

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

Order

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 order 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 Summary

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 Geoffrey Lincoln (Contact information for Mr. Lincoln is included in Section B of this preamble.) 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 Comments and Responses

The only comment the Board received during the 30 day public comment period for the proposed rulemaking was from the Pennsylvania State Association of Township Supervisors (PSATS). In their comments, PSATS stated their support of the rulemaking and noted that without the rulemaking, there most likely would be a detrimental effect on those municipalities within the watershed that rely on ground water for human consumption. In their comments, PSATS also acknowledged the responsibility of the Reade Township Municipal Authority to remedy any water contamination that may occur by potential mining activities, which, in their estimation, would result in substantial costs to the customers of the system. The Board appreciates the commentator's support of the rulemaking and notes that the Department has addressed the potential impacts of mining activities in the area in an Unsuitable for Mining (UFM) technical study, which is available from the Department upon request.

The Independent Regulatory Review Commission (IRRC) issued no objections, comments or recommendations on the rulemaking and noted that the rulemaking would be deemed approved if the regulation is not amended and is retained in its proposed form. The Board has not made any changes to the rulemaking based upon public comments.

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 April 27, 2010, the Department submitted a copy of the proposed rulemaking to IRCC and the Chairpersons of the House and Senate Environmental Resources and Energy Committees. In addition to submitting the proposed rulemaking, 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(c) of the Regulatory Review Act, IRRC and the Committees were provided with copies of the comments received during the public comment period, as well as other documents when requested. In preparing these final-form regulations, the Department has considered all comments from IRRC, the Committees and the public.

Under section 5.1(j.2) of the Regulatory Review Act, on _____, these final-form regulations were deemed approved by the House and Senate Committees. Under section 5.1(e) of the Regulatory Review Act, IRRC met on _____ and approved the final-form regulations.

J. 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 Pennsylvania Code §§ 7.1 and 7.2.

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

(3) These regulations do not enlarge the purpose of the proposal published at 40 *Pennsylvania Bulletin* 2425 (May 8, 2010).

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

K. Order of the Board

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

(a) The regulations of the Department of Environmental Protection, 25 Pennsylvania Code, Chapter 86, are amended to read as set forth in Annex A.

(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 of the Board shall submit this order and Annex A to the Independent Regulatory Review Commission 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.

BY:

MICHAEL KRANCER
Chairman
Environmental Quality Board