

**Virginia Department of Conservation and Recreation  
Public Hearing on Proposed Impounding Structure Regulations  
(4 VAC 50-20-10 et seq.)**

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**October 9, 2007 in Hampton, Virginia**

**Meeting Officer:** David C. Dowling  
Director of Policy, Planning and Budget  
Department of Conservation and Recreation

**Opening:**

**Mr. Dowling:** Good Evening, I would like to call this public hearing on the Virginia Soil and Water Conservation Board's proposed Impounding Structure Regulations to order. I am David Dowling, Director of Policy, Planning and Budget for the Department of Conservation and Recreation. I will be serving as the meeting officer this evening. I welcome you to this hearing.

I would like to thank the City of Hampton for allowing us to use this facility.

***Introduce DCR Staff assisting with the meeting.***

With me tonight I have Bill Browning, Division Director for DCR's Division of Dam Safety and Floodplain Management. Also with me are Jim Robinson, DCR's Dam Safety Program Manager, and Michael Fletcher, DCR's Board and Constituent Services Liaison. Michael will be audio taping our meeting and developing a set of minutes of the comments received tonight. Other DCR staff members with me this evening are Ryan Brown, our Policy and Planning Assistant Director, who will serve as our technical presenter, and Christine Watlington, our Policy and Budget Analyst.

I hope that all of you have registered on our attendance list. If not, please do so. Those wishing to speak should note that on the attendance list. Please also make sure that your contact information, including your name and address, is legible and complete as we will be utilizing it to keep you informed on the status of the regulatory action.

**Purpose of the public hearing:**

The purpose of this hearing is to receive input from interested citizens on the Board's proposed Virginia Impounding Structure Regulations during the 60-day public comment period which opened on August 20<sup>th</sup> [Vol 23 Issue 25] and closes on October 19th. These regulations not only impact dam owners but also impact the growing number of Virginians living downstream from dams.

The Department used the participatory approach to develop the proposal. Following the publication of the Notice of Intended Regulatory Action regarding these regulations in December

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of 2005 and the public comment period on the NOIRA, the Department formed a Technical Advisory Committee to assist in the development of the proposed regulations. The TAC included representatives from localities owning dams, owners of both large and small private dams, Soil and Water Conservation Districts, engineers, and federal and state regulators to name a few. The 28-member TAC met seven times between the months of May and October 2006. Following the completion of the TAC's work, the Soil and Water Conservation Board proposed these regulations at its meeting held on November 15, 2006. Copies of the proposed regulations are located on the table near the attendance list.

This concludes my introductory remarks. I would like to introduce Ryan Brown, DCR's Policy and Planning Assistant Director, who will explain in more detail what the proposed regulations do.

**Mr. Brown:** Thank you Mr. Dowling.

The Board's regulatory proposal has been developed to support and advance the goals of the Virginia Dam Safety Act, contained in § 10.1-604 et seq. of the Code of Virginia, which gives the Board the authority to adopt regulations to protect the health, safety, and welfare of citizens through ensuring that all regulated dams are properly and safely constructed, maintained, and operated.

Key provisions of this proposed regulatory action include the following:

1) First, a revision of the dam classification system found in 4VAC50-20-40 from four categories (Class I, II, III, and IV) to three hazard potential classifications (High, Significant, and Low). This conforms the classification categories contained in the regulations to those used by federal agencies and many other states.

2) Second, a specification that the Spillway Design Flood requirements found in Table 1 of 4VAC50-20-50 are applicable to all dams, and not just those constructed after July of 1982, as the currently-effective regulations state. In addition, Table 1 is revised to:

- Reflect the revised dam classifications
- Update spillway design requirements to enhance public safety and to move towards federal standards.
- Eliminate spillway design flood ranges within categories, which may result in inconsistency in application.
- Require that the spillway of all high-hazard dams be engineered to pass the full Probable Maximum Flood.
- Specify minimum thresholds for incremental damage assessments, which may be used to lower the required spillway design floods for dams.

3) Third, the creation of a new section, 4VAC50-20-52, that allows for the potential reduction of the spillway design flood requirement through an incremental damage assessment where the

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breach of a dam would not significantly worsen downstream flooding. This had previously been applicable only to dams constructed prior to July 1982, but now would be applicable to all eligible dams.

4) Fourth, the creation of a new section, 4VAC50-20-54, that sets out dam break inundation zone mapping requirements for all dams to be used in hazard potential classification determinations and in the development of Emergency Action Plans for High and Significant Hazard Potential dams.

5) Fifth, a specification in a new section, 4VAC50-20-58, that for each Operation and Maintenance certificate (Regular or Conditional) issued, the impounding structure owner shall send a copy of the certificate to the appropriate local government(s) with planning and zoning responsibilities.

6) Sixth, the development of language in a new section, 4VAC50-20-125, establishing a delayed effective date for certain dams determined to have an adequate spillway capacity prior to the effective date of these regulations but that would require modifications due to changes in the regulations. This delayed effective date section would allow upgrades to these dams to be phased in over an 8 to 11 year period.

7) Seventh, the creation of a new section, 4VAC50-20-175, expanding emergency action plan requirements for High and Significant Hazard Potential dams. The plan would be developed and periodically tested in coordination with all entities, jurisdictions, and agencies that would be affected by a dam failure or that have statutory responsibilities for warning, evacuation, and post-flood actions.

8) Eighth, the creation of a new section, 4VAC50-20-177, establishing emergency preparedness plan requirements for each Low Hazard Potential dam. These plans contain lesser requirements than the Emergency Action Plans required for High and Significant Hazard Potential dams due to the reduced threat posed by Low Hazard Potential dams.

9) Ninth, the creation of a series of new sections that establish fees for the administration of the dam safety program. These include the following new sections:

- 4VAC 50-20-340 Authority to establish fees
- 4VAC 50-20-350 Fee Submittal Procedures
- 4VAC 50-20-360 Fee Exemptions
- 4VAC 50-20-370 Construction Permit Application Fees
- 4VAC 50-20-380 Regular Operation and Maintenance Certificate Application Fees
- 4VAC 50-20-390 Conditional Operation and Maintenance Certificate Application Fees
- 4VAC 50-20-400 Incremental Damage Analysis Review Fees

10) Tenth, the removal of all forms currently incorporated by reference and incorporation of required elements of the forms into the regulations. Recommended forms will still be available.

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This will allow for the modification and improvement of forms without going through a lengthy regulatory action.

11) Eleventh, the provision of definitions or modifications to definitions in section 4VAC50-20-30 for the terms “Agricultural purpose”, “Agricultural purpose dam”, “Alteration”, “Construction”, “Dam break inundation zone”, “Department”, “Drill”, “Emergency Action Plan or EAP”, “Emergency Action Plan Exercise”, “Emergency Preparedness Plan”, “Freeboard”, “Height”, “Spillway”, “Stage I condition”, “Stage II condition”, “Stage III condition”, “Sunny Day Dam Failure”, “Tabletop Exercise”, and “Watercourse”.

12) Twelfth, updates necessary to reorganize, clarify, and expand multiple sections related to permits and the repealing of sections that are incorporated into the reorganized sections. These updates are included in:

- **4VAC50-20-70** Construction permits.
- **4VAC50-20-80** Alterations permits.
- **4VAC50-20-90** Transfer of permits.
- **4VAC50-20-105** Regular Operation and Maintenance Certificates.
- **4VAC50-20-150** Conditional Operation and Maintenance Certificate.
- **4VAC50-20-155** Extension of Operation and Maintenance Certificates.
- **4VAC50-20-160** Additional operation and maintenance requirements.

13) Thirteenth, the creation of a new section, 4VAC50-20-165, stating that dams operated primarily for agricultural purposes which are less than 25 feet in height or which create a maximum impoundment capacity smaller than 100 acre-feet are exempt from the regulations.

14) Fourteenth, and finally, updates to section 4VAC50-20-180 related to inspections, section 4VAC50-20-200 related to enforcement, and section 4VAC50-20-220 related to unsafe conditions. These updates reflect changes in the Code of Virginia made during the 2006 General Assembly.

This concludes the summary of key provisions contained in the proposed regulations.

**Mr. Dowling:** Thank you Mr. Brown.

Before we begin receiving testimony on the proposed regulations, I would like to stress that this is an information-gathering meeting. Everyone wishing to speak will be heard. If necessary, we may ask speakers questions concerning their testimony or to request additional information concerning a subject believed to be important to the process in order to help the clarify and properly capture your comments. Staff will be available after this hearing to take any individual questions you may have.

We will now begin the public comment portion of the hearing. When I call your name, please come to the front and use the podium. Please state your name and whom you represent. If you have an extra copy of your comments, we will be happy to accept it.

## **Public Comment Portion**

*Connie Bennett*

I represent York County. I served on the Technical Advisory Committee. At that time it was brought to my attention that the classifications were broken out so that the first order was what was downstream of the system. In other words if it was a dam that had a secondary or primary road or major facility downstream from it that put it in a classification regardless of the size of the dam or the height of the dam.

These proposed changes still do not reflect that. I don't know if that's the intent or not, but I think it needs to clarify in the definition at least for the 6 ft. height dam, that regardless of the storage capacity, that a secondary roadway or major utility downstream would also cause the dam to come under the requirement of needing a permit.

**Mr. Dowling:** You're saying six ft. height regardless of pool behind it, if it has a road behind it; you think it should be regulated.

**Ms. Bennett:** If there is a road downstream in the inundation zone, my understanding at the TAC was that it put it in a classification regardless of the storage capacity. It's not really clear or spelled out in the definitions that I read.

The other question that was brought up at a meeting that we had was the impact of the changes in spillway height could be impacting upstream owners especially in the Tidewater Area. If you have to raise the height of the dam it puts more people around the body of water in the flood area. It may be impacting more people upstream than down stream.

**Mr. Dowling:** Thank you Ms. Bennett.

*Scott Cahill*

It's good to see you. A couple of things I want to bring up again.

Alterations permits is one issue and that's 4VAC-50-20-80. I'm still very concerned about the concept of requiring an alteration permit for items which are considered maintenance even in the verbiage. I think that a dam owner should be free to continue to do items of maintenance on his dam without any incumbent cost or inconvenience whatsoever.

On 4VAC-50-20-105, Subsection e1, I would like to recommend that we incorporate into here a statement requiring the engineers to have some inspections done on the conduits and structures of the dams. We see a whole lot of failures due to parallel porting and failures of conduits.

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The other thing is, and it was discussed also a couple of times before, 4VAC-50-20-390. The cost of the permits both under the conditional and under the regular, I would implore you to consider the cost of these permits and mitigate the cost to the dam owners doing the right things and increase the costs to the dam owners not doing the right things. We need to get to the point where we have some amount of leverage on the few bad dam owners or we are not going to bring the inventory up to where it needs to be.

Thank you very much for giving me this time.

*Lisa Cahill*

I'm Lisa Cahill with Watershed Services. We are a dam repair contractor and do work all over the Eastern U.S. and have been inside of hundreds of Virginia's dams. We are therefore uniquely qualified to speak to these regulations.

One of my issues with the regulations is the infamous Table 1. Line 213 is where that starts. It contains sizes of dams. Since the issue here is basically public safety and to protect human life, the size of the dam that would injure or kill someone is really irrelevant and has no place in Table 1.

Echoing Mr. Cahill, I also agree that an alteration permit should not be needed for maintenance. It discourages proper action. It's too easy at that point to say I just won't replace the seal instead.

Proper action really needs to be encouraged. People who are maintaining most of the dams don't do that for a living. Their time is restricted, their efforts are restricted and the path should be paved for them as much as possible to do the right thing.

Line 1587 and following, which is Section 50-20-280, drain requirements. I would propose that the word "new" be struck so that it reads "all impounding structures regardless of their hazard classification shall include a device to permit draining of the impoundment within a reasonable time as instructed by the owner's licensed professional engineer." I would hate for existing dams to begin to think they could do away with drainage structures.

Also I would strike the last few words, "subject to the approval by the Director."

Thank you.

**Mr. Dowling:** That completes the list of those individuals who signed up to speak. Are there other individuals who would wish to comment or leave written remarks?

**Closing:**

**Mr. Dowling:** A handout is provided on the table outlining the public comment submittal procedures I am about to cover and the dates and locations of the remaining public meetings.

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Persons desiring to submit written comments pertaining to this notice and this meeting may do by mail, by the internet, or by facsimile. Comments should be sent to the Regulatory Coordinator at: Virginia Department of Conservation and Recreation, 203 Governor Street, Suite 302, Richmond, Virginia 23219. Comments also may be submitted electronically to the Regulatory TownHall. Or comments may be faxed to the Regulatory Coordinator at: (804) 786-6141. All written comments must include the name and address of the commenter. In order to be considered, comments must be received by 5:00 PM on October 19, 2007.

I would also draw your attention to the copies of the Virginia Dam Safety, Flood Prevention and Protection Assistance Fund Loan and Grant Manual and the loan round announcement on the table. The Fund is authorized to make loans and grants for qualifying dam rehabilitation, dam break inundation zone mapping, and floodplain-related projects proposed by local governments and private entities. The Department of Conservation and Recreation in cooperation with the Virginia Resources Authority intends to open a loan round on December 1, 2007 with applications due by February 1, 2008. All funding will be awarded on a competitive scoring basis, and all qualifying loan applicants must additionally undergo a financial capability analysis by the Virginia Resources Authority prior to final loan approval.

With that announcement, I would like to thank each of you for attending this meeting and providing us with your views and comments. This meeting is now officially closed. Staff will be available afterwards to take any individual questions you may have.

I hope that everyone has a safe trip home.

**Members of the Public in Attendance**

Connie Bennett, York County  
Marc Bennett, AES Consulting Engineers  
Lisa Cahill, Watershed Services  
Scott Cahill, Watershed Services  
John Carlock, HRPDC  
Scott Dewhirst, Waterworks  
Kevin Phillips Waterworks