

**STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF COMPLIANCE AND INSPECTION**

**Rules and Regulations for
Dam Safety**

FACT SHEET

The Rhode Island Department of Environmental Management, Office of Compliance and Inspection, is proposing to adopt a new regulation titled “Rules and Regulations for Dam Safety”.

RI General Law Chapter 46-19, “Inspection of Dams and Reservoirs”, was originally passed in 1896. The goal of the proposed Dam Safety Rules and Regulations is to fully implement this existing statute, thereby protecting public safety, real property and natural resources. This goal will be accomplished by concentrating efforts on the dams that pose a threat to public safety or property, requiring them to be inspected frequently and thoroughly enough for their conditions to be known, and requiring dam owners to take necessary action to return an unsafe dam to a safe condition.

Rhode Island has about 673 dams of varying age, size and state of repair. In the proposed regulations, each dam has a proposed hazard classification of high, significant or low, which is a determination made by the Director relating to the following probable consequences of failure or misoperation of the dam:

- A high hazard dam results in a probable loss of human life;
- A significant hazard dam results in no probable loss of human life but can cause major economic loss, disruption of lifeline facilities or impact other concerns detrimental to the public’s health, safety or welfare; and
- A low hazard dam results in no probable loss of human life and low economic losses.

A higher hazard does not imply a greater probability that the dam will fail or be misoperated, and the hazard has no relationship to the current condition of the dam. The Director has determined that about 210 dams should be classified as high or significant hazard.

Technical publications indicate that about 60 percent of dam failures were caused by lack of maintenance. Many of the state’s high and significant hazard dams, owned both publicly and privately, have not been properly maintained through the years, increasing the likelihood of a failure.

Recognizing the possible consequences of a dam failure, in May 2000, Governor Almond issued Executive Order 00-6, *Creation of Dam Safety and Maintenance Task Force*. The Task Force was charged with developing recommendations for a comprehensive program of monitoring, maintenance and repairs that will enhance upkeep and safety of the dams in the State. The Task Force, co-chaired by the Directors of DEM and of the RI Emergency Management Agency (RIEMA), consisted of 18 members comprised of representatives of the RI Budget Office, the RI Clean Water Finance Agency, the Natural Resources Conservation Service, Public Works Directors for three Rhode Island municipalities, five dam associations, two dam owners, and four members of the General Assembly. The Task Force convened for 12 two hour sessions over a six month period, and finalized their recommendations in a report dated January 2001, (online at www.dem.ri.gov/programs/benviron/compinsp/pdf/damrep01.pdf). The recommendations included legislative, regulatory, administrative and policy proposals designed to protect

public safety, create an efficient approach to dam repairs and ensure a timely response should a community be threatened by a dam failure.

Although the proposed legislation developed by the Task Force was not enacted, DEM identified a number of recommendations that can be implemented by regulations within the framework of existing statutes. In conjunction with proposed Dam Safety Regulations, DEM has been drafting amendments to the Freshwater Wetlands Regulations to streamline approvals for dam repair.

In August 2005, DEM met with 14 members of the former Task Force or their current designees, to discuss the proposed Dam Safety Regulations. Following the meeting, written comments were forwarded to DEM. DEM issued a written response to the meeting attendees, including changes to the proposed regulations, as appropriate.

DEM met with 9 members of the former Task Force in September 2005, to discuss the comments and responses from the August 2005 meeting, and to discuss the amended proposed regulations.

A Public Workshop held on October 10, 2006, to present and discuss the proposed regulations, was attended by about 45 people. Written invitations were mailed to all known dam owners, former Task Force members, area engineering consultants and other interested parties. Notice of the meeting was placed on the DEM website and forwarded to the media in a press release. During the workshop, questions were answered, and verbal and written comments were accepted for more than a month after the workshop. DEM issued a written response to comments, including changes to the proposed regulations, as appropriate. The response and amended proposed regulations were emailed to the workshop participants. DEM is now ready to initiate the formal promulgation process.

The following are the most significant points of the proposed Dam Safety Regulations:

- Defining important terms including dam, hazard classifications, maintenance, repair and unsafe dam;
- Assigning a hazard classification to each dam in the state inventory;
- Requiring owners to register their dams and notify DEM when ownership is transferred (no associated fee);
- Setting a schedule for visual inspections of high and significant hazard dams;
- Streamlining repair of high and significant hazard dams (no associated permit fee); and
- Providing a procedure for dam owners to take emergency actions for high and significant hazard dams.

The following three areas may financially affect owners of high and significant hazard dams:

- The existing statute requires visual inspections of dams on a schedule determined by the Director. The proposed Dam Safety Regulations require visual inspections of high and significant hazard dams every 2 and 5 years, respectively (same frequency as Massachusetts and Connecticut does not specify a frequency). During the process of developing the regulations, DEM considered two alternatives regarding which entity will perform the inspections – DEM or an engineer retained by the dam owner. The proposed regulations allow for both alternatives. DEM does not believe that its current staff (1 FTE) will be able to perform all of the inspections. It is likely that DEM will require some dam owners to retain an engineer to perform the inspections, at an estimated cost of \$2500 to \$3000 per inspection;

- The proposed Dam Safety Regulations, along with proposed amendments to DEM's Rules and Regulations Governing the Administration and Enforcement of the Freshwater Wetlands Act ("Wetlands Regulations") will allow repair of high and significant hazard dams to be conducted under the proposed Dam Safety Regulations rather than the Wetlands Regulations. This change will eliminate the present permit application fee for repairs, and is also expected to reduce the cost of professional evaluations and documentation currently required to support the application; and
- The existing statute requires a dam owner to pay the repair cost to bring an unsafe dam to a safe condition. The proposed regulations maintain this requirement.