



Final Regulation Agency Background Document

Approving authority name	Virginia Waste Management Board
Virginia Administrative Code (VAC) citation	9 VAC 20-85
Regulation title	Regulation Governing Management of Coal Combustion By-Products
Action title	Final Amendment 1- Fossil Fuel Combustion Products
Document preparation date	May 18, 2006

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 21 (2002) 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of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed.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.

This regulation establishes procedures for the use, reuse and reclamation of coal combustion by-products (CCB). The regulation establishes appropriate standards for siting, design, construction and operation of projects using CCB.

The Virginia Solid Waste Management Regulations were recently modified to include provisions allowing fossil fuel combustion products, when mixed with CCB, to be used in the same manner as CCB. Provisions for fossil fuel combustion products should also be reflected in the regulation governing CCB as well. Fossil fuel combustion products have previously been used under the current regulations through the submission of a variance application as allowed in 9 VAC 20-85-180. Updating the regulation to recognize fossil fuel combustion products will eliminate the need for a variance petition without detrimental impact to human health or the environment.

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 May 12, 2005, the Waste Management Board adopted posting of the draft proposed amendment of the Virginia Regulation Governing Management of Coal Combustion By-Products for public comment.

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.

Section 10.1-1402 of the Code of Virginia authorizes the Virginia Waste Management Board (Board) to issue regulations as may be necessary to carry out its powers and duties required by the Virginia Waste Management Act (Act). Section 10.1-1402(5) of the Act authorizes the Board to promote the development of resource conservation and recovery systems. Virginia code §10.1-1402(1), and (11) state:

“The Board shall carry out the purposes and provisions of this chapter and compatible provisions of federal acts and is authorized to:

1. Supervise and control waste management activities in the Commonwealth.”

...”11. Promulgate and enforce regulations, and provide for reasonable variances and exemptions necessary to carry out its powers and duties and the intent of this chapter and the federal acts, except that a description of provisions of any proposed regulation which are more restrictive than applicable federal requirements, together with the reason why the more restrictive provisions are needed, shall be provided to the standing committee of each house of the General Assembly to which matters relating to the content of the regulation are most properly referable. “

Section 10.1-1406.2 contains provisions for exemptions pertaining to the use of coal ash at facilities regulated by the Virginia Department of Mines, Minerals and Energy (DMME).

The regulation provides special provisions for the proper use and placement of CCB, or coal ash, which is one of the numerous solid wastes otherwise covered in the Virginia Solid Waste Management Regulations (9 VAC 20-80-10 et seq.) (VSWMR).

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.

This regulation establishes procedures for the proper management of coal combustion by-products (CCB) in construction projects. The regulations govern the use, reuse and reclamation of coal combustion by-products (CCB). The regulations establish appropriate standards for siting, design, construction and operation of projects using CCB.

The regulation allows for the use of CCB in structural fills and mined land reclamation projects.

It establishes minimum standards for all persons who use, reuse, or reclaim the CCB by applying it or placing it on the land and to owners and operators of coal mining facilities that accept CCB for mined land reclamation or mine refuse disposal on sites permitted by the DMME. The regulation contains provisions regarding the siting of projects, the design and construction of run-off and cover systems, and closure of projects involving CCB. It also provides minimum requirements for operation of the site.

The Virginia Solid Waste Management Regulations were recently modified to allow fossil fuel combustion products when mixed with CCB to be used in the same manner as CCB. Provisions for fossil fuel combustion products should also be reflected in the regulations governing CCB as well.

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.

Definitions of "fossil fuel combustion products" and "waste derived fuel product" have been incorporated into the regulations.

References contained within the regulation to the use of "coal combustion by-products" and "fossil fuel combustion products" under the provisions of the other regulations including the VSWMR have been updated where necessary.

The compaction specifications in Section 90 have been eliminated and the regulations have been modified to require the placement of fossil fuel combustion products as specified by a professional engineer. Section 80 has been modified to require the submission of the engineering specifications as part of the application package. Section 120 has been modified to require documentation that materials have been placed according to the specification in the final site report.

The administrative requirements in Section 150 have been updated to provide a completeness review and approval of the submission by the department.

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.*
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1) By implementing these regulatory provisions, both the Coal Combustion By-Product Regulations and the Virginia Solid Waste Management Regulations will allow the use of fossil fuel combustion products in a consistent manner.

2) The advantages to the Commonwealth include allowing the use of ash from fossil fuel combustion products in the same manner that coal combustion by-products are used and eliminate the need for a variance petition to use fossil fuel combustion products under the provision of this regulation. In addition, the regulation promotes the use of waste materials and helps preserve landfill space.

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
Title		Original Title: “Regulation Governing Management of Col Combustion By-Products Regulations”	Title changed to: “Coal Combustion By-Product Regulations” to keep the title as concise as possible
20 and throughout	No definition of “department” and occurrences of “director” throughout the document for submissions and approvals	Added definition of “department”; reassigned submissions and approvals from “director” to “department”.	Such submissions and approvals tend to be delayed if not delegated to department staff; the purpose here is to improve submission and approval efficiencies.
80.5	“All test methods will be in accordance with ASTM.”	Added specification for ASTM Standard E2277-03 <i>et seq</i> , where applicable—Standard Guide for Design and Construction of Coal Ash Structural Fills	To address comments from Robert Waldrop that the proposed test methods be clarified.
120.C.2	“To the department, a statement signed by a registered professional engineer that construction has been completed in accordance with the design plans, specifications, and the design report and a report prepared and certified by a registered professional engineer documenting that the requirements...have been met”	To the department, a statement signed by a registered professional engineer that construction has been completed in accordance with and meeting the requirements of (i) the design plans, specifications, and the design report of 9 VAC 20-85-80, (ii) 9 VAC 20-85-90 (operational requirements) and (iii) 9 VAC 20-85-100 through 9 VAC 20-85-10 (closure requirements).	To address comments from Robert Waldrop that original wording of section 120.C.2 was unclear about the difference between a report and a statement and how many documents are required
150.A.6	“6. Submits to the director an operational plan describing how the standards of 9 VAC 20-85-80 will be met.”	Changed standards to 9 VAC 20-85-90.	Comment from Robert Waldrop that the rules for site operations are in section 90 rather than in section 80—as originally indicated in this section
150 throughout	“director or department” as recipient of applicant’s materials	“appropriate department regional office”	To ensure a speedy review turn around, all submissions are directed to the regional office where the reviews will be conducted rather than to DEQ’s Central Office,

			thereby avoiding any mail and routing delays.
150.B	“The material submitted...will be evaluated for completeness within 30 days of receipt...Placement of fossil fuel combustion products may begin after the director has determined ...”	Added following text after ‘30 days of receipt...’: “If the department notifies the applicants of deficiencies within 30 days, the applicant shall postpone...until the department’s approval has been received. If the applicant has not received a notice of deficiency within 30 days, they can proceed.” Also, the following text: “Placement ... A of this section” was deleted, to better clarify the review period and expected actions.	Mr. Waldrop commented that the original wording of this section suggested that the applicant must wait on the director’s determination prior to any construction. He indicated this was ambiguous. Therefore, wording was changed to remove any such ambiguity (the applicant cannot proceed without approval during the 30 day period). However, additional text was added to ensure that no unnecessary delays in department approval occur either during the 30 day period or beyond the initial 30 days. If no deficiencies are identified nor approval is given by day 30, the applicant can proceed.

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.

Commenter	Comment	Agency response
Marty Leedy of American Electric Power	Mr. Leedy was concerned that an expanded definition of fossil fuel combustion products would be the source of environmental concerns and create a stigma for use of more standard coal combustion byproducts.	The department notes that the “expanded” definition is already contained in 9 VAC 20-80-10 and that consistency between the two regulation definitions is necessary. Further, the department cites the USEPA report to Congress of March 1999—Wastes from the Combustion of Fossil Fuels (EPA 530-R-99-010) which allays the environmental concerns cited. Finally, the department points out that each applicant can choose to adopt a more exclusive standard for their personal use—to segregate fossil fuel products from coal products—to reassure their clients about product quality. No changes to the regulation were made.

<p>Marty Leedy of American Electric Power</p>	<p>Mr. Leedy asked that the definition of “coal combustion byproducts” be amended to include residuals such as cenospheres and wished to change the definition of “speculatively accumulated material” to specify “within any 12 month period” rather than “annually.”</p>	<p>The department notes that these two definitions are contained in 9 VAC 20-80-10 and that consistency between the two sets of regulation definitions is necessary. Therefore, no changes to the regulation were made.</p>
<p>Robert Waldrop of Full Circle Solutions, Inc.</p>	<p>Mr. Waldrop requested that all new submittal requirements (sec. 80) be moved to sec. 150 to ensure a comprehensive listing in one place in the regulations.</p>	<p>The department notes that a checklist of all submittal requirements is provided in sec. 150. Cross references are provided to expanded explanations of the requirements in sec. 80. If sections 80 and 150 were to be restructured as suggested, the contents of other sections listed in 150 (40 and 70) would have to be included as well. As a result, sec. 150 would become too expansive and much of its clarity and straightforward presentation would be lost. Therefore, no changes to the regulation were made.</p>
<p>Marty Leedy of American Electric Power</p>	<p>Mr. Leedy suggested that the requirement to submit a construction specification in sec. 80 could present a barrier for small companies and operators.</p>	<p>In response, the department refers to the economic impact analysis for the CCB regulation (posted on this Virginia Town Hall site) that was conducted by the Department of Planning and Budget on this proposed regulation change. This analysis noted that small businesses that want to use the combustion products will save \$1000 to \$2000 in filing fees otherwise required to apply for a variance. The complete economic analysis indicates that increased costs in providing construction specifications is offset in the flexibility and application costs that will be saved. Therefore, no changes to the regulation were made.</p>
<p>Robert Waldrop of Full Circle Solutions, Inc. & Marty Leedy of American Electric Power</p>	<p>Both Mr. Waldrop and Mr. Leedy questioned the need for the new construction specifications and their preparation by a professional engineer in sec. 80. One of the commenters questioned the need for project drawings and compaction specifications. Mr. Waldrop favored the elimination of compaction specification requirements but not at the burden of submitting additional plans and specifications. Also, Mr. Waldrop suggested changes to wording of this section(s). Mr. Leedy suggested that the original requirement for a closure report remain.</p>	<p>The department responds again with the results of the impact analysis presented to the previous commenter. Additionally, it is noted that the new requirement will limit the legal exposure to which the department would be subjected, should a project built to the specifications fail. Therefore, the proposed requirements were retained in favor of the proposals by the commenters. The only change to the regulations that has been made was in response to Mr. Waldrop’s specific request that the proposed test methods be clarified—the ASTM standard is now specified (E2277-03), see Changes--above</p>
<p>Robert Waldrop</p>	<p>The original wording of section</p>	<p>The department agreed and the change has</p>

of Full Circle Solutions, Inc.	120.C.2 was unclear about the difference between a report and a statement and how many documents are required	been made (see above). Much of the restructuring suggested by the commenter has been included in the revised language.
Robert Waldrop of Full Circle Solutions, Inc.	The rules for site operations are in section 90 rather than in section 80—as originally indicated in section 150.A.6	The department agreed and the change has been made (see above).
Robert Waldrop of Full Circle Solutions, Inc.	The original wording of this section 150.B was ambiguous in that it appeared to suggest that the applicant must wait on the director’s determination prior to any construction.	The wording of 150.B was changed to remove any such ambiguity—the applicant now is advised that he definitely must wait on the director’s determination prior to any construction.
Robert Waldrop of Full Circle Solutions, Inc. & Marty Leedy of American Electric Power	Both commenters suggested that 9 VAC 20-85 and 9 VAC 20-80 remain as separate regulations and not be combined.	The department agrees that the two sets of regulations should remain separate. It is noted that the definitions and exemptions that otherwise would need to be removed from 9 VAC 20-80 are limited in extent, and readily recognizable, where they are, to new users. In addition, greater confusion is likely to result if the two sets of regulations were to be combined and, in the process, one set of provisions was eliminated. The two sets of regulations will remain separate.

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
20		Definition “CCB Site”	Removed and replaced with a definition of “fossil fuel combustion products site”
20		None	“Coal combustion by-products” definition consistent with the definition appearing in 9 VAC 20-80-10 provided.
20		None	“Fossil fuel combustion products” definition consistent with the definition appearing in 9 VAC 20-80-10 provided.
20		None	“Waste derived fuel products” definition consistent with the definition appearing in 9 VAC 20-80-10 provided.
30, 40, 60, 70, 80, 90,		None	Added the term fossil fuel combustion products to allow fossil fuel combustion products and CCB to be used in the same

100, 110, 120, 130, 140, 150, 160, 170			manner. Includes post-proposed stage changes to 80.5 (specific ASTM std, where applicable), 150.A.6 and 150.B (required 30 day completeness review process) as detailed above.
150	“director” as recipient of applicant’s materials	“appropriate department regional office”	To ensure a speedy review turn around, all submissions are directed to the regional office where the reviews will be conducted rather than to the central office, thereby avoiding any mail and routing delays.
40 A		None	References the beneficial use and conditional exemptions allowing the use of fossil fuel combustion products from the solid waste regulations.
80		Provides specific compaction requirements in 9 VAC 20-85-90.4	Requires the submission of construction specifications as part of the application package for a site using fossil fuel combustion products. Includes post-proposed stage change to 120.C.2 as detailed above.
20		None	“Waste derived fuel products” definition consistent with the definition appearing in 9 VAC 20-80-10 provided.
30, 40, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 160, 170		None	Added the term fossil fuel combustion products to allow fossil fuel combustion products and CCB to be used in the same manner.
40 A		None	References the beneficial use and conditional exemptions allowing the use of fossil fuel combustion products from the solid waste regulations.

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.

Regulatory methods, that would accomplish the applicable law and yet be as environmentally and humanly protective as an alternative to the limited director’s/staff approval proposed in this regulatory change, would be to require permits, permits-by-rule, or variances. Each of these alternatives would be

more costly than what is proposed in this regulation. The Department of Planning and Budget examined the cost of variances in its economic impact analysis. Each of these alternatives would present more stringent compliance and reporting requirements and schedules. The current proposal embodies the consolidation and simplification of requirements sought in this provision. Finally, the establishment performance standards would eliminate the flexibility that the Department of Planning and Budget identified as an financial asset in the approach presented in these regulations. Exemption of small businesses from these requirements would be less protective of the environment and human health and would not lessen the liability of the department in its responsibility for these sites.

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 regulations protect the public's health, safety and welfare and the environment from harmful results of the mismanagement of coal combustion by-products. However, the Regulations Governing the Management of Coal Combustion By-products has no other direct impact on the institution of the family.