

UNOFFICIAL

**TITLE 785. OKLAHOMA WATER RESOURCES BOARD
CHAPTER 25. DAMS AND RESERVOIRS**

Introduction:

This document contains permanent amendments to Chapter 25 adopted by the Oklahoma Water Resources Board that became effective May 27, 2008. Also, this document was prepared by Oklahoma Water Resources Board staff as a convenience to the reader, and is not a copy of the official Title 785 of the Oklahoma Administrative Code. The rules in the official Oklahoma Administrative Code control if there are any discrepancies between the Code and this document.

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[Authority: 82 O.S., Sections 105.25 – 105.27 and 1085.2]

[Source: Codified 12-31-91]

SUBCHAPTER 1. GENERAL PROVISIONS

Section

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785:25-1-1. Purpose

The rules of this Chapter on reservoir requirements and safety of dams set forth minimum standards for construction and maintenance of dams based on size and hazard classification, application requirements for approval of plans and specifications, and inspection requirements. These rules are adopted pursuant to 82 O.S. 1981, §§105.27, 110.1 et seq. (Oklahoma Dam Safety Act) and 1085.2(7), and Public Law 92-367, 92nd Congress, H.R. 15951, approved August 8, 1972 (33 U.S.C. 467 et seq.). Under no circumstances shall the rules in this Chapter be construed to deprive or limit the Oklahoma Water Resources Board of any exercise of powers, duties, and jurisdiction conferred by law nor to limit or restrict the amount or character of data or information which may be required from any owner of any dam for the proper administration of the law.

[Source: Amended at 10 Ok Reg 3287, eff 6-25-93]

785:25-1-2. Definitions

The following words and terms, when used in this Chapter, shall have the following meaning, unless the context clearly indicates otherwise:

"**Alteration**" means only such alteration as may affect the safety of a dam or reservoir.

"**Application**" means a formal request to the Board and the first step required by law to acquire the right to perform or engage in activities regulated by the Board.

"**Board**" means and refers to the Oklahoma Water Resources Board or any employee or agent or staff member thereof.

"Dam" means any artificial barrier, together with appurtenant works, which does or may impound or divert water.

"Enlargement" means any change in or addition to an existing dam or reservoir which raises or may raise the water storage elevation of the water impounded by the dam or reservoir.

"Gully plug" means any grade stabilization structure that has less than five acre-feet of water storage available below the principal spillway elevation and less than 50 acre-feet of storage volume below the emergency spillway elevation.

"Interested party" means party.

"Notice by publication" means unless otherwise specifically provided, publication in a daily or weekly newspaper of general circulation once a week or two (2) consecutive weeks (minimum seven day interval).

"Owner" means any person who, jointly or severally, owns, controls, maintains, manages, or proposes to construct a dam or reservoir, and includes those shown by records of the county registrar of deeds to have some interest, fee, easement, or otherwise, in the land on which the dam and lake lie and may also include those persons who may derive a direct pecuniary benefit from the existence of the lake [82:110.3].

"Party" means a person or agency named and participating, or properly seeking and entitled by law to participate, in hearings other than hearings on Board rules, regulations and standards.

"Person" means any individual, firm, partnership, association, corporation, any trust formed for the benefit of an individual, business or any public entity, federal agency, state agency, the State or any political subdivision thereof, municipalities, and any other legal entity [82:110.3].

"Repairs" means only such repairs as may affect the safety of a dam or reservoir.

"Reservoir" means any surface depression which contains or will contain the water impounded by a dam.

"Statistical twenty-four (24) hour, fifty (50) year storm" means a storm of twenty-four (24) hour duration with a probable recurrence interval of once in fifty (50) years as defined by the National Weather Service in Technical Paper Number 40, "Rainfall Frequency Atlas of the United States," May 1961, and subsequent amendments, or equivalent regional or state rainfall probability information developed therefrom.

"Water storage elevation" means that elevation of water surface which may be obtained by the temporary or permanent storage of water. This elevation is normally the lowest point on the top of the dam.

[Source: Amended at 10 Ok Reg 3287, eff 6-25-93; Amended at 11 Ok Reg 2931, eff 6-13-94]

785:25-1-3. Violations and penalties

(a) Under Section 105.20 of Title 82 of the Oklahoma Statutes, the continued use of works which are unsafe, after receiving notice to repair, and the refusal to change unsafe works when directed to do so, or the injury or obstruction of waterworks shall be a misdemeanor and each day such violation continues shall be a separate violation.

(b) Under the Oklahoma Dam Safety Act (82 O.S. Supp. 1992, §§110.1 et seq.), the Board is authorized to issue emergency orders without prior notice and hearing and orders after notice and hearing requiring an owner to take action as necessary to put a dam in safe condition. In addition, the Board may impose administrative penalties against owners of dams who fail, refuse or neglect to comply with the provisions of the Oklahoma Dam Safety Act. Procedures for imposition of such penalties are found in Subchapter 11 of this Chapter.

[Source: Amended at 10 Ok Reg 3287, eff 6-25-93]

785:25-1-4. Variances and waivers

A variance or waiver to rules specified in this chapter may be granted if the Board finds that the cost of compliance with the rule without a variance would impose significant expense without providing for additional safety of the construction for which the variance or waiver is sought, and integrity of the dam will not be adversely affected; provided, however, that if the rule for which the variance or waiver is requested relates to design criteria or otherwise calls for professional engineering judgment, the Board may require that a registered professional engineer certify that the variance or waiver being requested will not adversely affect the integrity of the dam.

[Source: Added at 21 Ok Reg 2625, eff 7-1-2004]

SUBCHAPTER 3. RESPONSIBILITY, CLASSIFICATION AND DESIGN STANDARDS

Section

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- 785:25-3-3. Classification of size and hazard potential
- 785:25-3-4. Dams considered unsafe and menace to life and property
- 785:25-3-5. Minimum design standards (other than spillway)
- 785:25-3-6. Minimum spillway performance standards
- 785:25-3-7. Minimum outlet conduit capacities
- 785:25-3-8. Measuring devices
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785:25-3-1. Dams subject to Board's jurisdiction

(a) *Dams, together with appurtenant works, which meet the following alternative criterion are subject to the provisions of [82:110.4] the Oklahoma Dam Safety Act and this Chapter of the Board's rules:*

(1) *Dams which are or will be twenty-five (25) feet or more in height from the natural bed of the stream or watercourse at the downstream toe of the barrier or from the lowest elevation of the outside limit of the barrier or from the lowest elevation of the outside limit of the barrier if it is not across a stream channel or watercourse, to the top of the dam [82:110.4];*
or

(2) *Dams which have or will have an impounding capacity of fifty (50) acre-feet or more [82:110.4];*

provided, however, any barrier to the flow of water which does or may impound water and which is or will be not in excess of six (6) feet in height, regardless of storage capacity, or which has or will have a storage capacity not in excess of fifteen (15) acre-feet, regardless of height, shall not be subject to regulation . . . unless it is determined to have a high hazard potential classification under these rules [82:110.4] or except as hereinafter provided. The figure in Appendix A of this Chapter presents a graphic illustration of the height and storage criteria reviewed to determine the Board's authority relating to dams.

(b) *No barrier to the flow of water determined by the Board to be designated primarily for roadfill shall be subject to regulation under this [82:110.4] Chapter.*

(c) *Gully plugs are not subject to regulation under this [82:110.4] chapter of the Board's rules.*

(d) *Dams constructed by any agency of the United States Government shall not be subject to regulation under this Chapter during or after construction while such dams remain under the supervision of any officer or agency of the United States [82:110.4]*

[Source: Amended at 10 Ok Reg 3287, eff 6-25-93; Amended at 11 Ok Reg 2931, eff 6-13-94]

785:25-3-2. Owner's responsibility

(a) **General.**

(1) Owners of dams to which the provisions of this Chapter apply shall have the responsibility to provide for the safety of such works by making any necessary changes to put the works in a safe condition.

(2) Such responsibility includes but is not necessarily limited to the following: the filing of an application to construct, enlarge, alter or repair the dam pursuant to Subchapter 5, the modification of the dam to meet applicable minimum requirements in this Subchapter, and the adequate maintenance, operation, and inspection of an existing dam.

(b) **Multiple owners.**

(1) When there is more than one owner of a dam, the Board shall consider all such owners responsible for the safety of such dam unless evidence to the contrary shows otherwise.

(2) The Board shall provide copies of inspection reports to at least one owner of record at the Board and shall provide notice of hearing on dam safety related matters to such owner with an instruction that the notice shall be delivered or mailed to all owners.

(3) Unless otherwise agreed by all the owners and the Board, the Board may, after such notice and hearing, order all the owners to take whatever remedial action is necessary to put the dam in a safe condition.

(4) The Board will not attempt to delineate levels of responsibility or allocate particular items of action among the owners.

(c) **Transfer of ownership.** Upon transfer of ownership of the works, the new owner shall notify the Board of such transfer.

[Source: Amended at 9 Ok Reg 1675, eff 5-11-92; Amended at 14 Ok Reg 2766, eff 7-1-97]

785:25-3-3. Classification of size and hazard potential

All dams shall be classified as to size and for potential hazards as follows:

(1) **Size Classification of Dams.** The size classification shall be based on the following chart:

SIZE CLASSIFICATION	MAXIMUM STORAGE (Ac-Ft)	MAXIMUM HEIGHT (Ft)
Small	less than 10,000	less than 50
Intermediate	between 10,000 and 50,000	between 50 and 100
Large	over 50,000	over 100

(2) **Classification of Hazard Potential.** The hazard classification shall be based on the following chart.

EXTENT OF POTENTIAL DOWNSTREAM DEVELOPMENT LOSSES

CATEGORY	LOSS OF LIFE	ECONOMIC LOSS (Property)
Low	None (No probable future)	Minimal (Undeveloped to)

	development , may be zoned to prevent future development .	occasional structure or agriculture)
Significant	None (Potential for future development exists, habitable structures may exist in inflow design flood floodplain, however, dam failure would not endanger lives that would not be endangered if structure did not exist.	Appreciable (Notable agriculture, industrial or structural)
High	Yes (One of more habitable structures with loss of life due to dam failure likely)	Excessive (Extensive community, industrial or agriculture)

(3) **Hazard classification subject to regulation and change.**

(A) For dams which were inventoried in the National Safety of Dams program authorized under 33 U.S.C. 467 et seq., and for which "Phase I" reports pursuant to said inventory were prepared, the hazard classifications set forth in such "Phase I" reports shall be presumed accurate. If the owner of the dam disagrees with the hazard classification, he shall have the burden to show that such hazard classification is inaccurate and should be changed.

(B) At the discretion of the Board, any proposed or existing dam considered to have classification of a high hazard potential may be subject to regulation regardless of size or impounding capacity.

(C) The hazard potential classification may change as the area downstream from a dam develops and the dam may be reclassified from time to time.

- (i) If, due to changed conditions or presentation of more accurate data, the hazard potential classification changes which results in more stringent minimum requirements, the Board shall, after notice and hearing, order such modifications necessary to meet the more stringent requirements.
- (ii) If the hazards potential classification changes which results in less stringent requirements, the Board shall notify the owner of that information and note the same in its records.

(4) **Determining hazard classification.** The extent of potential downstream development loss, and thereby the category of hazard classification, shall be determined through the use of acceptable mathematical computations applied to the downstream area from the dam to a point where the necessary design flood and breach is contained within the 100-year floodplain.

[Source: Amended at 11 Ok Reg 2931, eff 6-13-94]

785:25-3-4. Dams considered unsafe and menace to life and property

(a) In determining whether a dam is *unsafe and a menace to life and property* [82:105.27] under the provisions of Section 105.27 of Title 82 of the Oklahoma Statutes and the corrective actions necessary to put a dam in a safe condition, the Board shall review the requirements set forth in rules of this Chapter, and recommendations on matters which directly affect the integrity of dams set forth in DESIGN OF SMALL DAMS (1977) and DESIGN OF GRAVITY DAMS (1976), published by the U.S. Department Interior Bureau of Reclamation (BOR), ENGINEERING AND DESIGN MANUALS, SERIES EM-1110, published by the U.S. Department of the Army, Corp of Engineers (COE), the ENGINEERING FIELD MANUAL and TECHNICAL RELEASE NO. 60, published by the U.S. Department of Agriculture, Natural Resources Conservation Service, or equivalent recommendations.

(b) Existing dams which are in imminent peril of failure shall be considered *unsafe and a menace to life and property* [82:105.27] under the provisions of Section 105.27 of Title 82 of the Oklahoma Statutes.

[Source: Amended at 9 Ok Reg 1676, eff 5-11-92; Amended at 10 Ok Reg 3287, eff 6-25-93; Amended at 14 Ok Reg 2766, eff 7-1-97]

785:25-3-5. Minimum design standards (other than spillway)

Except as otherwise provided in this Chapter, all dams must be designed by methods, procedures and criteria that meet or exceed acceptable dam safety engineering practices, including those found in the federal agency publications referenced in 785:25-3-4.

785:25-3-6. Minimum spillways performance standards

(a) General performance standards

(1) Except as otherwise provided in this Chapter, all dams must meet or exceed the following performance standards as determined by analysis of plans and specifications for the dam and existing site conditions.

(2) Owners of existing dams which do not meet the following performance standards must make necessary changes in the dam to meet the applicable performance standards.

(3) The discharge capacity and/or storage capacity of the project shall be capable of passing the indicated spillway design flood without infringing on the minimum freeboard requirements, provided that a design which includes overtopping of the dam may be authorized if specifically approved by the Board.

(4) The minimum performance standards expressed as magnitude of spillway design flood and minimum freeboard will be assigned to the various size and hazard potential classification determined under 785:25-3-3 as follows:

(b) Minimum Performance Standards

MINIMUM SPILLWAY

SIZE	HAZARD	DESIGN FLOOD	MINIMUM FREEBOARD
Small	Low	25% PMF	0 Feet
Small	Significant	40% PMF	0 Feet
Small	High	50% PMF	1 Foot
Intermediate	Low	25% PMF	1 Foot
Intermediate	Significant	50% PMF	1 Foot
Intermediate	High	75% PMF	3 Feet
Large	Low	50% PMF	1 Foot
Large	Significant	75% PMF	1 Foot
Large	High	100% PMF	3 Feet

(c) **Amending minimum freeboard.** The minimum freeboard requirements may be amended by the Board on a case-by-case basis for good cause shown by the owner.

(d) **Probable maximum flood.**

(1) PMF means and refers to the Probable Maximum Flood and is defined as the flood that may be expected from the most severe combination of critical meteorologic and hydrologic conditions that are reasonably possible in the region as listed in Hydrometeorological Report No. 51, National Weather Service.

(2) Since design floods are usually determined by using mathematical computations through computer modeling and since several different acceptable models are available, flood design calculations must fall within plus/minus 5% PMF of the Board's current model results.

(3) The PMF storm should be of appropriate duration to adequately reflect the size and hydrologic characteristics of the watershed in which the dam is located.

(e) **PMF on dam designated for regulation.** A dam which the Board has determined is subject to regulation because of its high hazard potential, although otherwise considered too small, shall be required to safely pass 25% PMF with no minimum freeboard.

(f) **Dams constructed prior to June 13, 1973.** Any dam constructed prior to June 13, 1973 and which is classified as intermediate size and high hazard potential according to 785:25-3-3 shall be required to pass a minimum design of 50% of the PMF. Any dam constructed prior to June 13, 1973 and which is classified as large size and high hazard potential according to 785:25-3-3 shall be required to pass a minimum design flood of 75% of the PMF.

[Source: Amended at 9 Ok Reg 1676, eff 5-11-92; Amended at 12 Ok Reg 2687, eff 7-1-95]

785:25-3-7. Minimum outlet conduit capacities

(a) **Requirements for outlet conduit capacity shall be as follows:**

(1) All dams subject to the Board's jurisdiction shall have at least one outlet conduit of sufficient capacity to prevent interference with natural streamflow and injury of downstream appropriators and domestic users. Absent evidence to the contrary, the minimum size of the outlet conduits shall be as set forth in subsection (d) of this section.

(2) The height of the outlet conduit shall be no more than five feet (5') above the natural stream channel unless otherwise ordered by the Board. The capacity of the reservoir below the outlet conduit shall be designated as the inactive pool.

(b) **Conduit operation.** All conduits shall be gate- or valve-operated on the upstream side and shall be maintained in an operable condition at all times.

(c) **Conduit design life.** The design life expectancy of the conduit shall be equal to or greater than the design life of the dam.

(d) **Minimum size outlet conduit requirements.** The outlet conduit must be of sufficient size to draw down the entire reservoir to the inactive pool within twenty (20) days, provided that minimum size outlet requirements are as follows:

(1) For less than 100 acre-feet normal pool capacity (at principal spillway), the minimum size of conduit is 6-inch pipe.

(2) For 101 to 150 acre-feet normal pool capacity (at principal spillway), the minimum size of outlet conduit is 8-inch pipe.

(3) For 151 to 200 acre-feet normal pool capacity (at principal spillway), the minimum size of outlet conduit is 10-inch pipe.

(4) For 201-250 acre-feet normal pool capacity (at principal spillway), the minimum size of outlet conduit is 12-inch pipe.

(5) For 251-300 acre-feet normal pool capacity (at principal spillway), the minimum size of outlet conduit is 14-inch pipe.

(6) For 301-350 acre-feet normal pool capacity (at principal spillway), the minimum size of outlet conduit is 15-inch pipe.

(7) For 351-500 acre-feet normal pool capacity (at principal spillway), the minimum size of outlet conduit is 16-inch pipe.

(8) For more than 500 acre-feet normal pool capacity (at principal spillway), the minimum size of outlet conduit is 24-inch pipe.

(e) **Amendments of minimum requirements for good cause.** Minimum size requirements may be amended by the Board for good cause. However, conduit must be of sufficient size to draw down the entire reservoir to the inactive pool within a period of not more than twenty (20) days.

[Source: Amended at 21 Ok Reg 2625, eff 7-1-2004]

785:25-3-8. Measuring devices

When required by the Board, measuring devices capable of providing an accurate water measurement must be provided to measure the flow of the stream above and below the reservoir. Permanent staff gages may be required to be placed near the outlet of the reservoir and such other locations as specified by the Board and such gages shall be plainly marked in feet and tenths of feet.

785:25-3-9. Prohibited construction

No construction or excavation other than that necessary for the operation, maintenance, investigation and monitoring of the dam and reservoir, shall be allowed on a dam or spillway structure or within fifty (50) feet from the line where such dam or spillway structure meets the natural grade unless otherwise ordered by the Board after a showing by substantial, competent evidence that the proposed construction will not affect the integrity of the dam or spillway structure.

[Source: Amended at 9 Ok Reg 1676, eff 5-11-92]

785:25-3-10. Prohibited vegetation

Trees and heavy vegetation shall be removed from the slopes and crest of earthen embankments and emergency spillway area. Trees and heavy vegetation shall also be removed from an area a minimum distance from the toe of the embankment of 30 feet.

785:25-3-11. Minimum safety factors

As a guide for use by the Board and by engineers designing new dams, assessing the condition of existing dams or proposing modifications to existing dams, the following safety factors shall be utilized for:

(1) Embankment dams:

LOADING CONDITION	MINIMUM FACTOR OF SAFETY*
Steady seepage at emergency spillway crest	1.5
Rapid drawdown from principal spillway	1.2
Earthquake – reservoir at emergency spillway crest for downstream slope, reservoir at principal spillway for upstream slope	1.0

*The minimum factor of safety is calculated by the ratio of available shear strength stress required for stable equilibrium

(2) Concrete dams or concrete portions thereof.

LOADING CONDITION	MINIMUM FACTOR OF SAFETY ** (by hazard classification of dam)	
Principal spillway level	High and Significant 2.25	Low 2.0
Inflow design flood at	1.75	1.25

maximum pool
level
Principal spillway level
with earthquake

greater than	greater than
1.0	1.0

** These minimum factors of safety apply to the calculations of stress and the shear friction factor of safety within the structure of the rock/concrete interface and foundation

[Source: Amended at 11 Ok Reg 2931, eff 6-13-94]

SUBCHAPTER 5. APPLICATIONS AND APPROVAL OF CONSTRUCTION

Section

- 785:25-5-1. Application and fee required
- 785:25-5-2. Plans to be prepared by registered professional engineer
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- 785:25-5-4. Additional report information
- 785:25-5-5. Notice of hearing
- 785:25-5-6. Affidavit of notice publication
- 785:25-5-7. Protest
- 785:25-5-8. Approval or denial of application

785:25-5-1. Application and fee required

(a) General.

- (1) Any person who shall desire to construct, enlarge, alter, remove or repair any dam under the Board's jurisdiction shall submit an application upon printed forms which will be furnished by the Board upon request.
- (2) For the purposes of this subchapter, repair shall not be deemed to include routine normal maintenance.
- (3) The maps, plans, drawings, and specifications of the proposed work along with the required fee shall form a part of the application.
- (4) The application and attachments shall be filed in duplicate.
- (5) Notwithstanding the provisions of paragraph (1) of this subsection, *an owner who proposes to construct a new dam classified as having a low hazard potential that will be used primarily for agriculture purposes, and will be designed or constructed with the assistance of a local conservation district or federal agriculture related agency, shall be required only to notify the Board of such construction and file a notice of completion in accordance with 785:25-7-6 [82:110.5].*

(b) Signature of applicant. The application shall be signed as follows:

- (1) If the applicant is an individual, the application shall be signed by the applicant or his duly appointed agent, who shall present satisfactory evidence of his authority to represent the applicant.
- (2) A joint application shall be signed by each applicant or his duly authorized agent, provided that a joint application by husband and wife may be signed by either party (joint applicants are required to select one among them to act for and represent the others in dealing with the Board).
- (3) If the application is by a partnership, the applicant shall be designated by the firm name followed by the words "A Partnership" and the application shall be signed by each of the general partners or, if signed by one partner or other agent, a written statement of the agent's authorization to make the application, signed by the other parties of interest, shall be attached to the application.

(4) In the case of an estate or guardianship, the application shall be signed by the duly appointed guardian or representative of the estate, and a certified copy of the letter issued by the court shall be attached to the application.

(5) In the case of a water district, county, municipality, etc., the application shall be signed by a duly authorized official, and a certified copy of the resolution or other authorization to make the application shall be attached.

(6) In the case of a private corporation, the application shall be signed by a duly authorized person and, if not attested by the secretary or assistant secretary, a copy of the authorization shall be attached to the application.

(c) **Notary public required.** All applicants shall subscribe and swear to the application before a Notary Public, who shall also sign his name and affix his seal to the application.

(d) **Water rights.** Water rights requested or required in connection with a planned dam or reservoir may be approved based on preliminary information, however, no construction, enlargement, alternation or repair shall proceed until the application required by this Section has been submitted and approved in accordance with the rules of this subchapter and until the water rights required are approved.

[Source: Amended at 10 Ok Reg 3287, eff 6-25-93; Amended at 14 Ok Reg 2766, eff 7-1-97]

785:25-5-2. Plans to be prepared by registered professional engineer

Plans and specifications shall be prepared by a Registered Professional Engineer (59 O.S. 1981, §§475.1 and 475.15) who shall have training and/or experience concerning the analysis, design, and/or construction of dams and reservoirs, or by an engineer of any United States governmental agency acting in his official capacity (82 O.S. 1981, §105.27). However, if it is found that a project does not concern or involve the public welfare or the safeguarding of life, health or property, this requirement may be waived by the Board.

785:25-5-3. Content of plans and specifications

(a) The plans and specifications shall, as a minimum, include the following:

(1) A topographic map of the dam site showing the location of spillway and outlet works. The map shall also show all contiguous property and the owners thereof. The topographic maps for low hazard dams are not required to show test borings, test pits and borrow pits.

(2) A profile along the dam axis showing the location, elevation, depth of borings or test pits including logs or bore holes and/or test pits, provided that plans and specifications for low hazard dams are not required to contain such a profile.

(3) A maximum cross-section of the dam showing elevation and width of crest, slopes of upstream and downstream faces, thickness of riprap, zoning of earth embankment, location of cutoff and bonding trenches, elevations, size and type of outlet conduit, valves and operating mechanism.

(4) Area and capacity curves of the proposed reservoir.

(5) Detailed drawings showing plans, cross and longitudinal sections of the outlet conduits, valves and controls for operating the same, and trash racks.

(6) The discharge capacity in cubic feet per second of the spillway for each foot in water depth above the spillway crest up to the maximum high water level and the formula used in making such determinations.

(7) Detailed plans of spillway structures, cross-section of the channel leading to and from the spillway, spillway profile, and procedures for operation of the spillway structure.

(8) A requirement, during the period of construction, for supervision by an engineer as required in 785:25-7-2.

(9) A provision that the plans and specifications may not be substantially changed or changed in any material respect without prior written consent of the Board.

- (10) A provision stating in detail all matters necessary to ensure that construction is accomplished in a responsible manner and that needed control is exercised by an engineer as required in 785:25-7-2 to ensure construction of a safe structure.
- (b) The size of all plans and maps filed shall not be more than 11" x 17" and shall be drawn with an adequate number of views, in proper dimensions, and to a sufficiently large scale so that the plans and maps may be readily interpreted and studied. In addition to the plans and maps required to be filed, if plans and maps larger than 11" x 17" are submitted for review purposes, the larger plans and maps will not be retained by the Board.

785:25-5-4. Additional report information

An engineer's report giving details necessary for analysis of the structure and appurtenants shall be submitted with the plans and specifications. Included as a part of the report shall be the following:

- (1) Formula and assumptions used in design;
- (2) Hydrologic data used in determining runoff from the drainage areas including copies of any records that the applicant has of flood flows and precipitation for the region;
- (3) Foundation and materials investigations; and
- (4) All other information which would aid in evaluating the design.

785:25-5-5. Notice of application

(a) Notice preparation

- (1) After an application has been duly filed and accepted, the Board may require that notice be published and mailed as it instructs. If such notice is required, a notice will be prepared by the Board. The notice shall set forth information describing the application and the name and address of the applicant.
- (2) The notice will be mailed to the applicant with a letter of instructions as to the publication and mailing. Prior to publication and mailing as instructed by the Board, it will be the responsibility of the applicant to check the notice as prepared by the Board for any errors.

(b) Notice by publication in newspaper; mailing

- (1) The notice of application, if required, shall be published once a week for two (2) consecutive weeks on the dates designated by the Board in a newspaper having general circulation in the county of the proposed dam construction, enlargement, alteration, or repair.
- (2) The last notice shall be published at least ten (10) days prior to the hearing date.
- (3) The applicant shall bear the cost of publication and shall see that the notice is reproduced accurately in the newspaper.
- (4) If the Board instructs the applicant to mail notice, such mailing shall be by certified mail, return receipt requested.

[Source: Amended at 9 Ok Reg 1677, eff 5-11-92]

785:25-5-6. Affidavit of notice publication and mailing

(a) Affidavit of publication required

- (1) The sworn statement of the publisher of the published notice shall be attached to a copy of the notice and shall be filed with the Board on or before the application is considered by the Board or the hearing date, if a hearing is scheduled.
- (2) Such affidavit shall state the dates on which said notice was published in the newspaper.

(b) **Failure to furnish affidavit.** Failure to furnish evidence of publication or of mailing of the notice in the manner required on or before the date the Board considers the application or before the hearing date may be deemed evidence of abandonment of the application.

[Source: Amended at 9 Ok Reg 1677, eff 5-11-92]

785:25-5-7. Protest

- (a) Any interested person may protest any application.
- (b) If no hearing on the application has been scheduled, a hearing will be scheduled after a protest complying with the requirements of 785:4-5-4(b) is received. The hearing shall be held at least five (5) days after the protest is received by the Board.
- (c) During the hearing any interested party may appear and present evidence and testimony in support of such protest.
- (d) All hearings shall be conducted in accordance with Chapter 4 of this Title.

[Source: Amended at 9 Ok Reg 1677, eff 5-11-92]

785:25-5-8. Approval or denial of application.

- (a) After evaluating the application, if it is determined that the proposed construction, enlargement, alteration, or repair of any dam is safe and not a menace to life and property and is in conformity with all statutory requirements and the rules in this Chapter, said application shall be approved by the Board upon such conditions as the Board may prescribe.
- (b) If it is determined that the proposed construction, enlargement, alteration, or repair of any dam is *unsafe and a menace to life and property*, [82:105.2] said application shall be denied by the Board.
- (c) The applicant shall be notified in writing of the Board's decision
- (d) If the application is approved, no impoundment of water by the dam may be made until all additional requirements of these rules and regulations are met unless the approved construction is for an existing dam and the construction may be carried out without emptying the water in the reservoir.
- (e) The applicant shall commence construction within two (2) years after the date of approval of the plans and specifications or the approval will be deemed to have lapsed and shall thereafter be null and void, provided that the applicant may request an extension of time to commence such construction and if the extension is granted, the approval will not be deemed to lapse during the time extended.

SUBCHAPTER 7. POST APPROVAL ACTIONS

Section

- 785:25-7-1. Inspection during construction
- 785:25-7-2. Inspection fee
- 785:25-7-3. Deficiencies during and after construction
- 785:25-7-4. Supervision of construction by owner
- 785:25-7-5. Changes to plans and specifications after approval
- 785:25-7-6. Notice of completion and filing of supplementary drawings or descriptive matter
- 785:25-7-7. Warning and evacuation plans
- 785:25-7-8. Certificate of completion

785:25-7-1. Inspection during construction

During the construction, enlargement, repair, alteration, or removal of any dam or reservoir, periodic inspections may be made by the Board and the owner shall be required to perform at his expense such works or tests as necessary to disclose information sufficient to enable the Board to determine that substantial conformity with approved plans and specifications is being secured, which shall include adequate inspection, at owner's expense, to satisfy the Board of substantial compliance to approved plans, drawings, and specifications.

785:25-7-2. Inspection fee

- (a) Fees for any such inspection must be paid by the owner upon submission of an itemized statement by the Board.
- (b) Fees for inspections not paid by the owner within thirty (30) days after notice by the Board, *shall be a lien against any property of such owner, to be recovered by suit instituted by the District Attorney of the county at the request of the Board. Such liens shall be superior in right to all mortgages or other encumbrances, except ad valorem tax liens, placed upon the land and the water appurtenant thereto or used in connection therewith.* [82:105:27]

785:25-7-3. Deficiencies during and after construction

- (a) If, after any inspections, investigations, or examinations, or at any time after completion, it is found that amendments, modifications, or changes to the work performed pursuant to the approved plans and specifications are necessary to protect life and insure safety of the dam or to meet acceptable dam safety engineering practices, including those found in references set forth in 785:25-3-4, the owners shall be required to submit a revised application.
- (b) If conditions are revealed which will not permit the construction of a safe dam or reservoir, the prior approval may be revoked or modified by the Board after notice and hearing.
- (c) After the inspection, investigation, or examination, the Board shall, in a report to the owner, specify the deficiencies and allow a reasonable time for correcting the deficiencies.

[Source: Amended at 9 Ok Reg 1677, eff 5-11-92]

785:25-7-4. Supervision of construction by owner

After receiving approval of plans and specification, supervision of construction by the owner shall be as follows:

- (1) The work of construction, enlargement, repair, alteration or removal of dam or reservoir, for which approved application, plans, drawings, and specifications are required, shall be under the responsible charge of an engineer as defined in 785:25-5-2 who shall certify, upon completion and prior to impoundment of any waters, that such construction, enlargement, repair, alteration, or removal was done in accordance with approved plans, drawings, and specifications.
- (2) Final approval in writing by a United States governmental agency shall be required for those structures designed by and/or constructed under the supervision of personnel of that agency.

785:25-7-5. Changes to plans and specifications after approval

- (a) If during construction, enlargement, repair, alteration, or removal of any dam or reservoir, it is found that amendments, modifications, or changes that increase the normal or maximum water elevations, increase spillway releases or discharges, or that increase potential damages downstream will need to be made to the plans and specifications as previously approved by the Board, an amended application including maps, plans, drawings, and specifications shall be submitted to the Board for approval.
- (b) Notice of the date, place and time when the Board will consider the matter shall be given to those interested parties who appeared at the initial proceedings.
- (c) Other amendments, modifications or changes shown in as-built plans and specifications may be accepted by Board staff.

[Source: Amended at 9 Ok Reg 1677, eff 5-11-92]

785:25-7-6. Notice of completion and filing of supplementary drawings or descriptive matter

Immediately upon completion of a new dam or reservoir or enlargement or repair of a dam or reservoir, the owner shall give notice of completion and as soon thereafter as possible shall

file supplementary drawings or descriptive matter showing or describing the dam or reservoir as actually constructed, including the following:

- (1) A record of all grout holes and grouting;
- (2) A record of permanent location points and bench marks;
- (3) A record of tests of concrete soils, or other materials used in the construction of the dam or reservoir; and
- (4) Any other items which may be of permanent value and have a bearing on the safety and performance of the dam or reservoir.

785:25-7-7. Warning and evacuation plans

- (a) Owners of existing or proposed dams classified as high hazard, regardless of the size of such dams, and any other dam as determined by the Board, shall provide an adequate warning system and written evacuation plan to protect downstream lives and property, with a written description of said system and written evacuation plan to be approved by and filed with the local Civil Defense authorities.
- (b) Additionally, the written description of the warning system and approved evacuation plan shall be filed with the Board.

785:25-7-8. Certificate of completion

(a) Issuance; revocation; amendments.

Certificates of completion shall be issued and may be revoked or amended as follows:

- (1) Upon filing of notice of completion of works by the applicant, the Board shall, within sixty (60) days, inspect or cause the dam to be inspected. The Executive Director shall approve the issuance of a certificate of completion if, based on the certification from the engineer in the Notice of Completion, the dam or reservoir is safe to impound water within the limitations prescribed in the certificate. However, no certificate of completion shall be issued until receipt of fee for certificate and all invoiced filing and inspection fees.
- (2) Every certificate of completion issued shall contain *the date of approval of plans and specifications for the dam, date construction was completed on said dam, and* [82:110.8] any such terms and conditions as the Board may prescribe. The Board may revoke any such certificate whenever it is determined that the dam constitutes a danger to life and property. Whenever such action is necessary to safeguard life and property, the terms and conditions of any such certificate may be amended and a new certificate issued containing the revised terms and conditions.
- (3) *Certificates of completion of works from the . . . Board shall be required before any water may be impounded by a new dam or before water may be impounded at an elevation higher than that previously authorized by the Board at an existing dam which has been modified* [82:110.8]

- (b) **Notice and action.** After the issuance of the certificate of completion, the Board shall provide notice to the owner, allowing opportunity for a hearing, prior to the issuance of any order revoking or modifying the previous Board certificate.

[Source: Amended at 10 Ok Reg 3287, eff 6-25-93]

SUBCHAPTER 9. ACTIONS AFTER CONSTRUCTION

Section

- 785:25-9-1. Inspections of dams
- 785:25-9-2. Records and reports of owner
- 785:25-9-3. Correcting deficiencies (not creating imminent peril)
- 785:25-9-4. Notice and action (Revoked)
- 785:25-9-5. Correction of deficiencies creating imminent peril
- 785:25-9-6. Request for inspection of dams by other parties

785:25-9-7. Recovery of costs and expenses

785:25-9-8. Emergency repairs

785:25-9-1. Inspections of dams

(a) **Oversight vested in Board.** Oversight of the maintenance and operation of constructed dams and reservoirs insofar as necessary to safeguard life and property from injury by reason of the failure thereof is vested in the Board.

(b) **Periodic inspections.** Except for low hazard dams, owners are required to have their dams inspected by qualified persons periodically according to a schedule prepared by the Board to meet the requirements of paragraphs (1) and (2) of this subsection. Periodic inspections of dams shall be scheduled according to hazard classifications as follows:

(1) High hazard. High hazard shall be inspected at least once annually.

(2) Significant hazard. Significant hazard shall be inspected at least once every three years.

(3) Low hazard. Low hazard shall be inspected at least once every five years, which inspection shall be conducted by the Board without charge to the owner and shall consist of a review of the hazard classification.

(c) **Expense of periodic inspections.** Periodic inspections shall be at the owner's expense (except for low hazard periodic inspections) and shall be conducted by a Registered Professional Engineer hired by the owner who shall have training and/or construction of dams and reservoirs, or by an engineer of any United States governmental agency acting in his official capacity. Provided that inspections of low hazard classification dams may be conducted by persons who are not Registered Professional Engineers but who are trained in inspecting dams. If a periodic inspection is conducted by the owner or his representative, a written inspection report shall be submitted to the Board not later than 30 days after the inspection and shall contain, at a minimum, information as set forth in a Board's inspection report and in a format substantially similar to a Board's inspection report.

(d) **Unscheduled inspections.** Unscheduled (non-periodic) inspections such, as those conducted in response to complaints, after major heavy precipitation events or in emergency situations, shall be conducted by Board staff, or the Board may require the owner to conduct and unscheduled inspection at the owner's expense. No fee for such inspection shall be due, provided that a request for inspection by other parties and fees therefor shall be governed by 785:25-9-6.

(e) **United States dams not subject to inspection.** Any dam *constructed by the United States or its duly authorized agencies shall not be subject to inspection while under the supervision of officers or the United States.* [82:105.27]

(f) **Board to notify when inspection due; violation.** The Board shall notify persons shown by its records to own the dam of the date the periodic inspection of the dam is due. Such notice shall require the owner to advise the Board by a date specified when an engineer retained by the owner will conduct the inspection. Failure to so notify the Board or to have the inspection completed shall constitute a violation of Board rules.

[Source: Amended at 10 Ok Reg 3287, eff 6-25-93; Amended at 11 Ok Reg 2931, eff 6-13-94; Amended at 12 Ok Reg 2687, eff 7-1-95]

785:25-9-2. Records and reports of owner

(a) The owner of a dam or reservoir or his agent shall fully and promptly advise the Board by telephone or any sudden or unprecedented flood or unusual or alarming circumstances or occurrence affecting the safety of the dam or reservoir. Within ten (10) days after such flood event or circumstance, the owner or owner's agent shall provide a written report of any damages to the dam and of the need to make any repairs.

(b) The Board may require owners to keep records of and to report on maintenance, and staffing of any dam or reservoir if, in the opinion of the Board, such records and reports are necessary to safeguard life and property.

[Source: Amended at 10 Ok Reg 3287, eff 6-25-93]

785:25-9-3. Correction of deficiencies (not creating imminent peril)

(a) *When an owner fails, neglects or refuses to comply with the Oklahoma Dam Safety Act, rules of this chapter, or orders of the . . . Board, and there is no imminent peril to the public health or welfare shown the Board may, after notice and opportunity for hearing, issue an order requiring such owner to take whatever action the Board deems necessary to place the dam in a safe condition, meet the requirements of the Oklahoma Dam Safety Act, rules of the Board, or the previous orders of the Board [82:110.10].*

(b) *Actions which can be ordered may include but are not limited to lowering the level of or removing all water in the reservoir, providing an adequate warning to the public downstream, repair or modification of the existing dam after having the appropriate application for approval of plans and specifications granted, cease all construction work on a dam, and implementation of an appropriate operation and maintenance plan [82:110.10].*

(c) *If after such hearing it shall be determined to order such amendments, modifications or changes, the owner shall submit, if necessary under 785:25-5-1, plans and specifications for Board approval. Upon approval of the plans and specifications, the Board shall direct the time within which such modification, alteration, or construction shall be completed.*

(d) *In determining whether amendments, modifications or changes are necessary to protect life and insure safety of the dam, the Board shall take into consideration the possibility that the dam and reservoir might be endangered by overtopping, seepage, settlement, erosion, cracking, earth movement, or other conditions which exist in any area in the vicinity of the dam or reservoir.*

(e) *Amendments, modifications or changes may include routine maintenance items that do not require plans and specifications, such as removal of trees on an earthen embankment, establishing vegetation cover to prevent erosion, or updating a warning and evacuation plan, etc. Amendments, modifications or changes may also include alterations or repairs which require submittal and approval of plans and specifications, including but not limited to changing the spillway design capacity, rebuilding embankments, etc.*

[Source: Amended at 9 ok Reg 1678, eff 5-11-92; Amended at 10 Ok Reg 3287, eff 6-25-93]

785:25-9-4. Notice and action (Revoked)

[Source: Revoked at 10 Ok Reg 3287, eff 6-25-93]

Agency Note (1): The language in 785:25-9-4 has been moved to 785:25-7-8(c).

785:25-9-5. Correction of deficiencies creating imminent peril

(a) *When an owner fails, neglects or refuses to comply with the Oklahoma Dam Safety Act, rules of this Chapter, or orders of the Board, and there is an imminent peril to the public health or welfare shown, the Executive Director of the Board, or Assistant Director in the absence of the Executive Director, may, without notice or opportunity for hearing, issue an emergency order requiring such owner to take actions the Board deems necessary to place the dam in a safe condition. Such emergency order shall indicate the finding of imminent peril and shall specify the actions that are to be taken immediately. The order shall also specify a time and place for hearing to be held after such actions are taken. [82:110.10].* In determining whether an imminent peril to the public health or welfare exists, the Board may consider the following:

- (1) The condition of any dam or reservoir is so dangerous to the safety of life or property as not to permit time for the issuance and enforcement of an order after notice and hearing relative to maintenance or operation;

- (2) Passing imminent floods threaten the safety of any dam or reservoir.
- (b) The Board may, if the owner cannot be served or is otherwise unable to act, immediately employ remedial measures. The remedial measures the Board may take in such an emergency include but is not limited to any of the following:
- (1) Lower the water level by releasing water from the reservoir;
 - (2) Completely empty the reservoir, or
 - (3) Take such other steps as may be essential to safeguard life and property.
- (c) The cost and expenses of the remedial measures taken by the Board, including cost of any work done to render a dam or reservoir or its appurtenances safe, shall be recoverable by the State from the owner by action brought by the Board in the district court of the district wherein the dam or reservoir or any part thereof is situated.
- [Source: Amended at 10 Ok Reg 3287, eff 6-25-93]

785:25-9-6. Request for inspection of dams by other parties

Upon the request of any party, accompanied by the estimated cost of inspection, the Board shall cause any alleged unsafe works to be inspected. If the works are found to be unsafe, the money deposited by such party shall be refunded and the fee for inspection shall be paid by the owner of such works. [82:105.27]

[Source: Amended at 11 Ok Reg 2931, eff 6-13-94]

785:25-9-7. Recovery of costs and expenses

The costs and expenses incurred by the Board for inspection of any dam found to be unsafe shall be paid by the owner of such works and if not paid by the owner of the dam within thirty (30) days after the decision of the Board shall be a lien against any property of such owner and be recoverable by the State from the owner by suit instituted by the District Attorney of the county at the request of the Board. Such liens shall be superior in right to all mortgages or encumbrances, except ad valorem tax liens placed upon the land and the water appurtenant thereto or used in connection therewith. [82:105.27]

785:25-9-8. Emergency repairs

- (a) If conditions exist which may cause loss of life if repairs are not made immediately, emergency repairs may be made by the owner without prior submittal of the plans and specifications required under 785:25-5-1.
- (b) The Board shall be notified of the emergency and the repairs to be made within 48 hours and plans and specifications shall be furnished to the Board for review as required in 785:25-5-1 as soon as possible.

SUBCHAPTER 11. ADMINISTRATIVE PENALTIES AND PROCEDURES

Section

- 785:25-11-1. Applicability and authority
 785:25-11-2. Notice of violation and proposed assessment
 785:25-11-3. Determined amount of penalty
 785:25-11-4. Procedures for penalty assessment

785:25-11-1. Applicability and authority

(a) *The Board may impose administrative penalties against owners of dams who fail, refuse or neglect to comply with the provisions of the Oklahoma Dam Safety Act, rules of the Board promulgated pursuant to the Oklahoma Dam Safety Act, and orders of the Board. Such administrative penalties shall be imposed only after notice and opportunity for hearing on the proposed imposition of such penalties [82:110.10].*

(b) *The notice and opportunity for hearing required by this Section may be combined with the notice and hearing required in [82:110.10] 785:25-9-3.*

(c) *The penalties shall not exceed Five Hundred Dollars (\$500.00) per day for each violation [82:110.10].*

(d) *Each day a violation continues shall constitute a separate violation [82:110.10]*

[Source: Added at 10 Ok Reg 3287, eff 6-25-93]

785:25-11-2. Notice of violation and proposed assessment

The notice of proposed assessment of administrative penalties shall inform the respondent of the provisions of the Oklahoma Dam Safety Act or of the rule or order of the Board at issue and the proposed amount of the penalty. A letter, petition, notice of violation, consent order or final order may constitute a notice of proposed assessment for purposes of initiating administrative penalty proceedings if it meets the requirements of this section.

[Source: Added at 10 Ok Reg 3287, eff 6-25-93]

785:25-11-3. Determining amount of penalty

In setting the administrative penalty amount, the Board may consider the following:

(1) The nature, duration and number of previous instances of failure by respondent to comply with requirements of law relating to dam safety and requirements of Board rules and orders.

(2) The efforts of the owner to correct deficiencies or other instances of failure to comply with the requirements of Board rules and orders subject of the proposed penalty.

(3) The cost of carrying out actions required to meet the requirements of law and Board rules and orders;

(4) The size and hazard classification of the dam;

(5) Other factors deemed appropriate by the Board.

[Source: Added at 10 Ok Reg 3287, eff 6-25-93]

785:25-11-4. Procedures for penalty assessment

(a) The notice of proposed assessment of administrative penalties shall specify a time, date and place of a hearing.

(b) Failure of respondent to appear at the hearing shall be deemed to constitute an agreement with the imposition of the penalty in the amount proposed as set forth in the notice, and proposed findings, conclusions and order shall not be prepared in that instance. The Board and respondent may also agree to an informal disposition of the matter. In either situations, the matter shall be presented to the Board for consideration of entering a final order assessing the administrative penalty.

(c) The administrative penalty is due and payable immediately upon issuance of the final order, unless otherwise provided therein.

(d) If the Board believes that violations are continuing after issuance of the administrative penalty order, it may seek the issuance of additional orders to assess penalties occurring in the period after issuance of the previous assessment orders.

[Source: Added at 10 Ok Reg 3287, eff 6-25-93]

**APPENDIX A.
JURISDICTION OF BOARD BY SIZE AND HAZARD CLASSIFICATION**

JURISDICTION OF BOARD BY SIZE AND HAZARD CLASSIFICATION

