



Final Regulation Agency Background Document

Agency name	Department of Mines, Minerals and Energy (DMME)
Virginia Administrative Code (VAC) citation	4 VAC 25-170
Regulation title	Geothermal Energy Regulations
Action title	Amendments regarding the regulation of geothermal energy
Date this document prepared	August 3, 2010

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 36 (2006) and 58 (1999), and the *Virginia Register Form, Style, and Procedure Manual*.

Brief summary

Please provide a brief summary (no more than 2 short 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of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed.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. Also, please include a brief description of changes to the regulation from publication of the proposed regulation to the final regulation.

As a result of periodic review, the Department of Mines, Minerals and Energy (DMME) is amending 4VAC25-170, Geothermal Energy Regulations. Definitions are amended to enhance clarity. For example, the definition of "geothermal resource" is amended to clearly specify that the regulation does not apply to geothermal heat pump systems. Amendments are also offered to bring consistency to data submission requirements for the Division of Gas and Oil (DGO), allowing applicants to use the updated 1983 coordinate system. Since publication of the proposed stage, minor changes have been made to ensure consistency with other DMME regulations. No substantive changes have been made since publication of the proposed stage.

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 August 2, 2010, DMME adopted a final regulation entitled "Geothermal Energy Regulations".

Legal basis

Please identify the state and/or federal legal authority to promulgate this proposed regulation, including (1) the most relevant law and/or regulation, including Code of Virginia citation and General Assembly chapter numbers, if applicable, and (2) promulgating entity, i.e., agency, board, or person. Describe the legal authority and the extent to which the authority is mandatory or discretionary.

[§ 45.1-179.6](#) of the Code of Virginia authorizes DMME to promulgate regulations necessary to enforce the Virginia Geothermal Resource Conservation Act. Although this authority is not mandatory, this regulation is necessary to carry out the purpose of the act; namely, to foster the development of geothermal resources, prevent waste, protect correlative rights, protect water quality, safeguard the natural environment, promote geothermal and water resource conservation and management, and safeguard the health, safety and welfare of the citizens of the Commonwealth.

Purpose

Please explain the need for the new or amended regulation. Describe the rationale or justification of the proposed regulatory action. Detail the specific reasons it 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 regulatory action is to update obsolete technical language and clarify ambiguous language throughout the regulation. As geothermal technology continues to evolve, it is important to ensure that the necessary regulation is as up to date as possible.

Substance

Please identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. A more detailed discussion is required under the "All changes made in this regulatory action" section.

The amended regulation will better reflect current industry technology. Other amendments are made to ensure consistency with other DMME regulations. Many of the changes are technical in nature rather than substantive.

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 the public and regulated entities will be a clearer, technically updated regulation. There are no disadvantages.

Changes made since the proposed stage

Please describe all changes made to the text of the proposed regulation since the publication of the proposed stage. For the Registrar’s office, please put an asterisk next to any substantive changes.

Section number	Requirement at proposed stage	What has changed	Rationale for change
Throughout	Use of term “director”	Term has been changed to “division director”	This change more accurately reflects the fact that the DGO Director is charged with many of the tasks set out in the regulation.
4 VAC 25-170-10	Board is defined as Virginia Gas and Oil Board	The definition is removed.	The term is not used in the regulation so there is no need for a definition.
4 VAC 25-170-10	No definition of Director.	Term has been defined as Director of DMME	To clarify and maintain consistency with other DMME regulations.
4 VAC 25-170-10	No definition of Division Director.	Term has been defined as Director of DGO.	To clarify and maintain consistency with other DMME regulations.
4 VAC 25-170-20 (B)		“of this chapter” deleted from cross-reference.	The clause is redundant and unnecessary.
4 VAC 25-170-20 (C)	...director or his departmental representative.	“or his departmental representative” has been deleted.	The definition of division director makes this phrase unnecessary.
4 VAC 25-170-40 (1) (c)	..the Erosion and Sediment Control Regulations adopted by..	The Department of Conservation and Recreation changed to Soil and Water Conservation Board	It is the Board, not DCR, that promulgates these regulations.
4 VAC 25-170-60A4	N/A	Drilling logs and production records must be mailed.	Option is added for operators to submit records electronically. Many records are already filed with DGO electronically.

Public comment

Please summarize all comments received during the public comment period following the publication of the proposed stage, and provide the agency response. If no comment was received, please so indicate.

No comments were received after the publication of the proposed stage.

All changes made in this regulatory action

Please detail all changes that are being proposed and the consequences of the proposed changes. Detail new provisions and/or all changes to existing sections.

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change and rationale
Throughout	N/A	Term has been changed to "division director"	This change more accurately reflects the fact that the DGO Director is charged with many of the tasks set out in the regulation.
4 VAC 25-170-10	N/A	Commissioner is defined as the Director of DMME.	Commissioner definition is deleted and director is defined as DMME director to reflect current usage and maintain consistency with other DMME regulations.
4 VAC 25-170-10	N/A	Division Director is not defined.	Definitions of departmental representative and inspector are deleted and definition of division director is added to clarify and maintain consistency with other DMME regulations.
4 VAC 25-170-10	N/A	The current definition of "geothermal resource" does not clarify that the regulation applies to non-heat pump use only.	The definition is modified to indicate that the regulation is not for use with heat pumps.
4 VAC 25-170-20 (B)	N/A	"of this chapter" deleted from cross-reference.	The clause is redundant and unnecessary.
4 VAC 25-170-20 (C)	N/A	"or his departmental representative" has been deleted.	The definition of division director makes this phrase unnecessary.
4VAC25-170-30 (B) (1)	N/A	Use of latitude and longitude (the Virginia Coordinate System of 1927).	The amended language changes requirements for latitude and longitude to the Virginia Coordinate System of 1983 to reflect current industry technology.
4VAC25-170-40 (1) (a)	N/A	Use of latitude and longitude (the Virginia Coordinate System of 1927).	The amended language changes requirements for latitude and longitude to the Virginia Coordinate System of 1983 to reflect current industry technology.
4VAC25-170-40 (1) (c)	N/A	The method of meeting the guidelines of the Erosion and Sediment Control Regulations as adopted by the Virginia Soil and Water Conservation Board.	It is the Board, not DCR, that promulgates these regulations.
4VAC25-170-60	N/A	Division of Gas & Oil Address	Updated to reflect new location address in Lebanon.

4 VAC 25-170-60A4	N/A	Drilling logs and production records must be mailed.	Option is added for operators to submit records electronically. Many records are already filed with DGO electronically.
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Regulatory flexibility analysis

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.

The amended regulation better reflects current industry technology, allowing regulated entities to use the most efficient means possible when composing their permitting applications. Currently, there are no permitted geothermal operations in the Commonwealth so it is anticipated there will be no adverse impact on small businesses or any need to exempt them.

Family impact

Please assess the impact of the proposed 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 regulation will have no impact on the institution of the family or family stability.