



townhall.virginia.gov

Fast-Track Regulation Agency Background Document

Agency name	Department of Mines, Minerals and Energy
Virginia Administrative Code (VAC) citation(s)	4 VAC 25-170
Regulation title(s)	Geothermal Energy Regulations
Action title	Amendments resulting from periodic review
Date this document prepared	February 27, 2017

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 17 (2014) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

Brief summary

Please provide a brief summary (preferably no more than 2 or 3 paragraphs) of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed. Alert the reader to all substantive matters or changes. If applicable, generally describe the existing regulation.

DMME is updating its Geothermal Energy Regulations as the result of periodic review. These amendments result in a more efficient, clear, and up to date regulation. The definitions were amended for consistency with Gas and Oil Regulation 4VAC25-150-10. Bonding requirements were amended to clarify and match requirements in Virginia Gas and Oil Act, § 45.1-361.31. The fee structure was amended to match existing fees for gas and oil wells, resulting in a fee increase; however, DMME has not received any permit applications for geothermal energy. The regulations were also amended to require electronic submissions to DMME to reflect DGO's electronic permitting system. It is important to note that this regulation does not apply to the installation of typical residential geothermal systems.

Acronyms and Definitions

Please define all acronyms used in the Agency Background Document. Also, please define any technical terms that are used in the document that are not also defined in the "Definition" section of the regulations.

DMME Department of Mines, Minerals and Energy
DGO DMME's Division of Gas and Oil

Statement of final agency action

Please provide a statement of the final action taken by the agency including: 1) the date the action was taken; 2) the name of the agency taking the action; and 3) the title of the regulation.

On February 27, 2017, DMME adopted the amendments to its Geothermal Energy Regulations.

Legal basis

Please identify the state and/or federal legal authority to promulgate this proposed regulation, including: 1) the most relevant citations to the Code of Virginia or General Assembly chapter number(s), if applicable; and 2) promulgating entity, i.e., agency, board, or person. Your citation should include a specific provision authorizing the promulgating entity to regulate this specific subject or program, as well as a reference to the agency/board/person's overall regulatory authority.

DMME has the authority to promulgate this regulation under §§ [45.1-161.3](#) and [45.1-179.6](#) of the Code of Virginia.

Purpose

Please explain the need for the new or amended regulation. Describe the rationale or justification of the proposed regulatory action. Describe the specific reasons the regulation is essential to protect the health, safety or welfare of citizens. Discuss the goals of the proposal and the problems the proposal is intended to solve.

The purpose of this action is to ensure DMME's Geothermal Energy Regulations are up to date, consistent with existing law, and easy to understand. The minor amendments to the regulation accomplish these goals.

Rationale for using fast-track process

Please explain the rationale for using the fast-track process in promulgating this regulation. Why do you expect this rulemaking to be noncontroversial?

DMME is using the fast-track process because this rulemaking is noncontroversial. The proposed changes bring this regulation in line with the Virginia Gas and Oil Act and attendant regulations, as well as allowing for permit applications to be filed electronically. Other amendments were made for clarity.

Substance

Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both. A more detailed discussion is provided in the “Detail of changes” section below.

Bonding requirements were amended to clarify and match requirements in Virginia Gas and Oil Act, § [45.1-361.31](#). Requirements were also amended to match existing fee structure for gas and oil wells resulting in a fee increase; however, DMME has not received any permit applications for geothermal energy. The regulations were also amended to require electronic submissions to the department to reflect DGO’s electronic permitting system and current business practices. Language was amended for clarity, the removal of unnecessary or redundant regulations, and to align with existing Gas and Oil regulations.

Issues

Please identify the issues associated with the proposed regulatory action, including: 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 indicate.

The primary advantage to this action is increased efficiency and clarity that result from these largely technical amendments. There are no known disadvantages.

Requirements more restrictive than federal

Please identify and describe any requirement of the proposal which is more restrictive than applicable federal requirements. Include a rationale for the need for the more restrictive requirements. If there are no applicable federal requirements or no requirements that exceed applicable federal requirements, include a statement to that effect.

There are no applicable federal requirements.

Localities particularly affected

Please identify any locality particularly affected by the proposed regulation. Locality particularly affected means any locality which bears any identified disproportionate material impact which would not be experienced by other localities.

No localities are particularly affected.

Regulatory flexibility analysis

Pursuant to § 2.2-4007.1B of the Code of Virginia, please describe the agency’s analysis of alternative regulatory methods, consistent with health, safety, environmental, and economic welfare, that will accomplish the objectives of applicable law while minimizing the adverse impact on small business. Alternative regulatory methods include, at a minimum: 1) the establishment of less stringent compliance or reporting requirements; 2) the establishment of less stringent schedules or deadlines for compliance or reporting requirements; 3) the consolidation or simplification of compliance or reporting requirements; 4) the establishment of performance standards for small businesses to replace design or operational standards required in the proposed regulation; and 5) the exemption of small businesses from all or any part of the requirements contained in the proposed regulation.

DMME amended this regulation in several places to allow for electronic submittal of required information, allowing for easier compliance. Other amendments match reporting requirements to those in DMME’s Gas and Oil Regulation.

Economic impact

Please identify the anticipated economic impact of the proposed new regulations or amendments to the existing regulation. When describing a particular economic impact, please specify which new requirement or change in requirement creates the anticipated economic impact.

<p>Projected cost to the state to implement and enforce the proposed regulation, including: a) fund source / fund detail; and b) a delineation of one-time versus on-going expenditures</p>	<p>Any costs of implementation, which are expected to be minimal, would be absorbed by DMME.</p>
<p>Projected cost of the new regulations or changes to existing regulations on localities.</p>	<p>\$0. The minor changes to this regulation will not affect localities.</p>
<p>Description of the individuals, businesses, or other entities likely to be affected by the new regulations or changes to existing regulations.</p>	<p>Individuals or businesses, which engage in drilling for geothermal resources or construction of a geothermal well in Virginia, or those that operating, owning, controlling or in possession of any geothermal well, will be affected. It is important to note that typical residential geothermal systems are not regulated by DMME.</p>
<p>Agency’s best estimate of the number of such entities that will be affected. Please include an estimate of the number of small businesses affected. Small business means a business entity, including its affiliates, that: a) is independently owned and operated and; b) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.</p>	<p>It is difficult to provide an estimate of entities that will be affected as DMME has never received a permit application under these regulations.</p>
<p>All projected costs of the new regulations or changes to existing regulations for affected individuals, businesses, or other entities. Please be specific and include all costs including: a) the projected reporting, recordkeeping, and</p>	<p>It is difficult to provide cost projections as DMME has never received a permit application under these regulations.</p>

<p>other administrative costs required for compliance by small businesses; and b) specify any costs related to the development of real estate for commercial or residential purposes that are a consequence of the proposed regulatory changes or new regulations.</p>	
<p>Beneficial impact the regulation is designed to produce.</p>	<p>Aligning bonding requirements and language with Gas and Oil regulations, eliminating unnecessary paper copies and process inefficiencies by requiring electronic submissions, allowing work to be performed by professional engineers, and clarifying ambiguous language throughout the regulation.</p>

Alternatives

Please describe any viable 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. Also, include discussion of less intrusive or less costly alternatives for small businesses, as defined in § 2.2-4007.1 of the Code of Virginia, of achieving the purpose of the regulation.

This regulation is mandated by statute, so it must be maintained.

Public participation notice

If an objection to the use of the fast-track process is received within the 30-day public comment period from 10 or more persons, any member of the applicable standing committee of either house of the General Assembly or of the Joint Commission on Administrative Rules, the agency shall: 1) file notice of the objections with the Registrar of Regulations for publication in the Virginia Register; and 2) proceed with the normal promulgation process with the initial publication of the fast-track regulation serving as the Notice of Intended Regulatory Action.

Periodic review and small business impact review report of findings

If this fast-track is the result of a periodic review/small business impact review, use this form to report the agency's findings. Please (1) summarize all comments received during the public comment period following the publication of the Notice of Periodic Review and (2) indicate whether the regulation meets the criteria set out in Executive Order 17 (2014), e.g., is necessary for the protection of public health, safety, and welfare, and is clearly written and easily understandable. In addition, as required by 2.2-4007.1 E and F, please include a discussion of the agency's consideration of: (1) the continued need for the regulation; (2) the nature of complaints or comments received concerning the regulation from the public; (3) the complexity of the regulation; (4) the extent to which the regulation overlaps, duplicates, or conflicts with federal or state law or regulation; and (5) the length of time since the regulation has been evaluated or the degree to which technology, economic conditions, or other factors have changed in the area affected by the regulation.

DMME received no public comments following publication of the Notice of Periodic Review. DMME believes this regulation meets the criteria established in Executive Order 17.

DMME believes this regulation is still necessary as it is required by statute. The changes made in this regulatory action reflect changes in technology, as DMME has fully established an electronic permitting system since the last time this regulation was review.

Family impact

Please assess the impact of this regulatory action on the institution of the family and family stability including to what extent 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.

This regulatory action will have no impact on the institution of the family and family stability.

Detail of changes

Please list all changes that are being proposed and the consequences of the proposed changes; explain the new requirements and what they mean rather than merely quoting the proposed text of the regulation. If the proposed regulation is a new chapter, describe the intent of the language and the expected impact. Please describe the difference between existing regulation(s) and/or agency practice(s) and what is being proposed in this regulatory action. If the proposed regulation is intended to replace an emergency regulation, please follow the instructions in the text following the three chart templates below.

For changes to existing regulation(s), please use the following chart:

Current section number	Current requirement	Proposed change, intent, rationale, and likely impact of proposed requirements
4VAC25-170-10	Definition of water protection string	The definition was amended to match definition in Gas and Oil Regulation (4VAC25-150-10) for consistency. No substantive impact.
30A	Bonding requirements	Requirements were amended to clarify and match requirements in Virginia Gas and Oil Act, § 45.1-361.31. No substantive impact.
30B	Permit application fee	Requirements were amended to match existing fee structure for gas and oil wells. This would result in a fee increase, but DMME has not received any permit applications for geothermal energy.
30B4	Requirement that documents submitted to the department be signed	Amended to require electronic submissions to the department to reflect DGO's electronic permitting system and current business practices.

40.1.a	Surveying and plat certification must be completed by a registered surveyor.	Regulation is amended to allow this work to be completed by a professional engineer (PE). PEs are allowed to complete similar work for gas and oil permit applications.
40	Notification of intent to proceed requirements	Clarifying language added.
50A	Requirement that signs be painted or stencil	Obsolete language removed.
50A	Well identification numbers	Language added to clarify that well identification numbers shall be assigned to all approved permits.
50B	Telephonic notice of commencement of well work	Removed the option for telephonic notice. DGO utilizes an electronic permitting process and this requirement already exists for gas and oil permits.
50D	Deviation tests	“Tests” has been changed to “surveys” to reflect proper terminology. No substantive impact.
50F2	Blow-out preventer requirements	“Working” changed to “formation” for clarity. “Or could be” added to ensure preventers are utilized in correct situations.
50G3(a)	Casing requirements	“Surface casing” changed to “water protection string” for consistency. No substantive impact.
50G3c(1)	Casing requirements	Clarifying language added to reflect that surface strings are required to be cemented back to the surface. No substantive impact.
50G3d	Modifying casing requirements	Clarifying language added to allow DGO to modify cementing requirements when special conditions demand it. Casing and cementing go hand in hand. No substantive impact.
50I1	Access to sites	Redundant language deleted. “Business” changed to “reasonable” to allow access during evening, etc.
50J	Notice of chemical cleaning	Notice requirement changed from written to electronic to reflect DGO’s electronic permitting system.
50K	Completion reports	Language changed to reflect Gas and Oil Regulation requirements of submission within 90 days of completion.
60A3	Drilling logs confidential	Requirement deleted. DMME does not have the authority to administer Title 40.1
60A4	Reporting of production records	Language amended to reflect DGO’s electronic permitting system.
60B	Reporting of drilling logs	Language amended to match requirements of Gas and Oil Regulation.
70C	Subsidence monitoring requirements	Language amended to allow PE to complete work. PEs are permitted to do similar work in the Gas and Oil Regulation.
80A	Notice of abandonment reporting requirements	Language amended to match requirements of Gas and Oil Regulation.
80B2	Cement plug length above a producing formation	Increases the length of the cement plug from 50 to 100 feet to match similar Gas and Oil Regulation requirements.
80B4	Cement plug length at or near the surface in each hole	Increases the length of the cement plug from 20 to 100 feet to match similar Gas and Oil

		Regulation requirements.
80B7	Abandoned well requirements	Language added to require sign to reflect date of plugging, matching requirements of abandoned gas or oil wells.
80B9	Abandoned well reporting requirements	Language amended to match requirements of Gas and Oil Regulation.