



Economic Impact Analysis Virginia Department of Planning and Budget

4 VAC 25-31 – Reclamation Regulations for Mineral Mining
Department of Mines, Minerals and Energy
July 5, 2012

Summary of the Proposed Amendments to Regulation

As the result of a periodic review, the Department of Mines, Minerals and Energy (Department) proposes numerous changes to these regulations. Many of the proposed changes involve clarifications, additions and modifications to definitions, updating of citations, elimination of obsolete language, etc. Additionally the Department proposes to: 1) specify that areas that are disturbed (by mining activities) shall be provided with an undisturbed riparian buffer, 50 feet in width, along both sides of a perennial stream, 2) add irrevocable letters of credit as an acceptable form of performance bond, 3) add and modify language to enable mineral mining permits and permit applications to be submitted electronically, and 4) require operators to notify the Division of Mineral Mining (Division) immediately if an impoundment suffers a partial or complete failure.

Result of Analysis

The benefits likely exceed the costs for one or more proposed changes. There is insufficient data to accurately compare the magnitude of the benefits versus the costs for other changes.

Estimated Economic Impact

The current regulations specify that “All intermittent or perennial streams shall be protected from spoil by natural or constructed barriers.” The Department proposes to additionally state that

Areas disturbed after the effective date of this regulation shall provide an undisturbed riparian buffer, 50 feet in width, along both sides of a perennial stream unless otherwise

approved by the director. Areas disturbed prior to the effective date shall provide the aforementioned riparian buffer upon reclamation, in accordance with the approved post-mining land use.

A riparian buffer is defined as “an area of trees, shrubs or other vegetation that is managed to maintain the integrity of the stream channel and reduce the effects of upland sources of pollution by trapping, filtering, and converting sediments, nutrients, and other chemicals.”

The Department estimates the cost of riparian buffer compliance at less than \$1,000 per affected site. There are currently about 430 active permitted sites. Approximately 230 of the sites are within the Chesapeake Bay watershed, and would already fall under existing riparian buffer standards for that watershed.¹ These sites would not be affected by the proposed new language. The Department estimates that approximately 10% of the 200 sites outside the Chesapeake Bay watershed, or an estimated 20 sites, would be affected. Thus the total aggregated cost for all of the permitted site owners would likely be less than \$20,000.² The riparian buffers are likely to have a positive impact on the quality of waters passing through or adjacent to these mine sites. This may have a positive impact on public health and the surrounding ecosystem. The dollar value of potential improvement to public health and the local ecosystem cannot be easily measured, but likely exceeds the aggregated compliance cost of less than \$20,000.

The current regulations require that once a mineral permit application is deemed complete, the applicant shall submit a bond or bonds that cover the entire area presently disturbed by mining plus the estimated number of acres to be disturbed in the upcoming year. As additional areas outside the bonded acreage are to be disturbed to facilitate the mining operation, the permittee must file a bond or bonds to cover the acreage with the division. Permitted operators must certify annually with the permit renewal the type, current insurer or bank, and the amount of all reclamation bonds. Pursuant to a request from operators, the Department proposes to add irrevocable letters of credit as an acceptable form of bond. This will likely lower costs for mine owner/operators while still assuring that funds are available for site reclamation. This proposal will thus create a net benefit.

The Department proposes to add and modify language to enable mineral mining permits and permit applications to be submitted electronically. The current regulations specify that

¹ Source: Department of Mines, Minerals and Energy

² \$1,000 x 20 = \$20,000

submissions be made in writing. This proposed change will enable improved efficiency and reduced time costs.

The Department proposes to require that if upon examination an operator determines that a water impounding structure has failed partially or completely, the incident must be reported to the Division immediately. In practice operators have not always immediately notified the Division upon the discovery of impounding structure failures.³ By putting this into regulation it will become perfectly clear that operators should do so; and it gives operators added incentive to do so in that the Department can take punitive action for noncompliance. Immediate knowledge will enable the Division to act sooner and to reduce potential risk to public safety. The cost of immediate notification is negligible while the benefits may be substantial in that it may reduce significant risk to public safety and potential property damage.

Businesses and Entities Affected

The proposed amendments potentially affect any permitted mine site that has a perennial stream passing through or bordering on the permit. The Department currently has about 430 active permitted sites. Approximately 10% of the 200 sites in the western portion of the state would be affected, or an estimated 20 sites. Approximately 230 sites are within the Chesapeake Bay watershed, and would already fall under existing riparian buffer standards for that watershed. Outside firms that are contracted in order to implement riparian buffers are potentially affected as well.

Localities Particularly Affected

Localities outside of the Chesapeake Bay watershed with current or potential mining activity will be particularly affected.

Projected Impact on Employment

Some outside firms may be contracted in order to build riparian buffers. The additional business may modestly increase employment at a few of these firms.

Effects on the Use and Value of Private Property

Some outside firms may be contracted in order to build riparian buffers. The additional business may moderately increase the value of these firms.

Small Businesses: Costs and Other Effects

Owners of approximately 20 mining sites outside of the Chesapeake Bay watershed will face higher costs due to the proposed riparian buffer requirement. Small firms which may be contracted to help build the riparian buffers would likely benefit. The proposal to add irrevocable letters of credit as an acceptable form of performance bond will likely reduce costs for some small site owners.

Small Businesses: Alternative Method that Minimizes Adverse Impact

Owners of approximately 20 mining sites outside of the Chesapeake Bay watershed will face higher costs due to the proposed riparian buffer requirement. The proposed riparian buffer requirement is intended for improved water quality. There is no obvious alternative that would commensurately improve water quality at a lower cost.

Real Estate Development Costs

Adding irrevocable letters of credit as an acceptable form of performance bond may moderately reduce the cost of developing land for mining for some owners. On the other hand, requiring riparian buffers will add costs for developing certain affected sites for mining.

Legal Mandate

The Department of Planning and Budget (DPB) has analyzed the economic impact of this proposed regulation in accordance with Section 2.2-4007.04 of the Administrative Process Act and Executive Order Number 14 (10). Section 2.2-4007.04 requires that such economic impact analyses include, but need not be limited to, the projected number of businesses or other entities to whom the regulation would apply, the identity of any localities and types of businesses or other entities particularly affected, the projected number of persons and employment positions to be affected, the projected costs to affected businesses or entities to implement or comply with the regulation, and the impact on the use and value of private property. Further, if the proposed regulation has adverse effect on small businesses, Section 2.2-4007.04 requires that such economic impact analyses include (i) an identification and estimate of the number of small businesses subject to the regulation; (ii) the projected reporting, recordkeeping, and other administrative costs required for small businesses to comply with the regulation, including the

³ Source: Department of Mines, Minerals and Energy

type of professional skills necessary for preparing required reports and other documents; (iii) a statement of the probable effect of the regulation on affected small businesses; and (iv) a description of any less intrusive or less costly alternative methods of achieving the purpose of the regulation. The analysis presented above represents DPB's best estimate of these economic impacts.