

SUBCHAPTER D: OPERATION AND MAINTENANCE OF DAMS

§§299.41 – 299.46

Effective January 1, 2009

§299.41. Owner's Responsibilities.

(a) The owner shall be responsible for operating and maintaining the dam and appurtenant structures in a safe manner.

(b) The owner shall be responsible for addressing all maintenance and safety concerns at the dam and appurtenant structures identified during any inspections conducted by the executive director or the owner.

(c) The owner shall ensure that necessary maintenance, repairs, alterations, or modifications are initiated and completed in a timely manner following any inspection.

(d) Nothing in this chapter or in orders issued by the commission shall be construed to relieve an owner of a dam or reservoir of the legal duties, obligations, or liabilities incident to ownership or operation.

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§299.42. Inspections.

(a) Periodic engineering inspections by the executive director.

(1) The executive director may enter any person's property at any time for the purpose of inspecting any dam to determine if the dam is being maintained in a safe manner.

(2) The executive director shall perform periodic engineering inspections of dams based on hazard classification, as defined in §299.14 of this title (relating to Hazard Classification Criteria), on the following frequency.

(A) High-hazard dams shall be inspected once every five years.

(B) Significant-hazard dams shall be inspected once every five years.

(C) Large dams, as defined in §299.13 of this title (relating to Size Classification Criteria), in the low-hazard classification shall be inspected once every five years.

(D) Small and intermediate dams, as defined in §299.13 of this title, in the low-hazard classification shall not be included in the periodic inspection program. These dams may be inspected for the purposes of:

(i) determining hazard classification;

(ii) assessing condition of the dam following an emergency such as a flooding event;

(iii) assessing condition of the dam that could threaten the integrity of the dam as a result of a request by the owner;

(iv) assessing the condition of the dam as a result of a complaint; or

(v) assessing the condition of a dam as a result of a request from someone other than the owner.

(3) The executive director's engineering inspection may consist of:

(A) conducting a visual inspection and evaluation of the condition of the dam and appurtenant structures, the downstream area, and any other areas affected by the dam;

(B) taking measurements of elevations, dimensions, slopes, and locations of the dam and appurtenant structures;

(C) taking photographs for documentation;

(D) conducting an evaluation of the hazard classification to determine if the classification should be changed as a result of the inspection;

(E) reviewing and evaluating the owner's operation, maintenance, and inspection programs and all other records; and

(F) reviewing the owner's emergency action plan, including the gate operation plan if applicable.

(4) The executive director shall prepare a written inspection report that provides the findings from the inspection and lists recommendations for actions to be taken to assist the owner in maintaining the continued integrity, safety, and operation of the dam. The executive director may require the owner to have the owner's professional engineer perform hydrologic, hydraulic, or structural evaluations of the dam as described in Subchapter B of this chapter (relating to Design and Evaluation of Dams). The executive director shall provide the owner with a copy of the written report, or letter, as soon as practical after the inspection.

(5) The owner shall provide a written response to the executive director, if requested, and include a plan of action with time frames for addressing all of the executive director's recommendations from the inspection.

(b) Inspections by the owner.

(1) The owner, or the owner's representative, shall inspect the dam and appurtenant structures on a regular time frame as part of the owner's operation and maintenance procedures, as defined

in §299.43 of this title (relating to Operation and Maintenance), following significant rainfall events, and during emergency events as described in §299.61 of this title (relating to Emergency Action Plans). The owner or the owner's representative shall perform maintenance inspections at least once a year.

(2) The owner shall notify the executive director by telephone or electronic mail within 72 hours and in writing within five working days after becoming aware of any problems or damage that pose a significant threat to the dam's safety, integrity, or operation.

(3) The owner shall submit a copy of all engineering inspection reports prepared by the owner's professional engineer under this section to the executive director for review within 45 calendar days after receipt of the report from the professional engineer. The report prepared by the owner's professional engineer must consist of the inspection date, description of the items observed during the inspection, the findings, and recommendations.

(4) The owner may elect to have an engineering inspection by a professional engineer more frequently than described in subsection (a)(2) of this section. The executive director may use the engineering inspection report prepared for the owner by the professional engineer in lieu of making a periodic inspection as described in subsection (a)(2) of this section. A report prepared by a professional engineer with the Federal Energy Regulatory Commission, Natural Resources Conservation Service, Bureau of Reclamation, Corps of Engineers, or Mine Safety and Health Administration may also be used in lieu of the periodic inspection described in subsection (a)(2) of this section.

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§299.43. Operation and Maintenance.

(a) The owners of all dams shall develop and implement an operation and maintenance plan . The owner may use the most current version, at the time of the plan development, of the agency's Guidelines for Operation and Maintenance of Dams in Texas, a manual, a checklist, or some other procedure to demonstrate implementation of the program. Operation and maintenance activities that must be addressed include, but are not limited to:

- (1) the schedules for both engineering and maintenance inspections performed by the owner or the owner's professional engineer;
- (2) any restrictions imposed by the professional engineer's design;
- (3) a list of maintenance items and a schedule for addressing each item, including, but not limited to:
 - (A) replacing riprap;
 - (B) eliminating animal burrows;
 - (C) removing blockage from the principal spillway inlet and outlet structures and removing obstructions from the emergency spillways, including fences;

(D) lubricating, repairing, painting, and exercising gates or valves, if in working condition, or if applicable;

(E) removing corrosion on gates and other metal appurtenant structures;

(F) sealing of cracks and joints in concrete;

(G) preventing or controlling erosion, including animal and vehicular trails and wave action erosion;

(H) eliminating small trees (less than or equal to four inches in diameter) and brush on the dam and all trees and brush in the spillways and adjacent to concrete structures;

(I) maintaining adequate grass cover on earthen dams and spillways;

(J) maintaining proper function of foundation or toe drains; and

(K) correcting any other items that may impact the dam or appurtenant structures;
and

(4) if applicable, a plan for monitoring instrumentation in the dam and appurtenant structures, to include:

(A) a list of all types of instruments, instrument number, and locations;

(B) schedules and procedures for reading and maintenance of each instrument;
and

(C) a list of critical readings for each instrument and the process to follow if critical readings are measured.

(b) The owner shall document operation and maintenance activities undertaken and shall provide the documentation to the executive director for review as soon as possible upon request of the executive director.

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§299.44. Gate Operation Plan.

(a) The owners of all existing intermediate- and large-size dams, as defined in §299.13 of this title (relating to Size Classification Criteria), with gated spillways shall have a professional engineer develop a gate operation plan within two years after the effective date of the rules. The owner's professional engineer shall notify the executive director in writing that the gate operation plan has either been completed or a gate operation plan exists that meets the requirement of this section. If an owner cannot complete the gate operation plans within the two years required in subsection (b) of this section, the

owner shall request an extension of time showing cause or a reasonable basis for the need for an extension and providing a time frame to complete. The request shall be submitted to the executive director for review and approval.

(b) The gate operation plan must include:

(1) gate procedures for use during normal operating conditions, flood events, other varying hydrologic events, and power failures; and

(2) a method for coordinating releases with owners of other dams in the river basin, if applicable.

(c) The gate operation plan shall be considered an appendix to the owner's emergency action plan. If the owner submits a copy of the gate operation plan to the executive director, the executive director shall file it with the owner's emergency action plan in the agency's confidential, permanent records.

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§299.45. Emergency Repairs.

(a) The owner shall undertake emergency repairs under the supervision of a professional engineer and implement the emergency action plan as soon as possible after the emergency is discovered and evaluated. The owner may start emergency repairs without approval from the executive director.

(b) The owner shall notify the executive director by telephone, electronic mail, or facsimile of the action being taken as soon as the emergency situation allows, but no more than 12 hours after the emergency is discovered and evaluated.

(c) The owner shall have a professional engineer develop plans for permanent repairs as soon as the emergency is over. The owner shall have a professional engineer submit the plans for review and approval, as described in §299.22 of this title (relating to Review and Approval of Construction Plans and Specifications).

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§299.46. Records.

(a) All owners shall maintain records, if available, on the inspection, operation, and maintenance of their dams, including, but not limited to:

(1) inspection checklists, reports, and correspondence;

(2) a log of all operation and maintenance activities undertaken;

(3) a gate operation plan, if applicable;

(4) a log of all repairs undertaken, including the date of the repairs and the work

performed;

(5) a log of instrumentation readings, if applicable;

(6) a log of all flood events and emergencies; and

(7) approved plans, record drawings, specifications, approval letters, construction records, and other engineering and design reports.

(b) Owners shall maintain legible or electronic copies in a secure location, designated by the owner, that is immediately accessible to the owner for the life of the dam.

(c) Owners shall provide copies of all records or access to view the records to the executive director upon request.

(d) An owner shall provide all records to a new owner when there is an ownership change.

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