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Proposed Regulation Agency Background Document

Agency Name:	Department of Mines, Minerals and Energy
VAC Chapter Number:	4 VAC 25-101
Regulation Title:	Regulations Governing Vertical Ventilation Holes and Mining Near Gas and Oil Wells (New)
Action Title:	Proposed
Date:	September 6, 2000

This information is required pursuant to the Administrative Process Act (§ 9-6.14:9.1 *et seq.* of the *Code of Virginia*), Executive Order Twenty-Five (98), Executive Order Fifty-Eight (99), and the *Virginia Register Form,Style and Procedure Manual.* Please refer to these sources for more information and other materials required to be submitted in the regulatory review package.

Summary

Please provide a brief summary of the proposed new regulation, proposed amendments to an existing regulation, or the regulation proposed to be repealed. There is no need to state each provision or amendment or restate the purpose and intent of the regulation; instead give a summary of the regulatory action and alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation.

The proposed regulation will govern the drilling, equipping, operating and plugging vertical ventilation holes and the practice of mining near or through a vertical ventilation hole or gas well. Due to the extensive formatting changes, DMME is repealing 4 VAC 25-100, Regulations Governing Vertical Ventilation Holes and Mining Near Gas and Oil Wells and promulgating new 4 VAC 25-101, Regulations Governing Vertical Ventilation Holes and Mining Near Gas and Oil Wells.

Basis

Please identify the state and/or federal source of legal authority to promulgate the regulation. The discussion of this statutory authority should: 1) describe its scope and the extent to which it is mandatory or discretionary; and 2) include a brief statement relating the content of the statutory authority to the specific regulation. In addition, where applicable, please describe the extent to which proposed changes exceed federal minimum requirements. Full citations of legal authority and, if available, web site addresses for locating the text of the cited authority must be provided. Please state that the Office of the Attorney General has certified that the agency has the statutory authority to promulgate the proposed regulation and that it comports with applicable state and/or federal law.

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The Department of Mines, Minerals and Energy has the legal authority to promulgate this regulation under The Coal Mine Safety Act, Sections 45.1-161.3, 45.1-161.106, 45.1-161.121, 45.1-161.254 and 45.1-161.292 of the <u>Code of Virginia</u>. Sections 45.1-161.121 and 45.1-161.292 mandate the promulgation of this regulation.

Under the powers of the Department, Sections 45.1-161.3(4) states that the Department has the authority "To promulgate regulations necessary or incidental to the performance of duties or execution of powers conferred under this title and other relevant chapters, which regulations shall be promulgated by the Department, the Chief, or the Director, as appropriate, in accordance with the provisions of Article 2 (Section 9-6.14:7.1 et seq.) of the Administrative Process Act."

Sections 45.1-161.106 and 45.1-161.254 provide the Chief with the authority to promulgate rules and regulations necessary to ensure safe and healthy working conditions in underground coal mines and in surface coal mines respectively.

Additionally, Section 45.1-161.121 (C) states that "The Chief shall promulgate regulations which prescribe the procedure to be followed by mine operators in petitioning the Chief for approval to conduct such activities within 200 feet of a gas or oil well or a vertical ventilation hole."

Finally, Section 45.1-161.292(B) states that "The Chief shall promulgate regulations which prescribe the procedure to be followed by mine operators in petitioning the Chief for approval to conduct such activities closer than 200 feet to a well. A petition may include a request to mine through a plugged well or plugged vertical ventilation hole. A petition may also include a request to mine through a well or vertical ventilation hole and lower the head of such well or vertical ventilation hole."

Purpose

Please provide a statement explaining the need for the new or amended regulation. This statement must include the rationale or justification of the proposed regulatory action and detail the specific reasons it is essential to protect the health, safety or welfare of citizens. A statement of a general nature is not acceptable, particular rationales must be explicitly discussed. Please include a discussion of the goals of the proposal and the problems the proposal is intended to solve.

The proposed regulation will govern the drilling, equipping, operating and plugging vertical ventilation holes which are used to remove methane gas from underground coal mines. It also

will govern the practice of mining near or through a vertical ventilation hole or gas well. Use of vertical ventilation holes affects the safety of underground miners through the removal of explosive methane gas from the mine atmosphere. Safety is also affected by the potential hazards associated with mining activity occurring in close proximity to the vertical ventilation holes and gas wells. Sufficient barrier must be left around the wells to ensure underground miners don't accidently mine into the wells. The regulations also are necessary to protect the welfare of citizens having interests in the vicinity of a location of a vertical ventilation hole.

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The proposed regulation will also streamline the regulatory process, eliminate unnecessary regulatory requirements, clarify language, and implement changes based on the Department of Mines, Minerals and Energy's, mine operators', coal miners' and citizens' experiences in implementing the Regulations Governing Vertical Ventilation Holes and Mining Near Gas and Oil Wells (4 VAC 25-100). These regulations were last amended in 1991.

Substance

Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. Please note that a more detailed discussion is required under the statement providing detail of the regulatory action's changes.

- 4 VAC 25-101-10. Provide definitions which are consistent with the Virginia Gas and Oil Regulation (4 VAC 25-150) and current industry standards.
- 4 VAC 25-101-20. Clarify provisions for citizens right to object to permit applications.
- 4 VAC 25-101-90 and 4 VAC 25-101-140. Clarify recordkeeping requirements that are reasonable for the industry to comply with and easy for citizens to understand.
- 4 VAC 25-101-110. Clarify casing requirements for vertical ventilation holes, voids and gas and oil wells.
- 4 VAC 25-101-190. Provide safe mining procedures be included in the approved bleeder plan.
- 4 VAC 25-101-200. Clear requirements for plugging of open holes, cased holes and uncemented casing.
- 4 VAC 25-101-210. Provide permanent markers of abandoned vertical ventilation holes.

I ssues

Please provide a statement identifying the issues associated with the proposed regulatory action. The term "issues" means: 1) the primary advantages and disadvantages to the public, such as individual private citizens or businesses, of implementing the new or amended provisions; 2) the primary advantages and disadvantages to the agency or the Commonwealth; and 3) other pertinent matters of

interest to the regulated community, government officials, and the public. If there are no disadvantages to the public or the Commonwealth, please include a sentence to that effect.

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The primary advantage to the public, both citizens and industry, as well as to the DMME is that the regulation has been reformatted and two sections, 4 VAC 25-160 and 4 VAC 25-180, have been re-written to conform to the Virginia Gas and Oil Regulation 4 VAC 25-150. This change makes the requirements easier for the public to understand, will promote more efficient operation of vertical ventilation holes by streamlining the regulatory process and eliminating unnecessary requirements, and will clarify what DMME needs to do to help industry comply. Additionally, by conforming this regulation to the Virginia Gas and Oil Regulation, two divisions within DMME have their responsibilities for the management of methane gas more clearly defined. This change will help the DMME respond more promptly and efficiently to industry and the public's request for information.

The Department does not believe the proposed regulation will present any disadvantages to the public or the Commonwealth. The Department worked with its regulatory work committee to develop recommendations requiring the minimal amount of information necessary to ensure industry operations maintain compliance with applicable statutes.

Fiscal Impact

Please identify the anticipated fiscal impacts and at a minimum include: (a) the projected cost to the state to implement and enforce the proposed regulation, including (i) fund source / fund detail, (ii) budget activity with a cross-reference to program and subprogram, and (iii) a delineation of one-time versus ongoing expenditures; (b) the projected cost of the regulation on localities; (c) a description of the individuals, businesses or other entities that are likely to be affected by the regulation; (d) the agency's best estimate of the number of such entities that will be affected; and e) the projected cost of the regulation for affected individuals, businesses, or other entities.

- (a)
- (i) Fund Source/Fund Detail: General Fund; 0100: Permit Fees; 0218
- (ii)
- Functional area; Inspection and Enforcement: Program/Subprogram; Mine Inspections, 55503
- Functional area; Law and Regulatory/Compliance: Program/Subprogram; Mine Inspections, 55503
- (iii) DMME anticipates no additional one-time or ongoing cost to implement this regulation.
- (b) This proposed regulation will have no cost to localities.
- (c)

The regulation will affect coal and gas companies, coal miners, and gas well and vertical ventilation hole drillers.

(d) DMME estimates that 2 coal companies, 4 to 6 gas companies, 1,000 coal miners, and 8 to 10 drillers will be affected by the regulation.

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(e) The new provision in 4 VAC 25-101-220 will require coal companies to invest personnel time to compile an annual report. It is estimated that the coal companies will invest a maximum of 5 man-days from technical staff to complete the initial report at \$200 per man-day for a total cost of \$1,000. For subsequent years, DMME estimates that it will take one man-day to update the report for a total cost of \$200 a year. The remainder of the requirements in the proposed regulation are no more stringent than current standards, therefore no additional costs are anticipated for the affected parties.

Detail of Changes

Please detail any changes, other than strictly editorial changes, that are being proposed. Please detail new substantive provisions, all substantive changes to existing sections, or both where appropriate. This statement should provide a section-by-section description - or cross-walk - of changes implemented by the proposed regulatory action. Where applicable, include citations to the specific sections of an existing regulation being amended and explain the consequences of the proposed changes.

- 4 VAC 25-101-10. Definitions. (old 4 VAC 25-100.10) Several definitions were added (accurate map or plat, bridge plug, coalbed methane gas, coal seam, director, form prescribed by the Chief, gas well operator, gas and oil inspector, gas well, groundwater, intermediate string, log, mfc, minable coal seam, mining, mud, pending, permitted, pipeline, state plane coordinate system, string of pipe, tubing, water protection string) to update to current industry standards, to strengthen the safety standards, and to conform the definitions to those of the Virginia Gas and Oil Regulations (4 VAC 25-150).
- 4 VAC 25- 101-20. Application for permits; maps or plats; notice. (old 4 VAC 25-100.20) Changes to this section were for clarification purposes and formatting changes for better understanding. Specifically, the survey accuracy requirements were removed and detailed requirements for safety equipment were added. Changed the notice of right to object requirement from 15 to 10 days. This change was made to conform the requirement to the Code of Virginia.
- 4 VAC 25-101-30. Receipt of coal seam information; decision on casing. This is a new section that requires all parties to submit coal seam information to the Chief of the Division of Mines. This section also requires that the Chief must approve seams to be protected by casing.
- 4 VAC 25-101-40. Expiration of Permit. This is a new section that requires drilling to begin on a vertical ventilation hole within two years of the issuance of the permit or the permit expires.

4 VAC 25-101-50. Venting methane; bleeder system. (old 4 VAC 25-100-50.F) The new language prohibits vertical ventilation holes and coalbed methane gas wells from creating hazardous conditions underground and it requires mines to be adequately ventilated in accordance with bleeder plans.

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- 4 VAC 25-101.60. Requirements for issuance of permit. (old 4 VAC 100-110) The new language removes the simultaneous permit application for vertical ventilation holes and coalbed methane gas wells process and it details the requirements for the Chief to issue a permit.
- 4 VAC 25-101.70. Filing of objections; scheduling of hearings. (old 4 VAC 25-100-150) The new language removes the simultaneous permit application process for vertical ventilation holes and coalbed methane gas wells.
- 4 VAC 25-101-80. Location of vertical ventilation holes. (similar to old 4 VAC 25-100-170). The new language changes "workable coal seam" to "minable coal seam or inactive mine".
- 4 VAC 25-101-90. Record keeping. (old 4 VAC 25-100-180) The new language requires drillers log and plugging affidavits be kept by the Chief of the Division of Mines.
- 4 VAC 25-101-100. Review of action of chief. (old 4 VAC 25-190) No substantive change.
- 4 VAC 25-101-110. Casing requirements for vertical ventilation holes. (old 4 VAC 25-100-200) The new language conforms it to the Virginia Gas and Oil regulation. The cement wait time is reduced from 12 to 8 hours. The required cement strength is increased from 300 to 500 psi. Operators are required to perform a cement test and keep a record of the test and are required to keep records of the WOC (wait on cement time). These changes were made to be consistent with current industry standards.

Also, includes a minimum depth of 300 feet or 50 feet below groundwater for water protection strings and a minimum of 50 foot above and below coal seams for coal protection strings. Vertical ventilation holes drilled prior to December 11, 1985 must retain such coal protection strings as are in place and keep the space between casing strings open to the extent possible.

For voids, requirements include that casing to 30 feet below and 50 feet above voids are to be cemented. Unanticipated voids or groundwater horizons must be reported to the Chief of the Division of Mines and drilling reports must be submitted within 30 days of completion.

- 4 VAC 25-101-120. Survey requirements. (old 4 VAC 25-100-250) No substantive change.
- 4 VAC 25-101-130. Correction requirements. (old 4 VAC 25-100-250.B and C) No substantive change.
- 4 VAC 25-101-140. Filing of report. (old 4 VAC 25-100-250.D) The new language requires maps and logs including groundwater zones, coal seams, mineral beds and gas bearing formulations be included in the report.

4 VAC 25-101-150. Mining within 500 feet of a vertical ventilation hole or gas well. (old 4 VAC 25-100-290) No substantive change.

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- 4 VAC 25-101-160. Mining within 200 feet of a vertical ventilation hole, gas well or pipeline. (old 4 VAC 25-100-290.C) No substantive change.
- 4 VAC 25-101-170. Pillars of coal to be left unmined, and other protective measures. (old 4 VAC 25-100-290.E) No substantive change.
- 4 VAC 25-101-180. Mining within 200 feet of a plugged vertical ventilation hole or gas well. (old 4 VAC 100-290.G) The new language changes from 15 to 10 days the time a gas or oil well operator or mine operator has to object to the notice of intent to drill. This change was made to conform the requirement to the Code of Virginia.
- 4 VAC 25-101-190. Mining seams impacted by vertical ventilation holes and coalbed methane wells intended to degas the seams being mined. This is a new section that allows operators to include safe mining procedures in the approved bleeder plan.
- 4 VAC 25-100-200. Plugging of vertical ventilation holes. (old 4 VAC 25-100-370) This section was changed to conform it to the Virginia Gas and Oil Regulation. The new language sets out the plugging specifications for open hole, cased hole and un-cemented casing. It requires plugging plans to be approved by the Chief of the Division of Mines and sets out a variance procedure for approval by the Chief.
- 4 VAC 25-101-210. Identifying plugged holes; plugging affidavit. This is a new section based on the Gas and Oil regulations that details the requirements for permanent markers of abandoned vertical ventilation holes. It also provides for a variance procedure and requires that a plugging affidavit be submitted to the Chief of the Division of Mines.
- 4 VAC 25-101-220. Annual report; abandonment. (old 4 VAC 25-100-370) The new language requires that each July 1, vertical ventilation hole operators must submit a status report of all permitted holes to the Chief of the Division of Mines.

Alternatives

Please describe the specific alternatives to the proposal considered and the rationale used by the agency to select the least burdensome or intrusive alternative that meets the essential purpose of the action.

The Department of Mines, Minerals and Energy is proposing to repeal the current Regulations Governing Vertical Ventilation Holes and Mining Near Gas and Oil Wells (4 VAC 25-100) and replace it with 4 VAC 25-101, Regulations Governing Vertical Ventilation Holes and Mining Near Gas and Oil Wells, to incorporate recommendations resulting from reviews of the regulation and to reflect legislative changes.

The proposed regulation is advantageous to the public because it will ensure that the drilling, equipping, operating and plugging of vertical ventilation holes (VVH) used to remove methane gas from underground coal mines is performed safely. Use of VVHs affects the safety of underground miners and citizens having interests in the vicinity of the VVHs through their use to remove the explosive methane gas.

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The regulatory work committee which consisted of the Virginia Coal Mine Safety Board and Virginia gas and oil operators considered alternatives to each individual section in this regulation and believes the proposed regulation is the least burdensome and least intrusive for achieving its essential purpose. For example, the work committee considered the alternative of leaving the plugging and casing requirement sections different from the Virginia Gas and Oil Regulation but determined that it was more efficient to conform these two sections to a single set of requirements because the function of gas wells and vertical ventilation holes are comparable. Additionally, in most cases, the same companies that install gas wells also install the vertical ventilation holes. The work committee agreed that conforming these requirements made it easier for the public to understand both regulations, promotes more efficient operation of vertical ventilation holes, eliminates unnecessary requirements, and clarifies DMME's role in helping industry comply.

Public Comment

Please summarize all public comment received during the NOIRA comment period and provide the agency response.

DMME did not receive any public comments during the NOIRA comment period.

Clarity of the Regulation

Please provide a statement indicating that the agency, through examination of the regulation and relevant public comments, has determined that the regulation is clearly written and easily understandable by the individuals and entities affected.

The regulatory work committee which consisted of the Virginia Coal Mine Safety Board and Virginia gas and oil operators believes this regulation is clearly and concisely written and that it achieves its essential purpose.

Periodic Review

Please supply a schedule setting forth when the agency will initiate a review and re-evaluation to determine if the regulation should be continued, amended, or terminated. The specific and measurable regulatory goals should be outlined with this schedule. The review shall take place no later than three years after the proposed regulation is expected to be effective.

DMME will review this regulation no later than three years after the proposed regulation is effective. The review will consider whether the regulatory provisions regarding vertical ventilation holes should be continued, amended, or terminated.

The goal of this proposed regulation is to protect underground miners and the welfare of citizens having interests in the vicinity of the location of a vertical ventilation hole.

Family Impact Statement

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Please provide an analysis of the proposed regulatory action that assesses the potential impact on the institution of the family and family stability including the extent to which the regulatory action will: 1) strengthen or erode the authority and rights of parents in the education, nurturing, and supervision of their children; 2) encourage or discourage economic self-sufficiency, self-pride, and the assumption of responsibility for oneself, one's spouse, and one's children and/or elderly parents; 3) strengthen or erode the marital commitment; and 4) increase or decrease disposable family income.

The proposed regulation should have a positive impact on Virginia families by ensuring the safety of families in close proximity to the location of vertical ventilation holes. The proposed regulations also ensure the safety of underground miners which would benefit any member of the family that works in underground coal mines.

The proposed regulation should also increase disposable family income by creating the framework where industry will seek or expand operations in the Commonwealth thereby providing jobs in the mining industry.