



Proposed Regulation Agency Background Document

Agency name	Department of Mines, Minerals, & Energy
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	February 2, 2009

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

In a short paragraph, please summarize all substantive changes that are being proposed in this regulatory action.

As a result of periodic review, the Department of Mines, Minerals and Energy is amending 4VAC25-170, Geothermal Energy Regulations. Section 4VAC25-170-10 will be amended to correct the current technical language referring to "geothermal resource", which does not clarify that the regulation applies to non-residential use only. Amendments to 4VAC25-170-30 and 4VAC25-170-40 are being made to bring consistency to data submission requirements for the Division of Gas & Oil, allowing applicants to use the updated 1983 coordinate system. Section 4VAC25-170-40 is being amended to change the name of the "Virginia Soil and Water Conservation Board" to the "Virginia Department of Conservation & Recreation", reflecting the accuracy of the amended name for the state board statutorily responsible for Erosion and Sediment Control Regulation.

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 number(s), if applicable, and (2) promulgating entity, i.e., the agency, board, or person. Describe the legal authority and the extent to which the authority is mandatory or discretionary.

The Department of Mines, Minerals and Energy (DMME) has authority to promulgate this regulation under authority found in § 45.1-161.3, Powers of the Department, and § 45.1-179.6, Duties and responsibilities of Department, and § 45.1-179.7, Additional powers of Department.

- Section 45.1-161.3 of the Code of Virginia empowers DMME, with the approval of the Director, to promulgate regulations necessary or incidental to the performance of duties or execution of powers under Title 45.1 of the Code of Virginia.
- Section 45.1-179.6 of the Code of Virginia gives DMME jurisdiction and authority necessary to enforce the provisions of this chapter and shall have the power and authority to make and enforce rules, regulations, and orders
- Section 45.1-179.7 of the Code of Virginia empowers DMME to promulgate such rules and regulations as may be necessary to provide for geothermal drilling and the exploration and development of geothermal resources in the Commonwealth

Purpose

Please explain the need for the new or amended regulation by (1) detailing the specific reasons why this regulatory action is essential to protect the health, safety, or welfare of citizens, and (2) discussing the goals of the proposal, the environmental benefits, and the problems the proposal is intended to solve.

The purpose of the subject chapter is to protect the public and the environment during the development of geothermal energy resources. The proposed regulatory action will correct outdated sections of the chapter and clarify language that is currently ambiguous. The amendments will make the chapter more accurate and easier to understand.

Substance

Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. (More detail about these changes is requested in the "Detail of changes" section.)

Section 4VAC25-170-10 will be amended to correct the current technical language referring to "geothermal resource", which does not clarify that the regulation applies to non-residential use only. The amendment will clarify that the regulation does not apply to residential geothermal heat pumps, a common misconception.

Amendments to 4VAC25-170-30 and 4VAC25-170-40 are being made to bring consistency to data submission requirements for the Division of Gas & Oil. The use of latitude and longitude and the Virginia Coordinate System of 1927 have been replaced by the Virginia Coordinate System of 1983 in other Division of Gas & Oil regulations. Current industry practice is to use the more modern 1983 coordinate system for describing the locations of wells and core holes. Applicants for permits under this chapter must currently convert their coordinates back to the 1927 system, as required by the regulation, in order to submit them to the Department of Mines, Minerals and Energy's Division of Gas & Oil. The amendment will allow applicants to use the updated 1983 coordinate system.

Section 4VAC25-170-40 is being amended to change the name of the "Virginia Soil and Water Conservation Board" to the "Virginia Department of Conservation & Recreation". This change will

reflect the accuracy of the amended name for the state board statutorily responsible for Erosion and Sediment Control Regulation.

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 the regulatory action poses no disadvantages to the public or the Commonwealth, please so indicate.

DMME’s position is that the regulation should be amended, consistent with the stated objectives of applicable law, and that the amendments will have a positive economic impact on small business by reducing workload and increasing efficiency for applicants.

In addition, due to the renewed interest in alternative energy sources such as geothermal energy, there is an increased need for this regulation to be clarified so that the agency and the public will be able to better apply the regulation.

The agency is not using a participatory approach in the development of the proposal because the amendments are expected to be non-controversial. The fact that no public comments were received in response to the Notice of Periodic Review and Notice of Intended Regulatory Action supports the agency’s decision.

Requirements more restrictive than federal

Please identify and describe any requirement of the proposal which are 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 proposed requirements which are stricter than the 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.

There are no localities foreseen to be particularly affected by the proposed regulation.

Public participation

Please include a statement that in addition to any other comments on the proposal, the agency is seeking comments on the costs and benefits of the proposal and the impacts of the regulated community.

The agency is seeking comments on the intended regulatory action, including but not limited to 1) ideas to assist in the development of a proposal, 2) the costs and benefits of the alternatives stated in this background document or other alternatives and 3) potential impacts of the regulation. The agency is also seeking information on impacts on small businesses as defined in § 2.2-4007.1 of the Code of Virginia. Information may include 1) projected reporting, recordkeeping and other administrative costs, 2) probable effect of the regulation on affected small businesses, and 3) description of less intrusive or costly alternative methods of achieving the purpose of the regulation.

Anyone wishing to submit written comments may do so by mail, email or fax to **Tabitha Hibbitts Peace, Policy Analyst, P.O. Drawer 900, Big Stone Gap, VA 24219, phone 276-523-8212, fax 276-523-8148, or Tabitha.Peace@dmme.virginia.gov.** Written comments must include the name and address of the commenter. In order to be considered, comments must be received by the last day of the public comment period.

A public hearing will not be held unless a request for a hearing is received from 25 or more persons.

Economic impact

Please identify the anticipated economic impact of the proposed regulation.

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	\$0
Projected cost of the regulation on localities	\$0
Description of the individuals, businesses or other entities likely to be affected by the regulation	Only those individuals, businesses, and entities wishing to explore the use of geothermal resources on a commercial scale.
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 (i) is independently owned and operated and (ii) employs fewer than 500 full-time employees or has gross annual sales of less than \$6 million.	Undeterminable. There are no companies presently developing commercial-scale geothermal resources in Virginia. The extent of possible future developments is unknown.
All projected costs of the regulation for affected individuals, businesses, or other entities. Please be specific. Be sure to include the projected reporting, recordkeeping, and other administrative costs required for compliance by small businesses.	\$0

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.

No other alternative would meet the essential purposes of the proposed actions.

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.

No other alternative would meet the essential purposes of the proposed regulatory actions.

Public comment

Please summarize all comments received during public comment period following the publication of the NOIRA, and provide the agency response.

Commenter	Comment	Agency response

No public comment was received following the January 7, 2008 publication of the Notice of Periodic Review, or following the July 7, 2008 publication of the NOIRA.

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.

The proposed regulatory actions will have no impact on the family or family stability.

Detail of changes

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

If the proposed regulation is intended to replace an emergency regulation, please list separately (1) all changes between the pre-emergency regulation and the proposed regulation, and (2) only changes made since the publication of the emergency regulation.

The Department of Mines, Minerals and Energy is proposing amendments to sections of 4VAC25-170, Geothermal Energy Regulations as described in the following table.

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change and rationale
4VAC25-170-10	N/A	The current technical language referring to “geothermal resource” does not clarify that the regulation applies to non-residential use only.	Add clarification to the definition of "geothermal resource" to indicate that the regulation is not for use with residential heat pumps by adding “for non-residential use” to the end of the definition. <i>This technical correction will clarify application to non-residential use only.</i> “Commissioner” and “inspector” in these regs should be changed to the current used term of “director”. <i>Technical correction will update term usage, and 30 references to “inspector” throughout the regulation will be modified to read “director”.</i>
4VAC25-170-30 (B) (1)	N/A	Use of latitude and longitude (the Virginia Coordinate System of 1927).	Change requirements for latitude and longitude to “Virginia Coordinate System of 1983”. <i>Consistency with current standards of technology.</i>
4VAC25-170-40 (1) (a)	N/A	Use of latitude and longitude (the Virginia Coordinate System of 1927).	Change requirements for latitude and longitude to “Virginia Coordinate System of 1983”. <i>Consistency with current standards of technology.</i>
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.	Change the “Virginia Soil and Water Conservation Board” to “Virginia Department of Conservation & Recreation”. <i>Accuracy of state board statutorily responsible for setting Erosion and Sediment Control Regulations.</i>
4VAC25-170-60	N/A	Division of Gas & Oil Address	Updated to reflect new location address in Lebanon which will be in use as of April 16, 2009.