



## Fast Track Proposed Regulation Agency Background Document

<b>Agency name</b>	Virginia Soil and Water Conservation Board
<b>Virginia Administrative Code (VAC) citation</b>	4 VAC 50-20
<b>Regulation title</b>	Virginia Impounding Structure Regulations
<b>Action title</b>	Amendment to the Virginia Impounding Structure Regulations to provide streamlined compliance requirements and economic and regulatory relief for low hazard potential dam owners while maintaining the Commonwealth's public safety obligations.
<b>Date this document prepared</b>	February 29, 2012

This information is required for executive branch review and the Virginia Registrar of Regulations, pursuant to the Virginia Administrative Process Act (APA), Executive Orders 14 (2010) 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of the proposed new regulation, proposed amendments to the existing regulation, or the regulation proposed to be repealed.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.*

Changes being advanced by this regulatory action are largely in response to requirements placed in the Code of Virginia during the last several General Assembly Sessions that directed the Board to:

- Adopt regulations that consider the impact of downstream limited-use or private roadways with low traffic volume and low public safety risk on the determination of the hazard potential classification of an impounding structure under the Dam Safety Act (§ 10.1-604 et seq.).
- Adopt regulations in accordance with § 10.1-605 to establish a simplified methodology for dam break inundation zone analysis.
- Develop a general permit for the regulation of low hazard potential impounding structures in accordance with § 10.1-605.

The regulations contain provisions that address these Code requirements and offer a balance between public safety and the reduced risks associated with low hazard impounding structures. The key elements of the regulations include:

- Provisions to allow for the use of incremental damage analyses to modify hazard potential classifications;
- The use of an annual average daily traffic (AADT) volume of 400 vehicles or less as the number where a roadway may be considered “limited use” and processes by which such an impounding structure may qualify for low hazard potential classification;
- The implementation of a streamlined general permit process with reduced requirements for low hazard dams; and
- The ability for the Department to assist specified dam owners by conducting simplified dam break inundation zone analyses for them.

All of these provisions provide true economic and regulatory relief for low hazard potential dam owners while remaining mindful of the Commonwealth’s public safety obligations.

**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 24, 2011, the Virginia Soil and Water Conservation Board authorized the Director of the Department of Conservation and Recreation and the Departmental Regulatory Coordinator to develop a fast-track regulatory action for the Board’s consideration that included the following action items:

- 1) Develop regulations that consider the impact of downstream limited-use or private roadways with low traffic volume and low public safety risk on the determination of the hazard potential classification of an impounding structure;
- 2) Develop regulations that provide a method to conduct a simplified dam break inundation zone analysis; and
- 3) Develop regulations that set out the necessary requirements to obtain a general permit for a low hazard impounding structure.

In accordance with the Board’s direction, an eighteen member RAP composed of private, local, and state dam owners and engineers was assembled. The RAP held two meetings, the first on October 18<sup>th</sup> and the second on November 10<sup>th</sup>. The regulations represent general consensus by the committee.

The Virginia Soil and Water Conservation Board approved this final regulation related to the Board’s Virginia Impounding Structure Regulations (§ 4 VAC 50-20) on December 7, 2011 and authorized and directed its filing as a fast-track final regulation.

**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.

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The Virginia Dam Safety Act (§10.1-604 through §10.1-613 of the Code of Virginia) ensures public safety through the proper and safe design, construction, operation, and maintenance of impounding structures in the Commonwealth. This is accomplished through the effective administration of the Virginia Dam Safety Program (Program). Authority for the Program rests with the Virginia Soil and Water Conservation Board (Board) and it is administered on behalf of the Board by the Department of Conservation and Recreation's Division of Dam Safety and Floodplain Management. The Program focuses on enhancing public safety through bringing all impounding structures of regulated size under Regular Operation and Maintenance Certificates.

Pursuant to §10.1-605, the Board is directed to promulgate regulations for impounding structures:

*§10.1-605 The Board shall promulgate regulations to ensure that impounding structures in the Commonwealth are properly and safely constructed, maintained and operated.*

Further, the Board reserves the sole right to promulgate regulations:

*§ 10.1-605.1. Delegation of powers and duties.  
The Board may delegate to the Director or his designee any of the powers and duties vested in the Board by this article, except the adoption and promulgation of regulations. Delegation shall not remove from the Board authority to enforce the provisions of this article.*

The three items that the Board directed the Department and the RAP to consider in the regulatory action were as follows:

- 1) Develop regulations (considering existing guidance) that consider the impact of downstream limited-use or private roadways with low traffic volume and low public safety risk on the determination of the hazard potential classification of an impounding structure;
- 2) Develop regulations that provide a method to conduct a simplified dam break inundation zone analysis; and
- 3) Develop regulations that set out the necessary requirements to obtain a general permit for a low hazard impounding structure.

These actions were predicated on the following legislation and information which was closely considered in the development of the regulations:

Item 1:

- Chapter 270 of the 2010 Virginia Acts of Assembly (HB438 - Delegate David J. Toscano) amended § 10.1-605 C. of the Code of Virginia to direct that “[t]he Board shall

consider the impact of limited-use or private roadways with low traffic volume and low public safety risk that are downstream from or across an impounding structure in the determination of the hazard potential classification of an impounding structure”.

- Chapter 41 of the 2010 Virginia Acts of Assembly (SB244 – Senator John C. Watkins) resulted in the Codification of § 10.1-605.2 of the Code of Virginia that stipulates “[t]hat the Virginia Soil and Water Conservation Board shall, in accordance with the Administrative Process Act (§ 2.2-4000 et seq.), adopt regulations that consider the impact of downstream limited-use or private roadways with low traffic volume and low public safety risk on the determination of the hazard potential classification of an impounding structure under the Dam Safety Act (§ 10.1-604 et seq.)”.
- During 2010, in partial response to these legislative directives, the Director of the Department approved on November 30, 2010 a “Guidance Document on Roadways On or Below Impounding Structures”. The guidance was strongly considered in the construct of the regulations.

Item 2:

- Chapter 637 of the 2011 Virginia Acts of Assembly (SB1060 – Senator Ryan T. McDougle) created a § 10.1-604.1 titled “Determination of hazard potential class” with a subsection C. that specifies that “[t]he Board may adopt regulations in accordance with § 10.1-605 to establish a simplified methodology for dam break inundation zone analysis”.

Item 3:

- Chapter 637 of the 2011 Virginia Acts of Assembly (SB1060 – Senator Ryan T. McDougle) created a § 10.1-605.3 titled “General permit for certain impounding structures” with a subsection A that specifies that “[t]he Board shall develop a general permit for the regulation of low hazard potential impounding structures in accordance with § 10.1-605”.

**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 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.*

As noted in the legal basis above, the changes being advanced by this regulatory action are largely in response to requirements placed in the Code of Virginia during the last several General Assembly Sessions that directed the Board to:

- Adopt regulations that consider the impact of downstream limited-use or private roadways with low traffic volume and low public safety risk on the determination of the hazard potential classification of an impounding structure under the Dam Safety Act (§ 10.1-604 et seq.).
- Adopt regulations in accordance with § 10.1-605 to establish a simplified methodology for dam break inundation zone analysis.
- Develop a general permit for the regulation of low hazard potential impounding structures in accordance with § 10.1-605.

Accordingly, the provisions of the regulations being advanced will result in reduced and streamlined compliance requirements that will provide less costly services for mapping, provide additional mechanisms through which a hazard potential classification and related spillway design flood may be reduced through new provisions including low volume roadway and expanded incremental damage analysis considerations, as well as provide for a streamlined general permit process for the regulation of low hazard potential impounding structures. The provisions of this regulatory action are intended to provide true economic and regulatory relief for all Low Hazard Potential dam owners and additional opportunities for regulatory relief for High and Significant Hazard Potential dam owners while remaining mindful of the Commonwealth’s public safety obligations.

**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?*

*Please note: 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 (i) file notice of the objections with the Registrar of Regulations for publication in the Virginia Register, and (ii) proceed with the normal promulgation process with the initial publication of the fast-track regulation serving as the Notice of Intended Regulatory Action.*

This rulemaking is expected to be noncontroversial as the majority of the provisions included in these regulations largely incorporate requirements set out in the Code where limited discretion is offered and are being advanced to provide true economic and regulatory relief to those regulated. Where limited latitude was available in developing regulatory provisions, there was general consensus regarding the language included from a Regulatory Advisory Panel composed of private, local, and state dam owners and engineers that was assembled to provide sound recommendations to the Department and Board regarding these regulatory improvements.

**Substance**

*Please briefly identify and explain the new substantive provisions, the substantive changes to existing sections, or both where appropriate. (Provide more detail about these changes in the “Detail of changes” section.) Please be sure to define any acronyms.*

The new substantive provisions and the substantive changes to existing sections being made within this regulatory action are in response to requirements in the Code of Virginia that directed the Board to:

- Adopt regulations that consider the impact of downstream limited-use or private roadways with low traffic volume and low public safety risk on the determination of the hazard potential classification of an impounding structure under the Dam Safety Act (§ 10.1-604 et seq.).

- Adopt regulations in accordance with § 10.1-605 to establish a simplified methodology for dam break inundation zone analysis.
- Develop a general permit for the regulation of low hazard potential impounding structures in accordance with § 10.1-605.

In response to this legislative direction, the key substantive changes included in this regulation action involve the following:

- Amending the hazard potential classification section (4VAC50-20-40) to:
  - Exclude roadways with an annual average daily traffic volume of 400 vehicles or less from consideration as major roadways or secondary roadways that traditionally lead to hazard classifications of High or Significant respectively.
  - Establish that the Department may be requested by a dam owner in specified situations to conduct a simplified dam break inundation zone analysis to determine whether the impounding structure has a low hazard potential classification.
  - Specify that if the Department finds that an impounding structure appears to have a low hazard potential classification that the owner may be eligible for general permit coverage.
  - Specify that an incremental damage analysis may be utilized as part of hazard potential classification by the owner's engineer.
- Establishing a new section (4VAC50-20-45) on low volume roadways that tracks the guidance previously approved by the Director and specifically:
  - Sets out the analysis methods by which a determination may be made whether a road is impacted by a dam failure.
  - Specifies that an incremental damage analysis may be utilized to refine what roadways should be considered impacted.
  - Establishes that an impounding structure may qualify for low hazard potential classification based on annual average daily traffic (AADT) volume if other downstream factors do not exist that would otherwise raise the hazard classification.
  - Establishes accepted methodologies for determining a roads AADT.
  - Sets an AADT volume of 400 vehicles or less as the number where a roadway may be considered "limited use" and how an impounding structure may qualify for low hazard potential classification.
  - Requires that the Emergency Preparedness Plan consider these "limited use" roadways regarding proper notifications during emergency conditions.
- Amending the incremental damage analysis section (4VAC50-20-52) to establish processes by which the potential hazard potential classification of an impounding structure may be lowered based on the results of an incremental damage analysis.
- Amending the dam break inundation zone mapping section (4VAC50-20-54) to:
  - Clarify that the Department may complete for a dam owner a simplified dam break inundation zone map and analysis in accordance with this section.

- Specify that Emergency Action and Emergency Preparedness Plans shall include maps for the sunny day dam failure and a probable maximum flood with a dam failure.
- Specify the general deliverables and administrative processes associated with the Department conducting a simplified dam break inundation zone analysis.
- Establishing a new section (4VAC50-20-101) on general permit requirements for low hazard potential impounding structures that:
  - Specifies that the owner shall be subject to the following requirements:
    - The dam has a spillway design able to safely pass a 100-year flood.
    - The owner shall develop and maintain an emergency preparedness plan.
    - The owner shall perform an annual inspection and maintain such records and make them available to the Department upon request.
    - The owner shall ensure that the impounding structure is properly maintained and operated and shall have operation and maintenance plans and schedules available to the department for inspection upon request.
    - The owner shall file a dam break inundation zone map with the Department and the locality(ies)
    - The owner shall notify the specified authorities in the event of a failure or imminent failure of the impounding structure.
- Establishing a new section (4VAC50-20-102) regarding registering for coverage under the general permit for low hazard potential impounding structures that specifies that the owner shall submit a complete and accurate registration statement and sets out the eight components of that submittal.

Other less substantive provisions of this action are included in the Detail of Changes section of this form.

**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 regulations being advanced provide advantages (reduced and streamlined compliance requirements) to those impounding structure owners regulated under the Virginia Dam Safety Act and its attendant regulations by providing less costly services for mapping, providing additional mechanisms through which a hazard potential classification and related spillway design flood may be reduced through new provisions including low volume roadway and expanded incremental damage analysis considerations, as well as providing for a streamlined general permit process for the regulation of low hazard potential impounding structures. The provisions of this regulatory action are intended to provide true economic and regulatory relief



for all Low Hazard Potential dam owners and additional opportunities for regulatory relief for High and Significant Hazard Potential dam owners while remaining mindful of the Commonwealth's public safety obligations. Downstream residents and property owners below regulated dams should not be disadvantaged or their safety affected by these actions as they largely provide for streamlined processes, provide for less costly services, and reduce dam standards only where risks are low and reasonable to do such.

**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 federal requirements that are applicable to this regulatory action.

**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.*

The provisions of this regulatory action are intended to provide true economic and regulatory relief for all Low Hazard Potential dam owners and additional opportunities for regulatory relief for High and Significant Hazard Potential dam owners while remaining mindful of the Commonwealth's public safety obligations. No specific locality will be particularly impacted by this regulation as it will provide potential regulatory relief to all of them that own or maintain Low Hazard Potential dams as well as offer potential relief to those owning High or Significant Hazard Potential dams that may also benefit from these provisions. Updates to dam break inundation zone mapping requirements may also result in more useful and accurate information being available to local emergency management personnel.

**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 fundamental reason for this regulatory action is to provide less stringent and more streamlined compliance requirements for those regulated by the Virginia Dam Safety Act and its attendant regulations in accordance with changes made to the Code of Virginia during recent General Assembly Sessions. The regulations being advanced are being done so to provide true economic and regulatory relief for Low Hazard Potential dam owners and additional opportunities for regulatory relief for High and Significant Hazard Potential dam owners while remaining mindful of the Commonwealth’s public safety obligations. The regulations being advanced provide for less costly services for mapping, provide additional mechanisms through which a hazard potential classification and related spillway design flood may be reduced through new provisions including low volume roadway and expanded incremental damage analysis considerations, as well as providing for a streamlined general permit process for the regulation of low hazard potential impounding structures.

As a number of the regulated dams may be owned or operated by small businesses, this regulatory amendment does provide for a less stringent compliance requirements for this group and does minimize and reduce regulatory impacts on small businesses.

Alternatively, small businesses may also be located downstream of these dams and would be affected should one of these dams fail.

**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><b>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</b></p>	<p>This regulatory action is cost neutral to the state. Costs to the state associated with this regulatory action are largely related to the new services that the Department of Conservation and Recreation has been directed to provide by the Code of Virginia. Reasonable but sufficient fees have been established to cover these costs for services with the fees directed to be deposited to the Dam Safety Administrative Fund to be used for the administration of the dam safety program.</p> <p>The two new fees to cover services include:</p> <ol style="list-style-type: none"> <li>1) The establishment of a \$300 fee (for six years coverage) to cover the costs for processing the registration statement for owners seeking to obtain coverage under the new general permit for low hazard impounding structures. It</li> </ol>
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	<p>should be noted that such dam owners already had to pay a \$300 fee for review of an application for a six-year Regular Operation and Maintenance Certificate for a Low Hazard Potential impounding structure. (This should result in no increases or decreases in revenue.)</p> <p>2) The establishment of a \$2,000 fee for the Department to conduct the simplified dam break inundation zone analysis and create the map for them. It should be noted that a detailed dam break inundation analysis to be conducted by an owner’s engineer is more expensive than the rate being provided by the Department. (The Department ran several test analyses to determine the estimated costs associated with providing these required mapped services. It is also important to note that the regulations specify that “[i]f the department attains additional efficiencies in its analysis process, the department is authorized to reduce this fee to a level commensurate with the costs”.)</p>
<p><b>Projected cost of the new regulations or changes to existing regulations on localities.</b></p>	<p>No cost is anticipated to local governments as a result of this regulatory action. However, localities owning or operating dams may benefit from the regulatory relief offered through these regulations that provide additional mechanisms through which a hazard potential classification and related spillway design flood may be reduced through new provisions including low volume roadway and expanded incremental damage analysis considerations which could result in income being retained by the localities that might otherwise have to be directed to dam rehabilitation costs under the current regulations. How a dam may owner may benefit from these regulations, and what the cost saving are, will be unique to each dam and cannot be collectively assessed.</p>

<p><b>Description of the individuals, businesses or other entities likely to be affected by the <i>new regulations or changes to existing regulations</i>.</b></p>	<p>The Dam Safety Program and these regulatory changes affect regulated public and private dam owners that are subject to these regulations as well as downstream residents and property owners that would be potentially affected upon a dam failure.</p>
<p><b>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.</b> 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.</p>	<p>Approximately 1600 dams across the Commonwealth could be affected by this regulatory action. Of these dams, as of December 2011, slightly over 220 were classified as high hazard, almost 400 as significant hazard, and over 940 as low hazard. The low hazard dam owners will benefit the most from the new provisions of these regulations. A number of these dam owners may be small businesses. Small businesses that are located downstream of these dams may also be impacted should one of these dams fail.</p>
<p><b>All projected costs of the <i>new regulations or changes to existing regulations</i> for affected individuals, businesses, or other entities. Please be specific and include all costs. Be sure to include the projected reporting, recordkeeping, and other administrative costs required for compliance by small businesses. 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.</b></p>	<p>Public and private dam owners will be positively impacted as they may benefit from the regulatory relief offered through these regulations that provide additional mechanisms through which a hazard potential classification and related spillway design flood may be reduced through new provisions including low volume roadway and expanded incremental damage analysis considerations which could result in income being retained by these entities that might otherwise have to be directed to dam rehabilitation costs under the current regulations. The safety of downstream residents and property owners should not be affected by these actions as they largely provide for streamlined processes, provide for less costly services, and reduce dam standards only where risks are low and reasonable to do such.</p>
<p><b>Beneficial impact the regulation is designed to produce.</b></p>	<p>This action is being advanced to provide true economic and regulatory relief for low hazard potential dam owners and additional opportunities for regulatory relief for High and Significant Hazard Potential dam owners while</p>

	remaining mindful of the Commonwealth’s public safety obligations.
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**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.*

The changes being made within this regulatory action are predominately being made in response to requirements in the Code of Virginia that directed the Board to:

- Adopt regulations that consider the impact of downstream limited-use or private roadways with low traffic volume and low public safety risk on the determination of the hazard potential classification of an impounding structure under the Dam Safety Act (§ 10.1-604 et seq.).
- Adopt regulations in accordance with § 10.1-605 to establish a simplified methodology for dam break inundation zone analysis.
- Develop a general permit for the regulation of low hazard potential impounding structures in accordance with § 10.1-605.

The regulations being advanced are being done so to provide true economic and regulatory relief for low hazard potential dam owners and additional opportunities for regulatory relief for High and Significant Hazard Potential dam owners while remaining mindful of the Commonwealth’s public safety obligations. Accordingly, options to leave the current regulations in place as written would not be in compliance with the legal directives or achieve the desired results. The specific provisions included in these regulations largely incorporate requirements set out in the Code. Where limited latitude was available, there was general consensus regarding the provisions included from a Regulatory Advisory Panel composed of private, local, and state dam owners and engineers that was assembled to provide sound recommendations to the Department and Board regarding these regulatory improvements.

The regulations being advanced do represent a less intrusive and less costly set of alternatives for those impounding structure owners regulated under the Virginia Dam Safety Act and its attendant regulations by providing less costly services for mapping, providing additional mechanisms through which a hazard potential classification and related spillway design flood may be reduced through new provisions including low volume roadway and expanded incremental damage analysis considerations, as well as providing for a streamlined general permit process for the regulation of low hazard potential impounding structures.

**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.*

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It is not anticipated that this final regulation will have a direct impact on the institution of the family or family stability although it is anticipated that the regulatory relief offered through these regulations could result in income being retained that might otherwise have to be directed to dam rehabilitation costs.

**Detail of changes**

*Please list all changes that are being proposed and the consequences of the proposed changes. 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 list separately (1) all differences between the **pre-emergency regulation** and this proposed regulation, and (2) only changes made since the publication of the emergency regulation.*

For changes to existing regulation(s), use this chart:

Overall, these provisions are being advanced to provide true economic and regulatory relief for low hazard potential dam owners and additional opportunities for regulatory relief for High and Significant Hazard Potential dam owners while remaining mindful of the Commonwealth’s public safety obligations.

Current section number	Proposed new section number, if applicable	Current requirement	Proposed change, intent, rationale, and likely impact of proposed requirements
4VAC50-20-30		Contains definitions utilized in the regulations.	<p>Changes to this section include updates to a Code reference within an existing definition and the addition of a new definition necessary to complement new language added to later sections regarding low-volume roadways and their traffic usage. These included the following actions:</p> <ul style="list-style-type: none"> <li>• Updates an outdated Code reference for “agricultural purpose” that was changed when Title 3.1 of the Code of Virginia was recodified to Title 3.2.</li> <li>• Inserts a definition for “annual average daily traffic” or “AADT” that provides a measure of how busy a road is in terms of vehicular traffic.</li> </ul>
4VAC50-20-40		Outlines the hazard potential classification process for regulated dams and the current definitions by which they are determined to be High, Significant, or Low Hazard	<p>A number of provisions were added to this section in order to provide true economic and regulatory relief for all Low Hazard Potential dam owners and additional opportunities for regulatory relief for High and Significant Hazard Potential dam owners. These included the following actions:</p> <ul style="list-style-type: none"> <li>• Excludes roadways with an annual average daily traffic volume of 400 vehicles or</li> </ul>

		<p>Potential dams based on potential impacts to life and property upon an impounding structure failure.</p>	<p>less from consideration as major roadways or secondary roadways that traditionally lead to hazard classifications of High or Significant respectively.</p> <ul style="list-style-type: none"> <li>• Establishes that the Department may be requested by a dam owner in specified situations to conduct a simplified dam break inundation zone analysis to determine whether the impounding structure has a low hazard potential classification.</li> <li>• Specifies that if the Department finds that an impounding structure appears to have a low hazard potential classification that the owner may be eligible for general permit coverage.</li> <li>• Specifies that an incremental damage analysis may be utilized as part of hazard potential classification by the owner's engineer. This element is a significant change that could also provide regulatory relief to High and Significant Hazard Potential dam owners and reduce or eliminate the need for them to implement spillway upgrades.</li> </ul>
<p>4VAC50-20-45</p>	<p>4VAC50-20-45</p>		<p>These changes are being advanced to allow for the consideration of the impact of downstream limited-use or private roadways with low traffic volume and low public safety risk on the determination of the hazard potential classification of an impounding structure. This change establishes a new section on low volume roadways that tracks the November 30, 2010 "Guidance Document on Roadways On or Below Impounding Structures" approved by DCR's Director and specifically:</p> <ul style="list-style-type: none"> <li>• Sets out the analysis methods by which a determination may be made whether a road is impacted by a dam failure.</li> <li>• Specifies that an incremental damage analysis may be utilized to refine what roadways should be considered impacted.</li> <li>• Establishes that an impounding structure may qualify for low hazard potential classification based on annual average daily traffic (AADT) volume if other downstream factors do not exist that would otherwise raise the hazard classification.</li> <li>• Establishes accepted methodologies for determining a roads AADT.</li> <li>• Sets an AADT volume of 400 vehicles or less as the number where a roadway may be considered "limited use" and how an impounding structure may qualify for low hazard potential classification.</li> <li>• Requires that the Emergency Preparedness Plan consider these "limited use" roadways regarding proper notifications during emergency conditions.</li> </ul>
<p>4VAC50-20-52</p>		<p>This section currently authorizes a owner's engineer once the dam's hazard potential</p>	<p>This change as noted previously specifies that an incremental damage analysis may be utilized as part of hazard potential classification by the owner's engineer and may result in the lowering of an impounding structure's proposed potential hazard classification. This</p>



		<p>classification and spillway design flood have been determined to perform an incremental damage analysis to see if an additional reduction to the spillway design flood within the limits of the regulations may be considered in situations where downstream flooding has already affected life and property and a dam break adds no additional impacts.</p>	<p>element is a significant change that could also provide regulatory relief to High and Significant Hazard Potential dam owners and reduce or eliminate the need for them to implement spillway upgrades. The additions to this section provide additional details on the analysis methodologies that may be considered. The changes specifically include the following:</p> <ul style="list-style-type: none"> <li>• Amends the incremental damage analysis (IDA) section to establish processes by which the potential hazard potential classification of an impounding structure may be lowered based on the results of an incremental damage analysis.</li> <li>• This is a significant change that could markedly reduce the costs associated with spillway design requirements due to the potential for lowering a hazard potential classification based on an IDA.</li> </ul>
<p>4VAC50-20-54</p>		<p>This section currently outlines the current elements that are required to be in a dam break inundation zone map, specifies current mapping calculation procedures, and speaks to the inclusion of components of such maps into Emergency Action and Emergency Preparedness Plans.</p>	<p>Changes to this section were primarily made to allow dam owners the ability to secure specified technical mapping assistance from the Department and to explain what the deliverable and administrative processes related to that assistance included. The section has been amended specifically to:</p> <ul style="list-style-type: none"> <li>• Clarify that the Department may complete for a dam owner a simplified dam break inundation zone map and analysis in accordance with this section.</li> <li>• Specify that both the Emergency Action and Emergency Preparedness Plans shall include maps for the sunny day dam failure and a probable maximum flood with a dam failure.</li> <li>• Specify the general deliverables and administrative processes associated with the Department conducting a simplified dam break inundation zone analysis.</li> </ul>
	<p>4VAC50-20-101</p>		<p>This section has been added to comply with legislative changes that directed the Board to develop a general permit for the regulation of low hazard potential impounding structures in accordance with § 10.1-605 of the Code of Virginia. Accordingly, this change establishes a new section on general permit requirements for low hazard potential impounding structures that specifies that the owner shall be subject to the following simplified and streamlined requirements:</p> <ul style="list-style-type: none"> <li>• The dam has a spillway design able to safely pass a 100-year flood.</li> <li>• The owner shall develop and maintain an emergency preparedness plan.</li> <li>• The owner shall perform an annual inspection and maintain such records and make them available to the Department upon request.</li> <li>• The owner shall ensure that the impounding structure is properly maintained and operated and shall have operation and maintenance plans and schedules available to</li> </ul>

			<p>the department for inspection upon request.</p> <ul style="list-style-type: none"> <li>The owner shall file a dam break inundation zone map with the Department and the locality(ies).</li> <li>The owner shall notify the specified authorities in the event of a failure or imminent failure of the impounding structure.</li> </ul>
	4VAC50-20-102		This new section provides information to a dam owner regarding the processes for registering for coverage under the general permit for low hazard potential impounding structures. The section specifies that the owner shall submit a complete and accurate registration statement and sets out the eight components of that submittal.
	4VAC50-20-103		This new section outlines the process and timing for transitioning from regular or conditional certificates to general permit coverage for operation of a low hazard potential impounding structure.
	4VAC50-20-104		This new section stipulates how a dam owner maintains coverage under a general permit for operation of a low hazard potential impounding structure at the end of the six-year coverage period.
4VAC50-20-177			The changes made to this section simplify, reduce, and specify the information that must be provided in this streamlined plan. It does however require that it include a dam break inundation zone map which already has to be prepared for hazard potential determinations and it provides more useful and accurate information to emergency management personnel.
	4VAC50-20-195		This new section has been added to ensure the right for judicial review by any owner aggrieved by a decision regarding the owner's impounding structure made by the Director, Department, or Board.
4VAC50-20-200			The changes made to this section add additional specificity that failure of an impounding structure owner to comply with the provisions of the new general permit for operation of a low hazard potential impounding structures may also result in enforcement actions including the assessment of penalties available under the Dam Safety Act.
4VAC50-20-340			The changes made to this section are limited to amending the fee authority language to track recent Code changes regarding the collection and handling of fees and changing the name of

		collecting specified fees as well as the Fund into which such deposits should be made.	Fund to which they are deposited to be used for the administration of the dam safety program.
	4VAC50-20-375		This new section has been added to establish a \$300 fee (for six years coverage) to cover the costs for processing the registration statement for owners seeking to obtain coverage under the new general permit for low hazard impounding structures. It should be noted that such dam owners already had to pay a \$300 fee for review of an application for a six-year Regular Operation and Maintenance Certificate for a Low Hazard Potential impounding structure.
	4VAC50-20-395		This new section establishes the impounding structure owner's fee at \$2,000 for the Department to conduct the simplified dam break inundation zone analysis and create the map for them. It should be noted that a detailed dam break inundation analysis to be conducted by an owner's engineer is more expensive than the rate being provided by the Department.