

Executive Summary

DESIGNATION OF AREA AS UNSUITABLE FOR SURFACE MINING MUDDY RUN WATERSHED, READE TOWNSHIP, CAMBRIA COUNTY PROPOSED RULEMAKING (25 Pa Code, Chapter 86)

This regulation proposes to amend 25 Pa. Code § 86.130 to add subsection (b)(18), designating the Lower Kittanning, Clarion, Brookville and Mercer coals within the upper portions of the Muddy Run watershed, Reade Township, Cambria County, as unsuitable for surface mining operations. The regulation is the result of a comprehensive technical evaluation, which was initiated by a formal petition to the DEP requesting that an area within the Muddy Run watershed be designated as unsuitable for surface coal mining operations. The petition was submitted March 21, 1996, by the Reade Township Municipal Authority (RTMA).

The designation protects the RTMA's water supply wells by restricting mining on acid mine drainage producing coal seams situated in close proximity to the water supply's source aquifers. The water supply wells provide potable water to approximately 550 service accounts and provide water for local fire protection. The designation protects the water quality of Muddy Run and its tributaries by substantially limiting additional disturbance of acid mine drainage producing rock formations within the watershed.

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

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)).

The Department's key technical findings 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 of 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 wells 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 proposed regulation would affect all persons who have mineral rights within the designated area and all coal operators who may be interested in conducting surface mining operations on the identified coal seams. The remaining estimated reserves within the area are as follows: Lower Kittanning - 30 acres; Clarion - 200 acres; Brookville- 275 acres; and Mercer- 245 acres. The estimated mineable reserves total approximately 750 acres, representing approximately 2.75 million tons of coal. The coal reserve estimates are maximized by assuming persistent coal seams of uniform thickness. The estimated monetary and employment impacts assume that the coal reserves would be approved for mining through the normal permit application review process if the area were not designated unsuitable for mining. In fact, the high potential of these coal seams for causing pollution makes it highly unlikely that the Department would issue permits for surface mining on the coal seams.

The chronology of public participation in the Muddy Run designation process is as follows. 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. A 30-day comment period will follow publication of this proposed rulemaking in the Pennsylvania Bulletin.

The legislative oversight process established in Sections 5(c) and 6(a) of the Regulatory Review Act provide for legislative participation. Copies of this proposed regulation, a detailed regulatory analysis form, and a copy of the Comment and Response document will be sent to the Chairman of the House Conservation Committee, the Senate Environmental Resources and Energy Committees, and the Independent Regulatory Review Commission.

Recommendation

The Department recommends that the surface mineable coal reserves of the Lower Kittanning, Clarion, Brookville and Mercer coals in the Muddy Run watershed, Cambria County, located south of State Route 253, including Muddy Run and its eastern tributary, Curtis Run, be proposed for designation as unsuitable for surface mining.