximately \$28,000 annually. The savings to the regulated community is based upon: (1) eliminating the requirement to monitor and test runoff water for manganese, which amounts to an estimated annual savings of \$24,000 based upon an estimated 1,000 water discharges monitored 4 times a year at a cost of \$6 per sample (1,000 discharges × 4 samples × \$6 per sample = \$24,000); and (2) expanding the circumstances upon which a permit term may be extended which amounts to an estimated annual savings of \$4,000 based upon an estimated 2 permits per year at a cost of \$2,000 per permit application (2 permits × \$2,000 per permit application = \$4,000).

Compliance Costs

These changes in the regulations will impose no additional compliance costs on the regulated community.

Compliance Assistance Plan

The coal mining regulatory program has existed for several years in this Commonwealth. Compliance assistance will focus upon providing written notification of these changes to the coal mining industry. If necessary or requested, regional meetings with the industry will be arranged. Department technical guidance will be modified based upon these regulatory changes and the guidance made available to the coal mining industry.

G. Sunset Review

These final-form regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which they were intended.

H. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on April 16, 1997, the Department submitted a copy of this proposed rulemaking to IRRC and the Chairpersons of the Senate and House Environmental Resources and Energy Committees. In compliance with section 5(b.1) of the Regulatory Review Act, the Department also provided IRRC and the Committees with copies of the comments, as well as other documentation.

In preparing these final-form regulations, the Department has considered the comments received from IRRC and the public. These comments are addressed in the comment and response document and Section E of this Preamble. The Committees did not provide comments on the proposed rulemaking.

These final-form regulations were deemed approved by the House and Senate Environmental Resources and Energy Committees on March 16, 1998. IRRC met on March 26, 1998, and approved the final-form regulations in accordance with section 5(c) of the Regulatory Review Act.

I. Findings of the Board

The Board finds that:

(1) Public notice of proposed rulemaking was given under sections 201 and 202 of the act of July 31, 1968 (P. L. 769, No. 240) (45 P. S. §§ 1201 and 1202) and regulations promulgated thereunder at 1 Pa. Code §§ 7.1 and 7.2.

(2) A public comment period was provided as required by law, and all comments were considered.

(3) These final-form regulations do not enlarge the purpose of the proposal published at 27 Pa.B. 2255.

(4) These final-form regulations are necessary and appropriate for administration and enforcement of the authorizing acts identified in Section C of this Preamble.

J. Order of the Board

The Board, acting under the authorizing statutes, orders that:

(a) The regulations of the Department, 25 Pa. Code Chapters 86—90, are amended by amending §§ 86.2, 86.31, 86.32, 86.34, 86.37, 86.40, 86.64, 86.70, 86.132—86.134, 86.174, 87.1, 87.62, 87.77, 87.93, 87.97, 87.101, 87.102, 87.106, 87.126, 87.127, 87.138, 87.144, 87.146, 87.159, 87.160, 87.166, 87.173, 87.174, 87.176, 87.209, 88.1, 88.42, 88.56, 88.83, 88.91, 88.92, 88.96, 88.118, 88.133, 88.138, 88.144, 88.187, 88.191, 88.221, 88.231, 88.237, 88.283, 88.291, 88.292, 88.296, 88.334, 88.335, 88.341, 88.492, 88.509, 89.38, 89.52, 89.65, 89.67, 89.82, 89.87, 89.88, 89.90, 90.1, 90.31, 90.40, 90.93, 90.97,

90.101, 90.102, 90.106, 90.134, 90.140, 90.147, 90.150 and 90.166 to read as set forth in Annex A, with ellipses referring to the existing text of the regulations.

(b) The Chairperson of the Board shall submit this order and Annex A to the Office of General Counsel and the Office of Attorney General for review and approval as to legality and form, as required by law.

(c) The Chairperson shall submit this order and Annex A to IRRC and the Senate and House Environmental Resources and Energy Committees as required by the Regulatory Review Act.

(d) The Chairperson of the Board shall certify this order and Annex A and deposit them with the Legislative Reference Bureau, as required by law.

(e) This order shall take effect immediately upon publication in the *Pennsylvania Bulletin*.

JAMES M. SEIF,
Chairperson

Fiscal Note: 7-307 No fiscal impact; (8) recommends adoption.

Editor's Note: For the text of the order of the Independent Regulatory Review Commission relating to this document, see 28 Pa.B. 1806 (April 11, 1998.)

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 MINING OF COAL: GENERAL

Subchapter A. GENERAL PROVISIONS

§ 86.2. Scope.

This chapter specifies certain general procedures and rules for those persons who engage in coal mining activities. This chapter together with Chapters 87—90 specifies the procedures and rules for those who engage in coal mining activities.

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.

(a) An applicant for a permit, transfer or renewal, or for revision as required by § 86.54 (relating to public notice of permit revision) shall place at the time of filing an application with the Department, an advertisement in a local newspaper of general circulation in the locality of the proposed coal mining activities at least once a week for 4 consecutive weeks. The advertisement shall contain, at a minimum, the following information:

- (1) The name and business address of the applicant.
- (2) A map or description which shall:

(i) Clearly show or describe towns, rivers, streams or other bodies of water, local landmarks and other information, including routes, streets or roads and accurate

distance measurements, necessary to allow local residents to readily identify the proposed permit area.

(ii) Clearly show or describe the exact location and boundaries of the proposed permit area, and the receiving stream.

(iii) State the name of the United States Geological Survey 7.5 minute quadrangle map which contains the area shown or described.

(iv) Indicate the north point, if a map is used.

(3) The location where a copy of the application is available for public inspection under subsection (b).

(4) The name and address of the Department's appropriate district or regional office to which written comments, objections or requests for informal conferences on the application may be submitted under §§ 86.32 and 86.34 (relating to opportunity for submission of written comments or objections on the permit application; and informal conferences).

(5) A concise statement describing the public road, the particular part to be relocated, where the relocation is to occur and the duration of the relocation, if an applicant seeks a permit to mine within 100 feet (30.48 meters) of the outside right-of-way of a public road or to relocate a public road.

(6) If an applicant seeks a variance to conduct coal mining activities within 100 feet (30.48 meters) of a stream, a description of the activities and the name of the stream.

(b) No later than the first date of the newspaper advertisement under subsection (a), the applicant for a new permit, except as provided in § 86.35(a) (relating to public availability of information in permit applications), shall file a complete copy of the application for the public to copy and inspect at a public office approved by the Department in the county where the coal mining activities are to occur. The applicant shall file a subsequent revision of the application for a new permit with that office at the same time the revision is submitted to the Department. In the case of repermitting under §§ 86.12 and 86.14 (relating to continued operation under interim permits; and permit application filing deadlines), permit renewals under § 86.55 (relating to permit renewals: general requirements), permit revisions under § 86.52 (relating to permit revisions) and permit transfers under § 86.56 (relating to transfer of permit), the permittee shall indicate in the public notice that a copy of the permit and accompanying documents is available for inspection and copying at the appropriate district or regional office.

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

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

(2) Sewage and water treatment authorities and water companies that may be affected by the activities.

(3) Governmental planning agencies with jurisdiction to act with regard to land use, air or water quality planning in the area of the proposed activities.

(4) Federal, State and local government agencies with jurisdiction over or an interest in the area of the proposed activities, including, but not limited to, general governmental entities and fish and wildlife and historic preservation agencies.

(d) The content of the notice shall include:

(1) The application number.

(2) The name and address of the applicant.

(3) The township and county in which the operation is located.

(4) The receiving stream.

(5) A brief description of the operation and the location.

(6) The location where a copy of the application may be inspected.

(7) The location where comments on the application may be submitted.

(8) A statement that the application is for a new permit, a renewal of an existing permit or the transfer of an existing permit to a new operator.

(e) The applicant for a permit, transfer or renewal or revision for surface mining activities who proposes to conduct surface mining activities within 125 feet (38.1 meters) of a permitted or registered oil or gas well shall send to each permittee or to any owner or agent of any owner of a permitted or registered oil or gas well a notice, by certified mail, return receipt requested, that the applicant intends to conduct surface mining activities within 125 feet (38.1 meters) of the well. The notice shall include the information required by subsection (a)(1)—(4). The notice shall be sent by certified mail prior to the filing of the surface mining activities permit application with the Department. If the applicant demonstrates that it has made a good faith effort to comply with this requirement by mailing the required notice to the address of record or last known address of the registered well owner or permittee, and the notice has been returned as undeliverable or refused, notice may be deemed made by publication in compliance with subsection (a). Where a permittee under an approved surface mining permit proposes to conduct surface mining activities within 125 feet (38.1 meters) of a permitted or registered oil or gas well, and if publication of the proposed activities is not required, the surface mining permittee shall send the notice required by this subsection by certified mail, return receipt requested, to the owner, agent of an owner or permittee of a permitted or registered oil or gas well within 125 feet (38.1 meters) of the activities at least than 60 days prior to conducting the activities.

§ 86.32. Opportunity for submission of written comments or objections on the permit application.

(a) Written comments or objections on the permit application or application for permit revision may be submitted to the Department within 30 days after the last publication of the newspaper advertisement placed by the applicant under § 86.31(a) (relating to public notices of filing of permit applications) by a person or an officer or head of a Federal, State or local government agency or authority. In addition to submitting comments, the permittee, owner or agent of an owner of an oil or gas well who receives a notice required by § 86.31(e) may provide the Department, within 30 days after the last publication of the newspaper advertisement placed by the applicant, or if publication of the advertisement is not required, within 45 days after receipt of the notice required by § 86.31(e), a description of the measures the well permittee, owner or agent believes are necessary to minimize damage, destruction or disruption of services provided by the oil or gas well which may be caused by the proposed surface mining activities. The Department will also publish notice of permit applications in the *Pennsylvania Bulletin*.

(b) The Department will immediately transmit comments or objections received under this section to the applicant and the office where the applicant filed a copy of the application for public inspection under § 86.31(b).

§ 86.34. Informal conferences.

(a) A person or the officer or head of a Federal, State or local government agency or authority or the owner or operator of an oil and gas well who receives a notice required by § 86.31(e) (relating to public notices of filing of permit applications) may, in writing, request that the Department hold an informal conference on an application for a permit. The request shall:

(1) Briefly summarize the issues or objections to be raised by the requestor at the conference.

(2) State whether the requestor desires to have the conference conducted in the locality of the proposed coal mining activities.

(3) Be filed with the Department within 30 days after the last publication of the newspaper advertisement placed by the applicant under § 86.31(a) or within 30 days of receipt of notice by the public entities to whom notification is provided under § 86.31(c).

(b) Except as provided in subsection (c), if an informal conference is requested in accordance with subsection (a), the Department will hold an informal conference within 60 days of the close of the public comment period. The informal conference will be conducted according to the following:

(1) The conference will be held in the locality of the proposed mining, if requested under subsection (a)(2).

(2) The date, time and location of the informal conference will be advertised by the Department in a newspaper of general circulation in the locality of the proposed mine at least 2 weeks prior to the scheduled conference.

(3) If requested, in writing, by a conference requestor in a reasonable time prior to the conference, the Department may arrange with the applicant to grant parties to the conference access to the permit area for the purpose of gathering information relevant to the conference.

(4) The conference will be conducted by a representative of the Department who may accept oral or written statements and other relevant information from a party to the conference. An electronic or stenographic record will be made of the conference proceeding, unless waived by all parties. The record will be maintained and will be accessible to the parties of the conference until final release of the applicant's performance bond under Subchapter F (relating to bonding and insurance requirements).

(c) If all parties requesting the informal conference stipulate agreement before the requested informal conference and withdraw their request, the informal conference need not be held.

(d) Informal conferences held in accordance with § 86.103(c) (relating to procedures) may be used by the Department as the public hearing required under proposed uses or relocation of public roads.

(e) The Department will give its findings of the conference to the permit applicant and to each person who is a party to the conference within 60 days of the conference.

(f) Within 60 days of the informal conference, the Department will notify the applicant of its decision to approve, disapprove or of its intent to disapprove the

application subject to the submission of additional information to resolve deficiencies.

§ 86.37. Criteria for permit approval or denial.

(a) A permit or revised permit application will not be approved unless the application affirmatively demonstrates and the Department finds, in writing, on the basis of the information in the application or from information otherwise available, which is documented in the approval, and made available to the applicant, that the following apply:

(1) The permit application is accurate and complete and that the requirements of the acts and this chapter have been complied with.

(2) The applicant has demonstrated that the coal mining activities can be feasibly accomplished as required by the act and this chapter under the operation and reclamation plan contained in the application.

(3) The applicant has demonstrated that there is no presumptive evidence of potential pollution of the waters of this Commonwealth.

(4) The assessment of the probable cumulative impacts of all anticipated coal mining in the general area on the hydrologic balance as described in § 87.69, § 88.49, § 89.36 or § 90.35 has been made by the Department, and the activities proposed under the application have been designed to prevent material damage to the hydrologic balance outside the proposed permit area.

(5) The proposed permit area is not one of the following:

(i) Included within an area designated unsuitable for mining under Subchapter D (relating to areas unsuitable for mining).

(ii) Within an area which has been included in a petition for designation under § 86.124(a)(6) (relating to procedures: initial processing, recordkeeping and notification requirements).

(iii) On lands subject to the prohibitions or limitations of Subchapter D.

(iv) Within 100 feet (30.48 meters) of the outside right-of-way line of any public road, except as provided for in Subchapter D.

(v) Within 300 feet (91.44 meters) from any occupied dwelling, except as provided for in Subchapter D.

(vi) Within 100 feet (30.48 meters) of a stream, except as provided for in § 86.102 (relating to areas where mining is prohibited or limited).

(6) The proposed activities will not adversely affect any publicly owned parks or places included on the National Register of Historic Places, except as provided for in Subchapter D. The effect of the proposed coal mining activities on properties listed on or eligible for listing on the National Register of Historic Places has been taken into account by the Department. This finding may be supported in part by inclusion of appropriate permit conditions or operational plan changes to protect historic resources, or a documented decision that no additional protective measures are necessary.

(7) Prior to approval of the bond under Subchapter F (relating to bonding and insurance requirements), a right of entry has been obtained from the landowner for each parcel of land to be affected by the coal mining activities in accordance with § 86.64 (relating to right of entry).

(8) The applicant has submitted proof that a violation related to the mining of coal by the applicant, a person owned or controlled by the applicant or a person who owns or controls the applicant under the definition of "owned or controlled" or "owns or controls" in § 86.1 (relating to definitions) or by a related party of the acts, a rule, regulation, permit or license of the Department has been corrected or is in the process of being corrected to the satisfaction of the Department, whether or not the violation relates to an adjudicated proceeding, agreement, consent order or decree, or which resulted in a cease order or civil penalty assessment. A permit issued under this paragraph on the basis that a violation is in the process of being corrected or pending the outcome of an appeal, and the appropriate regulatory authority program having jurisdiction over the violation provides for a stay of execution of the abatement procedure or a court of competent jurisdiction has issued a supersedeas providing that relief, will be issued conditionally.

(9) A statement from the applicant that all reclamation fees required by 30 CFR Part 870 (relating to abandoned mine reclamation fees) have been paid.

(10) There are no past or continuing violations which show the applicant's, a person owned or controlled by the applicant or a person who owns or controls the applicant under the definition of "owned or controlled" or "owns or controls" in § 86.1, lack of ability or intention to comply with the acts or the regulations promulgated thereunder, whether or not the violation relates to an adjudicated proceeding, agreement, consent order or decree, or which resulted in a cease order or civil penalty assessment. If the Department makes a finding that the applicant or the operator specified in the application or a person who owns or controls the applicant or operator or a person owned or controlled by the applicant or operator, has demonstrated a pattern of willful violations of the acts of a nature and duration and with resulting irreparable damage to the environment as to indicate an intent not to comply with the acts, a permit will not be issued.

(11) The applicant has submitted proof that a violation by the applicant or by a person owned or controlled by the applicant or by a person who owns or controls the applicant under the definition of "owned or controlled" or "owns or controls" in § 86.1, of a law, rule or regulation of the United States or a state—other than the law of the Commonwealth—law, rule or regulation pertaining to air or water environmental protection enacted under Federal law, has been corrected or is in the process of being satisfactorily corrected. A permit issued under this paragraph on the basis that a violation is in the process of being corrected or pending the outcome of an appeal, and the appropriate regulatory authority program having jurisdiction over the violation provides for a stay of execution of the abatement procedure or a court of competent jurisdiction has issued a supersedeas providing that relief, will be issued conditionally.

(12) The applicant shall submit the bond required under Subchapter F prior to the issuance of the permit.

(13) The applicant has satisfied the requirements of § 87.53, § 88.32, § 88.491(k), § 89.121 or § 90.22.

(14) The proposed postmining land use of the permit area meets the requirements of § 87.159, § 88.89, § 88.183, § 88.289, § 88.493, § 89.88 or § 90.166.

(15) The proposed activities would not affect the continued existence of endangered or threatened species or result in the destruction or adverse modification of their critical habitats as determined under the Endangered Species Act of 1973 (16 U.S.C.A. §§ 1531—1544).

(16) A statement from the applicant that State and Federal final civil penalty assessments have been paid. Final civil penalty assessments are civil penalty assessments which have not been appealed within 30 days of assessment or appealed civil penalty assessments which have been adjudicated by the EHB or other applicable judicial forum. For purposes of this subsection, civil penalty assessments include State and Federal civil penalty assessments related to coal mining activities which are assessed by one of the following:

(i) The Department under the authority of the acts.

(ii) The Federal Office of Surface Mining Reclamation and Enforcement (OSMRE) under the authority of the Surface Mining Control and Reclamation Act of 1977 (30 U.S.C.A. §§ 1201—1328).

(iii) A State regulatory authority which has been granted primary jurisdiction by OSMRE to implement the Federal coal mining regulatory program within its boundaries.

(b) An incremental phase approval of the permit will not be granted to conduct mining or reclamation operations or to expand mining or reclamation operations within a permit area if the Department has already issued an incremental phase approval for the area to another permittee, except for an area used for access or haul roads. An incremental phase approval of the permit will not be granted to conduct mining or reclamation operations, or permission to expand mining or reclamation operations within a permit area which has been limited to a portion or phase of the entire area until the applicant:

(1) Has filed with the Department a bond in accordance with § 86.143 (relating to requirements to file a bond).

(2) Meets the requirements of subsection (a)(7)—(9).

(c) After an application is approved, but before the permit is issued, the Department will reconsider its decision to approve the application, based on the compliance review required by subsection (a)(8), (10) and (11) in light of new information submitted under §§ 86.62(d) and 86.63(c) (relating to identification of interests; and compliance information).

§ 86.40. Permit terms.

(a) Each permit shall be issued for a fixed term not to exceed 5 years. A longer fixed permit term may be granted, if:

(1) The application is full and complete for the specified longer term.

(2) The applicant shows that a specified longer term is reasonably needed to allow the applicant to obtain necessary internal or external financing of equipment, facilities or structures for the opening or continuance of the operation, and this need is confirmed in writing by the applicant's source for the financing.

(b) A permit shall terminate if the permittee has not begun the coal mining activities covered by the permit within 3 years of the issuance of the permit. However, the Department may grant reasonable extensions of time for commencement of these activities upon receipt of a written statement showing that the extensions of time are necessary if litigation precludes the commencement or threatens substantial economic loss to the permittee or if there are conditions beyond the control and without the

fault or negligence of the permittee. Requests for extensions shall be submitted to the Department prior to expiration of the permit.

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

MINIMUM REQUIREMENTS FOR LEGAL FINANCIAL COMPLIANCE AND RELATED INFORMATION

§ 86.64. Right of entry.

(a) An application shall contain a description of the documents upon which the applicant bases his legal right to enter and commence coal mining activities within the permit area and whether that right is the subject of pending court litigation. The description shall identify the documents by type and date of execution, identify the specific lands to which the document pertains and explain the legal rights claimed by the applicant.

(b) Where the private mineral estate to be mined has been severed from the private surface estate, an applicant shall also submit one of the following:

(1) A copy of the written consent of the surface owner for the extraction of coal by surface mining methods.

(2) A copy of the conveyance that expressly grants or reserves the right to extract coal by surface mining methods.

(3) If the conveyance does not expressly grant the right to extract the coal by surface mining methods, documentation that under the law of the Commonwealth, the applicant has the legal authority to extract the coal by those methods.

(c) This section will not be construed to provide the Department with the authority to adjudicate property rights disputes.

(d) Except for permit applications based upon leases in existence on January 1, 1964, for bituminous coal surface mines, or leases in existence on January 1, 1972, for anthracite coal surface mining operations or permit applications for coal refuse disposal areas, coal preparation facilities which are not situated on a surface mining permit area and the surface activities of underground mines, the application for a permit shall include, upon a form prepared and furnished by the Department, the written consent of the landowner to enter upon land to be affected by the activities by the operator and by the Commonwealth and of its authorized agents prior to the initiation of surface mining activities, during surface mining activities, and for 5 years after the activities are completed or abandoned for the purpose of reclamation, planting and inspection or for the construction of pollution abatement facilities as deemed necessary by the Department for the purpose of the acts. The forms shall be deemed to be recordable documents and, prior to the initiation of coal mining activities under the permit, the forms shall be recorded by the applicant at the office of the recorder of deeds in the county in which the area to be affected under the permit is situated.

(1) In the case of a lease in existence on January 1, 1964, for bituminous coal surface mines, or leases in existence on January 1, 1972, for anthracite coal surface mining operations, the application for permit shall include, upon a form prescribed and furnished by the

Department, a notice of the existence of the lease and a description of the chain of title.

(i) The forms shall be deemed to be recordable documents, and, prior to the initiation of coal mining activities under the permit, the forms shall be recorded by the applicant at the office of the recorder of deeds in the county in which the area to be affected under the permit is situated.

(ii) The forms shall require the information and execution necessary to provide entry upon land to be affected by the operation without constraints pertaining to the assignability, transferability or duration of the consent, except as provided for in the acts. This form may not alter or constrain the contractual agreements and rights of the parties thereto.

(2) In the case of permits for coal refuse disposal areas, coal preparation facilities which are not situated on a surface mining permit area, and underground mines, the applicant shall describe the documents upon which the applicant bases the right to enter upon the land and conduct coal mining activities. The Department will have access to the permitted surface facilities and lands during the mining activities and for 5 years after completion or abandonment of the mining and reclamation activities for the purpose of reclamation, planting and inspection or for the construction of pollution-abatement facilities deemed necessary by the Department. The Department may issue orders to require access. If a landowner fails or refuses to comply with an order to require access, the landowner shall be liable for reasonable legal expenses incurred by the Department in enforcing the order. For purposes of issuing orders and imposing liability for reasonable legal expenses under this subsection, a landowner includes a person holding title to, or having a proprietary interest in, surface or subsurface rights.

(3) The requirements of this subsection are in addition to the information required by subsections (a) and (b).

(e) For the purpose of this section the term "lease" means an agreement in which the surface landowner is the lessor and the applicant is the lessee or the assignee of the lessee. A deed of severance is not a lease.

(f) The information required in this section shall be made part of the permit application prior to approval of the bond under Subchapter F (relating to bonding and insurance requirements).

§ 86.70. Proof of publication.

An application shall contain an intent to publish and a copy of the language to appear in the public notice demonstrating that the advertisement requirement of § 86.31(a) (relating to public notices of filing of permit applications) is in the process of being satisfied, and prior to the issuance of the permit, but no later than 4 weeks after the last date of advertisement, the applicant shall submit a copy of the advertisements as required by § 86.31(a) or the original notarized proof of publication to the Department.

Subchapter E. COAL EXPLORATION

§ 86.132. Definitions.

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

Coal exploration—The field gathering of surface or subsurface geologic, physical or chemical data by mapping, trenching, drilling, geophysical or other techniques necessary to determine the quality of overburden and coal

of an area, or the gathering of environmental data, to establish the conditions of an area.

Substantially disturb—For purposes of coal exploration, including, but not limited to, to have a significant impact upon land, air or water resources by activities such as blasting, mechanical excavation or altering coal or water exploratory holes or wells, construction of roads and other access routes, removal of topsoil or overburden and the placement of structures, excavated earth or other debris on the surface of land.

§ 86.133. General requirements.

(a) A person who intends to conduct coal exploration shall, prior to conducting the exploration, file with the Department one copy of a written notice of intention to explore for each exploration area at least 10 days prior to the exploration on forms provided by the Department.

(b) The notice shall include:

(1) The name, address and telephone number of the person seeking to explore.

(2) The name, address and telephone number of the representative who will be present at and responsible for conducting the exploration activities.

(3) A map, at a scale of 1:24,000, of the exploration area showing the extent of the exploration, location of drill holes and exploration trenches, existing and proposed roads, occupied dwellings, topographic features, bodies of water and pipelines.

(4) A statement of the period of intended exploration.

(5) A description of the practices proposed to be followed to protect the environment from adverse impacts as a result of the exploration activities.

(c) A person who conducts coal exploration which substantially disturbs the natural land surface shall comply with § 86.134 (relating to coal exploration performance and design standards).

(d) The Department will, except as otherwise provided in § 86.137(b) (relating to public availability of information), place the notices on public file and make them available for public inspection and copying during regular office hours at the established fee.

(e) A person who intends to conduct coal exploration in which coal will be removed shall, prior to conducting the exploration, obtain a permit under this chapter. Prior to removal of coal, the Department may waive the requirements for the permit to enable the testing and analysis of coal properties, if 250 tons (226 metric tons) or less are removed. The removal of more than 250 tons (226 metric tons) of coal during coal exploration requires a permit under this chapter.

(f) Coal exploration on lands where a petition to declare an area unsuitable for mining has been received by the Department or on lands designated unsuitable for mining shall be conducted only after written approval is granted by the Department. The Department may prescribe conditions and requirements necessary to preserve the values sought to be protected in the petition before approving coal exploration in these areas. The exploration activities shall be conducted in accordance with § 86.129 (relating to coal exploration) to insure that the exploration activity does not interfere with a value for which the area has been designated unsuitable for mining.

(g) A person who conducts coal exploration by means of boreholes or coreholes shall case, line, seal or otherwise manage the hole to prevent degradation of the quality of

groundwater and surface water, minimize disturbance to the prevailing hydrologic balance and ensure the safety of people, livestock, fish and wildlife, and machinery in the permit and adjacent area, and meet the requirements of §§ 89.54 and 89.83 (relating to preventing discharges from underground mines; and closing of underground mine openings).

§ 86.134. Coal exploration performance and design standards.

The following performance standards are applicable to coal exploration which substantially disturbs the land surface:

(1) Habitats of unique value for fish, wildlife and other related environmental values may not be disturbed during coal exploration.

(2) Roads used for coal exploration shall comply with the following:

(i) A new road in the exploration area shall comply with §§ 87.160 and 87.166 (relating to haul roads and access roads; and haul roads and access roads: restoration).

(ii) Existing roads may be used for exploration in accordance with the following:

(A) Applicable Federal, State and local requirements shall be met.

(B) If the road is significantly altered for exploration, including, but not limited to, change of grade, widening or change of route, or if the use of the road for exploration contributes additional suspended solids to streamflow or runoff, paragraph (7) applies to the areas of the road which are altered or which result in the additional contributions.

(C) If the road is significantly altered for exploration activities or will remain as a permanent road after exploration activities are completed, the person conducting exploration shall ensure that the requirements of §§ 87.160 and 87.166, as appropriate, are met for the design, construction, alteration and maintenance of the road.

(iii) Promptly after exploration activities are completed, existing roads used during exploration shall be reclaimed to one or more of the following:

(A) A condition equal to or better than their preexploration condition.

(B) The condition required for permanent roads under §§ 87.160 and 87.166, as appropriate.

(3) If excavations, artificial flat areas or embankments are created during exploration, these areas shall be returned to the approximate original contour promptly after the features are no longer needed for coal exploration.

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

(5) All areas disturbed by coal exploration activities shall be revegetated in a manner that encourages prompt revegetation and recovery of a diverse, effective and permanent vegetative cover.

(6) With the exception of small and temporary diversions of overland flow of water around new roads, drill pads and support facilities, ephemeral, intermittent or

perennial streams may not be diverted during coal exploration activities. Overland flow of water shall be diverted in a manner that:

- (i) Prevents erosion.
- (ii) Prevents additional contributions of suspended solids to streamflow or runoff outside the exploration area, to the extent possible using the best technology currently available.
- (iii) Complies with other applicable State or Federal requirements.

(7) Each exploration hole, borehole, well or other underground opening created or encountered by exploration shall meet the requirements of §§ 87.93, 89.54 and 89.83 (relating to casing and sealing of drilled holes; preventing discharges from underground mines; and closing of underground mine openings).

(8) Facilities and equipment shall be removed from the exploration area promptly when they are no longer needed for exploration, except for facilities and equipment that the Department determines may remain to do one of the following:

- (i) Provide additional environmental quality data.
- (ii) Reduce or control the onsite and offsite effects of the exploration activities.
- (iii) Facilitate future surface mining and reclamation operations by the person conducting the exploration, under an approved permit.

(9) Coal exploration shall be conducted in a manner which minimizes disturbance of the prevailing hydrologic balance, and shall include sediment control measures, or sedimentation ponds which comply with Chapter 89, Subchapter A (relating to erosion and sedimentation control).

(10) Toxic- or acid-forming materials shall be handled and disposed of in accordance with §§ 87.110 and 87.145 (relating to hydrologic balance: acid-forming and toxic-forming spoil; and backfilling and grading: covering coal and acid-forming and toxic-forming materials.)

(11) Coal exploration and related reclamation activities shall be conducted to avoid damage to, or destruction of, known historic resources.

Subchapter F. BONDING AND INSURANCE REQUIREMENTS

RELEASE OF BONDS

§ 86.174. Standards for release of bonds.

(a) When the entire permit area or a portion of a permit area has been backfilled or regraded to the approximate original contour or approved alternative, and when drainage controls have been installed in accordance with the approved reclamation plan, Stage 1 reclamation standards have been met.

(b) When the entire permit area or a portion of the permit area meets the following standards, Stage 2 reclamation has been achieved:

- (1) Topsoil has been replaced and revegetation has been successfully established in accordance with the approved reclamation plan.
- (2) The reclaimed lands are not contributing suspended solids to stream flow or runoff outside the permit area in excess of the requirements of the acts, regulations thereunder or the permit.

(3) If prime farmlands are present, the soil productivity has been returned to the required level when compared with nonmined prime farmland in the surrounding area, to be determined from the soil survey performed under the reclamation plan approved in Chapters 87—90.

(4) If a permanent impoundment has been approved as an alternative postmining land use, the plan for management of the permitted impoundment has been implemented to the satisfaction of the Department.

(c) When the entire permit area or a portion of the permit area meets the following performance standards, State 3 reclamation has been achieved:

(1) The permittee has successfully completed mining and reclamation operations in accordance with the approved reclamation plan so that the land is capable of supporting postmining land use approved under §§ 87.159, 88.133, 89.88 and 90.166.

(2) The permittee has achieved compliance with the requirements of the acts, regulations thereunder, the conditions of the permit and the applicable liability period under § 86.151 (relating to period of liability) has expired.

(d) Additional standards for release of bonds for underground mining operations are as follows: release of the bond posted for mine subsidence, 10 years after completion of mining and reclamation.

CHAPTER 87. SURFACE MINING OF COAL

Subchapter A. GENERAL PROVISIONS

§ 87.1. Definitions.

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

* * * * *

Land use—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. 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 Department. Land use may be defined as:

* * * * *

(x) *Unmanaged natural habitat*. Idle land which does not require a specific management plan after the reclamation and revegetation have been accomplished.

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Subchapter D. SURFACE COAL MINES: MINIMUM REQUIREMENTS FOR OPERATION AND RECLAMATION PLAN

§ 87.62. Operational information.

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

- (1) A description of the type and method of coal mining procedures, proposed engineering techniques and the major equipment to be used.
- (2) An explanation of the construction, modification, use, maintenance and removal of the following facilities—unless retention of the facilities is approved for postmining land use under § 87.159 (relating to postmining land use):
 - (i) Dams, embankments and other impoundments.

(ii) Overburden and topsoil handling and storage area and structures.

(iii) Coal removal, handling, storage, cleaning and transportation area and structures.

(iv) Spoil, coal processing waste and noncoal waste removal, handling, storage, transportation and disposal areas and structures.

(v) Mine facilities.

(vi) Water and air pollution control facilities.

(vii) Erosion control facilities.

(3) A description or explanation of the relative sequence of surface mining activities, including the relative timing of various phases and the estimated life of the mine.

(4) A demonstration that the notification requirements of § 86.31(e) (relating to public notices of filing of permit applications) have been satisfied.

§ 87.77. Protection of public parks and historic places.

(a) For publicly owned parks or historic places listed on the National Register of Historic Places that may be adversely affected by the proposed operations, each application shall describe the measures to be used to accomplish the following:

(1) Prevent adverse impacts and meet the requirements of Chapter 86, Subchapter D (relating to areas unsuitable for mining).

(2) Minimize adverse impacts, if valid existing rights exist or joint agency approval is to be obtained under Chapter 86, Subchapter D.

(b) The Department may require the applicant to protect historic or archaeological properties listed on or eligible for listing on the National Register of Historic Places through appropriate mitigation and treatment measures. Appropriate mitigation and treatment measures may be required to be taken after permit issuance. The required measures shall be completed before the properties are affected by surface mining activity.

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

§ 87.93. Casing and sealing of drilled holes.

(a) Each exploration hole, other drill or borehole, well or other exposed underground opening (except for holes solely drilled and used for blasting) shall be cased, sealed or otherwise managed as approved by the Department in order to:

(1) Prevent acid or other toxic drainage from entering groundwaters or surface waters.

(2) Minimize disturbance to the prevailing hydrologic balance.

(3) Ensure the safety of people, property, livestock, fish and wildlife and machinery in the permit and adjacent area.

(4) Prevent groundwater and surface water from entering underground mine workings.

(b) 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 Department.

(c) Use of a drilled hole, borehole or monitoring well as a water well shall meet the provisions of § 87.117 (relating to hydrologic balance: surface water monitoring).

(d) Gas and oil wells shall be sealed in accordance with the Oil and Gas Act (58 P. S. §§ 601.101—601.605).

(e) A solid barrier of undisturbed earth, 125 feet (38.1 meters) in radius shall be maintained around all oil and gas wells, except in the case of one of the following:

(1) The well is sealed in accordance with subsection (d).

(2) The Department approves, in writing, a lesser distance, if:

(i) Access to the well is provided at all times.

(ii) The integrity of the well is maintained.

(iii) The measures included in the permit to minimize damage, destruction or disruption of services under § 87.173(b) (relating to support facilities and utility installations) are implemented.

§ 87.97. Topsoil: removal.

(a) All topsoil shall be removed from the areas to be disturbed in a separate layer prior to drilling, blasting, mining or other surface disturbance. A vegetative cover which would interfere with the removal and use of the topsoil shall be removed prior to topsoil removal.

(b) In the event removal of vegetative matter, topsoil or other materials may result in erosion which may cause air or water pollution, the size of the area from which topsoil is removed at any one time shall be limited and other measures shall be taken that the Department may approve or require to control erosion.

(c) If topsoil is less than 12 inches (30.48 centimeters), a 12-inch (30.48 centimeters) layer which includes the topsoil and the unconsolidated materials immediately below the topsoil shall be removed, segregated, conserved and replaced as the final surface soil layer. If the topsoil and the unconsolidated material measure less than 12 inches (30.48 centimeters), the topsoil and all unconsolidated material shall be removed, segregated, conserved and replaced as the final surface soil layer.

(d) On areas that have been previously affected by mining and which have no available topsoil or subsoil, sufficient material best suited to support vegetation shall be segregated, conserved and redistributed as the final surface layer.

(e) The B horizon and portions of the C horizon, or other underlying layers demonstrated to have qualities for comparable root development, shall be segregated and replaced as subsoil if either of these is necessary to ensure soil productivity consistent with the approved postmining land use.

(f) When approved by the Department in writing, other materials may be substituted for or used as a supplement to topsoil if the operator demonstrates that the resulting soil medium is equal to or more suitable than topsoil for sustaining vegetation and soil productivity. In making this demonstration, the Department may require chemical and physical analyses of the substituted material and topsoil. These analyses may include determinations of pH, net acidity or alkalinity, phosphorus, potassium, texture class, field site trials or greenhouse tests, or other analyses as required by the Department.

§ 87.101. Hydrologic balance: general requirements.

(a) Surface mining activities shall be planned and conducted to minimize disturbances to the prevailing

hydrologic balance in the permit and adjacent areas and to prevent material damage to the hydrologic balance outside the permit area. The Department may require additional preventative, remedial or monitoring measures to assure that material damage to the hydrologic balance outside the permit area is prevented.

(b) Changes in water quality and quantity, the depth of groundwater, and the location of surface water drainage channels shall be minimized so that the approved postmining land use of the permit area is not adversely affected.

(c) The treatment requirements and effluent limitations established under § 87.102 (relating to hydrologic balance: effluent standards) may not be violated.

(d) Each person who conducts surface mining activities shall conduct the mining and reclamation operation to prevent water pollution and, when necessary, operate and

maintain the necessary water treatment facilities until applicable treatment requirements and effluent limitations established under § 87.102 are achieved and maintained.

(e) Surface mining activities shall be planned and conducted to prevent to the maximum extent practical the accumulation of water in the pit. Pit water shall be collected and pumped to approved water treatment facilities. Pit water may not be discharged from the surface mining operation by gravity drains.

§ 87.102. Hydrologic balance: effluent standards.

(a) *Discharge of water.* A person may not allow a discharge of water from an area disturbed by coal mining activities, including areas disturbed by mineral preparation, processing or handling facilities which exceeds the following groups of effluent criteria. The effluent limitations shall be applied under subsection (b).

<i>Parameter</i>	<i>Group A</i>		
	<i>30-day Average</i>	<i>Daily Maximum</i>	<i>Instantaneous Maximum</i>
iron (total)	3.0 mg/l	6.0 mg/l	7.0 mg/l
manganese (total)	2.0 mg/l	4.0 mg/l	5.0 mg/l
suspended solids	35 mg/l	70 mg/l	90 mg/l
pH ¹		greater than 6.0; less than 9.0	
alkalinity greater than acidity ¹		greater than 6.0; less than 9.0	

¹ This parameter is applicable at all times

<i>Parameter</i>	<i>Instantaneous Maximum</i>
	iron (total)
settleable solids	0.5 ml/l
pH	greater than 6.0; less than 9.0
alkalinity greater than acidity	greater than 6.0; less than 9.0

<i>Parameter</i>	<i>Instantaneous Maximum</i>
	pH
alkalinity greater than acidity	greater than 6.0; less than 9.0

* * * * *

§ 87.106. Hydrologic balance: sediment control measures.

Appropriate sediment control measures shall be designed, constructed and maintained using the best technology currently available to:

- (1) Prevent to the extent possible contributions of sediment to streamflow or to runoff outside the affected area.
- (2) Meet the treatment requirements and effluent limitations of § 87.102 (relating to hydrologic balance: effluent standards).
- (3) Minimize erosion to the extent possible.
- (4) Meet the requirements of Chapter 102 (relating to erosion control).

§ 87.126. Use of explosives: public notice of blasting schedule.

- (a) *Blasting schedule publication.*
 - (1) Each person who conducts surface mining activities shall publish a blasting schedule in a newspaper of

general circulation in the locality of the proposed site, at least 10 days, but not more than 30 days, before beginning a blasting program in which blasts that use more than 5 pounds of explosives or blasting agents are detonated.

- (2) Copies of the schedule shall be distributed by mail to local governments and public utilities and by mail or delivered to each resident within 1/2 mile of the blasting area. Copies sent to residents shall be accompanied by information advising the owner or resident how to request a preblasting survey.
- (3) The person who conducts the surface mining activities shall republish and redistribute the schedule by mail at least every 12 months.

(b) *Blasting schedule contents.*

- (1) A blasting schedule may not be so general as to cover the entire permit area or all working hours, but shall identify as accurately as possible the location of the blasting sites and the time periods when blasting will occur.

(2) The blasting schedule shall contain at a minimum the following:

(i) Identification of the specific areas in which blasting will take place. Each specific blasting area described shall be reasonably compact and not larger than 300 acres (121.4 hectares).

(ii) Dates and time periods when explosives are to be detonated. Each period may not exceed 4 hours.

(iii) Methods to be used to control access to the blasting area.

(iv) Types of audible warnings and all-clear signals to be used before and after blasting.

(v) A description of possible emergency situations that might prevent blasting at times announced in the blasting schedule, such as rain, lightning, other atmospheric conditions or operator or public safety which may require unscheduled detonation.

(c) *Public notice of changes to blasting schedules.*

(1) The person who conducts the surface mining activities shall prepare a revised blasting schedule before blasting in areas or at times not in a previous schedule.

(2) The blasting schedule shall be revised, published and distributed in accordance with this action. Advice on requesting a preblast survey need not be provided to those parties advised in the original distribution under subsection (a)(2).

§ 87.127. Use of explosives: surface blasting requirements.

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(f) Requirements for blasting are as follows:

* * * * *

(5) Flyrock, including blasted material traveling along the ground, may not be cast from the blasting vicinity more than one-half the distance to the nearest dwelling or other occupied structure and in no case beyond the permit boundary, or beyond the area or regulated access required under subsection (d).

* * * * *

§ 87.138. Protection of fish, wildlife and related environmental values.

(a) A person conducting surface mining activities shall, to the extent possible using the best technology currently available:

(1) Minimize disturbances and adverse impacts of the activities on fish, wildlife and related environmental values, and achieve enhancement of the resources when practicable.

(2) Locate and operate haul and access roads to avoid or minimize impacts to fish and wildlife species or other species protected by State or Federal law.

(3) Avoid disturbance to, enhance where practicable, or restore, habitats of unusually high value for fish and wildlife.

(4) Restore, enhance when practicable, or maintain natural riparian vegetation on the banks of streams, lakes and other wetland areas.

(5) Not use restricted pesticides on the areas during surface mining and reclamation activities, unless approved by the Department of Agriculture.

(6) Do the following, if fish and wildlife habitat is the postmining land use, in addition to the requirements of §§ 87.147—87.153, 87.155 and 87.156:

(i) Select plant species to be used on reclaimed areas, based on the following criteria:

(A) Their proven nutritional value for fish and wildlife.

(B) Their uses as cover for fish and wildlife.

(C) Their ability to support and enhance fish and wildlife habitat after release of bonds.

(ii) Distribute plant grouping to maximize benefit to fish and wildlife. Plants should be grouped and distributed in a manner which optimizes edge effect, cover and other benefits for fish and wildlife.

(7) 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, when cropland is to be the alternative postmining land use and when appropriate for wildlife and crop management practices. Wetlands shall be preserved or created rather than drained or otherwise permanently abolished.

(8) Intersperse reclaimed lands with greenbelts utilizing species of grass, shrubs and trees useful as food and cover for birds and small animals, unless the green belts are inconsistent with the approved postmining land use, when the primary land use is to be residential, public service or industrial land use.

(9) Design fences, overland conveyors and other potential barriers to permit passage for large mammals, except if the Department determines that the requirements are unnecessary.

(10) Fence, cover or use other appropriate methods to exclude wildlife from ponds which contain hazardous concentrations of toxic-forming materials.

(b) A person who conducts surface mining activities shall promptly report to the Department the presence in the permit area of threatened or endangered species under State or Federal laws of which that person becomes aware and which was not previously reported to the Department by that person. Upon notification, the Department will consult with the Game Commission or the Fish and Boat Commission and appropriate Federal fish and wildlife agencies and, after consultation, will identify whether, and under what conditions, the operator may proceed.

(c) Surface mining activity may not be conducted in a manner which would result in the unlawful taking of a bald or golden eagle, its nest or its eggs. The operator shall promptly report to the Department a golden or bald eagle nest within the permit area of which the operator becomes aware. Upon notification, the Department will consult with the United States Fish and Wildlife Service and the Game Commission and, after consultation, will identify whether, and under what conditions, the operator may proceed.

(d) Surface mining activity may not be conducted which is likely to jeopardize the continued existence of endangered or threatened species listed by the Secretary of the Interior, the Game Commission or the Fish and Boat Commission or which is likely to result in the destruction or adverse modification of designated critical habitats of these species in violation of the Endangered Species Act of 1973 (16 U.S.C.A. §§ 1531—1544).

§ 87.144. Backfilling and grading: final slopes.

(a) The final graded slopes shall approximate premining slopes, or any lesser slopes approved by the Department based on consideration of soil, climate or other characteristics of the surrounding area.

(b) Postmining final graded slopes need not be uniform, but shall approximate the general nature of the premining topography.

(c) On approval by the Department in order to conserve soil moisture, ensure stability and control erosion on final graded slopes, cut and fill terraces may be allowed if the terraces are compatible with the approved postmining land use and are substitutes for construction of lower grades on the reclaimed lands.

(d) Small depressions may be constructed, if they:

(1) Are approved by the Department to minimize erosion, conserve soil moisture or promote vegetation.

(2) Do not restrict normal access.

(3) Are not inappropriate substitutes for lower grades on the reclaimed lands.

(e) All surface mining activities on slopes above 20°, or on lesser slopes that the Department defines as steep slopes, shall meet §§ 87.158 and 87.159 (relating to cessation of operations: permanent; and postmining land use).

(f) All final grading, preparation of overburden before replacement of topsoil and placement of topsoil shall be conducted in a manner which minimizes erosion and provides a surface for replacement of topsoil which will minimize slippage.

§ 87.146. Regrading or stabilizing rills and gullies.

(a) 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 do one of the following shall be filled, regraded or otherwise stabilized:

(1) Disrupt the approved postmining land use or the reestablishment of the vegetative cover.

(2) Cause or contribute to a violation of water quality standards for receiving streams.

(c) For the areas listed in subsection (b), the topsoil shall be replaced and the areas shall be reseeded or replanted.

§ 87.159. Postmining land use.

(a) Prior to the release of land from permit area in accordance with Chapter 86, Subchapter F (relating to bonding and insurance requirements), affected areas shall be restored in a timely manner to conditions that are capable of supporting the uses which they were capable of supporting before any mining, or to higher and better uses achievable under criteria and procedures of this section.

(b) The premining use of land to which the postmining land use is compared shall be determined by the following:

(1) The postmining land use for land that has not been previously mined and has been properly managed shall be judged on the basis of those uses which the land previously supported.

(2) The postmining land use for land that has been previously mined and not reclaimed shall be judged on the basis of the condition prior to any mining or to a higher or better use that can be achieved and is compatible with surrounding areas.

(c) Alternative land uses may be approved by the Department after consultation with the landowner or the

land management agency having jurisdiction over the lands and after determining that the following criteria are met:

(1) The proposed postmining land use is compatible with adjacent land use and applicable land use policies, plans, and programs and Federal, State and local law. A written statement of the views of the authorities with statutory responsibilities for land use policies and plans is submitted to the Department before surface mining activities begin. Any required approval, including any necessary zoning or other changes required for land use by local, State or Federal land management agencies, is obtained and remains valid throughout the surface mining activities.

(2) The owner of the surface requests in a notarized written statement that the alternative land use be approved.

(3) The proposed postmining land use is reasonably likely to be achieved which may be demonstrated by one or more of the following or other similar criteria:

(i) Specific plans are prepared and submitted to the Department which show the feasibility of the postmining land use as related to projected land use trends and markets. The plan shall include a schedule showing how the proposed use will be developed and achieved within a reasonable time after mining and how the development will be sustained. The Department may require appropriate demonstrations to show that the planned procedures are feasible, reasonable and integrated with mining and reclamation, and that the plans will result in successful reclamation.

(ii) Provision for necessary public facilities is ensured with letters of commitment from parties other than the person who conducts surface mining activities, as appropriate to provide the public facilities in a manner compatible with the plans submitted under § 87.75 (relating to postmining land uses). The letters shall be submitted to the Department before surface mining activities begin.

(iii) The applicant presents specific plans for the proposed postmining land use and appropriate assurances that the use will be practicable with respect to private financial capability for completion of the proposed use.

(4) The proposed use will neither pose an actual threat to public health or safety or of water diminution, interruption, contamination or pollution.

(5) The use will not involve unreasonable delays in reclamation or implementation.

(6) Necessary approval of measures to prevent or mitigate adverse effects on fish, wildlife and related environmental values and threatened or endangered plants is obtained from the Department, and appropriate State and Federal fish and wildlife management agencies have been provided a 30-day period in which to review the plan before surface mining activities begin.

§ 87.160. Haul roads and access roads.

(a) Haul roads and access roads shall be designed, constructed and maintained to control or prevent erosion and contributions of sediment to streams or runoff outside the affected area; air and water pollution; damage to fish and wildlife or their habitat; and flooding and damage to public or private property. 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 necessary design criteria established by the Department. Upon completion of the associated surface mining activities, the area disturbed by the road shall be restored in accordance with § 87.166 (relating to haul roads and access roads: restoration) unless retention of the road and its maintenance plan is approved as part of the postmining land use.

(b) The haul or access road may not be located in or within 100 feet (30.48 meters) of a perennial or intermittent stream except in accordance with § 86.102 (relating to areas where mining is prohibited or limited). A crossing of a perennial or intermittent stream shall be made using bridges, culverts or similar structures. Bridges, culverts or other encroachment or water obstruction shall meet the requirements of Chapter 105 (relating to dam safety and waterway management).

(c) Each road shall have a drainage system that is compatible with the natural drainage system, is structurally stable, and which will pass safely the peak flow from a 10-year, 24-hour precipitation event or larger event if required by the Department. The drainage system shall include a sloped or crowned road surface, cross drains or culverts, stabilized ditches, erosion-resistant surfacing, sediment traps and other appropriate sediment control measures as required by § 87.106 (relating to hydrologic balance: sediment control measures).

(d) Roads shall be constructed on stable areas that avoid wet or unstable soils.

(e) Prior to the construction of the road, topsoil shall be removed, stored on a stable site and protected against erosion and compaction until restoration of the haul road.

(f) Disturbed areas adjacent to the road shall be vegetated or otherwise stabilized to prevent erosion.

(g) Haul roads shall be surfaced with material sufficiently durable for the anticipated volume of traffic and the weight and speed of vehicles using the road. Acid or toxic-forming material may not be used for surfacing or construction of a road except where the road is within the confines of a coal refuse disposal or reprocessing area and the effluent meets the requirements of § 87.102 (relating to hydrologic balance: effluent standards).

(h) A road damaged by a catastrophic event, such as a flood or earthquake, shall be repaired or reclaimed as soon as practicable after the damage has occurred.

(i) Haul roads and roads approved as part of the postmining land use shall be certified by a qualified registered professional engineer or qualified registered land surveyor that the roads have been constructed or reconstructed as designed in accordance with the approved plan.

§ 87.166. Haul roads and access roads: restoration.

Unless the Department approves retention of a road as suitable for the approved postmining land use in accordance with § 87.159 (relating to postmining land use), as soon as practicable after the road is no longer needed for the associated surface mining activities:

- (1) The road shall be physically closed to vehicular traffic.
- (2) The road and adjacent slopes shall be regraded to blend with the natural contours and drainage pattern.
- (3) Bridges and culverts shall be removed.

(4) Roadbeds shall be ripped or scarified.

(5) Fill slopes shall be rounded or reduced and shaped to conform the site to adjacent terrain and to meet natural drainage restoration standards.

(6) Cut slopes shall be shaped to blend with the natural contour.

(7) Cross drains, dikes and water bars shall be constructed to minimize erosion.

(8) Terraces shall be constructed as necessary to prevent excessive erosion and to provide long-term stability in cut and fill slopes.

(9) Road surfacing materials shall be removed if the materials are incompatible with the postmining land use and establishment of vegetation.

(10) Disturbed areas shall be covered with topsoil in accordance with §§ 87.96—87.100 and revegetated in accordance with § 87.147 (relating to revegetation: general requirements).

(11) Excess material and debris shall be disposed of in a manner approved by the Department.

§ 87.173. Support facilities and utility installations.

(a) Support facilities required for, or used incidentally to, the operation of the mine, including, but not limited to, mine buildings, coal loading facilities at or near the mine-site, coal storage facilities, equipment storage facilities, fan buildings, hoist buildings, preparation plants, sheds, shops and other buildings shall be located, maintained and used in a manner that does the following:

(1) Prevents or controls erosion and siltation, water pollution and damage to public or private property.

(2) To the extent possible using the best technology currently available minimizes:

(i) Damage to fish, wildlife and related environmental values.

(ii) Additional contributions of suspended solids to streamflow or runoff outside the permit area. These contributions may not be in excess of limitations of State or Federal law.

(b) All surface 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 Department.

§ 87.174. Steep slope operations.

(a) Each person who conducts or intends to conduct surface mining and reclamation operations on steep slopes shall comply with this subchapter and this section, except to the extent a variance is approved under § 87.175 (relating to variance to contouring).

(b) Debris, from clearing and grubbing of haul road construction, abandoned or disabled equipment, spoil material, waste mineral matter or other waste material may not be placed on the downslope below the bench or mining cut, except for material used to construct road embankment in accordance with §§ 87.160, 87.166 and 87.172 (relating to haul roads and access roads; haul roads and access roads: restoration; and other transportation facilities).

(c) The disturbed area shall be returned to approximate original contours by completely covering the highwall with compacted spoil and grading the area in accordance with §§ 87.141, 87.142 and 87.144—87.146. The person who conducts the surface mining and reclamation operation shall demonstrate to the Department, using standard geotechnical analysis, that the minimum static factor of safety for the stability of all portions of the reclaimed land is at least 1.3.

(d) Land above the highwall may not be disturbed unless the Department finds that the disturbance facilitates compliance with this subchapter.

(e) Material in excess of that required by the grading and backfilling provisions of subsection (b) shall be disposed of in accordance with the requirements of § 87.131 (relating to disposal of excess spoil).

(f) Woody materials may not be buried in the backfilled area unless the applicant demonstrates that the proposed method for disposal of the woody materials will not deteriorate the stability of the backfilled area as required by subsection (b). Wood may be chipped and used as mulch if the requirements of § 87.153 (relating to revegetation: mulching) are met.

§ 87.176. Auger mining.

(a) Auger mining associated with surface mining activities shall be conducted to maximize recoverability of mineral reserves remaining after the mining activities are completed. A person who conducts auger mining operations shall leave areas of undisturbed coal to provide access for removal of those reserves by future underground mining activities, unless the person who conducts surface mining activities demonstrates to the satisfaction of the Department that the coal reserves have been depleted or are limited in thickness or extent to the point that it will not be practicable to recover the remaining coal reserves.

(b) An auger hole may not be made closer than 500 feet (152.40 meters) in horizontal distance to abandoned or active underground mine workings, except as approved in accordance with § 87.135 (relating to protection of underground mining).

(c) To prevent pollution of surface water and groundwater and to reduce fire hazards, an auger hole shall be plugged to prevent the discharge of water from the hole and access of air to the coal. An auger hole shall be plugged within 30 days after completion by backfilling and compacting noncombustible and impervious material into the hole to a depth sufficient to form a watertight seal. Plugging shall be done within 72 hours after completion if the holes are discharging water containing acid or toxic forming material.

(d) The Department will prohibit auger mining unless the person conducting the surface mining activities demonstrates, the following

(1) Adverse water quality impacts can be prevented or corrected.

(2) Fill stability can be achieved.

(3) The auger mining is necessary to maximize the utilization, recoverability or conservation of the solid fuel resources.

(4) Subsidence resulting from auger mining will not disturb or damage powerlines, pipelines, buildings or other facilities.

Subchapter F. SURFACE COAL MINES: MINIMUM REQUIREMENTS FOR REMINING AREAS WITH POLLUTIONAL DISCHARGES

§ 87.209. Criteria and schedule for release of bonds on pollution abatement areas.

(a) The Department will release up to 60% of the amount of bond for the authorized pollution abatement area if the applicant demonstrates and the Department finds that:

(1) The surface coal mining activities were conducted on the permit area, including the pollution abatement area, under the requirements of the permit and the authorization, Chapter 86 (relating to surface and underground coal mining: general) and this chapter except as specifically modified by this subchapter.

(2) The operator has satisfactorily completed backfilling, regrading and drainage control under the approved reclamation plan.

(3) The operator has properly implemented each step of the pollution abatement plan approved and authorized under this subchapter.

(4) The operator has not caused degradation of the baseline pollution load at any time during the 6 months prior to the submittal of the request for bond release under this subsection and until the bond release is approved as shown by all ground and surface water monitoring conducted by the permittee under § 87.206(1) (relating to operational requirements) or conducted by the Department.

(5) The operator has not caused or contributed to surface water pollution or groundwater degradation by re-affecting or mining the pollution abatement area.

(b) The Department will release an additional amount of bond for the authorized pollution abatement area but retain an amount sufficient to cover the cost to the Department of reestablishing vegetation if completed by a third party if the operator demonstrates and the Department finds that:

(1) The operator has replaced the topsoil or material conserved under § 87.97(d) (relating to topsoil: removal), completed final grading, planting and established revegetation under the approved reclamation plan and achieved the standards of success for revegetation in § 87.205(a)(5) (relating to approval or denial).

(2) The operator has not caused or contributed to surface water pollution or groundwater degradation by re-affecting or mining the pollution abatement area.

(3) The operator has complied with one of the following:

(i) Achieved the actual improvement of the baseline pollution load described in the approved abatement plan and shown by ground and surface water monitoring conducted by the permittee for the time provided in the abatement plan after completion of backfilling, final grading, drainage control, topsoiling and establishment of revegetation to achieve the standard of success for revegetation in § 87.205(a)(5).

(ii) Achieved the following:

(A) At a minimum has not caused degradation of the baseline pollution load as shown by ground and surface water monitoring conducted by the operator or the Department for one of the following:

(I) For the 12 months prior to the date of application for bond release and until the bond release is approved

under subsection (b), if backfilling, final grading, drainage control, topsoiling and establishment of revegetation to achieve the standard of success for revegetation in § 87.205(a)(5) have been completed.

(II) If treatment has been initiated at any time after initial bond release under subsection (a) and § 87.207(e) (relating to treatment of discharges), for 12 months from the discontinuance of treatment under § 87.207(d), if backfilling, final grading, drainage control, topsoiling and establishment of revegetation to achieve the standard of success for revegetation in § 87.205(a)(5) have been completed.

(B) Conducted the measures provided in the approved abatement plan and additional measures specified by the Department in writing at the time of initial bond release under subsection (a) for the area requested for bond release.

(C) Caused aesthetic or other environmental improvements or the elimination of public health and safety problems by re-mining and re-affecting the pollution abatement area.

(D) Stabilized the pollution abatement area.

(c) The Department will release the remaining portion of the amount of bond on the authorized pollution abatement area if the applicant demonstrates and the Department finds that:

(1) The operator has successfully completed the approved abatement and reclamation plans, and the pollution abatement area is capable of supporting the postmining land use approved under § 87.159 (relating to postmining land use).

(2) The operator has complied with the permit and the authorization, Chapter 86 and this chapter, except as specifically modified by this subchapter.

(3) The operator has not caused degradation of the baseline pollution load from the time of bond release under subsection (b) or, if treatment has been initiated after bond release under subsection (b) in accordance with § 87.207(e) for 5 years from the discontinuance of treatment under § 87.207(d).

(4) The applicable liability period has expired under § 86.151 (relating to period of liability).

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:

* * * * *

Land use—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. A change 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 Department. The term is further defined as:

* * * * *

(x) *Unmanaged natural habitat*. Idle land which does not require a specific management plan after the reclamation and revegetation have been accomplished.

* * * * *

OPERATION AND RECLAMATION PLAN

§ 88.42. Operational plan: general information.

An application for anthracite coal surface mining activities shall include at a minimum:

(1) A narrative description of the type and method of mining and reclamation procedures and proposed engineering techniques and the major equipment to be used.

(2) A narrative explaining the construction, modification, use, maintenance and removal of the following facilities, unless retention of the facilities is approved for postmining land use:

(i) Dams, embankments and other impoundments.

(ii) Overburden, soil or vegetation-supporting material handling and storage areas.

(iii) Handling, storage, transportation areas and structures affected by coal removal.

(iv) Handling, storage, transportation and disposal areas and structures affected by mine spoil or coal processing waste.

(v) Mine facilities.

(vi) Water pollution control facilities.

(vii) Erosion control facilities.

(viii) Air pollution control methods.

(3) A description of the measures to be employed to ensure that all debris, potential acid-forming and potential toxic-forming materials, and materials constituting a fire hazard are disposed of in accordance with this chapter and a description of the contingency plans which have been developed to preclude combustion of these materials.

(4) A description of the measures to be employed to seal drill holes or encountered mine openings.

(5) A demonstration that the notification requirements of § 86.31(e) (relating to public notices of filing of permit applications) have been satisfied.

§ 88.56. Protection of public parks and historic places.

(a) For publicly-owned parks or historic places listed on the National Register of Historic Places that may be adversely affected by the proposed operations, each application shall describe the measures to be used to accomplish the following:

(1) Prevent adverse impacts and meet the requirements of Chapter 86, Subchapter D (relating to areas unsuitable for mining).

(2) Minimize adverse impacts, if valid existing rights exist or joint agency approval is to be obtained under Chapter 86, Subchapter D.

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

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

§ 88.83. Sealing of drilled holes: general requirements.

(a) An exploration hole, other drill or borehole, well or other exposed opening (except for holes solely drilled and used for blasting), shall be sealed, backfilled or otherwise managed, as approved by the Department, in order to do the following:

(1) Prevent acid or other toxic drainage from entering groundwaters or surface waters.

(2) Minimize disturbance to the prevailing hydrologic balance.

(3) Ensure the safety of people, property, livestock, fish and wildlife and machinery in the permit and adjacent areas.

(4) Prevent groundwater and surface water from entering underground mine workings.

(b) 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 Department.

(c) Use of a drilled hole, borehole or monitoring well as a water well shall meet the provisions of § 88.106 (relating to hydrologic balance: surface water monitoring).

(d) Gas and oil wells shall be sealed in accordance with the Oil and Gas Act (58 P. S. §§ 601.101—601.605).

(e) A solid barrier of undisturbed earth, 125 feet (38.1 meters) in radius shall be maintained around all oil and gas wells, unless:

(1) The well is sealed in accordance with subsection (d).

(2) The Department approves in writing a lesser distance if:

(i) Access to the well is provided at all times.

(ii) The integrity of the well is maintained.

(iii) The measures included in the permit to minimize damage, destruction or disruption of services are implemented.

§ 88.91. Hydrologic balance: general requirements.

(a) Surface mining activities shall be planned and conducted to minimize disturbances to the prevailing hydrologic balance in the permit and adjacent areas and to prevent material damage to the hydrologic balance outside the permit area. The Department may require additional preventive, remedial or monitoring measures to assure that material damage to the hydrologic balance outside the permit area is prevented. Where the area has been previously mined, the surface mining activity shall be planned and conducted to maximize the abatement of water pollution and the reclamation of the land.

(b) Changes in water quality and quantity, the depth to groundwater, and the location of surface water drainage channels shall be minimized so that the approved postmining land use of the permit area is not adversely affected.

(c) The treatment requirements and effluent limitations established under § 88.92 (relating to hydrologic balance: effluent standards) may not be violated.

(d) A person who conducts surface mining activities shall conduct the mining and reclamation operation to prevent water pollution and, if necessary, operate and maintain the necessary water treatment facilities until applicable treatment requirements and effluent limitations established under § 88.92 are achieved and maintained. If these practices are not adequate, the person who conducts surface mining activities shall provide the necessary water treatment facilities to obtain the applicable water quality standards.

§ 88.92. Hydrologic balance: effluent standards.

(a) *Groups of effluent criteria.* A person may not allow a discharge of water from an area disturbed by mining activities which exceeds the following groups of effluent criteria. The effluent limitations shall be applied under subsection (b).

<i>Parameter</i>	<i>Group A</i>		
	<i>30-day Average</i>	<i>Daily Maximum</i>	<i>Instantaneous Maximum</i>
iron (total)	3.0 mg/l	6.0 mg/l	7.0 mg/l
manganese (total)	2.0 mg/l	4.0 mg/l	5.0 mg/l
suspended solids	35 mg/l	70 mg/l	90 mg/l
pH ¹		greater than 6.0; less than 9.0	
alkalinity greater than acidity ¹			

¹ The parameter is applicable at all times.

<i>Parameter</i>	<i>Group B</i>	
	<i>Instantaneous Maximum</i>	
iron (total)	7.0 mg/l	
settleable solids	0.5 ml/l	
pH	greater than 6.0; less than 9.0	
alkalinity greater than acidity		

<i>Parameter</i>	<i>Group C</i>	
	<i>Instantaneous Maximum</i>	
pH	greater than 6.0; less than 9.0	
alkalinity greater than acidity		

* * * * *

§ 88.96. Hydrologic balance: sediment control measures.

Appropriate sediment control measures shall be designed, constructed and maintained to:

- (1) Prevent, to the extent possible, contributions of sediment to streamflow or to runoff outside the affected area.
- (2) Meet the treatment and effluent requirements of § 88.92 (relating to hydrologic balance: effluent standards).
- (3) Minimize erosion to the extent possible.
- (4) Meet the requirements of Chapter 102 (relating to erosion control).

§ 88.118. Backfilling and grading: final slopes.

(a) The final graded slopes shall approximate premining slopes, or slopes approved by the Department based on consideration of soil, rock formation, climate or other characteristics of the surrounding area.

(b) Postmining final graded slopes need not be uniform but shall approximate the general nature of the premining topography.

(c) Cut and fill terraces may be allowed on approval by the Department to conserve soil moisture, ensure stability and control erosion on final graded slopes, if the terraces are compatible with the approved postmining land use and are substitutes for construction of lower grades on the reclaimed lands.

(d) Small depressions may be constructed, if they:

(1) Are approved by the Department to minimize erosion, conserve soil moisture or promote vegetation.

(2) Do not restrict normal access.

(3) Are not inappropriate substitutes for lower grades on the reclaimed lands.

(e) All surface mining activities on slopes above 20°, or on lesser slopes that the Department defines as steep slopes, shall meet the appropriate provisions.

(f) All final grading, preparation of overburden before replacement of soil or suitable vegetation support material shall be conducted in a manner which minimizes erosion and provides a surface for replacement of soil which will minimize slippage.

§ 88.133. Postmining land use.

(a) All affected areas shall be restored in a timely manner to conditions that are capable of supporting the uses which they were capable of supporting before mining, or to higher or better uses achievable under criteria and procedures of this section and prior to the release of land from the permit area in accordance with Chapter 86, Subchapter F (relating to bonding and insurance requirements).

(b) The premining use of land to which the postmining land use is compared shall be determined by the following:

(1) The postmining land use for land that has not been previously mined and has been properly managed shall be judged on the basis of uses which the land previously supported.

(2) The postmining land use for land that has been previously mined and not reclaimed shall be judged on

the basis of the condition prior to mining or to a higher or better use that can be achieved and is compatible with surrounding areas.

(c) Alternative land uses will be approved by the Department after consultation with the landowner or the land management agency having jurisdiction over the lands and after determining the following criteria have been met:

(1) The proposed postmining land use is compatible with adjacent land use and applicable land use policies, plans and programs and Federal, State and local law. A written statement of the views of the authorities with statutory responsibilities for land use policies and plans is submitted to the Department before surface mining activities begin. Any required approval, including any necessary zoning or other changes required for land use by local, State or Federal land management agencies, is obtained and remains valid throughout the surface mining activities.

(2) The owner of the surface requests in a notarized written statement that the alternative land use be approved.

(3) The proposed postmining land use is reasonably likely to be achieved which may be demonstrated by one or more of the following or other similar criteria:

(i) Provision of any necessary public facilities is ensured as evidenced by letters of commitment from parties other than the person who conducts surface mining activities, as appropriate, to provide the public facilities in a manner compatible with the plans submitted under Subchapter A (relating to general provisions). The letters shall be submitted to the Department before surface mining activities begin.

(ii) Specific plans are prepared and submitted to the Department which show the feasibility of the postmining land use as related to projected land use trends and markets. The plan shall include a schedule showing how the proposed use will be developed and achieved within a reasonable time after mining and how the development will be sustained. The Department may require appropriate demonstrations to show that the planned procedures are feasible, reasonable and integrated with mining and reclamation, and that the plans shall result in successful reclamation.

(4) The proposed use will neither pose an actual or potential threat to public health or safety or of water diminution, interruption, contamination or pollution.

(5) The use will not involve unreasonable delays in reclamation or implementation.

(6) Necessary approval of measures to prevent or mitigate adverse effects on fish, wildlife and related environmental values and threatened or endangered plants is obtained from the Department and appropriate State and Federal fish and wildlife management agencies have been provided a 30-day period in which to review the plan before surface mining activities begin.

§ 88.138. Haul roads and access roads: general.

(a) Haul roads and access roads shall be designed, constructed and maintained to control or prevent erosion and contributions of sediment to streams or runoff outside the affected area; air and water pollution; damage to

fish and wildlife or their habitat; flooding and damage to public or private property. Upon completion of the associated surface mining activities, the area disturbed by the road shall be restored in accordance with § 88.144 (relating to haul roads and access roads: restoration) unless retention of the road and its maintenance plan is approved as part of the postmining land use.

(b) The haul road may not be located in or within 100 feet (30.48 meters) of a perennial or intermittent stream except in accordance with § 86.102 (relating to areas where mining is prohibited or limited). Any crossing of a perennial or intermittent stream shall be made using bridges, culverts or similar structures. Bridges, culverts or other encroachment or water obstruction shall meet the requirements of Chapter 105 (relating to dam safety and waterway management).

(c) Each road shall have a drainage system that is compatible with the natural drainage system, structurally stable and which will pass safely the peak flow from a 10-year precipitation event or larger event if required by the Department. The drainage system shall include sloped or crowned road surfaces, cross drains or culverts, stabilized ditches, erosion resistant surfacing, sediment traps and other appropriate sediment control measures as required by § 88.96 (relating to hydrologic balance: sediment control measures).

(d) Roads shall be constructed on stable areas that avoid wet or unstable soils.

(e) Prior to the construction of the road, all topsoil shall be removed, stored on a stable site and protected against erosion and compaction until restoration of the haul road.

(f) Any disturbed area adjacent to the road shall be vegetated or otherwise stabilized to prevent erosion.

(g) Acid-forming or toxic-forming material may not be suitable for surfacing or construction of a road except where the road is within the confines of a road refuse disposal or reprocessing area and the effluent meets the requirements of § 88.92 (relating to hydrologic balance: effluent standards).

§ 88.144. Haul roads and access roads: restoration.

Unless the Department approves retention of a road as suitable for the approved postmining land use in accordance with § 88.133 (relating to postmining land use), as soon as practicable after the road is no longer needed for the associated surface mining activities:

(1) The road shall be physically closed to vehicular traffic.

(2) The road and adjacent slopes shall be regraded to blend with the natural contours and drainage pattern.

(3) All bridges and culverts shall be removed.

(4) Cross drains, dikes and water bars shall be constructed to minimize erosion.

(5) All disturbed areas shall be revegetated in accordance with § 88.122 (relating to revegetation: timing).

(6) All excess material and debris shall be disposed of in a manner approved by the Department.

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

§ 88.187. Hydrologic balance: effluent standards.

(a) *Groups of effluent criteria.* A person may not allow a discharge of water from an area disturbed by mining activities which exceeds the following groups of effluent criteria. The effluent limitations shall be applied under subsection (b).

<i>Parameter</i>	<i>Group A</i>		
	<i>30-day Average</i>	<i>Daily Maximum</i>	<i>Instantaneous Maximum</i>
iron (total)	3.0 mg/l	6.0 mg/l	7.0 mg/l
manganese (total)	2.0 mg/l	4.0 mg/l	5.0 mg/l
suspended solids	35 mg/l	70 mg/l	90 mg/l
pH ¹		greater than 6.0; less than 9.0	

alkalinity greater than acidity¹

¹ The parameter is applicable at all times.

<i>Parameter</i>	<i>Instantaneous Maximum</i>
	iron (total)
settleable solids	0.5 ml/l
pH	greater than 6.0; less than 9.0
alkalinity greater than acidity	

<i>Parameter</i>	<i>Instantaneous Maximum</i>
	pH
alkalinity greater than acidity	

* * * * *

§ 88.191. Hydrologic balance: sediment control measures.

Appropriate sediment control measures shall be designed, constructed and maintained to:

- (1) Prevent, to the extent possible, contributions of sediment to streamflow or to runoff outside the permit.
- (2) Meet treatment and effluent limitations of § 88.187 (relating to hydrologic balance: effluent standards).
- (3) Minimize erosion to the extent possible.
- (4) Meet the requirements of Chapter 102 (relating to erosion control).

§ 88.221. Postmining land use.

(a) All affected areas shall be restored in a timely manner to conditions that are capable of supporting the uses which they were capable of supporting before any mining, or to higher or better uses achievable under criteria and procedures of this section, and prior to the release of land from permit area in accordance with Chapter 86, Subchapter F (relating to bonding and insurance requirements).

(b) The premining use of land to which the postmining land use is compared shall be determined by the following:

(1) The postmining land use for land that has not been previously mined and has been properly managed shall be judged on the basis of uses which the land previously supported.

(2) The postmining land use for land that has been previously mined and not reclaimed shall be judged on the condition prior to mining or to a higher or better use that can be achieved and is compatible with surrounding areas.

(c) Alternative land uses shall be approved by the Department after consultation with the landowner or the land management agency having jurisdiction over the lands and after determining the following criteria are met:

(1) The proposed postmining land use is compatible with adjacent land use and applicable land use policies, plans and programs and Federal, State and local law. A written statement of the views of the authorities with statutory responsibilities for land use policies and plans is submitted to the Department before surface mining activities begin. Any required approval, including any necessary zoning or other changes required for land use by local, State or Federal land management agencies, is obtained and remains valid throughout the surface mining activities.

(2) The owner of the surface requests in a notarized written statement that alternative land use be approved.

(3) The proposed postmining land use is reasonably likely to be achieved which may be demonstrated by one or more of the following or other similar criteria:

(i) Provision of any necessary public facilities is ensured as evidenced by letters of commitment from parties other than the person who conducts surface mining activities, as appropriate, to provide the public facilities in a manner compatible with the plans submitted under Subchapter A (relating to general provisions). The letters shall be submitted to the Department before surface mining activities begin.

(ii) Specific plans are prepared and submitted to the Department which show the feasibility of the postmining land use as related to projected land use trends and markets. The plan shall include a schedule showing how the proposed use will be developed and achieved within a reasonable time after mining and how the development will be sustained. The Department may require appropriate demonstrations to show that the planned procedures are feasible, reasonable and integrated with mining and reclamation, and that the plans will result in successful reclamation.

(4) The proposed use will neither pose an actual or potential threat to public health or safety or of water diminution, interruption, contamination or pollution.

(5) The use will not involve unreasonable delays in reclamation or implementation.

(6) Necessary approval of measures to prevent or mitigate adverse effects on fish, wildlife and related environmental values and threatened or endangered plants is obtained from the Department, and appropriate State and Federal fish and wildlife management agencies have been provided a 30-day period in which to review the plan before surface mining activities begin.

§ 88.231. Haul roads and access roads: general.

(a) Haul roads and access roads shall be designed, constructed and maintained to control or prevent erosion and contributions of sediment to streams or runoff outside the affected area; air and water pollution; damage to fish and wildlife or their habitat; flooding and damage to public or private property. Upon completion of the associated surface mining activities, the area disturbed by the road shall be restored in accordance with § 88.237 (relating to haul roads and access roads: restoration) unless retention of the road and its maintenance plan is approved as part of the postmining land use.

(b) The haul road may not be located in or within 100 feet (30.48 meters) of a perennial or intermittent stream except in accordance with § 86.102 (relating to areas where mining is prohibited or limited). Any crossing of a perennial or intermittent stream shall be made using bridges, culverts or similar structures. Bridges, culverts or other encroachments or water obstructions comply with Chapter 105 (relating to dam safety and waterway management).

(c) Each road shall have a drainage system that is compatible with the natural drainage system, structurally stable and which will pass safely the peak flow from a 10-year precipitation event or larger event if required by the Department. The drainage system shall include sloped or crowned road surfaces, cross drains or culverts, stabilized ditches, erosion resistant surfacing, sediment traps and other appropriate sediment control measures as required by § 88.191 (relating to hydrologic balance: sediment control measures).

(d) Roads shall be constructed on stable areas that avoid wet or unstable soils.

(e) Prior to the construction of the road, all topsoil shall be removed, stored on a stable site and protected against erosion and compaction until restoration of the haul road.

(f) Any disturbed area adjacent to the road shall be vegetated or otherwise stabilized to prevent erosion.

(g) Acid-forming or toxic-forming material may not be used for surfacing or construction of a road except where the road is within the confines of a coal refuse disposal or

reprocessing area and the effluent meets the requirements of § 88.187 (relating to hydrologic balance: effluent standards).

§ 88.237. Haul roads and access roads: restoration.

Unless the Department approves retention of a road as suitable for the approved postmining land use in accordance with § 88.221 (relating to postmining land use), as soon as practicable after the road is no longer needed for the associated surface mining activities:

- (1) The road shall be physically closed to vehicular traffic.
- (2) The road and adjacent slopes shall be regraded to blend with the natural contours and drainage pattern.
- (3) All bridges and culverts shall be removed.
- (4) Cross drains, dikes and water bars shall be constructed to minimize erosion.
- (5) All disturbed areas shall be revegetated in accordance with § 88.209 (relating to vegetation: general requirements).
- (6) All excess material and debris shall be disposed of in a manner approved by the Department.

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

§ 88.283. Sealing of drilled holes: general requirements.

(a) Each exploration hole, other drill or borehole, well or other exposed underground opening (except for holes solely drilled and used for blasting) shall be sealed, backfilled or otherwise managed, as approved by the Department to:

- (1) Prevent acid or other toxic drainage from entering groundwaters or surface waters.
- (2) Minimize disturbance to the prevailing hydrologic balance.
- (3) Ensure the safety of people, property, livestock, fish and wildlife and machinery in the permit and adjacent areas.
- (4) Prevent groundwaters and surface water from entering underground mine workings.
- (b) If these openings are uncovered or exposed by coal refuse disposal activities within the permit area, they shall be permanently closed unless approved for water monitoring, or otherwise managed in a manner approved by the Department.

(c) Use of a drilled hole, borehole or monitoring well as a water well shall meet the provisions of § 88.305 (relating to hydrologic balance: groundwater monitoring).

(d) Gas and oil wells shall be sealed in accordance with the Oil and Gas Act (58 P. S. §§ 601.101—601.605).

(e) A solid barrier of undisturbed earth, 125 feet (38.1 meters) in radius shall be maintained around all oil and gas wells, unless one of the following exists:

- (1) The well is sealed in accordance with subsection (d).
- (2) The Department approves, in writing, a lesser distance if:
 - (i) Access to the well is provided at all times.
 - (ii) The integrity of the well is maintained.
 - (iii) The measures included in the permit to minimize damage, destruction or disruption of services are implemented.

(f) All exploration holes, other drill or boreholes, wells (other than gas or oil wells) and other exposed underground openings which have been identified in the approved permit application for use to return waste to an underground mine as part of an operation approved under this chapter, or to be used to monitor groundwater conditions shall be protected by temporary seals, barricades, fences or other protective devices approved by the Department. These devices shall be periodically inspected and maintained in good operating condition during the coal refuse disposal activities.

§ 88.291. Hydrologic balance: general requirements.

(a) Coal refuse disposal activities shall be planned and conducted to minimize disturbances to the prevailing hydrologic balance in the permit and adjacent areas and to prevent material damage to the hydrologic balance outside the permit area. The Department may require additional preventive, remedial or monitoring measures to assure that material damage to the hydrologic balance outside the permit area is prevented.

(b) Prevent pollution of water and prevent, to the maximum extent possible, changes to water quality and quantity, the depth to groundwater and in the location of surface water drainage channels so that the approved post disposal land use of the permit areas is not adversely affected.

(c) The treatment requirements and effluent limitations established under § 88.192 (relating to hydrologic balance: treatment facilities) may not be violated.

(d) Each person who conducts surface mining and reclamation activities shall conduct the mining and reclamation operation to prevent water pollution and, if necessary, operate and maintain the necessary water treatment facilities until applicable treatment requirements and effluent limitations established under § 88.192 are achieved and maintained. If these practices are not adequate, the person who conducts bank removal and reclamation activities shall provide the necessary water treatment facilities to obtain the applicable water quality standards.

§ 88.292. Hydrologic balance: effluent standards.

(a) *Groups of effluent criteria.* A person may not allow a discharge of water from an area disturbed by mining activities which exceeds the following groups of effluent criteria. The effluent limitations shall be applied under subsection (b).

Parameter	Group A		
	30-day Average	Daily Maximum	Instantaneous Maximum
iron (total)	3.0 mg/l	6.0 mg/l	7.0 mg/l
manganese (total)	2.0 mg/l	4.0 mg/l	5.0 mg/l
suspended solids	35 mg/l	70 mg/l	90 mg/l

<i>Parameter</i>	<i>30-day Average</i>	<i>Daily Maximum</i>	<i>Instantaneous Maximum</i>
pH ¹ alkalinity greater than acidity ¹		greater than 6.0; less than 9.0	

¹ This parameter is applicable at all times.

Group B

<i>Parameter</i>	<i>Instantaneous Maximum</i>
iron (total)	7.0 mg/l
settleable solids	0.5 ml/l
pH alkalinity greater than acidity	greater than 6.0; less than 9.0

Group C

<i>Parameter</i>	<i>Instantaneous Maximum</i>
pH alkalinity greater than acidity	greater than 6.0; less than 9.0

* * * * *

§ 88.296. Hydrologic balance: sediment control measures.

Appropriate sediment control measures shall be designed, constructed and maintained to:

- (1) Prevent, to the extent possible, additional contributions of sediment to streamflow or to runoff outside the affected area.
- (2) Meet the treatment and effluent requirements of § 88.292 (relating to hydrologic balance: effluent standards).
- (3) Minimize erosion to the extent possible.
- (4) Meet the requirements of Chapter 102 (relating to erosion control).

§ 88.334. Postdisposal land use.

(a) All affected areas shall be restored in a timely manner to conditions that are capable of supporting the uses which they were capable of supporting before refuse disposal, or to higher or better uses achievable under criteria and procedures of this section and prior to the release of land from the permit area in accordance with Chapter 86, Subchapter F (relating to bonding and insurance requirements).

(b) The predisposal use of land to which the postdisposal land use is compared shall be determined by the following:

- (1) The postdisposal land use for land that has not been previously mined and has been properly managed shall be judged on the basis of those uses which the land previously supported.
- (2) The postdisposal land use for land that has been previously mined and not reclaimed shall be judged on the basis of the condition prior to mining or to a higher or better use that can be achieved and is compatible with surrounding areas.
- (c) Alternative land uses shall be approved by the Department after consultation with the landowner or the land management agency having jurisdiction over the lands and after determining that the following criteria are met:

(1) The proposed postdisposal land use is compatible with adjacent land use and applicable land use policies, plans and programs and Federal, State and local law. A written statement of the views of the authorities with statutory responsibilities for land use policies and plans is submitted to the Department before refuse disposal activities begin. Any required approval, including any necessary zoning or other changes required for land use by local, State or Federal land management agencies, is obtained and remains valid throughout the coal refuse disposal activities.

(2) The owner of the surface shall request in a notarized written statement that the alternative land use be approved.

(3) The proposed postmining land use is reasonably likely to be achieved which may be demonstrated by one or more of the following or other similar criteria:

(i) Provision of any necessary public facilities is ensured as evidenced by letters of commitment from parties other than the person who conducts refuse disposal activities, as appropriate, to provide the public facilities in a manner compatible with the plans submitted under Subchapter A (relating to general provisions). The letters shall be submitted to the Department before coal refuse disposal activities begin.

(ii) Specific plans are prepared and submitted to the Department which show the feasibility of the postmining land use as related to projected land use trends and markets. The plan shall include a schedule showing how the proposed use will be developed and achieved within a reasonable time after mining and how the development will be sustained. The Department may require appropriate demonstrations to show that the planned procedures are feasible, reasonable and integrated with mining and reclamation, and that the plans will result in successful reclamation.

(4) The proposed use shall neither pose an actual or potential threat to public health or safety or of water diminution or interruption, contamination or pollution.

(5) The use may not involve unreasonable delays in reclamation or implementation.

(6) Necessary approval of measures to prevent or mitigate adverse effects on fish, wildlife and related environ-

mental values and threatened or endangered plants is obtained from the Department, and appropriate State and Federal fish and wildlife management agencies have been provided a 30-day period in which to review the plan before coal refuse disposal activities begin.

§ 88.335. Haul roads and access roads: general.

(a) Haul roads and access roads shall be designed, constructed and maintained to control or prevent erosion and contributions of sediment to streams or runoff outside the affected area; air and water pollution; damage to fish and wildlife or their habitat; flooding and damage to public or private property. Upon completion of the associated surface mining activities, the area disturbed by the road shall be restored in accordance with § 88.341 (relating to haul roads and access roads: restoration) unless retention of the road and its maintenance plan is approved as part of the postmining land use.

(b) The haul road may not be located in or within 100 feet of a perennial or intermittent stream except in accordance with § 86.102 (relating to areas where mining is prohibited or limited). Any crossing of a perennial or intermittent stream shall be made using bridges, culverts or similar structures. Bridges, culverts or other encroachment or water obstruction shall meet the requirement of Chapter 105 (relating to dam safety and waterway management).

(c) Each road shall have a drainage system that is compatible with the natural drainage system, structurally stable and which will pass safely the peak flow from a 10-year precipitation event or larger event if required by the Department. The drainage system shall include sloped or crowned road surface, cross drains or culverts, stabilized ditches, erosion resistant surfacing, sediment traps and other appropriate control measures as required by § 88.296 (relating to hydrologic balance: sediment control measures).

(d) Roads shall be constructed on stable areas that avoid wet or unsuitable soils.

(e) Prior to the construction of the road, all topsoil shall be removed, stored on a stable site and protected against erosion and compaction until restoration of the haul road.

(f) Any disturbed area adjacent to the road shall be vegetated or otherwise stabilized to prevent erosion.

(g) Acid or toxic-forming material may not be used for surfacing or construction of a road except where the road is within the confines of a coal refuse disposal or reprocessing area and the effluent meets the requirements of § 88.292 (relating to hydrologic balance: effluent standards).

§ 88.341. Haul roads and access roads: restoration.

Unless the Department approves retention of a road as suitable for the approved postmining land use in accordance with § 88.334 (relating to postdisposal land use), as soon as practicable after the road is no longer needed for the associated surface mining activities:

(1) The road shall be physically closed to vehicular traffic.

(2) The road and adjacent slopes shall be regraded to blend with the natural contours and drainage pattern.

(3) All bridges and culverts shall be removed.

(4) Cross drains, dikes and water bars shall be constructed to minimize erosion.

(5) All disturbed areas shall be revegetated in accordance with § 88.322 (relating to revegetation: general requirements).

(6) All excess material and debris shall be disposed of in a manner approved by the Department.

Subchapter F. ANTHRACITE UNDERGROUND MINES

§ 88.492. Minimum requirements for reclamation and operation plan.

* * * * *

(f) *Protection of public parks and historic places.*

(1) For publicly-owned parks or historic places listed on the National Register of Historic Places that may be adversely affected by the proposed operations, each application shall describe the measures to be used to accomplish the following:

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

§ 88.509. Criteria and schedule for release of bonds on pollution abatement areas.

(a) The Department will release up to 60% of the amount of bond for the authorized pollution abatement area if the applicant demonstrates and the Department finds that:

(1) The surface mining activities were conducted on the permit area, including the pollution abatement area, under the requirements of the permit and the authorization, Chapter 86 (relating to surface and underground coal mining: general) and this chapter, except as specifically modified by this subchapter.

(2) The operator has satisfactorily completed backfilling, regrading and drainage control in accordance with the approved reclamation plan.

(3) The operator has properly implemented each step of the pollution abatement plan approved and authorized under this subchapter.

(4) The operator has not caused degradation of the baseline pollution load at any time during the 6 months prior to the submittal of the request for bond release under this subsection and until the bond release is approved as shown by all ground and surface water monitoring conducted by the permittee under § 88.506(1) (relating to operational requirements) or conducted by the Department.

(5) The operator has not caused or contributed to surface water pollution or groundwater degradation by reaffected or mining the pollution abatement area.

(b) The Department will release an additional amount of bond for the authorized pollution abatement area but retaining an amount sufficient to cover the cost to the Department of reestablishing vegetation if completed by a third party if the operator demonstrates and the Department finds that:

(1) The operator has replaced the topsoil or material conserved under §§ 88.87 and 88.183 (relating to vegetation-supporting material: available soil removal; and vegetation-supporting material: soil), completed final

grading, planting and established revegetation in accordance with the approved reclamation plan and achieved the standard of success for revegetation in § 88.505(a)(5) (relating to approval or denial).

(2) The operator has not caused or contributed to surface water pollution or groundwater degradation by re-affecting or mining the pollution abatement area.

(3) The operator has complied with one of the following:

(i) Achieved the actual improvement of the baseline pollution load described in the approved abatement plan and shown by all ground and surface water monitoring conducted by the permittee for the period of time provided in the abatement plan after completion of backfilling, final grading, drainage control, topsoiling and establishment of revegetation to achieve the standard of success for revegetation in § 88.505(a)(5).

(ii) Achieved all of the following:

(A) At a minimum has not caused degradation of the baseline pollution load as shown by all ground and surface water monitoring conducted by the operator or the Department:

(I) For 12 months prior to the date of application for bond release and until the bond release is approved under subsection (b), if backfilling, final grading, drainage control, topsoiling and establishment of revegetation to achieve the standard of success for revegetation in § 88.505(a)(5) have been completed.

(II) If treatment has been initiated at any time after initial bond release under subsection (a) and in accordance with § 88.507(e) (relating to treatment of discharges), for 12 months from the discontinuance of treatment under § 88.507(d), if backfilling, final grading, drainage control, topsoiling and establishment of revegetation to achieve the standard of success for revegetation in § 88.505(a)(5) have been completed.

(B) Conducted all measures provided in the approved abatement plan and additional measures specified by the Department in writing at the time of initial bond release under subsection (a) for the area requested for bond release.

(C) Caused aesthetic or other environmental improvements or elimination of public health and safety problems by re-mining and re-affecting the pollution abatement area.

(D) Stabilized the pollution abatement area.

(c) The Department will release the remaining portion of the amount of bond on the authorized pollution abatement area if the applicant demonstrates and the Department finds that:

(1) The operator has successfully completed all the approved abatement and reclamation plans and the pollution abatement area is capable of supporting the postmining land use approved under §§ 88.221 and 88.334 (relating to postmining land use; and postdisposal land use).

(2) The operator has complied with the permit and the authorization, Chapter 86 and this chapter, except as specifically modified by this subchapter.

(3) The operator has not caused degradation of the baseline pollution load from the time of bond release under subsection (b) or, if treatment has been initiated after bond release under subsection (b) in accordance with § 88.507(e) for 5 years from the discontinuance of treatment under § 88.507(d).

(4) The applicable liability period has expired under § 86.151 (relating to period of liability).

CHAPTER 89. UNDERGROUND MINING OF COAL AND COAL PREPARATION FACILITIES

Subchapter B. OPERATIONS

INFORMATION REQUIREMENTS

§ 89.38. Archaeological and historical resources, public parks and publicly-owned parks.

(a) The operation plan shall describe and identify the nature of archaeological, cultural and historic resources listed on or eligible for listing on the National Register of Historic Places and known significant archaeological or cultural sites and public parks within the proposed permit area and adjacent area. The description shall be based on available information, including, but not limited to, data of State and local archaeological, historical and cultural preservation agencies. The Department may require the applicant to identify and evaluate important historic and archaeological resources that may be eligible for listing on the National Register of Historic Places, through one or more of the following:

- (1) The collection of additional information.
- (2) The conducting of field investigations.
- (3) Other appropriate analysis.

(b) For publicly owned parks or historic places listed on the National Register of Historic Places that may be adversely affected by the proposed underground mining activities, the plan shall describe the measures to be used to accomplish one of the following:

- (1) The prevention of adverse impacts and meet the requirements of Chapter 86, Subchapter D (relating to areas unsuitable for mining).
- (2) The minimization of adverse impacts if valid existing rights exist or joint agency approval is to be obtained under Chapter 86, Subchapter D.

(c) The Department may require the applicant to protect historic or archaeological properties listed on or eligible for listing on the National Register of Historic Places through appropriate mitigation and treatment measures. Appropriate mitigation and treatment measures may be required to be taken after permit issuance if the required measures are completed before the properties are affected by underground mining activity or coal preparation activity.

PERFORMANCE STANDARDS

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

* * * * *

(c) *Effluent limitations.* A person may not allow a discharge of water from an area disturbed by underground mining activities, including areas disturbed by mineral preparation, processing or handling facilities which exceeds the following groups of effluent standards. The effluent limitations shall be applied under subsection (d).

<i>Parameter</i>	<i>Group A</i>		
	<i>30-day Average</i>	<i>Daily Maximum</i>	<i>Instantaneous Maximum</i>
iron (total)	3.0 mg/l	6.0mg/l	7.0 mg/l
manganese (total)	2.0 mg/l	4.0 mg/l	5.0 mg/l
suspended solids	35 mg/l	70 mg/l	90 mg/l
pH ¹		greater than 6.0; less than 9.0	
alkalinity greater than acidity ¹			

¹ The parameter is applicable at all times.

<i>Parameter</i>	<i>Group B</i>	
		<i>Instantaneous Maximum</i>
iron (total)		7.0 mg/l
settleable solids		0.5 ml/l
pH		greater than 6.0; less than 9.0
alkalinity greater than acidity		

<i>Parameter</i>	<i>Group C</i>	
		<i>Instantaneous Maximum</i>
pH		greater than 6.0; less than 9.0
alkalinity greater than acidity		

* * * * *

§ 89.65. 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 of the activities on fish, wildlife and related environmental values, and achieve enhancement of the resources when practicable.

(b) The operator shall promptly report to the Department the presence in the permit area of any threatened or endangered species under State or Federal law of which that person becomes aware and which was not previously reported to the Department by that person.

(c) The operator shall ensure that the design and construction of any new electric power lines and other transmission facilities to be used for or incidental to the underground mining activities on the permit area shall be designed and constructed in accordance with the guidelines in Environmental Criteria for Electric Transmission Systems (USDI, ISDA (1970)), or in alternative guidance manuals approved by the Department. Distribution lines shall be designed and constructed in accordance with REA Bulletin 61-10 Powerline Contact by Eagles and Other Large Birds or in alternative guidance manuals approved by the Department. For information purposes, these two documents are available at the Office of Surface Mining Office, United States Department of the Interior, South Interior Building, Washington, D.C., 20240, and at each Office of Surface Mining Regional Office, District Office and Field Office.

(d) The operator shall to the extent possible, using the best technology currently available:

(1) Locate and operate haul and access roads to avoid or minimize impacts to fish and wildlife species or other species protected by State or Federal law.

(2) Avoid disturbances to, enhance where practicable, or restore habitats of unusually high value for fish and wildlife.

(3) When practicable, maintain natural riparian vegetation on the banks of streams, lakes and other wetland areas.

(4) Not use restricted pesticides or herbicides on the area during underground mining and reclamation activities unless approved by the Department of Agriculture.

§ 89.67. Support facilities.

(a) Support facilities required for, or used incidentally to, the operation of the underground mine, including, but not limited to, mine buildings, coal loading facilities at or near the mine site, coal storage facilities, equipment storage facilities, fan buildings, hoist buildings, preparation plants, sheds, shops and other buildings, shall be located, maintained and used in a manner that does the following:

(1) Prevents or controls erosion and siltation, water pollution and damage to public or private property.

(2) To the extent possible using the best technology currently available:

(i) Minimizes damage to fish, wildlife and related environmental values.

(ii) Minimizes additional contributions of suspended solids to streamflow or runoff outside the permit area. Contributions may not be in excess of limitations of State or Federal law.

(b) 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 Department.

**Subchapter C. RECLAMATION
PERFORMANCE STANDARDS**

§ 89.82. 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 achieve enhancement of the resources where practicable.

(b) The operator shall promptly report to the Department the presence in the permit area of threatened or endangered species under State or Federal laws of which that person becomes aware and which was not previously reported to the Department by that person. Upon notification, the Department will consult with the Game Commission or the Fish and Boat Commission and appropriate Federal fish and wildlife agencies and, after consultation, identify whether, and under what conditions, the operator may proceed.

(c) The operator shall, to the extent possible using the best technology currently available:

(1) Restore, and enhance when practicable, natural riparian vegetation on the banks of streams, lakes and other wetland areas.

(2) Select plant species for their proven nutritional value and their ability to support and enhance fish and wildlife habitat, when the postmining land use is to be fish and wildlife habitat. Plants should be grouped and distributed in a manner which optimizes edge effect, cover and other benefits for fish and wildlife.

(3) Intersperse reclaimed lands with green belts, utilizing species of grass, shrubs and trees useful as food and cover for birds and small animals, when the postmining land use is to be residential, public service or industrial land use.

(4) Design fences, overland conveyors and other potential barriers to permit passage for large mammals, except where the Department determines that these requirements are unnecessary.

(5) Fence, cover or use other appropriate methods to exclude wildlife from ponds which contain hazardous concentrations of toxic-forming materials.

(d) Underground mining activities may not be conducted in a manner which would result in the unlawful taking of a bald or golden eagle, its nest or its eggs. The operator shall promptly report to the Department a golden or bald eagle nest within the permit area of which the operator becomes aware. Upon notification the Department will consult with the United States Fish and Wildlife Service and the Game Commission and, after consultation, will identify whether, and under what conditions, the operator may proceed.

(e) Underground mining activities may not be conducted which are likely to jeopardize the continued existence of endangered or threatened species listed by the Secretary of the Interior, the Game Commission or the Fish and Boat Commission or which are likely to result in the destruction or adverse modification of designated critical habitats of these species in violation of the Endangered Species Act of 1973 (16 U.S.C.A. §§ 1531—1544).

§ 89.87. Regrading or stabilizing rills and gullies.

(a) 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 do one of the following shall be filled, regraded or otherwise stabilized:

(1) Disrupt the approved postmining land use or the reestablishment of the vegetative cover.

(2) Cause or contribute to a violation of water quality standards for receiving streams.

(c) For areas listed in subsection (b), the topsoil shall be replaced, and the areas shall be reseeded or replanted.

§ 89.88. Postmining land use.

(a) Surface land areas affected by underground mining activities shall be restored, in a timely manner, to conditions that are capable of supporting the use which the areas were capable of supporting before any mining, or to higher or better uses achievable under the criteria and procedures of subsection (c).

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

(c) Alternative land uses may be approved by the Department after consultation with the landowner or the land management agency having jurisdiction over the lands, if the following apply:

(1) The proposed alternative land use is compatible with adjacent land use and, when applicable, with existing local, State or Federal land use policies and plans. When an alternative land use is proposed, the Department will notify authorities with statutory responsibility for land use policies and plans. These authorities shall have 60 days to submit written statements on the proposed alternative land use. Any required approval of local, State or Federal land management agencies, including any necessary zoning or other changes required for the land use, is obtained and remains valid throughout the mining activities.

(2) The proposed postmining land use is reasonably likely to be achieved which may be demonstrated by the following or other similar criteria: Specific plans are prepared and submitted to the Department which show the feasibility of the alternative land use as related to projected land use trends and markets, which include a schedule showing how the proposed use will be developed and achieved within a reasonable time after mining, and which show how the use will be sustained. The Department may require appropriate demonstrations to show how the use will be sustained. The Department may require appropriate demonstrations to show that the planned procedures are feasible, reasonable and integrated with mining and reclamation, and that the plans will result in successful reclamation.

(3) The proposed uses will neither present actual nor probable hazard to public health, safety or water flow diminution or pollution.

(4) The proposed uses will not involve unreasonable delays in reclamation.

(5) Necessary approval of measures to prevent adverse effects on fish, wildlife and related environmental values and threatened or endangered plants are obtained from the Department and appropriate State and Federal fish and wildlife management agencies.

(6) Proposals to change premining land uses of range, fish and wildlife habitat, forest land, hayland or pasture to a postmining cropland use, when the cropland would require continuous maintenance such as seeding, plowing,

cultivation, fertilization or other similar practices to be practicable or to comply with applicable Federal, State and local laws, have been reviewed by the Department to ensure that:

(i) There is a firm written commitment by the operator or by the landowner or land manager to provide sufficient crop management after release of applicable performance bonds under Chapter 86, Subchapter F (relating to bonding and insurance requirements) to assure that the proposed postmining cropland use remains practical and reasonable.

(ii) There is sufficient water available and committed to maintain crop production.

(iii) Topsoil quality and depth are sufficient to support the proposed use.

§ 89.90. Restoration of roads.

(a) Unless the Department approves retention of a road as suitable for the approved postmining land use, as soon as practicable after the road is no longer needed for operations, reclamation or monitoring:

- (1) The road shall be closed to vehicular traffic.
- (2) The natural drainage patterns shall be restored.
- (3) Bridges and culverts shall be removed.
- (4) Roadbeds shall be ripped or scarified.
- (5) Fill slopes shall be rounded or reduced and shaped to conform the site to adjacent terrain and to meet natural drainage restoration standards.
- (6) Cut slopes shall be shaped to blend with the natural contour.
- (7) Cross drains, dikes and water bars shall be constructed to minimize erosion.
- (8) Terraces shall be constructed as necessary to prevent excessive erosion and to provide long-term stability in cut-and-fill-slopes.
- (9) Road surfaces shall be covered with topsoil in accordance with § 89.85(b) (relating to topsoil use) and revegetated in accordance with § 89.86 (relating to revegetation).
- (b) Road-surfacing materials shall be removed, hauled or conveyed, and disposed of in accordance with § 89.63 (relating to disposal of noncoal wastes).

CHAPTER 90. COAL REFUSE DISPOSAL

Subchapter A. GENERAL PERMIT AND APPLICATION REQUIREMENTS FOR COAL REFUSE DISPOSAL

§ 90.1. Definitions.

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

* * * * *

Land use—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. 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 Department.

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(x) *Unmanaged natural habitat*—Idle land which does not require a specific management plan after the reclamation and revegetation have been accomplished.

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Subchapter C. MINIMUM OPERATION AND RECLAMATION PLAN INFORMATION REQUIRED IN APPLICATIONS FOR COAL REFUSE DISPOSAL

§ 90.31. General requirements.

An application shall contain a description of the coal refuse disposal activities proposed to be conducted during the life of the coal refuse disposal operations within the proposed permit area, including, at a minimum, the following:

- (1) A narrative description of the type and method of coal refuse disposal procedures and proposed engineering techniques and the major equipment to be used during operations.
- (2) A narrative explaining the construction, modification, use, maintenance and removal of the following facilities and structures, unless retention of the facility or structure is necessary for postdisposal land use as specified in § 90.166 (relating to postdisposal land use):
 - (i) Dams, embankments and other impoundments.
 - (ii) Overburden and topsoil handling and storage areas.
 - (iii) Coal removal, handling, storage, cleaning, processing and transportation areas and structures.
 - (iv) Spoil, coal refuse, mine development waste and noncoal waste removal, handling, storage, transportation and disposal areas and structures.
 - (v) Mine facilities.
 - (vi) Water and air pollution control facilities.
 - (vii) Erosion and sediment control facilities.
- (3) A description of the measures to be employed to ensure that all debris, potential acid-forming and potential toxic-forming materials, and materials constituting a fire hazard are disposed of in accordance with this chapter and a description of the contingency plans which have been developed to preclude combustion of the materials.

(4) A description, including appropriate cross sections and maps, of the measures to be used to seal or manage mine openings, and to plug, case, line or manage exploration holes, other boreholes, wells and other openings within the proposed permit area.

(5) A demonstration that the notification requirements of § 86.31(e) (relating to public notices of filing of permit application) have been satisfied.

§ 90.40. Protection of public parks and historic places.

(a) For publicly-owned parks or historic places listed on the National Register of Historic Places that may be adversely affected by the proposed coal refuse disposal activities, each application shall describe the measures to be used to accomplish the following:

- (1) Prevent adverse impacts and meet the requirements of Chapter 86, Subchapter D (relating to areas unsuitable for mining).
- (2) Minimize adverse impacts if valid existing rights exist or joint agency approval is to be obtained under Chapter 86, Subchapter D.

(b) The Department may require the applicant to protect historic or archaeological properties listed on or eligible for listing on the National Register of Historic Places through appropriate mitigation and treatment measures. Appropriate mitigation and treatment measures may be required to be taken after permit issuance, if the required measures are completed before the properties are affected by coal refuse disposal activity.

Subchapter D. PERFORMANCE STANDARDS FOR COAL REFUSE DISPOSAL

§ 90.93. Casing and sealing of drilled holes and underground workings.

(a) An exploration hole, other drill or borehole, well or other exposed underground opening—except for holes solely drilled and used for blasting—shall be cased, sealed or otherwise managed, as approved by the Department to:

(1) Prevent acid or other toxic drainage from entering groundwaters or surface waters.

(2) Minimize disturbance to the prevailing hydrologic balance.

(3) Ensure the safety of people, livestock, fish and wildlife and machinery in the permit and adjacent areas.

(4) Prevent groundwater or surface water from entering underground mine workings.

(b) If these openings are uncovered or exposed by coal refuse disposal activities within the permit area, they shall be permanently closed unless approved for water monitoring, or otherwise managed in a manner approved by the Department.

(c) Use of a drilled hole, borehole or monitoring well as a water well shall meet the provisions of § 90.115 (relating to hydrologic balance: groundwater monitoring).

(d) Gas and oil wells shall be sealed in accordance with the Oil and Gas Act (58 P. S. §§ 601.101—601.605).

(e) A solid barrier of undisturbed earth, 125 feet (38.1 meters) in radius shall be maintained around all oil and gas wells, unless one of the following happens:

(1) The well is sealed in accordance with subsection (d).

(2) The Department approves, in writing, a lesser distance, if:

(i) Access to the well is provided at all times.

(ii) The integrity of the well is maintained.

(iii) The measures included in the permit to minimize damage, destruction or disruption of services under § 90.147(b) (relating to support facilities and utility installations) are implemented.

(f) All exploration holes, other drill or boreholes, wells—other than gas or oil wells—and other exposed underground openings which have been identified in the approved permit application for use to return waste to an underground mine as part of an operation approved under Chapter 89 (relating to underground mining of coal and coal preparation facilities), or to be used to monitor groundwater conditions, shall be protected by temporary seals, barricades, fences or other protective devices approved by the Department. These devices shall be periodically inspected and maintained in good operating condition during the coal refuse disposal activities.

§ 90.97. Topsoil: removal.

(a) All topsoil shall be removed from the areas to be disturbed in a separate layer prior to drilling, blasting, coal refuse disposal or other surface disturbance. Any

vegetation cover which would interfere with the removal and use of the topsoil shall be removed prior to topsoil removal.

(b) In the event removal of vegetative matter, topsoil or other materials may result in erosion which may cause air or water pollution, the size of the area from which topsoil is removed at any one time shall be limited and other measures taken that the Department may approve or require to control erosion.

(c) If topsoil is less than 12 inches (30.48 centimeters), a 12-inch (30.48 centimeters) layer of topsoil, subsoil and unconsolidated materials shall be removed, segregated, conserved and replaced as the final surface soil layer. If the topsoil and all unconsolidated material measures less than 12 inches (30.48 centimeters), all the topsoil, subsoil and unconsolidated material shall be removed and the mixture segregated and redistributed as the final surface soil layer.

(d) On areas that have been previously affected by mining or coal refuse disposal activities and have no available topsoil or subsoil, sufficient material best suited to support vegetation shall be segregated, conserved and redistributed as the final surface layer.

(e) The B horizon and portions of the C horizon, or other underlying layers demonstrated to have qualities for comparable root development, shall be segregated and replaced as subsoil if the Department determines that either of these is necessary or desirable to ensure soil productivity consistent with the approved postdisposal land use.

(f) When approved by the Department, in writing, other material may be substituted or used as a supplement to topsoil if the operator demonstrates that the resulting soil medium is equal or more suitable than topsoil for sustaining vegetation and soil productivity. In making this demonstration, the Department may require chemical and physical analyses of the substituted material and topsoil. These analyses may include determinations of pH, net acidity or alkalinity, phosphorus, potassium, texture class, field site trials or greenhouse tests or other analyses as required by the Department.

§ 90.101. Hydrologic balance: general requirements.

(a) Coal refuse disposal activities shall be planned and conducted to minimize disturbances to the prevailing hydrologic balance in the permit and adjacent areas and to prevent material damage to the hydrologic balance outside the permit area. The Department may require additional preventive, remedial or monitoring measures to assure that material damage to the hydrologic balance outside the permit area is prevented.

(b) Coal refuse disposal activities shall be planned and conducted to prevent pollution of the water and prevent, to the maximum extent possible, changes to the water quantity, depth to groundwater and location of surface water drainage channels so that the approved postdisposal land use of the permit is not adversely affected.

(c) In no case shall the treatment requirements and effluent limitations established under § 90.102 (relating to hydrologic balance: water quality standards, effluent limitations and best management practices) be violated.

(d) Operations shall be conducted to prevent water pollution and, when necessary, treatment methods shall be used.

(e) A person who conducts coal refuse disposal activities shall conduct the disposal and reclamation operation to prevent water pollution and, when necessary, operate and maintain the necessary water treatment facilities until applicable treatment requirements and effluent limitations established under § 90.102 are achieved and maintained.

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

(a) A person may not allow a discharge of water from an area disturbed by coal refuse disposal activities, including areas disturbed by mineral preparation, processing or handling facilities which exceeds the following groups of effluent criteria. The effluent imitations are to be applied under subsection (b).

<i>Parameter</i>	<i>Group A</i>		
	<i>30-day Average</i>	<i>Daily Maximum</i>	<i>Instantaneous Maximum</i>
iron (total)	3.0 mg/l	6.0 mg/l	7.0 mg/l
manganese (total)	2.0 mg/l	4.0 mg/l	5.0 mg/l
suspended solids	35 mg/l	70 mg/l	90 mg/l
pH ¹		greater than 6.0; less than 9.0	
alkalinity greater than acidity ¹		greater than 6.0; less than 9.0	

¹ The parameter is applicable at all times.

<i>Parameter</i>	<i>Group B</i>	
	<i>Instantaneous Maximum</i>	
iron (total)	7.0 mg/l	
settleable solids	0.5 ml/l	
pH	greater than 6.0; less than 9.0	
alkalinity greater than acidity	greater than 6.0; less than 9.0	

<i>Parameter</i>	<i>Group C</i>	
	<i>Instantaneous Maximum</i>	
pH	greater than 6.0; less than 9.0	
alkalinity greater than acidity	greater than 6.0; less than 9.0	

* * * * *

§ 90.106. Hydrologic balance: erosion and sedimentation control.

(a) Appropriate erosion and sediment control measures shall be designed, constructed and maintained using the best technology currently available to:

(1) Prevent, to the extent possible, contributions of sediment to stream flow or to runoff outside the affected area.

(2) Meet the treatment requirements and effluent limitations of § 90.102 (relating to hydrologic balance: water quality standards, effluent limitations and best management practices).

(3) Minimize erosion to the extent possible.

(4) Meet the requirements of Chapter 102 (relating to erosion control).

(b) All areas disturbed by coal refuse disposal activities shall be permanently stabilized as soon as practicable.

§ 90.134. Haul roads and access roads: general.

(a) Haul roads and access roads shall be designed, constructed and maintained to control or prevent: contributions of sediment to streams or runoff outside the affected area; flooding; air and water pollution; damage to fish and wildlife or their habitat; and damage to public or private property. 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 necessary design criteria established by the Department. Upon completion of the associated surface mining activities, the area disturbed by the road shall be restored in accordance with § 90.140 (relating to haul roads and access roads: restoration), unless retention of the road and its maintenance plan are approved as part of the postmining land use.

(b) The haul road or access roads may not be located in or within 100 feet (30.48 meters) of a perennial or intermittent stream except in accordance with § 86.102 (relating to areas where mining is prohibited or limited). Crossing of a perennial or intermittent stream shall be made using bridges, culverts or similar structures. Bridges, culverts or other encroachment or water obstruction shall meet the requirements of Chapter 105 (relating to dam safety and waterway management).

(c) Each road shall have a drainage system that is compatible with the natural drainage system, structurally stable and will pass safely the peak flow from a 10-year, 24-hour precipitation event, or larger event if required by the Department. The drainage system shall include sloped or crowned road surface, cross drains or culverts, stabilized ditches, erosion-resistant surfacing, sediment traps and other appropriate sediment control measures as required by § 90.106 (relating to hydrologic balance: erosion and sedimentation control).

(d) Roads shall be constructed on stable areas that avoid wet or unstable soils.

(e) Prior to the construction of the road, all topsoil shall be removed, stored on a stable site and protected against erosion and compaction until restoration of the haul road.

(f) Disturbed areas adjacent to the road shall be vegetated or otherwise stabilized to prevent erosion.

(g) Haul roads shall be surfaced with material sufficiently durable for the anticipated volume of traffic and the weight and speed of vehicles using the road. Acid or toxic-forming material may not be used for surfacing or construction of a road except when the road is within the confines of a coal refuse disposal or reprocessing area, and the effluent meets the requirements of § 90.102 (relating to hydrologic balance: water quality standards, effluent limitations and best management practices).

(h) A road damaged by a catastrophic event, such as a flood or earthquake, shall be repaired or reclaimed as soon as practicable after the damage has occurred.

(i) Haul roads and roads approved as part of the postmining land use shall be certified by a qualified registered professional engineer or qualified registered land surveyor that the roads have been constructed or reconstructed as designed in accordance with the approved plan.

§ 90.140. Haul roads and access roads: restoration.

Unless the Department approves retention of a road as suitable for the approved postdisposal land use in accordance with § 90.166 (relating to postdisposal land use), as soon as practicable after the road is no longer needed for operations, reclamation or monitoring:

- (1) The road shall be physically closed to vehicular traffic.
- (2) The road and adjacent slopes shall be regraded to blend with the natural contours and drainage pattern.
- (3) Bridges and culverts shall be removed.
- (4) Roadbeds shall be ripped or scarified.
- (5) Fill slopes shall be rounded or reduced and shaped to conform the site to adjacent terrain and to meet natural drainage restoration standards.
- (6) Cut slopes shall be shaped to blend with the natural contour.
- (7) Cross drains, dikes and water bars shall be constructed to minimize erosion.
- (8) Terraces shall be constructed as necessary to prevent excessive erosion and to provide long-term stability in cut and fill slopes.
- (9) Road surfacing materials shall be removed if the materials are incompatible with the postmining land use and establishment of vegetation.
- (10) Disturbed areas shall be covered with topsoil in accordance with §§ 90.96—90.100 and revegetated in accordance with § 90.151 (relating to revegetation: general requirements).
- (11) Excess material and debris shall be disposed in a manner approved by the Department.

§ 90.147. Support facilities and utility installations.

(a) Support facilities required for, or used incidentally to, the operation of the coal refuse disposal area, including, but not limited to, buildings, coal loading facilities at or near the coal refuse disposal site, coal storage facilities,

equipment storage facilities, fan buildings, hoist buildings, preparation plants, sheds, shops and other buildings, shall be located, maintained and used in a manner that does the following:

(1) Prevents or controls erosion and siltation, water pollution and damage to public or private property.

(2) To the extent possible using the best technology currently available minimizes:

(i) Damage to fish, wildlife and related environmental values.

(ii) Additional contributions of suspended solids to streamflow or runoff outside the permit area. These contributions may not be in excess of limitations of State or Federal law.

(b) All coal refuse disposal 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 Department.

§ 90.150. Protection of fish, wildlife and related environmental values.

(a) A person conducting coal refuse disposal activities shall, to the extent possible using the best technology currently available:

(1) Minimize disturbances and adverse impacts of the activities on fish, wildlife and related environmental values, and achieve enhancement of the resources when practical.

(2) Locate and operate haul and access roads to avoid or minimize impacts to fish and wildlife species or other species protected by State or Federal law.

(3) Avoid disturbance to, enhance where practicable, or restore habitats of unusually high value for fish and wildlife.

(4) Restore, enhance when practicable, or maintain natural riparian vegetation on the banks of streams, lakes and other wetland areas.

(5) Not use restricted pesticides on the areas during coal refuse disposal activities, unless approved by the Department of Agriculture.

(6) Do the following, if fish and wildlife habitat is to be postdisposal land use, in addition to the requirements of §§ 90.151—90.157, 90.159 and 90.160:

(i) Select plant species to be used on reclaimed areas, based on the following criteria:

(A) Their proven nutritional value for fish and wildlife.

(B) Their uses as cover for fish and wildlife.

(C) Their ability to support and enhance fish and wildlife habitat after release of bonds.

(ii) Distribute plant groupings to maximize benefit to fish and wildlife. Plants shall be grouped and distributed in a manner which optimizes edge effect, cover and other benefits for fish and wildlife.

(7) 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 when cropland is to be the alternative postdisposal land use and when appropriate for wildlife and crop management practices. Wetlands

shall be preserved or created rather than drained or otherwise permanently abolished.

(8) Intersperse reclaimed lands with greenbelts utilizing species of grass, shrubs and trees useful as food and cover for birds and small animals, unless the green belts are inconsistent with the approved postdisposal land use, when the primary land use is to be residential, public service or industrial land use.

(9) Design fences, overland conveyors and other potential barriers to permit passage for large mammals, except if the Department determines that the requirements are unnecessary.

(10) Fence, cover or use other appropriate methods to exclude wildlife from ponds which contain hazardous concentrations of toxic-forming materials.

(b) A person who conducts coal refuse disposal activities shall promptly report to the Department the presence in the permit area of threatened or endangered species under State or Federal laws of which that person becomes aware and which was not previously reported to the Department by that person. Upon notification, the Department will consult with the Game Commission or the Fish and Boat Commission and appropriate Federal fish and wildlife agencies and, after consultation, will identify whether, and under what conditions, the operator may proceed.

(c) Coal refuse disposal activities may not be conducted in a manner which would result in the unlawful taking of a bald or golden eagle, its nest or its eggs. The operator shall promptly report to the Department a golden or bald eagle nest within the permit area of which the operator becomes aware. Upon notification, the Department will consult with the United States Fish and Wildlife Service and the Game Commission and, after consultation, will identify whether, and under what conditions, the operator may proceed.

(d) Coal refuse disposal activities may not be conducted which are likely to jeopardize the continued existence of endangered or threatened species listed by the Secretary of the Interior, the Game Commission or the Fish and Boat Commission or which are likely to result in the destruction or adverse modification of designated critical habitats of the species in violation of the Endangered Species Act of 1973, 16 U.S.C.A. §§ 1531—1544.

§ 90.166. Postdisposal land use.

(a) Prior to the release of land from permit area in accordance with Chapter 86, Subchapter F (relating to bonding and insurance requirements), all affected areas shall be restored in a timely manner to conditions that are capable of supporting the uses which they were capable of supporting before any coal refuse disposal activities, or to higher or better uses achievable under criteria and procedures of this section.

(b) The predisposal use of land to which the postdisposal land use is compared shall be determined by the following:

(1) The postdisposal land use for land that has not been previously mined or had coal refuse disposal activities and has been properly managed shall be judged on the basis of those uses which the land previously supported.

(2) The postdisposal land use for land that has been previously mined and not reclaimed shall be judged on the basis of the condition prior to any mining, including

disposal, or the highest and best use that can be achieved and is compatible with surrounding areas.

(c) Alternative land uses may be approved by the Department after consultation with the landowner or the land management agency having jurisdiction over the lands and after determining that the following criteria are met:

(1) The proposed postdisposal land use is compatible with adjacent land use and applicable land use policies, plans, and programs and Federal, State and local law. A written statement of the views of the authorities with statutory responsibilities for land use policies and plans is submitted to the Department before coal refuse disposal activities begin. Any required approval, including any necessary zoning or other changes required for land use by local, State or Federal land management agencies, is obtained and remains valid throughout the coal refuse disposal activities.

(2) The owner of the surface requests in a notarized written statement that the alternative land use be approved.

(3) The proposed postmining land use is reasonably likely to be achieved which may be demonstrated by one or more of the following or other similar criteria:

(i) Specific plans are prepared and submitted to the Department which show the feasibility of the postdisposal land use as related to projected land use trends and markets. The plan shall include a schedule showing how the proposed use will be developed and achieved within a reasonable time after coal refuse disposal activities are completed and how the development will be sustained. The Department may require appropriate demonstrations to show that the planned procedures are feasible, reasonable and integrated with coal refuse disposal activities, and that the plans will result in successful reclamation.

(ii) Provision for necessary public facilities is ensured as evidenced by letters of commitment from parties other than the person who conducts coal refuse disposal activities, as appropriate, to provide the public facilities in a manner compatible with the plans submitted under § 86.34 (relating to informal conferences). The letters shall be submitted to the Department before coal refuse disposal activities begin.

(iii) Specific and feasible plans are submitted to the Department which show that financing, attainment and maintenance of the postdisposal land use are feasible and, if appropriate, are supported by letters of commitment from parties other than the person who conducts the coal refuse disposal activities.

(4) The proposed use will not present an actual or potential threat to public health or safety or of water diminution, interruption, contamination or pollution.

(5) The use will not involve unreasonable delays in reclamation.

(6) Necessary approval of measures to prevent or mitigate adverse effects on fish, wildlife and related environmental values and threatened or endangered plants is obtained from the Department, and appropriate State and Federal fish and wildlife management agencies have been provided a 30-day period to review the plan before coal refuse disposal activities begin.

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