



Economic Impact Analysis Virginia Department of Planning and Budget

4 VAC 25-150 – Gas and Oil Regulations
Department of Mines, Minerals and Energy
June 15, 2009

Summary of the Proposed Amendments to Regulation

As a result of periodic review, the Department of Mines, Minerals and Energy (DMME) proposes numerous amendments to the Virginia Gas & Oil Regulations, including: 1) adding a definition for “red zone,” 2) updating required symbols to the current industry standard CAD template, 3) adding a requirement that operations plan specify “red zone” areas, 4) increasing the application fee for transfer of permit rights from \$65 to \$75, 5) eliminating the requirement to mail permit approvals to all persons given notice of the hearing, but maintaining the requirement to mail permit denials to all persons given notice of the hearing, 6) extending reporting deadlines from 30 or 45 days to 90 days, 7) changing required notification of ground-disturbing activity from at least two working days prior to commencing ground-disturbing activity to at least 48 hours prior, 8) adding requirement for posting red zone signs, 9) reduce specificity of topsoil requirement so that any soil suitable for stabilizing the site with vegetation can be used, 10) allowing any form of variance request, 11) changing the specific circumstances under which an inclination survey must be performed, 12) adding a requirement that all pits be reclaimed within 90 days unless a variance is granted by the field inspector, and 13) adding a new section defining the length of time wells can remain shut in without a requirement for plugging.

Result of Analysis

The benefits 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

DMME proposes several amendments to these regulations merely reflect modern usage such as GPS, electronic communication, and the use of the current industry standard CAD template. Virginia's gas and oil industry through the representation of the Virginia Gas and Oil Association (VGOA) has expressed approval of these changes and generally agrees that these types of changes are beneficial.

The proposed regulations define "red zone" as a zone in or contiguous to a permitted area that could have potential hazards to workers or to the public. Further, the proposed regulations require that operation plans identify red zone areas and that red zone signs be posted to alert the public and workers of the hazards in the area. VGOA estimates that this proposed requirement will add \$1,000 to \$2,000 of cost per plan and approximately \$100 per sign, but agrees that it will potentially significantly reduce safety risks. Thus, these proposed changes likely produce a net benefit.

DMME proposes to increase the application fee for transfer of permit rights from \$65 to \$75. According to the agency even the proposed higher fee falls far short of covering their regulating expenses. VGOA does not oppose the fee increase.

Under the current regulations, in hearings on objections to permit applications the DMME director must mail his decision to all parties given notice of the hearing. DMME proposes to eliminate the requirement to mail permit approvals to all persons given notice of the hearing, but to continue to require that permit denials be sent to all persons given notice of the hearing. Parties directly involved would still be notified of permit approvals of course. The proposed change would reduce some small costs in time for DMME staff, but it is unclear whether the small reduction in time cost exceeds the reduced benefit in informing interested members of the public.

The current regulations include various reporting deadlines of either 30 days or 45 days which DMME proposes to extend to 90 days. The extra time will be beneficial for firms and DMME states that the extra time for reporting is unlikely to significantly affect health and safety. Thus, these proposed longer deadlines will likely produce a net benefit.

The agency proposes to change the required notification of ground-disturbing activity from at least two working days prior to commencing ground-disturbing activity to at least 48 hours prior. According to DMME, staff is available to receive notification on the weekends and 48 hours notice is sufficient to ensure safety. This proposed change allows firms to not have to proceed with work one or two days sooner at times without negatively affected safety. Consequently, this proposed change produces a net benefit for the Commonwealth.

DMME also proposes some additional options for satisfying requirements that will reduce costs for firms without compromising safety or the environment. Under the current regulations during construction topsoil sufficient to provide a suitable growth medium for permanent stabilization with vegetation must be used to stabilize the site. The agency proposes to permit the use of soil that is not necessarily topsoil, but which still can provide a suitable growth medium for permanent stabilization with vegetation. Also the timing for acceptance of variances is less restrictive under the proposed regulations.

The current regulations require that an inclination survey be performed prior to drilling into a coal seam where active mining is being conducted. DMME proposes to instead require that an inclination survey be performed prior to drilling within 500 feet of a coal seam where workers are assigned travel, etc. According to DMME their definition of active mining includes where coal workers are not currently working; and thus under the proposed language there will be fewer instances where inclination surveys are required. VGOA estimates that inclination surveys cost \$2,000 to \$3,000 per well. Since only instances where coal workers are not present will be eliminated from when an inclination survey is required, the proposed change should not negatively affect safety while saving \$2,000 to \$3,000 per instance where the inclination survey is no longer required.

The regulations state that "Pits are to be temporary in nature and are to be reclaimed when the operations using the pit are complete. DMME proposes to add that "All pits shall be reclaimed within 90 days unless a variance is granted by the field inspector." Reclamation concerns meeting water quality standards. According to VGOA, mandatory reclamation within 90 days can significantly add to costs. VGOA states that drought conditions can cause pits to not meet water quality standards that would meet the standards under non-drought conditions, causing firms to spend thousands of dollars which they could have avoided if they were not

required to act within 90 days. The counter argument would be that there are environmental costs to the pits not meeting water quality standards and perhaps the benefits of improved environment are worth those costs.

Abandoned wells are required to be plugged to prevent environmental damage and safety risks from leaks. DMME proposes to require that permittees submit either a well plugging plan or a future well production plan for wells that have been in non-producing status for two years. Further, the agency proposes that “In no circumstance shall a non-producing well remain unplugged for more than a three year period unless approved by the director (of DMME).” The intent of this proposal is to limit the existence of non-producing wells that may be producing environmental damage through leaks.

The proposed plugging requirement may produce large costs and could discourage natural gas production. According to VGOA it costs approximately \$20,000 to plug a well, and from \$350,000 to \$500,000 to drill a new well. VGOA states that it is essentially not feasible to unplug a plugged well, and thus would cost another \$350,000 to \$500,000 to re-drill a well at the site of a plugged well. The proposed plugging requirement would discourage some natural gas production (according to VGOA) in that the time frame that a well could be used would be reduced and thus the potential benefits of drilling in new locations would be reduced. Thus it is not clear that the potential environmental benefits of requiring plugging within three years would exceed the costs.

Businesses and Entities Affected

According to the Department of Mines, Minerals and Energy, four companies drill most oil and gas wells in Virginia and an unknown number of other companies may also undertake such activities from time to time. None of these would be defined as small businesses.

Localities Particularly Affected

The proposed regulations particularly affect the City of Norton and the following counties: Buchanan, Dickenson, Lee, Russell, Scott, Tazewell, Washington and Wise.

Projected Impact on Employment

Most of the proposed amendments would not significantly affect employment. The proposal to require plugging for wells not used for three years might discourage some natural gas drilling and might have some negative impact on employment.

Effects on the Use and Value of Private Property

Several of the proposed amendments add moderate costs for oil and gas firms in order to improve public safety and the environment. These changes may have some moderate positive affect on the value of neighboring properties. Some of the proposed amendments reduce costs for firms without compromising safety or the environment. These changes will provide some counterbalance to the aforementioned increased costs. The proposal to requiring plugging for wells not in use for three years may produce larger costs for private firms.

Small Businesses: Costs and Other Effects

According to DMME, none of the firms directly affected by the proposed regulations are small businesses. Small businesses that serve the large firms may be indirectly affected.

Small Businesses: Alternative Method that Minimizes Adverse Impact

According to DMME, none of the firms directly affected by the proposed regulations are small businesses.

Real Estate Development Costs

This regulation concerns the use of land for gas and oil acquisition. Several proposed changes that increase public safety or reduce environmental risk, such as requiring red zone signs, add moderate costs. Some proposed changes, such as permitting the use of soil that is not necessarily topsoil, but which still can provide a suitable growth medium for permanent stabilization with vegetation, moderately reduce land use costs.

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 36 (06). 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 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.