

Rulemaking Hearing Rules
of
Tennessee Department of Environment and Conservation
Division of Water Supply

Chapter 1200-05-07
Rules and Regulations Applied to the Safe Dams Act of 1973.

Amendments

Paragraph (33) of rule 1200-05-07-.02 Definitions is amended by adding the phrase “National Weather Service” before the word “meteorological” and by adding the sentence “The PMP for 10 square miles shall be used for watersheds smaller than 10 square miles.” at the end of the paragraph so that, as amended, the paragraph shall read:

- (33) Probable Maximum Precipitation (PMP) means the greatest amount of rainfall of a six-hour duration which would be expected for a given drainage basin as determined by National Weather Service meteorological estimates. The PMP for 10 square miles shall be used for watersheds smaller than 10 square miles.

Part 7 of subparagraph (b) of paragraph (1) of rule 1200-05-07-.04 Certificates of Construction, Operation, and Alteration is amended by deleting the comma so that, as amended, the part shall read:

- 7. The purpose or purposes for which the dam or reservoir is to be used.

Subparagraph (f) of paragraph (2) of rule 1200-05-07-.04 Certificates of Construction, Operation, and Alteration is amended by deleting the phrase “for any dam not having a Construction Certificate” so that, as amended, the subparagraph shall read:

- (f) Application for an Operating Certificate shall be made on forms available from the Commissioner. Any dam owner who is notified by the Commissioner of the need to apply for an Operating Certificate shall submit such application within thirty (30) days.

Paragraph (1) of rule 1200-05-07-.05 Classification of Dams is amended by replacing the number “40.9” with the number “49.9”, the first number “40” with the number “49”, the second number “40” with the number “49”, the phrase “1,000 to 50,000” with the phrase “1,000 to 49,999”, the phrase “41 to 100” with the phrase “50 to 99”, the phrase “greater than 50,000” with the phrase “50,000 or greater”, and the phrase “greater than 100” with the phrase “100 or greater” so that, as amended, the paragraph shall read:

- (1) Size. The classification for size is based on the height of the dam and storage capacity in accordance with the table below. The height of the dam is established with respect to the maximum water storage elevation measured from the natural bed of the stream or watercourse at the downstream toe of the barrier, or if it is not across a stream or watercourse, the height from the lowest elevation of the outside limit of the barrier, to the maximum water storage elevation. For the purpose of determining project size, the maximum storage elevation will be considered equal to the top of dam elevation as defined in Rule 1200-5-7-.02(26). Size classification will be determined by either storage or height, whichever gives the larger size category. For size classification purposes, fractions of heights and storages shall be rounded down to the nearest whole number, e.g., 49.9 feet would be classified in the 20 to 49 feet category.

Size Classification

Category	Storage (Ac-Ft)	Height (Ft)
Small	30 to 999	20 to 49
Intermediate	1,000 to 49,999	50 to 99
Large	50,000 or greater	100 or greater

Subparagraph (b) of paragraph (1) of rule 1200-05-07-.07 Design Standards for New Dams is amended by adding the phrase “constructed before 2008” after the word “dams” and by adding the sentences “All dams constructed during or after 2008 shall be designed to withstand the peak ground acceleration for an earthquake with a 10% probability of exceedance in 50 years as determined by the United States Geological Survey at the time the construction permit is issued. A different peak ground acceleration may be used if site specific studies using accepted engineering practices determine that a different value is appropriate.” at the end of the paragraph so that, as amended, the subparagraph shall read:

- (b) All structures other than Category 3 dams constructed before 2008 shall be designed to withstand seismic accelerations of the following intensities: Zone 1 = 0.025g, Zone 2 = 0.05g, Zone 3 = 0.15g. Zones refer to “Geologic Hazards Map of Tennessee” by Robert A. Miller, 1978. All dams constructed during or after 2008 shall be designed to withstand the peak ground acceleration for an earthquake with a 10% probability of exceedance in 50 years as determined by the United States Geological Survey at the time the construction permit is issued. A different peak ground acceleration may be used if site specific studies using accepted engineering practices determine that a different value is appropriate.

Subparagraph (c) of paragraph (4) of rule 1200-05-07-.07 Design Standards for New Dams is amended by replacing the phrase “emergency spillway “ with the word “freeboard” so that, as amended, the subparagraph shall read:

- (c) Emergency spillways shall be proportioned so that they will pass the freeboard hydrograph at the safe velocity determined for the site. They shall have sufficient capacity to pass the freeboard hydrograph with the water surface in the reservoir at or below the maximum storage elevation.

Subparagraph (g) of paragraph (4) of rule 1200-05-07-.07 Design Standards for New Dams is amended by deleting the phrase “emergency spillway hydrograph and the” so that, as amended, the subparagraph shall read:

- (g) The freeboard hydrograph shall be routed through the reservoir starting with the water surface at the elevation of the principal spillway inlet.

Part 8 of subparagraph (h) of paragraph (4) of rule 1200-05-07-.07 Design Standards for New Dams is amended by deleting the comma after “soil” so that, as amended, the part shall read:

- 8. Where bona fide studies or investigations have been made to determine the permissible velocity for a specific soil and site, these values may be used in lieu of those shown below.

Subparagraph (a) of paragraph (5) of rule 1200-05-07-.07 Design Standards for New Dams is amended by deleting the phrase “most severe of the following conditions: (1) the” and the phrase “or (2) the passage of the emergency spillway hydrograph,” so that, as amended, the subparagraph shall read:

- (a) Sufficient freeboard shall be provided to prevent overtopping with the passage of the freeboard hydrograph plus the additional freeboard required by the site for wave action.

Paragraph (2) of rule 1200-05-07-.09 Fees is amended by replacing the amount of \$300 with the amount of \$500 so that, as amended, the paragraph shall read:

- (2) Safety Inspection Fee. Fees will be charged for Safety Inspections by the Division. The fee is to accompany the application for an Operating Certificate. The fee will be \$500 per inspection. All fees and charges shall be payable only by check or money order to the State of Tennessee.

Authority: T.C.A. 4-5-202, 69-11-104, and 69-11-101 et seq.

The rulemaking hearing rules set out herein were properly filed in the Department of State on the 18th day of April, 2008, and will become effective on the 2nd day of July, 2008. (FS 04-11-08; DBID 2864)

ECONOMIC IMPACT STATEMENT

Paragraph 1200-05-07-.09(2)

This regulation raises the dam inspection fee from \$300 to \$500 per inspection. This increase is necessary to fund the Safe Dams program adequately to allow it to continue its inspection program. The fee is paid every one, two, or three years, depending on the hazard category of the dam. The fee payment is thought to be well within the ability of the small businesses involved to pay.

1. The type or types of small business and an identification and estimate of the number of small businesses subject to the proposed rule that would bear the cost of, and/or directly benefit from the proposed rule:

There are about 650 regulated dams in Tennessee. Just over 50% are owned by the state, cities, counties, watershed districts, soil conservation districts, or utility districts. Approximately 40% (about 260) are owned by what might qualify as small businesses. Of these, 138 dams are owned by property owners associations, 55 by individuals, 28 by private groups (such as hunting clubs), and 37 by businesses comprised almost entirely of golf courses and property developers.

2. The projected reporting, recordkeeping and other administrative costs required for compliance with the proposed rule, including the type of professional skills necessary for preparation of the report or record:

There are no reporting, recordkeeping, or other administrative costs associated with this rule change.

3. A statement of the probable effect on impacted small businesses and consumers:

The probable effect on impacted small businesses and consumers is negligible.

4. A description of any less burdensome, less intrusive or less costly alternative methods of achieving the purpose and objectives of the proposed rule that may exist, and to what extent such alternative means might be less burdensome to small business:

The only alternative to this fee increase is an increase in state general fund money to the Safe Dams program. The state has not allocated any new state funds to the Safe Dams program since 1990 and attempts to obtain additional state funds have not been successful to date.

5. A comparison of the proposed rule with any federal or state counterparts:

There is no equivalent federal program to compare with. No other southeastern state charges dam inspection fees. Arkansas, North Carolina, and Florida charge other types of fees which provide something in excess of \$100,000 to those states' dam safety programs.

6. Analysis of the effect of the possible exemption of small businesses from all or any part of the requirements contained in the proposed rule:

Exemption of small businesses from paying the increased fee will result in a budget shortfall for the Safe Dams program or in a larger increase being imposed on the remaining regulated dam owners.