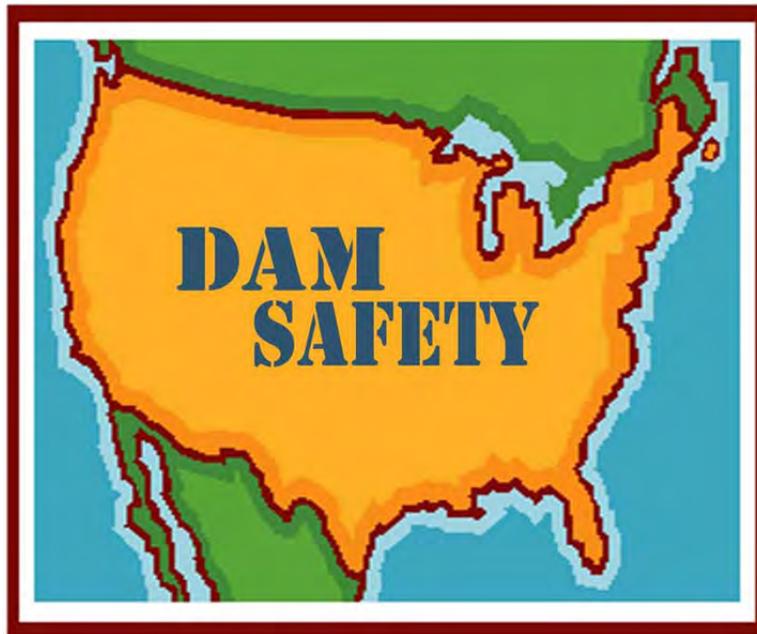


The National Dam Safety Program

Model State Dam Safety Program

FEMA 316/July 2007



Federal Emergency Management Agency
www.fema.gov

Association of State Dam Safety Officials
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CHAPTER I - LEGISLATION AND REGULATIONS

The foundation of any state dam safety program is the legislative authority and accompanying administrative regulations that give substance to the statutes. As such, the drafting of legislation and regulations is a critical first step in developing a strong dam safety program. Great care must be taken to include the necessary authority while avoiding the inappropriate verbiage that will direct the program away from its intended course. The authority for dam safety must be provided within a single agency to provide consistent oversight.

Some states prefer to detail specific program requirements within the statute. This approach gives the program the “weight of law.” Other states prefer to keep the authorizing legislation simple and supplement the program specifics with administrative rules and regulations. This approach provides more flexibility. In either case, certain items must be included in the authorizing statutes and/or administrative regulations to create an effective dam safety program.

Appendix A is a “Model State Law.” This model uses the detailed statute approach to establish an effective regulatory program. It provides a specific statutory guide for a state program. Corresponding Model Law sections are referenced below.

I. Legislation

Legislation must be enacted that provides state dam safety programs with comprehensive statutory authority and sufficient appropriations to regulate the design, construction, reconstruction, modification, breach, removal*, abandonment*, inspection, operation, monitoring and maintenance of any dam* determined to have a potential to cause loss of human life, economic loss (including property damage), and lifeline disruption;

The following specific items must be included:

- A. Authority to define those dams within state jurisdiction. [see Appendix A, section 1009];
- B. Authority and duty to adopt rules and regulations and establish standards. [see Appendix A, section 4410];
- C. Authority to require that the design of initial construction, reconstruction, enlargement, alteration, repair, operation, abandonment, breach, or removal of dams and supervision of construction be in the charge of an engineer* [see Appendix A, section 2030];

* See Glossary for definition.

- D. Authority to require that a permit or application approval* be obtained in writing prior to the start of any activity involving the construction, reconstruction, enlargement, alteration, modification, breach, removal, abandonment, repair and operation of a structure. [see Appendix A, section 5110 and section 5210];
- E. Authority to approve/deny the impoundment of water. [see Appendix A, Article 7200];
- F. Authority to inspect dams during construction and periodically during the life of the structure. This includes necessary authority for agency personnel to enter private lands. [see Appendix A, section 4160, section 7610 and section 8130];
- G. Authority to order repairs of a dam or modifications to a dam's operation to assure the dam's safety. [see Appendix A, sections 4170, 8130, and 10150];
- H. Authority to take such corrective action as required to carry out the purposes of the statute. [see Appendix A, section 4310];
- I. Authority to take emergency* action. [see Appendix A, sections 8210, 8220, 8230, and 8240];
- J. Penalties for non-compliance. [see Appendix A, chapter 9000];
- K. A liability disclaimer for the state and the agencies' personnel. [see Appendix A, section 2040];
- L. Responsibility for implementation of the statutory authority should be placed with one agency. [see Appendix A, section 4120];
- M. Authority to require the owner to:
 - 1. Fully comply with all state laws and regulations. [see Appendix A, Article 4300];
 - 2. Monitor, [see Appendix A, section 8120 and section 8210] operate or maintain [see Appendix A, section 8110] the dam in a safe condition and make required repairs in accordance with the regulations [see Appendix A, section 4130], terms and conditions of permits or approved applications [see Appendix A, section 5210], approved operating plans and orders of the agency issued pursuant to the statute. [see Appendix A, section 8120];

* See Glossary for definition.

3. Conduct periodic inspections [see Appendix A, section 8120] and analyses [see Appendix A, section 8130] as may reasonably be required by the agency, considering the size and hazard potential* of the dam. In addition, as required by the agency, submit certified reports on the condition of the dam to the agency, provided, that, the agency may accept reports of equivalent inspections prepared by governmental agencies. [see Appendix A, section 8120];
 4. Immediately notify the state agencies and responsible authorities in downstream communities of any condition which threatens the safety of the dam, and take all necessary actions to protect against loss of human life, economic loss (including property damage), and lifeline disruption, including any action required under an emergency action plan or agency order issued pursuant to the statute. [see Appendix A, section 4140 and section 8210]; and
 5. Retain records.
- N. Authority to establish fee structures that may include application review, and inspection of dams or annual registration fees [see Appendix A, Chapter 6000]; and
- O. Authority to require proof of financial responsibility. [See Appendix A, section 4410].

II. Regulations

The purpose of administrative rules is to establish the specific standards and criteria to be used within a state's dam safety program. In developing such regulations (rules), consideration should be given to the following items:

- A. The statutory authority for adopting rules and regulations;
- B. Definition of terms;
- C. Purposes of regulations;
 1. Provide for the comprehensive regulation and supervision of dams determined to have a potential effect upon loss of human life, economic loss (including property damage), and lifeline disruption; and
 2. Assure proper planning, design, construction, reconstruction, enlargement, repair, alteration, breach, removal, abandonment,

operation, maintenance, monitoring and supervision of dams, including such preventive measures as are necessary to provide an adequate margin of safety.

D. Scope of jurisdiction;

Jurisdiction shall be established by one or more of the following criteria:

1. Height of dam;
2. Maximum storage capacity; and
3. Hazard potential classification.

E. Classification criteria;

1. Size classification;
2. Hazard Potential Classification; and
3. Purpose.

F. Design criteria;

1. Design criteria specific to the state or region. ASDSO maintains an information clearinghouse for further information regarding specific hydrologic, hydraulic, structural, and geotechnical design criteria; and
2. The regulations should allow the agency to consider a reduced design criteria for any specific dam where it can be demonstrated that such criteria protects against loss of human life, economic loss (including property damage), and lifeline disruption.

G. Permits or application approval requirements for new construction, reconstruction, enlargement, repair, or alteration of dams;

H. Permit or application approval requirements for operation and maintenance of existing dams;

I. Permit or application approval requirements for breach, removal or abandonment of dams;

J. Construction requirements and procedures;

1. Notice in advance of start of work;
2. Approval of personnel for oversight and supervision of construction;

3. Construction reports;
 4. Prior approval by the agency of major changes to approved plans and specifications;
 5. Agency approval to impound water;
 - a. Certification of construction according to approved plans and specifications by the design engineer;
 - b. Submittal of “as built” documents; and
 - c. Submittal of a filling and monitoring schedule by the design engineer.
- K. Requirements for operation and maintenance;
1. Owner's responsibilities - The owner of any dam shall at all times operate and maintain the dam and all appurtenant works* in a safe condition in accordance with all permit or application approval terms and conditions;
 2. Regardless of the date of construction of a dam, it shall be the ongoing duty and financial responsibility of the dam owner to evaluate the safety of the dam and all appurtenant works and to modify the dam in accordance with the permit or application approval requirements (as noted above) to ensure protection against loss of human life, economic loss (including property damage), and lifeline disruption in accordance with changed conditions and current dam safety criteria;
 3. The owner of any dam shall immediately take such steps as the agency may prescribe to protect against loss of human life, economic loss (including property damage), and lifeline disruption; and
 4. The owner of any dam shall follow the method and schedule of operation of the dam, any plan for permanent monitoring of instrumentation in the dam, the emergency action plan, and the operation plan approved by the agency.
- L. Requirements for inspection by owners;
1. Requirement for owners to submit periodic inspection reports to the agency. These reports are to be prepared by an engineer. The agency

* See Glossary for definition.

will set the frequency of owner inspections based on dam size and hazard classification;

2. Requirement that owners shall retain records of their inspections, including records of actions taken to correct conditions found in such inspections. Copies of such records shall be provided to the agency; and
 3. Acceptance of reports of equivalent inspections conducted and prepared by governmental agencies (e.g., reports prepared for/or by the Federal Energy Regulatory Commission (FERC), the Natural Resources Conservation Service (NRCS), etc.), in lieu of inspections conducted by the owner. Also, the agency may accept equivalent inspection reports certified by the owner and submitted to other governmental agencies (e.g., reports to the Mine Safety and Health Administration (MSHA), etc.).
- M. Requirements for emergency action procedures. Adopted regulations should generally address what is required of the dam owner. Additional recommendations regarding emergency response for a model state program and what should be included in an Emergency Action Plan are covered in Chapter V. Example emergency action plans are included in Appendix E. What should be addressed in regulations is listed below:
1. All owners of high and significant hazard potential dams shall prepare, update, and periodically test an Emergency Action Plan. The plan must be coordinated with the local emergency services agency and be approved by the state agency. The detail and extent of the plan may vary in accordance with the dam's hazard potential classification;
 2. The owner shall provide for the immediate notification of emergency response agencies, any persons who may be endangered if the dam should fail and the state dam safety agency of any condition which threatens the safety of the dam or downstream areas; and
 3. The owner shall take all necessary actions during an emergency to protect against loss of human life, economic loss (including property damage), and lifeline disruption.
- N. Enforcement procedures;
1. Administrative actions;
 2. Judicial actions;
 3. Penalties;

4. Appeals; and
 5. Emergency Action.
- O. Fee Structures;
1. Fee structure for application/permit review. [see Appendix A - chapter 6000, Appendix B and Appendix K]; and
 2. Fee structure for inspection of dams by the state agencies' dam safety personnel and/or annual registration fee. [see Appendix A - Article 6200, Appendix B and Appendix K];
- P. Owner Financial Responsibility.
1. Authority for the agency to require, by regulation, that the permittee demonstrate proof of financial responsibility or surety assuring the proper construction, operation, maintenance and termination of any dam project which may present a substantial risk to human life, or cause economic loss (including property damage), or lifeline disruption. [see Appendix A, section 4410 F].

III. Policies and Procedures

The agency should develop policies and procedures for the implementation of the program. A detailed review and re-evaluation of the policies and procedures should be conducted every 5 years. The review should evaluate the design hydrology, hydraulics, structural, stability, and construction practices with current "State of the Practice" procedures.

APPENDIX A

MODEL STATE LAW

MODEL LAW FOR STATE SUPERVISION OF SAFETY OF DAMS AND RESERVOIRS

It is the intent of the legislature by this Act to provide for the regulation of dams and reservoirs exclusively by the state for the protection of public safety.

Chapter 1000. Definitions: The definitions in this chapter govern the construction of this Act.

1001. "Abandonment" means to render a dam non-impounding by dewatering and filling the reservoir created by that dam with solid materials and by diverting the natural drainway around the site.

1002. "Adverse Consequences" means negative impacts that may occur upstream, downstream, or at locations remote from the dam. The primary concerns are loss of human life, economic loss (including property damage), disruption of public utilities, and environmental impact.

1003. "Agency" means that agency, department, office, or other unit of state government designated by state law to be responsible for implementation and administration of this Act. (This section to be replaced in enactment of the law by a reference to the state unit created or selected to implement and administer the Act. The state unit created or selected to implement and administer the Act may consist of regular state employees or specialists and consultants, including consulting engineering firms or organizations.)

1004. "Alterations" or "repairs" means only alterations or repairs to existing dam and appurtenant structures that affect the safety of the dam or reservoir, as determined by the agency.

1005. "Application Approval" means authorization in writing issued by the agency to an owner who has applied to the agency for permission to construct, reconstruct, enlarge, repair, alter, remove, maintain, operate or abandon a dam and which specifies the conditions or limitations under which work is to be performed by the owner or under which approval is granted.

1006. "Appurtenant works" include, but are not limited to, such structures as spillways, either in the dam or separate therefrom; the reservoir and its rim; low level outlet works; and water conduits such as tunnels, pipelines or penstocks, either through the dam or its abutments.

1007. "Breach" means partial removal of a dam, creating a channel through the dam to the original stream bottom elevation.

1008. "Certificate of Approval to Impound" means authorization in writing issued by the agency to an owner who has completed construction,

reconstruction, enlargement, repair, or alteration of a dam and which specifies the conditions or limitations under which the dam and reservoir are to be maintained and operated.

1009. "Dam" means any artificial barrier, including appurtenant works, with the ability to impound water, wastewater, or liquid borne materials and which (a) is 25 feet or more in height from the natural bed of the stream or watercourse measured at the downstream toe 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 maximum water storage elevation; or (b) has an impounding capacity at maximum water storage elevation of 50 acre-feet or more,

A. This definition does not apply to any such barrier which is not in excess of 6 feet in height regardless of storage capacity or which has a storage capacity at maximum water storage elevation not greater than 15 acre feet regardless of height, unless such a barrier, due to its location or other physical characteristics, is classified as a high hazard potential dam;

B. No obstruction in a canal used to raise or lower water shall be considered a dam; and

C. A fill or structure for highway or railroad use or for any other purpose, which impounds water, shall be subject to review by the agency. Such fill or structure shall be considered a dam if the criteria of Section 1009 are applicable.

1010. "Dam Rehabilitation Loan Program" means a low interest revolving dam rehabilitation loan program, created through this Statute.

1011. "Days" used in establishing deadlines, means all calendar days, including Sundays and holidays.

1012. "Emergency" includes, but is not limited to, breaches and all conditions leading to or causing a breach, overtopping, or any other condition in a dam and its appurtenant structures that may be construed as unsafe or threatening to life or property.

1013. "Emergency Action Plan" means a plan that identifies the area that would likely be inundated by the failure of a dam and the actions that should be taken in the event of a failure or threatening condition at the dam. The plan is usually implemented in conjunction with the local and regional emergency government personnel.

1014. "Engineer" means a qualified professional engineer. The term "qualified professional engineer" as used in this law is intended to mean an individual who has a background in civil engineering and;

- A. Is a licensed professional engineer;
- B. Is competent in areas related to dam investigation, design, construction, and operation for the type of dam being investigated, designed, constructed or operated;
- C. Has at least ten (10) years of relevant experience in areas such as investigation, design, construction, reconstruction, enlargement, repair, alteration, maintenance, operation, breach, removal or abandonment of dams; and
- D. Understands adverse dam incidents, failures and the potential causes and consequences of failures.
- E. Continues with necessary training to keep abreast of the state of the practice in dam safety engineering.

1015. "Enlargement" means any change in or addition to an existing dam or reservoir that raises or may raise the water storage elevation of the water impounded by the dam.

1016. "Hazard Potential" means the possible adverse incremental consequences that result from the release of water or stored contents due to failure of the dam or mis-operation of the dam or appurtenances. The hazard potential classification of a dam does not reflect in any way on the current condition of the dam and its appurtenant structures (e.g., safety, structural integrity, flood routing capacity).

1017. "High Hazard Potential Dam" means a dam assigned the high hazard potential classification where the dam's failure or mis-operation will probably cause loss of human life

1018. "Incremental" means under the same conditions (e.g., flood, earthquake, or other event), the difference in impacts that would occur due to failure or mis-operation of the dam over those that would have occurred without failure or mis-operation of the dam and appurtenances.

1019. "Low Hazard Potential Dam" means a dam assigned the low hazard potential classification where failure or mis-operation results in no probable loss of human life and low economic and/or environmental losses. Economic losses are principally limited to the owner's property.

1020. "Owner" includes any of the following who own, control, operate, maintain, manage, or propose to construct, reconstruct, enlarge, repair, alter, remove or abandon a dam or reservoir:

- A. The state and its departments, institutions, agencies, and political subdivisions;
- B. Every municipal or quasi-municipal corporation;
- C. Every public utility;
- D. Every district;
- E. Every person;
- F. The duly authorized agents, lessees, or trustees of any of the foregoing; and
- G. Receivers or trustees appointed by any court for any of the foregoing.

1021. "Person" means any person, bankruptcy trustee, firm, association, organization, partnership, business trust, corporation, LLC, LLP, or company.

1022. "Probable" means more likely than not to occur; reasonably expected; realistic.

1023. "Reconstruction" means removal and replacement of an existing dam, or a portion thereof.

1024. "Removal" means complete elimination of the dam embankment or structure to restore the approximate original topographic contours of the valley.

1025. "Reservoir" means any area which contains or will contain impounded water, wastewater, or liquid-borne materials by virtue of its having been impounded by a dam.

1026. "Significant Hazard Potential Dam" means a dam assigned the significant hazard potential classification where failure or mis-operation results in no probable loss of human life but can cause major economic loss, environmental damage, disruption of lifeline facilities, or impact other concerns. Significant hazard potential classification dams are often located in predominantly rural or agricultural areas but could be located in areas with population and significant infrastructure.

1027. "State Dam Safety Office" means that agency, department, division, office, or other unit of State government, created, empowered, or designated by statute to be responsible for implementation, direction, or administration of The Model Law for State supervision of safety of dams and reservoirs.

1028. "Water Storage Elevation" means the maximum elevation of water surface which can be obtained by the dam or reservoir.

Chapter 2000. General Provisions

2010. It is the intent of the legislature by this Act to provide for the regulation of all dams and reservoirs exclusively by the state for the protection of public safety.

2020. No political subdivision of this State may enact a rule, ordinance, or other such law which conflicts with the regulatory authority established by this Act. Additionally, no political subdivision of this State may enact a rule, ordinance, or other such law which results in a dam or reservoir being regulated less stringently than it would otherwise be regulated under this Act. Notwithstanding the preceding, this Act shall not prevent a city or county from adopting ordinances regulating, supervising, or providing for the regulation or supervision of dams and reservoirs that (a) are not within this Act's state's jurisdiction; and (b) are not subject to regulation by another public agency or body, or apply only to appurtenances such as roads and fences not germane to the safety of the structure.

2030. All plans and specifications for initial construction, reconstruction, enlargement, alteration, repair, operation, breach, abandonment, or removal of dams and supervision of construction shall be in the charge of an engineer, assisted by qualified engineering geologists and other specialists as necessary.

2040. No action shall be brought against the state, the agency or its agents or employees for the recovery of damages caused by the partial or total failure of any dam or reservoir as a result of the agency's inspection or regulation of such dam or reservoir:

2050. Nothing in this Act shall be construed to relieve an owner or operator of a dam or reservoir of the legal duties, obligations, or liabilities incident to the ownership or operation of the dam or reservoir.

2060. The findings and orders of the agency, an agency's approval of an application, and the certificate of approval to impound of any dam or reservoir issued by the state are final, conclusive and binding upon all owners, state agencies, and other government agencies, regulatory or otherwise, as to the safety of design, construction, reconstruction, enlargement, repair, alteration, breach, removal, abandonment, maintenance, and operation of any dam or

reservoir. The agency's approval of an application or a certificate of approval to impound will not be considered final if it can be demonstrated to the agency that the agency's approval of the relevant application or certificate of approval was based on one or more misrepresentations.

2070. Nothing in this Act shall be construed to deprive any owner of such administrative or judicial recourse to the courts as he may be entitled to under the laws of this state.

2080. Records of official actions of the agency pertaining to the supervision of dams and reservoirs are public documents.

2090. Current owners shall notify the agency of any proposed change in ownership of any dam subject to this Act prior to the transfer of ownership.

Chapter 3000. Administrative Provisions

3010. The agency shall be administered and directed by an engineer, licensed by this state, and clearly qualified by training and experienced in the design, construction, reconstruction, enlargement, repair, alteration, breach, removal, maintenance, operation and abandonment of dams and reservoirs, and it shall employ such clerical, engineering, and other assistants as are necessary for carrying on the work of dam and reservoir supervision in accordance with this Act.

3020. The agency may require additional independent specialists or consulting boards for technical considerations pertaining to an application, approval for plans and specifications or certificate of approval to impound water. Appointment of these specialists/consulting boards must be approved by the agency. The expenses of these specialists/consulting boards shall be paid for entirely by the owner.

Chapter 4000. Powers of the Agency

Article 4100. Powers in General

4110. The agency, under the police power of the state, shall review and approve the design, construction, reconstruction, enlargement, alteration, repair, maintenance, operation, breach, abandonment and removal of dams and reservoirs for the protection of life and property as provided in this Act.

4120. All dams and reservoirs in the state shall be under the jurisdiction of the agency.

4130. It is unlawful to construct, reconstruct, enlarge, repair, alter, remove, maintain, operate or abandon any dam or reservoir coming within the

purview of this Act except upon application approval of the agency, provided that this section shall not be deemed to apply to routine maintenance and operation not affecting the safety of the structure, provided that action taken under Chapter 8000, Article 2 – Emergency Actions will not require an application.

4140. In order to protect life and property, owners of high and significant hazard potential dams shall develop, and periodically test and update, an emergency action plan that shall be implemented in the event of an emergency involving that owner's dam(s). This plan shall include, but not be limited to, the following elements

- A. Emergency notification plan with flowchart;
- B. Statement of purpose;
- C. Project description;
- D. Emergency detection, evaluation, and classification;
- E. General responsibilities;
- F. Preparedness;
- G. Inundation maps or other acceptable description of the inundated area; and
- H. Appendices.

4150. For the purposes of evaluating the adequacy of a dam owner's emergency action plan, the agency shall review and approve each emergency action plan submitted under the provisions of this Act.

4160. In making any investigation or inspection necessary to enforce or implement this Act, the agency or its representatives may enter upon such private property of the dam owner as may be necessary.

4170. When the agency determines that a dam and reservoir constitutes a risk to life or property, the agency shall order the owner to take such action as necessary to remove the resultant risk to life and property.

Article 4200. Investigations and Studies

4210. The agency shall investigate and gather or cause the owner to gather such data including advances made in safety practices elsewhere, as may be needed for a proper review and study of the various features of the design,

construction, reconstruction, repair, enlargement, alteration, breach, removal, maintenance, operation, or abandonment of dams, reservoirs, and appurtenances.

4220. The agency shall make or cause the owner to make such watershed investigations and studies as shall be necessary to keep abreast of development affecting run-off and peak storm discharges from the dam

4230. The agency shall make or cause the owner to make seismic investigations and studies as shall be necessary to keep abreast of developments affecting seismic stability of dams.

Article 4300. Administrative and Legal Actions

4310. The agency may take any administrative or legal action necessary for the enforcement of this Act.

4320. An action or proceeding under this article may be initiated whenever any owner or any person acting as an agent of any owner is:

A. Failing to comply with the requirements imposed by this Act or by any application approval, certificate of approval to impound, order, rule, regulation, or requirement of the agency under the authority of this Act; or

B. Committing or allowing the commission of violations of this Act or any application approval, certificate of approval to impound, order, rule, regulation, or requirement of the agency under this Act.

4330. Any action or proceeding under this article shall be initiated either administratively or by appropriate legal filing in a court of appropriate jurisdiction in which:

A. The dam, area of hazard potential, or some part thereof exists;

B. The owner or person complained of has its principal place of business;

C. The person complained of resides; or

D. The state capitol resides.

Article 4400. Regulations and Standards

4410. The agency shall have the power and duty to adopt such regulations and standards for the design, construction, reconstruction, enlargement, alteration, operation, monitoring, maintenance, modification, repair,

breach, abandonment and removal of dams and reservoirs to carry out the purposes of this Act. The regulations shall include, but are not limited to, rules establishing:

A. Standards and criteria for the siting and design of dams considering both existing and projected conditions which may affect the safety of a project during its construction and operational life;

B. Requirements for operation of dams including operational plans to be prepared and implemented by owners;

C. Requirements for monitoring, inspection and reporting of conditions affecting the safety of dams;

D. Requirements for emergency action plans to be prepared and implemented by owners, in cooperation with civil authorities;

E. Reasonable fees for the processing of applications and periodic inspections, for the purpose of reimbursing the state for the costs of administration of this Act; and

F. Requirements that the owner of an approved dam be financially responsible.

4420. In promulgating regulations pursuant to this Act applicable to dams regulated by this Act which may present a risk to life or property, the agency shall consider:

A. the inclusion of the best available preventative measures necessary to assure protection of life, health, property and the environment with an adequate factor of safety;

B. water management and the impacts of development in watersheds and;

C. the state of scientific and technological knowledge at the time the regulations are adopted.

Chapter 5000. Applications

Article 5100. New Dams or Enlargements of Dams

5110. Construction of any new dam or the enlargement of any dam shall not be commenced until the owner has applied for and obtained from the agency written application approval of plans and specifications.

5120. A separate application for each dam shall be filed with the agency upon forms provided by the agency. Plans and specifications signed and sealed by the design engineer must accompany the application.

5130. The application shall provide the following information:

- A. The name and address of the owner;
- B. The location, type, size, purpose, and height of the proposed dam and reservoir and appurtenant works;
- C. The storage capacity and reservoir surface areas for normal pool and maximum water storage elevation;
- D. Plans for proposed permanent instrument installations in the dam;
- E. As accurately as may be readily obtained, the area of the drainage basin, rainfall and streamflow records, flood-flow records and estimates;
- F. Maps and design drawings showing plans, elevations, and sections of all principal structures and appurtenant works with other features of the project in sufficient detail, including design analyses, to determine safety, adequacy and suitability of design; and
- G. Proof of financial responsibility
- H. Such other pertinent information as the agency requires.

5140. The agency shall, when in its judgment it is necessary, also require the following:

- A. Data concerning subsoil and rock foundation conditions and the materials involved in the construction, or enlargement of the dam or reservoir;
- B. Investigations of, and reports on, subsurface conditions, exploratory pits, trenches and adits, drilling, coring, geophysical tests to measure in place and in the laboratory the properties and behavior of foundation materials at the dam and reservoir site;
- C. Investigations and reports on the geology of the dam or reservoir site, possible geologic hazards, seismic activity, faults, weak seams and joints, availability and quality of construction materials, and other pertinent features;

D. Separate emergency action plans (EAP) for construction and post construction periods; and

E. Such other appropriate information as may be necessary.

Article 5200. Reconstruction, Repairs, Alterations, Abandonment, Breach or Removals

5210. Before commencing the reconstruction, repair, or alteration of a dam, or the abandonment, breach or removal of a dam so that it no longer constitutes a dam as defined in this Act, the owner shall file an application and secure the written approval of that application by the agency. Repairs shall not be deemed to apply to routine maintenance and operation not affecting the safety of the dam.

A. The application shall give such pertinent information or data concerning the dam, as may be required by the agency;

B. The application shall give the name and address of the applicant, and shall adequately detail, with appropriate references to the existing dam, the proposed reconstruction, repair, alteration, abandonment, breach, or removal of the dam. The application shall be accompanied by plans and specifications signed and sealed by the design engineer. The agency may waive any of the requirements of the application process outlined in this section if: (1) the requirements are unnecessary for the application approval, or (2) an emergency is declared by the agency.

C. In case of an emergency where the agency declares that repairs or breaching of the dam is necessary to safeguard life and property, repairs or breaching shall be started immediately by the owner or by the agency at the owner's expense. The agency shall be notified at once of emergency repairs or breaching when instituted by the owner; and

D. The proposed repairs, breaching and work shall conform to such orders as the agency issues.

Article 5300. Application Approval

5310. Upon receipt of an application the agency shall approve or disapprove the application within the time provided in Section 5330.

5320. If an application is incomplete or defective, the agency shall return the application to the applicant to correct the defects. If the applicant wishes to pursue the agency's approval of the application, the applicant must correct the defects in the application and must resubmit the application to the agency within 30 days, or such additional time as the agency may grant the applicant, after the

agency returns the application to the applicant. If the application is not returned to the agency within the appropriate time period, the agency shall reject the application.

5330. No applications shall be approved in fewer than 10 days after the receipt of the fee required by Article 6100, but all applications shall be approved or disapproved as soon as practicable thereafter. At the discretion of the agency, public hearings may be held on each application.

5340. Application approval shall be granted with terms, conditions, and limitations necessary to safeguard life and property.

5350. Actual construction, reconstruction, enlargement, repair, alteration, breach, removal, or abandonment shall be commenced within the time frame set by the agency; otherwise, the application approval becomes void.

5360. The agency may, upon written application and for good cause shown, extend an owner's time for commencing construction, reconstruction, repair, alteration, breach, removal, or abandonment of a dam or reservoir.

5370. Written notice shall be provided to the agency at least 10 days before construction, reconstruction, repair, alteration, breach, removal, or abandonment is to begin and such other notices shall be given to the agency as it may require.

Chapter 6000. Fees

Article 6100. The application for construction, reconstruction, enlargement, repair, alteration, breach, removal, or abandonment of a dam shall set forth the estimated cost of the project and shall be accompanied by a filing fee as established in the regulations.

6110. Only one filing fee shall be collected for an enlargement of a dam by flashboards, sandbags, earthen levees, gates, or other works, devices, or obstructions which will from time to time, be removed and replaced or opened and shut and thereby operated so as to vary the surface elevation of the reservoir.

6120. For the purposes of this Act, the estimated cost of the dam construction, reconstruction, enlargement, repair, alteration, breach, removal, or abandonment involved shall include the following:

A. The cost of all labor and materials for the dam, appurtenant works and reservoir;

B. The cost of preliminary investigations and surveys;

C. The cost of the construction plant properly chargeable to the cost of the dam and reservoir; and

D. Any and all other items entering directly into the cost of the dam and reservoir.

6130. Excluded from the cost listed in Section 6120 shall be:

A. The costs of right-of-way, detached powerhouses, electrical generating machinery, and roads and railroads affording access to the dam and reservoir; and

B. Any and all other items not entering directly into the cost of the dam and reservoir.

6140. Dams and reservoirs that are 90 percent or more constructed, reconstructed, enlarged, repaired, altered, removed or abandoned on the effective date of this Act as determined by the agency and that are subject to the provisions of this Act shall not be required to pay a fee but shall submit an application for approval and issuance of an application approval. Application approvals of dams and reservoirs that are made subject to this Act that are found by the agency to have been less than 90 percent constructed, reconstructed, enlarged, repaired, altered, removed or abandoned on the effective date of this Act shall be accompanied by fees reduced by the percentage of construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment found by the agency to have been completed on that date.

6150. An application approval shall not be considered by the agency until the filing fee is received. All or part of the filing fee may be returned to the applicant only if he withdraws or cancels the application any time prior to the start of construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment. The amount of the refund will be determined by the agency with due regard to funds actually expended by the agency in review of the application.

6160. Within 30 days after giving the notice of completion required in Section 7110 and Section 7310, the owner shall file a sworn affidavit with the agency stating the actual cost of the dam and reservoir or enlargement thereof. to determine whether a further fee is due. In the event the owner of a new or enlarged dam, because of loss of records, recent change of ownership, or other causes beyond his control, is unable to report the actual cost of construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment, he shall file an affidavit, stating the reasons why. The agency shall then make its own appraisal of the cost of construction, reconstruction, enlargement, repair,

alteration, breach, removal or abandonment, and determine what further fee, if any, is required.

6170. All filing fees and other charges collected under the provisions of this Act shall be paid into a special fund in the state treasury, to be available to the agency for expenditure for the purposes authorized by this Act.

6180. The fees provided for in this article shall be required of all owners as defined in Chapter 1000 of this Act.

Article 6200. Annual Registration Fees and Inspection Fees

6210. Owners of existing dams holding certificates of approval to impound shall be assessed an annual registration fee as established in the regulations. Existing certificates of approval to impound will be extended for one year upon receipt of the annual registration fee. Any certificate of approval to impound is void without notification to the person holding the certificate of approval to impound when the annual registration fee is more than forty-five (45) days past due. Resubmission of an application is required where a certificate of approval to impound has become void due to failure to pay the appropriate annual registration fee within 45 days of the date due; and

6220. Dam owners shall pay a fee following state inspections conducted in accordance with Section 8130 of this Act.

Chapter 7000. Inspections and Certificates of Approval to Impound

Article 7100. New, Reconstructed or Enlarged Dams and Reservoirs

7110. The design engineer shall be represented during construction as specified in Section 7610. Immediately upon completion of a new or reconstructed dam and reservoir, or enlargement of a dam and reservoir, the owner shall give a notice of completion to the agency. The owner shall file with the agency a statement signed by the design engineer certifying that the project was constructed, reconstructed or enlarged in conformance with approved plans and specifications, accompanied by supplementary drawings or descriptive matter signed and sealed by the design engineer showing or describing the dam and reservoir as actually constructed, reconstructed, or enlarged. Such supplementary materials shall include, but not be limited to, the following:

A. A record of all geological boreholes and grout holes and grouting;

B. A record of permanent location points, benchmarks and instruments embedded in the structure;

C. A record of tests of concrete or other material used in the construction, reconstruction, or enlargement of the dam and reservoir; and

D. A record of initial seepage flows and embedded instrument readings.

Article 7200. Certificates of Approval to Impound

7210. Each dam owner must hold a valid certificate of approval to impound in order to legally impound water under the laws of this State.

7220. A certificate of approval to impound shall be issued by the agency upon a finding by the agency that the dam and reservoir are safe to impound water within the limitations prescribed in the application approval. No water shall be impounded by a dam or reservoir prior to issuance of a valid certificate to impound.

7230. Each certificate of approval to impound issued by the agency under this Act shall contain such terms and conditions as the agency may prescribe.

7240. The agency shall revoke, suspend, or amend any certificate of approval to impound whenever it determines that the dam or reservoir constitutes a danger to life and property. Upon the agency's revocation of a certificate to impound, the owner of the dam must take action within time limits specified by the agency to alleviate the hazard associated with the dam.

7250. Before any certificate of approval to impound is revoked by the agency, the agency shall hold a public hearing. Written notice of the time and place of the hearing shall be mailed, at least 10 days prior to the date set for the hearing, to the holder of the certificate to impound. Any interested person(s) may appear at the hearing and present their views and objections to the proposed action. Any petition to a court of appropriate jurisdiction to inquire into the validity of action of the agency revoking a certificate of approval to impound shall be commenced within 30 days after the date the agency issues its decision to revoke the owner's certificate to impound. An appeal of the agency's decision shall not be constitute an automatic stay of the agency's action.

Article 7300. Repaired or Altered Dams and Reservoirs

7310. Immediately upon completion of the repair or alteration of any dam or reservoir, the owner shall give written notice of completion to the agency. The design engineer shall file with the agency a written statement certifying that the repairs or alterations were completed in accordance with the approved plans and specifications. The statement shall be accompanied by supplementary drawings

and descriptive matter signed and sealed by the design engineer describing the dam and reservoir as repaired or altered together with such maps, data, records, and information pertaining to the dam and reservoir as repaired or altered.

7320. A certificate of approval to impound shall be issued upon a finding by the agency that the dam and reservoir are safe to impound water within the limitations and conditions prescribed in the application approval. Pending issuance of a new or revised certificate of approval to impound, the owner of the dam or reservoir shall not cause the dam or reservoir to impound water beyond the limitations or conditions prescribed in the existing application approval.

Article 7400. Removal, Breach, or Abandonment of Dams and Reservoirs

7410. Upon completion of the removal, breach, or abandonment of a dam, the design engineer shall file with the agency a written statement certifying that the breach, removal or abandonment was completed in accordance with the approved plans and specifications.

7420. Before final approval of the removal of a dam or reservoir is issued, the agency shall inspect the site of the work and determine that all work was accomplished in substantial conformance with the approved application.

7430. Following the removal of a dam or reservoir, the agency may report this event in a timely manner to the National Inventory of Dams (NID)

Article 7500. Complaints of Unsafe Conditions

7510. Upon receipt of a written complaint alleging that the person or property of the complainant is endangered by the construction, reconstruction, enlargement, repairs, alterations, maintenance, or operation of any dam and reservoir, the agency shall cause an inspection and investigation to be made unless the data, records, and inspection reports on file are found adequate to make a determination whether the complaint is valid. The complainant shall be provided with a copy of the official report of the inspection and investigation.

7520. If the agency finds that an unsafe condition exists, the agency shall notify the owner to take such action as is necessary to render or cause the condition to be corrected, including breaching or removal of any dam found beyond repair. If the owner is unavailable or unresponsive, the agency may commence action under Chapter 8000, Article 8200 – Emergency Actions.

Article 7600. Inspection During Progress of Work

7610. During the construction, reconstruction, enlargement, repair, alteration, breach, abandonment or removal of any dam or reservoir, the agency shall make periodic inspections for the purpose of ascertaining compliance with

the approved plans and specifications. The agency shall require the owner to provide adequate supervision by an engineer during construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment and to provide sufficient information to enable the agency to determine that conformity with the approved plans and specifications is being attained. The design engineer shall be continuously represented on-site during construction.

7620. If, after any inspection or investigation, during the construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment, or at any time prior to issuance of a certificate of approval to impound, it is found by the agency that modifications or changes are necessary to ensure the safety of the dam, the agency shall order the owner to revise his plans and specifications.

7630. If at anytime during construction, reconstruction, enlargement, repair, alterations, breach, removal, or abandonment of any dam and reservoir, the agency finds that the work is not being done in accordance with the provisions of the approved plans and specifications, the agency shall deliver a written notice of noncompliance to the owner. The notice shall be delivered by registered mail or by personal service to the owner.

A. The notice of non-compliance shall state the particulars in which the approved plans and specifications are not being or have not been complied with and shall order the immediate compliance with the approved plans and specifications; and

B. The agency may order that no further work be done until such compliance has been effected and approved by the agency.

7640. A failure to comply with the application approval may cause revocation of application approval by the agency. If compliance with the notice is not forthcoming in sixty days, the agency shall order the incomplete structure removed sufficiently to eliminate any safety hazard to life or property.

Chapter 8000. Maintenance, Operation, Emergency Actions and Funding

Article 8100. Maintenance and Operation

8110. The agency shall regulate the maintenance and operation of dams and reservoirs as necessary to safeguard life and property from a dam failure.

8120. The agency shall require owners to keep available and in good order, records of original and any modification construction. The owner shall report at least annually with respect to maintenance, operation and engineering, including horizontal and vertical controls, seepage measurements, piezometric

data and geologic investigations. The agency shall require engineering and geologic investigations to safeguard life and property. The agency may accept reports of equivalent inspections prepared by governmental agencies. In addition, the owner of a dam and reservoir shall immediately advise the agency of any flood or unusual circumstances which may affect the safety of the dam and reservoir.

8130. The agency shall make inspections of dams and reservoirs at any time for the purpose of determining their safety. If serious safety concerns are found by the agency during the inspections, the agency shall require the owner to conduct tests and investigations sufficient for the agency to determine the condition of the dam. After review of the tests or investigations, the agency may require modification, removal or breach of the dam or alteration of operating procedures to restore or improve the safety of the dam, and may require installation of instrumentation to monitor the performance of the dam.

Article 8200. Emergency Actions

8210. Owners of dams and reservoirs have the primary responsibility for determining when an emergency involving a dam or reservoir exists. When the owner of a dam or reservoir determines an emergency exists, the owner shall immediately implement the emergency action plan required by Section 4140, notify any persons who may be endangered if the dam should fail, notify emergency management organizations, and take additional actions necessary to safeguard life, health and property.

8220. If necessary actions are not being taken by the owner in the judgment of the agency, the agency has the authority and shall take any action necessary to protect life and property if, in the agency's judgment, either:

A. 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 relative to maintenance or operation, or

B. Passing or imminent floods or any other condition threatens the safety of any dam or reservoir.

8230. In applying the remedial means provided for in this article, the agency may in an emergency with its own forces, or by other means at its disposal, do any or all of the following:

A. Take full charge and control of any dam or reservoir;

B. Lower the water level by releasing water from the reservoir;

C. Completely drain the reservoir;

D. Perform any necessary remedial or protective work at the site;

or

E. Take such other steps as may be essential to safeguard life and property.

8240. The agency shall continue in full charge and control of such dam and reservoir and its appurtenances until they are rendered safe or the emergency occasioning the action has ceased and the owner is able to take back such operations. The agency's take-over of the dam, the reservoir, or their appurtenances shall not relieve the owner of a dam or reservoir of legal liability to the agency or third parties for those items which are causing an emergency situation. The agency's assumption of control over the dam shall not constitute a takings and the agency shall not be liable to the dam owner or others for diminution in value that may be caused by the agency's work.

Article 8300. Funding

8310. The cost and expense of the remedial means provided in this article, including cost of any work done to render a dam and reservoir or its appurtenances safe, shall be collected by presentation of bills to owners in the same manner as other debts to the state are recoverable. If such bills are not promptly paid by the owners, the cost shall be recovered by the state from the owner by action brought by the agency in a court of appropriate jurisdiction.

8320. Emergency Dam Repair Fund

A. The emergency dam repair fund shall be funded through monies appropriated by the legislature and monies collected by the agency in full or partial satisfaction of liens created by Subsection 8320 B (iii). Monies in the fund shall be used to employ remedial measures necessary to protect life and property in accordance with provisions of Section 8230 and Section 8240. The agency shall administer the fund. On notice from the agency, the state treasurer shall invest and divest monies in the fund and monies earned from investment shall be credited to the fund. Monies in the emergency dam repair fund are exempt from lapsing.

B. The agency may spend monies from the emergency dam repair fund established by Section 8320 with the following provisions:

i. If monies in the emergency dam repair fund are insufficient to pay for such remedial measures, the agency may transfer monies

from the non-emergency dam repair fund established by Section 8330 to meet necessary costs of employing remedial measures;

ii. The agency shall remain in full charge and control of the dam, reservoir and appurtenances until they have been rendered safe or the emergency has terminated;

(iii). The costs and expenses of the control, regulation and abatement provided by this section, including costs of construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment work done to render the dam, reservoir, or appurtenances safe, shall constitute a statutory lien against all property of the owner. The lien shall be considered prior and superior to all other mortgages, liens or encumbrances of record even if those other mortgages, liens, or encumbrances were filed before the lien becomes due.

iv. The lien referred to in Subsection 8320 B (iii) may be perfected and foreclosed in advance of construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment or after completion of the construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment. If perfected in advance, the lien shall be perfected by the filing of an affidavit of the agency setting forth the estimate of the costs of construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment within the county in which the dam is located in the same manner as prescribed for mechanic's liens. When the affidavit is filed, the amount set forth in the affidavit shall be a lien in such amount against all property of the owner. If the actual cost of construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment exceeds the estimated cost, the agency may amend the affidavit setting forth the additional estimated cost. If the estimated cost exceeds the actual costs of construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment at completion, the agency shall file an amended affidavit at completion. If a lien is perfected in advance and the construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment is not commenced within two years from the date of perfection, the lien shall be void. The agency shall file a satisfaction of lien upon payment of the costs of construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment by the owner;

v. Monies collected in full or partial satisfaction of a lien created pursuant to Section 8320 B (iii) of this section shall be deposited in the emergency dam repair fund established by Section 8320.

8330. Non-Emergency Funding

A. The Agency shall create a Dam Rehabilitation Loan Program; or may partner with other public or private agencies or organizations to create a

Dam Rehabilitation Loan Program. The program shall initially be funded with \$XX Million through monies appropriated by the legislature and:

i. The State Legislature may authorize required funding to expand the financial size of the Dam Rehabilitation Loan Program.

ii. The Dam Rehabilitation Loan Program is a revolving fund to be used exclusively for the purposes of this law. The Program shall be initially funded through monies appropriated by the legislature

iii. The Program shall be subsequently funded through additional monies appropriated by the legislature or agency inspection fees collected, filing fees collected pursuant to Article 6100 and Article 6200, payments of principal and interest collected by the agency pursuant to Section 8330, civil penalties collected pursuant to Section 9050, monies paid to the fund pursuant to directive of the legislature and all interest earned on the investment of monies in the fund by the state treasurer.

iv. The Dam Rehabilitation Loan Program may obtain funds through partnerships with any private or public, bonding or loaning, agency or organization.

v. State funding to the Dam Rehabilitation Loan Program cannot be reduced because of federal funds provided for a rehabilitation loan program.

vii. Monies in the Dam Rehabilitation Loan fund do not revert to the State general fund. Monies in the fund are exempt from lapsing.

B. The following Dam Rehabilitation Loan Program provisions apply:

i. Monies in the fund shall be used for loans as provided in Section 8330 A. The agency may transfer monies in the fund to the emergency dam repair fund established by Section 8320 to pay necessary costs of remedial measures as authorized in Section 8230 and Section 8240; and

ii. The agency may grant loans from the non-emergency dam repair fund to dam owners to defray the costs of repairing dams which the agency determines to be dangerous to the safety of life and property but which are not in an emergency condition. Loans shall be granted on such terms and conditions as may be imposed by the agency. The following provisions apply:

(a) The Agency shall adopt administrative rules that are required to administer this statute.

(b) The Agency may take any administrative or legal action necessary for the administration of this statute.

iii. If the balance of the non-emergency dam repair fund exceeds one million dollars, no single loan shall be made for more than twenty percent of the monies available in the fund. No loan shall be made to any dam owner that, at the time of the loan application, has more than twenty percent of the outstanding loans of the fund;

iv. The loans granted by the agency shall be for a term of not more than twenty years; and the loans shall bear interest at rates set by the agency in the regulations;

v. Each loan shall be evidenced by a contract between the dam owner and the agency, acting on behalf of this state. The contract shall provide for the loan by this state of a stated amount to defray some or all of the costs of repairing the dam. The contract shall provide for equal annual payments of principal and interest for the term of the loan. Eligible cost provisions include:

(a) Any costs directly related to rehabilitating safety deficiencies of a dam shall be eligible to be funded through the Dam Rehabilitation Loan Program.

(b) Fees for analysis, feasibility work, alternative evaluation, and engineering design, are only eligible retroactively after construction has been initiated, or at the point that analysis has shown a dam to be in compliance.

(c) Up to 100% of rehabilitation costs for a dam may be loaned.

(d) Dam owners may use multiple programs or sources to fund the rehabilitation costs for a dam, up to 100% of rehabilitation costs.

(e) Rehabilitation cost for any dam is eligible, except for dams owned by the federal government.

(f) Any costs directly related to compliance with other laws and regulations, above the State's minimum dam safety requirements are eligible as part of an overall rehabilitation project.

(g) Any costs for State agency required fish passage is eligible if it is part of an overall rehabilitation project; but such

costs are not eligible if they are not part of an overall rehabilitation project.

vi. The agency may take whatever security interest it deems necessary in the dam owner's property in exchange for the loan. If the agency chooses to take a security interest in the dam owner's property, the agency shall perfect that security interest by filing appropriate documentation with the proper authorities.

vii. The attorney general or the agency's legal counsel may, with the consent of the agency, commence whatever actions are necessary to enforce the contract and achieve repayment of loans provided by the agency pursuant to this section.

C. Owners' responsibilities include:

i. Once a loan has been granted under this statute, the owner of a dam must have an operation and maintenance plan with written, regularly scheduled reports, so as to maintain and keep the structure and its appurtenant works in the state of repair and operating condition required by the exercise of prudence; due regard for life or property; the application of sound and accepted engineering principles; the provisions of rules, guidelines, or policies.

ii. As part of any rehabilitation project utilizing funds from this program the owner must have an emergency action plan developed (if one doesn't currently exist).

iii. Cooperate with the Agency's agents, engineers, and other employees in the conduct of the statute.

iv. Facilitate access to the structure or appurtenance.

v. Furnish upon request the plans, specifications, operating and maintenance data, or other information that is pertinent to the structure, appurtenance, and loan.

D. General Loan Guidelines

i. Owners of dams without taxing authority should be allowed to participate in the Dam Rehabilitation Loan Program.

ii. Complete rehabilitations are to be encouraged, but phased projects can be funded.

iii. Removal of dams as a rehabilitation alternative should be allowed.

iv. As part of the application process, owners should demonstrate the ability to appropriately operate and maintain the dam after rehabilitation is complete.

v. Owners are allowed to partner with an individual, local agency, or organization, for purposes of the loan, and for purposes of operation and maintenance.

vi. Rehabilitation projects that are in compliance with State statute and rules, and are permitted, accepted, and approved by the State Dam Safety Office are eligible to be funded through the Dam Rehabilitation Loan Program.

vii. If a dam is exempt from State regulation, to obtain funding through the Dam Rehabilitation Loan Program, the project must adhere to State standards that relate to design, construction and provisions of this act.

viii. Costs for lake enhancement projects such as, lake dredging, sediment removal projects, or boat ramps, which do not enhance the safety of the dam, are not eligible to be funded through the Dam Rehabilitation Loan Program.

ix. The Agency and its agents, engineers, and other employees may, for the purposes of this Model State Law, enter upon any land or water in the State without a search warrant or liability for trespass.

x. The State Legislature authorizes staff positions, required funding, and organizational structure, to administer the Dam Rehabilitation Loan Program.

xi. This statute does not create a liability for damages against the Agency, its officers, agents, and employees caused by or arising out of any of the following:

(a) The construction, maintenance, operation, or failure of a dam, or appurtenant works.

(b) The issuance and enforcement of an order or a rule issued by the Agency to carry out the Agency's duties.

xii. The State does not assume ownership obligations, responsibilities, or liabilities if an owner defaults on a loan.

Chapter 9000. Offenses and Penalties

9010 Penalties

A. Whenever the Agency finds that any owner or any person has violated any provision of the Act or any rule, regulation or order issued pursuant thereto, the Agency may:

- i. Issue an order requiring any such person to comply in accordance with subsection B. of this section; or
- ii. Bring a civil action in accordance with subsection C. of this section; or
- iii. Levy a civil administrative penalty in accordance with subsection D. of this section; or
- iv. Bring an action for a civil penalty in accordance with subsection E. of this section; or
- v. Petition the Attorney General to bring a criminal action in accordance with subsection F. of this section.

Recourse to any of the remedies available under this section shall not preclude recourse to any of the other remedies prescribed in this section or by any other applicable law.

B. Whenever, on the basis of available information, the Agency finds a person in violation of any provision of this Act or any rule, regulation or order issued pursuant thereto, the Agency may issue an administrative order:

- i. Specifying the provision or provisions of the law, rule, regulation, or order, of which the person is in violation;
- ii. Citing the action which constituted the violation;
- iii. Requiring compliance with the provision or provisions violated;

- iv. Requiring the restoration of the area which is the site of the violation; and
- v. Providing notice to the person of the right to a hearing on the matters contained in the order.

C. The Agency is authorized to institute a civil action in Superior Court for appropriate relief from any violation of this Act, or any rule, regulation or order issued pursuant thereto. Such relief may include, singly or in combination:

i. A temporary or permanent injunction, including an order or judgment as will effectually secure the persons interested from danger of loss from the breaking of a dam. The court may proceed in the action in a summary manner or otherwise;

ii. Assessment of the violator for the costs of any investigation, inspection, or monitoring survey which led to the establishment of the violation, and for the reasonable costs of preparing and bringing legal action under this subsection

iii. Assessment of the violator for any costs incurred by the State in removing, correcting, or terminating the adverse effects resulting from any violation for which legal action under this subsection may have been brought;

iv. Assessment against the violator for compensatory damages for any loss or destruction of wildlife, fish or aquatic life, and for any other actual damages caused by a violation;

v. A requirement that the violator restore the site of the violation to the maximum extent practicable and feasible.

D. The Agency is authorized to assess a civil administrative penalty of up to \$25,000 for each violation of any provision of this Act, or any rule, regulation or order issued pursuant thereto, and each day during which each violation continues shall constitute an additional, separate, and distinct offense. Any amount assessed under this subsection shall fall within a range established by regulation by the Agency for violations of similar type, seriousness, and duration. In adopting rules and regulations establishing the amount of any penalty to be assessed, the Agency may take into account the economic benefits from the violation gained by the violator. No assessment shall be levied pursuant to this section until after the party has been notified by certified mail or personal service. The notice shall:

i. Identify the section of the law, rule, regulation or order violated;

ii. Recite the facts alleged to constitute a violation;

iii. State the amount of the civil penalties to be imposed; and

iv. Affirm the rights of the alleged violator to a hearing. The ordered party shall have 20 days from receipt of the notice within which to deliver to the Agency a written request for a hearing. After the hearing and upon finding that a violation has occurred, the Agency may issue a final order specifying the amount of the fine imposed. If no hearing is requested, the notice shall become final

after the expiration of the 20-day period. Payment of the assessment is due when a final order is issued or the notice becomes a final order. The authority to levy an administrative penalty is in addition to all other enforcement provisions in this act and in any other applicable law, rule, or regulation, and the payment of any assessment shall not be deemed to affect the availability of any other enforcement provisions in connection with the violation for which the assessment is levied. Any civil administrative penalty assessed under this section may be compromised by the Agency upon the posting of a performance bond by the violator, or upon such terms and conditions as the Agency may establish by regulation.

E. A person who violates any provision of this Act or any rule, regulation or order issued pursuant thereto, an administrative order issued pursuant to subsection b. of this section, or a court order issued pursuant to subsection c. of this section, or who fails to pay a civil administrative penalty in full pursuant to subsection d. of this section, shall be subject, upon order of a court, to a civil penalty not to exceed \$10,000 per day of such violation, and each day during which the violation continues shall constitute an additional, separate, and distinct offense. In addition to any penalties, costs or interest charges, the court may assess against the violator the amount of actual economic benefit accruing to the violator from the violation.

F. A person who purposely, knowingly or recklessly violates any provision of this Act, or any rule, regulation or order issued pursuant thereto, shall be guilty, upon conviction, of a crime of the fourth degree and shall be subject to a fine of not less than \$2,500 nor more than \$25,000 per day of violation. A second or subsequent offense under this subsection shall subject the violator to a fine to the contrary, of not less than \$5,000 nor more than \$50,000 per day of violation. A person who knowingly makes a false statement, representation, or certification in any application, record, or other document filed or required to be maintained under the provisions of this Act shall be guilty, upon conviction, of a crime of the fourth degree and shall be subject to a fine of not more than \$10,000

G. In addition to the penalties prescribed in this section, a notice of violation of any provision of this Act, or any rule, regulation or order issued pursuant thereto, shall be recorded on the deed of the property wherein the violation occurred, on order of the Agency, by the clerk or register of deeds and mortgages of the county wherein the affected property is located and with the clerk of the Superior Court and shall remain attached thereto until such time as the violation has been remedied and the Agency orders the notice of violation removed.

H. The Agency may require an owner or person having control of a reservoir or dam to provide any information the Agency requires to determine compliance with any provision of this Act, or any rule, regulation or order issued pursuant thereto.

I. Any person who knowingly, recklessly, or negligently makes a false statement, representation or certification in any application, record, or other document filed or required to be maintained under the provisions of this Act shall be in violation of the act and shall be subject to the penalties assessed pursuant to subsections D. and E. of this section.

J. All penalties collected pursuant to this section or sums collected pursuant to Act shall be deposited in the " Non-emergency/Emergency Dam Repair Fund," established pursuant to this Act.

K. The Agency shall have the authority to enter any property, facility, premises, or site for the purpose of conducting inspections to determine the condition of any dam, or to conduct inspections of ordered repairs or to otherwise determine compliance with the provisions of this Act.

9020 Cease and Desist Order; Temporary Cease and Desist Order; Hearing; Injunctive Relief

A. Except as provided by Subsection B of this section, if the agency has reason to believe that an owner or person is violating or has violated a provision of this Act, application approval, certificate of approval to impound, rule, regulation, order or requirement of the agency issued or adopted pursuant to this Act, the agency shall give the owner or person written notice by certified mail that the owner or person may appear and show cause at a hearing before the agency not less than thirty days from the date of mailing of the notice why the owner or person should not be ordered to cease and desist from the violation. The notice shall inform the owner or person of how to request the hearing and the consequences of failure to request a hearing.

B. If the agency finds that an owner or person is constructing, reconstructing, enlarging, repairing, altering, operating, removing, or abandoning a dam without having first obtained the required application approval of the agency, the agency shall issue a temporary order for the owner or person to cease and desist the construction, reconstruction, enlargement, repair, alteration, operation, breach, removal or abandonment pending final action by the agency pursuant to Subsection C. of this section. The temporary order shall include written notice by certified mail to the owner or person of a hearing before the agency to show cause why the temporary order should be vacated.

C. After a hearing pursuant to Subsection A or Subsection B of this section, or after the expiration of the time to request a hearing, the agency shall issue a decision and final order. The decision and final order may take such form as the agency determines to be reasonable and appropriate and may include a determination of violation, a cease and desist order, the recommendation of a civil penalty and an order directing that positive steps be taken to abate or ameliorate any harm or damage arising from the violation. The owner or person affected may appeal the hearing decision to a court of appropriate jurisdiction in which the violation is alleged to have occurred.

D. If the owner or person continues the violation after the agency has issued a final decision and order pursuant to Subsection C. of this section or a temporary order pursuant to Subsection B of this section, the agency may apply for a temporary restraining order or preliminary or permanent injunction from a court of appropriate jurisdiction according to the state rules of civil procedure. A decision to seek injunctive relief does not preclude other forms of relief or enforcement against the violator.

Chapter 10000. Dams and Reservoirs Existing Prior to the Effective Date of this Act

Article 10100. Dams and Reservoirs Completed Prior to Effective Date of this Act

10110. Every owner of a dam that falls within the definition of a dam in this Act and completed prior to the effective date of this Act shall file with the agency a separate application and any other supporting information as required by the agency for each of these dams. Each application shall also be accompanied by applicable application fees referenced by Article 6100.

10120. The agency shall give notice to file an application to impound to owners of such dams or reservoirs who have failed to file such applications as required by this article.

10130. The notice provided for in this article shall be delivered by certified mail to the owner at his last address of record in the office of the county tax assessor in which the dam is located. Such mailing shall constitute service.

10140. The agency shall make inspections of such dams and reservoirs.

10150. The agency shall require owners of such dams and reservoirs to perform at their expense such work or tests as may reasonably be required to disclose information sufficient to enable the agency to determine whether to issue certificates of approval to impound, or to issue orders directing further work at the owner's expense necessary to safeguard life and property. For this purpose, the agency may require an owner to lower the water level of, or to drain, the reservoir.

10160. If, upon inspection or upon completion to the satisfaction of the agency of all work that may be ordered, the agency finds that the dam and reservoir are safe to impound water, a certificate of approval to impound shall be issued. The agency may find that the dam or reservoir will not safely impound water and may refuse to issue a certificate of approval to impound. Upon finding the dam and reservoir are unsafe to impound water, the agency shall issue a written notice to the owner, whereupon the owner shall cause the dam and reservoir to no longer impound water after receipt of the notice.

Article 10200. Dams and Reservoirs Under Construction, Reconstruction, Enlargement, Repair, Alteration, Breach, Removal or Abandonment Before Effective Date of this Act

10210. Any dam or reservoir that falls within the definition of a dam and reservoir in this Act and which the agency finds was under construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment and based on its findings not 90 percent constructed, reconstructed, enlarged, repaired, altered, removed or abandoned on the effective date of this Act shall, except as provided in Section 10220, be subject to the same provisions in this Act as a dam or reservoir commenced after that date. Every owner of such a dam and reservoir shall file an application with the agency for the agency's written application approval of the plans and specifications.

10220. Construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment work on such a dam and reservoir may proceed, provided an application for approval of the plans and specifications is filed, until an application approval is received by the owner approving the dam and reservoir or an order is received by the owner specifying how the construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment must be performed to render the dam or reservoir safe. After receipt of an application approval or order specifying how construction, reconstruction, enlargement, repair, alteration, breach, removal or abandonment of the dam or reservoir must be performed, work thereafter must be in accordance with the application approval or order.

A. All laws and parts of law in conflict with this Act are hereby repealed.

B. A declaration that certain parts of this Act are unconstitutional shall not affect the constitutionality of other parts of this Act.

APPENDIX K

SAMPLE FEE STRUCTURES

CASE 1: WEST VIRGINIA

CASE 1: West Virginia Example:

Annual Registration Fees - Owners of existing dams holding certificates of approval shall be assessed an annual registration fee. In accordance with provisions of the Dam Control and Safety Act, West Virginia Code • 22-14-7, existing certificates of approval will be extended for one year upon receipt of the annual registration fee, an inspection report, a monitoring and emergency action plan, and a maintenance plan; Provided that where an approved, up-to-date: inspection report; monitoring and emergency action plan; and maintenance plan are on file in the Dam Safety Section, and where no outstanding violation(s) exist, then the certificate of approval will be extended without resubmission of the foregoing documents upon receipt of the annual registration fee. The following annual registration fees apply:

Low hazard potential dams shall be assessed fifty dollars.

Significant hazard potential dams shall be assessed seventy-five dollars.

High hazard potential dams shall be assessed one hundred dollars.

Any certificate of approval issued pursuant to W. Va. Code • 22-14-17 and this rule is void without notification to the person holding the certificate of approval when the annual registration fee is more than one hundred eighty (180) days past due. Resubmission of an application in accordance with section 5 of this rule is required where a certificate has become void due to failure to pay the appropriate annual registration fee within 180 days of the date due.