

## **Executive Summary**

### **Revisions to Title 25, Pa. Code Chapter 105 Dam Safety and Waterway Management**

#### **Purpose of Proposed Rulemaking:**

The purpose of the proposed rulemaking package is to amend the Department's Dam Safety and Waterway Management regulations to address the findings of a recent audit of the Dam Safety Program by the Auditor General's office and to incorporate amendments to strengthen the program. The proposed rulemaking package will amend numerous sections within Chapter 105 to address Dam Safety Program concerns and address the audit findings by clarifying existing sections and amending outdated sections. The protection of the public will be improved by providing the Commonwealth the financial wherewithal to remove or otherwise modify unsafe or deficient high-hazard dams that are abandoned by their owner or when owners refuse to make necessary safety improvements. The protection of the public will also be improved by the clarification of engineering design requirements necessary for the proper design and construction of dams.

#### **Summary of Amendments:**

##### **Proof of financial responsibility:**

This section was moved to a new section so that the regulations better followed the application process. This section was also revised to require proof of financial responsibility for all existing Hazard Potential Category 1 and Category 2 dams. The current regulation only requires proof of financial responsibility for Hazard Potential Category 1 dams when a permit is being issued. Currently, a significant number of dams with permits issued prior to the adoption of the current regulations lack the needed proof of financial responsibility. An escalation clause was also added to ensure that sufficient funds are available for continued operation and maintenance during the lifetime of the facility. The Department may not increase the amount more than once every ten years unless the facility is being modified by permit.

##### **Notices and reports:**

In order to improve the understanding of the permit requirements and provide a mutual understanding of the conditions for dam construction, the requirement for a pre-construction meeting between the permittee, the Department, the contractor and the engineer responsible for construction supervision was added. The pre-construction meeting must be held at least 15 days but not more than 30 days prior to the commencement of construction unless a different time is established by the Department.

##### **Terms and conditions of Department permits and approvals:**

The requirement for the permittee to sign the permit, certifying acceptance of the terms and conditions of the permit, and returning a signed copy of the permit to the Department has been eliminated. The permittee is still required to sign an acknowledgement form, provided by the

Department, acknowledging the terms, conditions, restrictions and covenants in the permit. This eliminates a duplication of the permittee signing both the permit and acknowledgement form and streamlines the permit issuance process. The permit will now be effective upon the Department signing the permit and sending it to the permittee.

**Time limits:**

In order to provide a dam permittee or owner adequate time to finance and construct a dam project and eliminate the need for continually requesting an extension, dam permits or other Department approvals for dam construction or modification will no longer have a completion date. However, if the work authorized has not commenced within 5 years following permit issuance or other Department approval, the Department must reassess project design and reauthorize the project prior to commencement of work.

**Permit applications for construction and modification of dams and reservoirs:  
Permit applications for operation and maintenance of existing dams and reservoirs:**

To provide a better understanding of the information needed to be submitted with a permit application, these two sections were rewritten to more clearly outline the needed information.

**Dam Permit Issuance:**

The Department will now issue a permit for construction upon approval of an application for a new dam or modification of an existing dam. Upon satisfactory completion of work and acceptance of the project, the Department will issue an operation and maintenance permit for the dam.

**Letters of Amendment and Letters of Authorization for modification of dams and reservoirs:**

This new section explains the use of a Letter of Amendment and Letter of Authorization for authorizing the modification of a dam or reservoir where a permit is not required. Also, it outlines the information required to be submitted for review and approval of the authorization.

**Classification of dams and reservoirs:**

A fourth Hazard Potential Category has been added to eliminate the confusion in the existing regulations for the Category 2 Hazard Potential Classification. Amendments to the Dam Safety and Encroachments Act in 1985 necessitated that the Category 2 Classification be divided into two separate categories. One in which loss of life was expected, Category 2 High Hazard, and one in which only economic or property damage was expected, Category 2 Non-High Hazard, as a result of dam failure. This created significant confusion when dealing with the regulated community. Adding the fourth category to separate the existing Category 2 Hazard Potential Classification should eliminate this confusion and will bring the Hazard Potential Category designation in line with the revision that is expected in the National Dam Safety Program.

**Stability of structures:**

This was expanded to explain the operational conditions under which a dam must be demonstrated by engineering calculations to be stable.

**Design flood criteria:**

This section was revised to more clearly explain how the spillway design flood is determined through an incremental dam breach analysis using current hydrometeorological data.

**Final Inspection:**

This section was added to require a final inspection with the permittee or owner, the permittee or owner's supervising engineer, and the Department's field representative at the completion of work to construct a new dam or the modification of an existing dam.

**Commencement of storage of water, fluid or semifluid:**

This section was expanded to better explain the requirements which must be met prior to the commencement of storage of water, fluid or semifluid behind a newly constructed or modified dam.

**Emergency action plan:**

This section was rewritten to more accurately explain the requirements and steps in developing an emergency action plan (EAP) needed to protect the public in the event of a dam emergency. The EAP shall be prepared in accordance with the most recent emergency action plan guidelines developed by the Department and PEMA. In preparing the EAP the permittee or owner shall meet with the county emergency management coordinators to review the EAP and obtain the coordinators concurrence with the EAP. Upon approval of the EAP by the Department, the permittee or owner shall provide the Department a written statement certifying that EAP has been provided to the appropriate agencies and that Notices have been posted in public locations within the downstream flood area. Also, the EAP shall be reviewed and updated every 5 years or sooner if required by the Department.

**Advisory Committee Review:**

The draft proposed amendments were submitted to the Water Resources Advisory Committee (WRAC) for review and discussion at their April 2009 meeting. Comments from WRAC were addressed and presented to WRAC at its July 2009 meeting with a request for a formal record of the committee's recommendations. The proposed amendments were approved by WRAC on July 15, 2009. Attached is a copy of the minutes from WRAC's July 15, 2009 meeting.

**Adoption Deadline:**

The Department recommends the Board's approval of the proposed rulemaking, which amends the Dam Safety and Waterway Management Regulations (25 Pa. Code Chapter 105) in order to address Dam Safety Program concerns and address the audit findings by clarify existing sections, to amend outdated sections. The proposed amendments will make the existing regulations easier to understand to assure proper planning, design, construction, operation, maintenance and monitoring of dams and reservoirs to protect the health, safety, welfare and property of the public and protect the water quality and natural regime of watercourses. These regulations should be adopted during 2010.

**Recommendations for Public Comment Period and Public Meetings/Hearings:**

The Department recommends a 30-day public comment period. Public meetings or hearings should not be necessary.