

**Notice of Proposed Rulemaking  
Department of Environmental Protection  
Environmental Quality Board  
(25 Pa. Code, Chapter 86)  
(Coal Mining)**

**Preamble**

The Environmental Quality Board (Board) proposes to amend 25 Pa. Code, Chapter 86.130 (relating to areas designated as unsuitable for mining). The amendment designates the surface mineable reserves of the Lower Kittanning, Clarion, Brookville, and Mercer coals within the headwaters of the Muddy Run watershed, Reade Township, Cambria County as unsuitable for surface mining operations.

This proposal was adopted by the Board at its meeting of \_\_\_\_ (date).

**A. Effective Date**

The amendment will go into effect upon publication in the *Pennsylvania Bulletin* as final rulemaking.

**B. Contact Persons**

For further information contact Geoffrey Lincoln, Bureau of Mining and Reclamation, P.O. Box 8461, Rachel Carson State Office Building, Harrisburg, PA 17105-8461, (717) 787-5103, or Richard Morrison, Assistant Counsel, Bureau of Regulatory Counsel, P.O. Box 8464, Rachel Carson State Office Building, Harrisburg, PA 17105-8464, (717) 787-7060. Information regarding submitting comments on this proposal appears in Section J of this preamble. Persons with a disability may use the AT&T Relay Service by calling 1-800-654-5984 (TDD users) or 1-800-654-5988 (voice users). This proposal is available electronically through the DEP Web site (<http://www.dep.state.pa.us>).

**C. Statutory Authority**

The proposed rulemaking is being made under the authority of Section 4.5 of the Surface Mining Conservation and Reclamation Act (52 P.S. § 1396.4e); Section 6.1 of the Coal Refuse Disposal Control Act (52 P.S. § 30.56a); and Sections 315 (h)-(o) of the Clean Streams Law (35 P.S. § 691.315 (h) – (o)).

**D. Background and Purpose**

Section 522 of the Federal Surface Mining Control and Reclamation Act, 30 U.S.C. § 1272, requires each state seeking primary regulatory authority (primacy) over coal mining operations to establish a procedure for the designation of areas as unsuitable for mining. The state statutory authority for this procedure, referenced in Section C, was created in the 1980 amendments to the authorizing acts as part of Pennsylvania's effort to obtain primacy. On November 19, 1980, the Board adopted Chapters 86 through 90. Chapter 86, Subchapter D (§§ 86.121 – 86.129), contains the Department of Environmental Protection's (Department) regulation for procedures and criteria

for the designation of areas as unsuitable for surface mining. Chapter 86, Subchapter D (§ 86.130) also contains a description of each areas designated as unsuitable for mining by the Board.

The Department is required to designate areas as unsuitable for surface mining when it determines that reclamation pursuant to the requirements of the Surface Mining Conservation and Reclamation Act (Act) is not technologically or economically feasible. In addition, the Department may designate an area as unsuitable for all or certain types of surface coal mining operations if such operations will: 1) be incompatible with existing state or local land use plans or programs; 2) affect fragile or historic lands where such operations would result in significant damage to important historical, cultural, scientific, and aesthetic values and natural systems; 3) cause a substantial loss or reduction in long-range productivity of food or fiber products or water supply, including aquifers and aquifer recharge areas; or 4) substantially endanger life and property in natural hazard areas, including areas subject to frequent flooding and areas of unstable geology.

On March 21, 1996, pursuant to § 86.122, the Reade Township Municipal Authority (RTMA) submitted a petition to the Department requesting that approximately 3,200 acres of the Muddy Run watershed be designated as “unsuitable for mining.” RTMA’s stated purpose was the protection of their public water supply wells from potential, adverse mining-related impacts. RTMA’s petition alleged that surface mining activities could destroy or seriously degrade the source aquifers tapped by the township’s public water supply wells, and could adversely impact other local surface and groundwater resources. RTMA provided supporting evidence documenting mining-related impacts to a private water well within the Muddy Run watershed, and provided an outline of deleterious mining-induced impacts to Muddy Run and to adjacent watersheds.

The Department determined the petition to be complete and acceptable for technical study in April of 1997. The petitioner was notified accordingly on May 1, 1997.

Technical study fieldwork, including water sampling and site reconnaissance, began in 1997. The technical study process was suspended in early 1999 and was re-activated in December of 2003. This suspension occurred while the Department awaited the courts’ decision on a challenge to a previous UFM designation as an unconstitutional taking. The Pennsylvania Supreme Court decided, in *Machipongo Land and Coal Company, Inc. v. Dep’t of Environmental Resources*, 569 Pa. 3 (2002), that a UFM designation was not an unconstitutional taking. The Muddy Run study was completed in October of 2004. Copies of the two-volume technical study, entitled “*A Petition to Designate Areas Unsuitable for Mining: Muddy Run Watershed*,” as well as the Comment and Response Document prepared to address public input are available from the Department. The key findings of the technical study are as follows:

- The recharge area for the RTMA wells appears to be primarily from the area east of the well field along the upper flank of the Allegheny Mountain, where the source aquifers are at, or near, the surface. Additional recharge to these aquifers is from downward infiltration from closely overlying coal-bearing units. The downward infiltration of water is enhanced by numerous fractures and two regional faults in the area.
- Based on available information, including regional geochemical tracer studies confirming acidic mine water traveling significant horizontal and vertical distances in the subsurface, there is a potential for mining-related pollution of the RTMA wells. Groundwater tests conducted to date are not sufficient to characterize conditions beyond the immediate vicinity

of the RTMA wells or to assess the impact of highly transmissive fractures. The potential exists for hydrologic exchange between the RTMA water supply aquifer and the potentially acidic overlying coal-bearing units. The only way to conclusively determine the existence of a hydrologic connection to the well is to conduct extensive draw down pump testing. However such tests create an unacceptable risk because establishing the connection would destroy the public water supply wells.

- Overburden analysis results indicate the presence of high sulfur zones, with little or no alkaline strata, associated with the Lower Kittanning, Clarion, Brookville, and Mercer coals. There is a very significant potential for production of acid mine water from surface mining of these coals.
- Coal mining has significantly impacted the water quality and aquatic community of Muddy Run. As a result of coal mining activities, all stream sections of Muddy Run and its tributaries within the study area, except for the headwaters in the eastern portion of the study area (the unmined RTMA wells' recharge area), are acidic with low pH and have high concentrations of aluminum, iron, and manganese.
- Surface mining activities have significantly degraded groundwater resources within the technical study area, including numerous domestic and private water supplies.

The purpose to the proposed regulation is to protect the quality of surface water and groundwater in the Muddy Run watershed, including source aquifers for the RTMA wells. A secondary purpose is to help coal mine operators plan future mining activities by alerting potential mine permit applicants to the adverse hydrologic impacts associated with mining certain coal seams adjacent to the designated area.

## **E. Summary of Regulatory Requirements**

Chapter 86, § 86.122 requires that the Board's decisions to designate areas unsuitable for mining be published as regulations. Pursuant to § 86.122, subsection 86.130(b) lists areas that the Board has designated as unsuitable for mining. Subsection 86.130(b) is periodically amended as new areas are designated. The proposed regulation will amend subsection 86.130(b) to include a description of the portion of the Muddy Run watershed that is covered by the unsuitable for surface mining designation. The description identifies impacted coal seams. This proposed amendment does not affect or modify §§ 86.121 – 129 of Chapter 86, which provide the underlying procedural provisions that define the unsuitable for mining process.

As outlined in Section D, the federal companion provisions to Pennsylvania's unsuitable for mining statutory language are in Section 522 of the federal Surface Mining Control and Reclamation Act of 1977 (30 U.S.C. Section 1272). The proposed regulation does not include any standards or requirements that exceed federal requirements.

On March 21, 1996, pursuant to § 86.122 and § 86.123, the Reade Township Municipal Authority, Cambria County, submitted a petition to the Department requesting that approximately 3,200 acres of the Muddy Run watershed be designated as "unsuitable for mining." The Department determined the petition to be complete and acceptable for technical study in April of 1997. The petitioner was notified accordingly on May 1, 1997.

Pursuant to § 86.124, notification of the receipt and acceptance of the petition was made to persons with known mineral ownership, surface ownership, and other interested parties on May 12, 1997. Notification to the general public was made on May 10 and 17, 1997, in the Progress, Clearfield, Pennsylvania, on May 11 and 18, 1997 in The Tribune Democrat, Johnstown, Pennsylvania, and in the Pennsylvania Bulletin on May 17, 1997 (27 Pa.B. 2476). Pursuant to § 86.125, in early 1998 local landowners were notified by mail of an opportunity to provide comments on the petition at a public hearing. Notification of the hearing was made to the general public on December 31, 1997, and February 14 and 21, 1998, in the Progress, Clearfield, Pennsylvania, and on January 29, and February 12 and 19, 1998, in The Tribune Democrat, Johnstown, Pennsylvania. The hearing was held on February 26, 1998, at Glendale High School in Reade Township.

The Muddy Run UFM technical study process was suspended in early 1999 and was re-activated in December of 2003. This suspension occurred while the Department awaited the courts' decision on a challenge to a previous UFM designation as an unconstitutional taking. The Pennsylvania Supreme Court decided, in *Machipongo Land and Coal Company, Inc. v. Dep't of Environmental Resources*, 569 Pa. 3 (2002), that a UFM designation was not an unconstitutional taking. Subsequently, in May of 2004, a second round of notification letters was sent to mineral and surface property owners primarily to solicit input from new property owners within the technical study area. This was done to address surface and mineral tracts that may have been sold, transferred, or subdivided since 1998. A Comment and Response Document was prepared to address the comments raised at the public hearing, as well as written comments received since the Department accepted the petition. There were sixteen (16) Commentors.

## **F. Benefits, Costs and Compliance**

### **Benefits**

The proposed regulation would benefit the RTMA's customers by restricting mining on coal seams with high acid mine drainage potential in areas in close proximity to the RTMA water supply aquifers. Mining in close proximity could pollute the public water supply wells. The RTMA presently provides potable water to approximately 550 service accounts and provides water for local fire protection to Reade Township, including the towns of Blandburg, Hollentown, Fallentimber, Flinton, and Van Ormer. The RTMA wells were drilled in 1993 and 1994, using part of a nearly \$5 million-dollar grant provided by the Rural Economic Development Agency. The location and construction of the Reade Township Municipal Authority water supply wells was the result of several years of effort. Two previous attempts to develop water supply wells were not successful because of insufficient quantity or quality of local groundwater resources, in part due to aquifer degradation from previous surface coal mining. Based on available information, alternative well sites would be limited or nonexistent should the existing wells become contaminated.

The designation process also serves to aid coal operators in planning future mining activities. The unsuitable for mining areas are explicitly delineated by regulation. This allows operators to avoid the cost of evaluating properties within designated areas, and to avoid the subsequent costs of preparing permit applications for mine sites on similar coal seams adjacent to the designated area that are highly unlikely to be approved for surface mining activities.

The designation restricts mining by seam, and by type, within the boundaries of the technical study area. Therefore, the designation will benefit the surface water and groundwater quality of the Muddy Run watershed by eliminating or limiting the mining-related disturbance of high-sulfur acid mine drainage producing rock formations that have minimal or no neutralizing potential.

### **Compliance Costs**

The regulation imposes no costs on the regulated community. The regulation benefits the regulated community by helping coal operators plan future mining activities. The unsuitable for mining areas are explicitly delineated by regulation. This allows operators to avoid the cost of evaluating properties within designated areas, and to avoid the subsequent costs of preparing permit applications for mine sites on similar coal seams adjacent to the designated area that are highly unlikely to be approved for surface mining activities.

### **Compliance Assistance Plan**

The Department will provide written notification of the changes to the coal mining industry.

### **Paperwork Requirements**

The only paperwork requirements imposed by the proposed regulation are those necessary to make operators and Department personnel aware of the location of the designated area. Copies of the regulation containing a description of the area and a map of the location of the area will be held on file at the appropriate Department offices.

## **G. Pollution Prevention**

The Federal Pollution Prevention Act of 1990 established a national policy that promotes pollution prevention as the preferred means for achieving state environmental protection goals. DEP encourages pollution prevention, which is the reduction or elimination of pollution at its source, through the substitution of environmentally-friendly materials, more efficient use of raw materials, and the incorporation of energy efficiency strategies. Pollution prevention practices can provide greater environmental protection with greater efficiency because they can result in significant cost savings to facilities that permanently achieve or move beyond compliance. This regulation has incorporated the following pollution prevention incentives:

The proposed designation of the headwaters of Muddy Run as unsuitable for mining prevents pollution by prohibiting further coal mining in the area. The intent of the designation is to protect the public water supply wells of RTMA.

## **H. Sunset Review**

This regulation will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulation effectively fulfills the goals for which it was intended.

## **I. Regulatory Review**

Under Section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on     (blank)    , the Department submitted a copy of these proposed amendments to the Independent Regulatory Review Commission (IRRC) and the Chairpersons of the House and Senate Environmental Resources and Energy Committees. In addition to submitting the proposed amendments, the Department has provided IRRC and the Committees with a copy of a detailed regulatory analysis form prepared by the Department. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed regulations within 30 days of the close of the public comment period. The comments, recommendations or objections shall specify the regulatory review criteria that have not been met. The Act specifies detailed procedures for review of these issues by the Department, the General Assembly and the Governor prior to final publication of the regulations.

## **J. Public Comments**

**Written Comments** - Interested persons are invited to submit comments, suggestions, or objections regarding the proposed regulation to the Environmental Quality Board, P.O. Box 8477, Harrisburg, PA 17105-8477 (express mail: Rachel Carson State Office Building, 15th Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. Comments, suggestions or objections must be received by the Board by     (blank)     (within 30 days of publication in the *Pennsylvania Bulletin*). Interested persons may also submit a summary of their comments to the Board. The summary may not exceed one page in length and must also be received by     (blank)     (within 30 days following publication in the *Pennsylvania Bulletin*). The one-page summary will be provided to each member of the Board in the agenda packet distributed prior to the meeting at which the final regulation will be considered.

**Electronic Comments** - Comments may be submitted electronically to the Board at [RegComments@state.pa.us](mailto:RegComments@state.pa.us) and must also be received by the Board by     (date)    . A subject heading of the proposal and a return name and address must be included in each transmission.

Persons in need of accommodations as provided for in the Americans With Disabilities Act of 1990 should contact the Environmental Quality Board at (717) 787-4526 or through the Pennsylvania AT&T Relay Service at 1-800-654-5984 (TDD) to discuss how the Department may accommodate their needs.

BY:

JOHN HANGER  
Chairperson  
Environmental Quality Board