

1 Section 1. Amend Title 7 of the Delaware Code by enacting in Part IV a new “Chapter 42. Dam Safety” as follows:

2 “CHAPTER 42. DAM SAFETY.

3 § 4201. Purpose.

4 It is the purpose of this Chapter to provide for the proper design, construction, operation, maintenance and
5 inspection of dams in the interest of public health, safety, and welfare, in order to reduce the risk of failure of dams
6 and to prevent injuries to persons, damage to downstream property and loss of reservoir storage.

7 § 4202. Definitions.

8 The following words, terms and phrases, when used in this Chapter, shall have the meanings ascribed to them
9 except where the context clearly indicates a different meaning:

- 10 (a) ‘Dam’ shall mean any artificial barrier, including appurtenant works, with the ability to impound or
11 divert water, wastewater, or liquid-borne materials.
- 12 (b) ‘Department’ shall mean the Department of Natural Resources and Environmental Control.
- 13 (c) ‘Secretary’ shall mean the Secretary of the Department of Natural Resources and Environmental
14 Control.
- 15 (d) ‘Owner’ shall include any of the following who own, control, operate, maintain, manage, or propose to
16 construct, reconstruct, enlarge, repair, alter, remove or abandon a dam or reservoir: the State and its
17 departments, institutions, agencies and political subdivisions; every municipal or quasi-municipal
18 corporation; every public utility; every district; every person; the duly authorized agents, lessees, or
19 trustees of any of the foregoing; and receivers or trustees appointed by any court for any of the
20 foregoing.
- 21 (e) ‘Maximum Storage Elevation’ shall mean the elevation of the lowest point of the top of dam
22 independent of low points caused by partial failure or collapse.
- 23 (f) ‘Person’ shall mean any person, firm, association, organization, partnership, business trust, corporation
24 or company.
- 25 (g) ‘Emergency Action Plan’ shall mean a plan prepared by the dam owner and approved by the Department
26 which identifies emergency conditions at a dam and specifies preplanned actions to minimize loss of life
27 and property damage in the event of a potential dam failure.
- 28 (h) ‘Reservoir’ shall mean any basin that contains or will contain impounded water, wastewater, or liquid-
29 borne materials by virtue of its having been impounded by a dam.

- 30 (i) 'State' shall mean the State of Delaware.
- 31 (j) 'Supervising Engineer' shall mean the design engineer who is responsible for conducting dam
32 construction quality assurance inspections in order to certify the construction has been completed in
33 accordance with the approved plans and specifications.
- 34 (k) 'High Hazard Potential Dam' shall mean any dam whose failure or mis-operation will cause probable
35 loss of human life.
- 36 (l) 'Significant Hazard Potential Dam' shall mean any dam whose failure or mis-operation will cause
37 possible loss of human life, economic loss, environmental damage, disruption of lifeline facilities, or can
38 impact other concerns.
- 39 (m) 'Low Hazard Potential Dam' shall mean any dam whose failure or mis-operation is unlikely to cause
40 loss of human life but may cause minor economic and/or environmental losses.

41 § 4203. Application.

- 42 (a) This Chapter shall apply to any dam which is owned by the State or any county in the State, or any
43 Municipality or any quasi-governmental agency of the State that is 25 feet or more in height from the natural
44 bed of the stream or watercourse measured at the downstream toe of the barrier or from the lowest elevation
45 of the outside limit of the barrier, or if it is not across a stream channel or watercourse, measured at
46 maximum water storage elevation; or any dam having an impounding capacity, at maximum storage
47 elevation, of 50 acre-feet or more; or any dam that is deemed by the Secretary to be a significant or high
48 hazard potential structure due to its location or other physical characteristics.
- 49 (b) This Chapter shall not apply to any dam that is not in excess of six (6) feet in height regardless of storage
50 capacity, or any dam having a storage capacity at maximum water storage elevation not greater than 15 acre-
51 feet regardless of height, or any low hazard potential dam constructed prior to the effective date of this
52 legislation, unless deemed by the Secretary to be a significant or high hazard potential structure due to its
53 location or other physical characteristics.
- 54 (c) This Chapter shall not apply to any private owner of a dam unless such owner executes a document with the
55 Department requesting such coverage.

56 § 4204. Construction of Dams.

- 57 (a) No owner shall begin the construction of any dam to which this Chapter applies without written approval
58 from the Department. Owners intending to construct any dam to which this Chapter applies shall file with the

59 Department a preliminary application which shall include a dam break analysis, the dam height, the
60 maximum impounding capacity, purpose, location and determination of hazard class, and other information
61 required by the Department. If on the basis of this information it is the opinion of the Department that the
62 proposed dam is exempt from the provisions of this Chapter, it shall notify the owner that no approval from
63 the Department is required. If on the basis of the submitted information it is the opinion of the Department
64 that the proposed dam is not exempt, the Department shall notify the owner that construction shall not be
65 commenced until a full application has been filed by the owner and such application approved in accordance
66 with § __06 and __09 of this Chapter. The Department shall require emergency action plans and operation
67 and maintenance plans for high or significant hazard potential dams, and may also require of owners so
68 notified the filing of any additional information it deems necessary, including, but not limited to, streamflow
69 and rainfall data, maps, plans, and specifications. Every owner applying for approval of a dam subject to the
70 provisions of this Chapter shall also file with the Department a Certificate from a qualified professional
71 engineer, licensed in the State of Delaware. The Certificate should state that the engineer is qualified and
72 responsible for the design of the dam; that the design is safe and adequate; and that the engineer shall be
73 responsible for construction quality assurance to certify that the construction has been completed in
74 accordance with the approved plans.

- 75 (b) The Department shall send a copy of each completed application to the Delaware Emergency Management
76 Agency and other State, Federal and local agencies it considers appropriate for review and comment.
- 77 (c) Upon receipt of a full application in proper form, the Secretary shall give notice in the form of an
78 advertisement in a newspaper of general circulation in the county in which the activity is proposed and in a
79 daily newspaper of general circulation throughout the State:
- 80 (1) the fact that the application has been received;
 - 81 (2) a brief description of the nature of the application;
 - 82 (3) the place at which a copy of the application may be inspected; and
 - 83 (4) procedures to request a public hearing.

84 The Secretary shall hold a public hearing on an application, if he receives a request from any party whose
85 interests are substantially affected by the proposed application, as determined by the Secretary, if such
86 request is received within twenty-one (21) calendar days of the public notice. Such notice shall also be sent

87 by mail to any person who has requested such notification from the Department and provides a name and
88 address.

89 § 4205. Repair, Alteration, or Removal of Dams.

90 (a) Before commencing the repair, alteration or removal of any dam to which this Chapter applies, application
91 shall be made by the owner for written approval by the Department, except as otherwise provided by this
92 Chapter. The application shall state the name and address of the owner, shall adequately detail the changes it
93 proposes to affect, impacts or modifications to plans of operation and maintenance and emergency action
94 plans, and shall be accompanied by maps, plans, and specifications setting forth such details and dimensions
95 as the Department requires. The Department may waive the requirements of this Section for the repair or
96 alteration of a dam if the proposed action is determined to be minor as defined by the Department by
97 regulation. The application shall give such other information concerning the dam and reservoir required by
98 the Department, such information concerning the safety of any change as it may require, and shall state the
99 proposed time of commencement and completion of the work. When the Department determines an
100 application has been completed it may be referred by the Department for agency review and report, as
101 provided by § __04 of this Chapter in the case of original construction. The application for repair, alteration
102 or removal of the dam shall be subject to the public notice requirements.

103 (b) Upon receipt of a full application in proper form, the Secretary shall give notice in the form of an
104 advertisement in a newspaper of general circulation in the county in which the activity is proposed and in a
105 daily newspaper of general circulation throughout the State:

- 106 (1) the fact that the application has been received;
107 (2) a brief description of the nature of the application;
108 (3) the place at which a copy of the application may be inspected; and
109 (4) procedures to request a public hearing.

110 The Secretary shall hold a public hearing on an application, if he receives a request from any party whose
111 interests are substantially affected by the proposed application, as determined by the Secretary, if such
112 request is received within twenty-one (21) calendar days of the public notice. Such notice shall also be sent
113 by mail to any person who has requested such notification from the Department and provides a name and
114 address.

- 115 (c) When repairs are necessary to safeguard life and property they may be started immediately, but the
116 Department shall be notified as soon as practical but no longer than twenty-four (24) hours after such repairs
117 have commenced. The owner shall be required to submit as-built plans and certification from a professional
118 engineer, licensed in Delaware, demonstrating that the repairs comply with this Chapter.

119 § 4206. Actions by the Department Upon Applications.

120 Public notice of application shall consist of an advertisement in a newspaper of general circulation in the
121 county in which the activity is proposed and in a daily newspaper of general circulation throughout the State to
122 include the fact that the application has been received, a brief description of the nature of the application and the place
123 at which a copy of the application may be inspected.

- 124 (a) Following the receipt of requested comments the Department shall approve, disapprove, or approve subject
125 to conditions necessary to ensure safety all applications pursuant to this Chapter.
- 126 (b) A defective application shall not be rejected but notice of the defects shall be sent to the owner. If the owner
127 fails to file a perfected application within thirty (30) days of the date of the notice the original shall be
128 canceled unless further time is allowed.
- 129 (c) If the Department disapproves an application, one (1) copy shall be returned with a statement of its
130 objections. If an application is approved, the approval shall be attached thereto, and a copy returned.
131 Approval shall be granted under terms, conditions, and limitations which the Department deems necessary to
132 safeguard life and property.
- 133 (d) Construction shall be commenced within two (2) years after the date of approval of the application and
134 completed within five (5) years of commencement of construction or the approval is void. The Department
135 upon written application and good cause shown may extend the time for commencing construction or for
136 completing the construction. Notice by registered or certified mail shall be given the Department at least ten
137 (10) days before construction is commenced.

138 § 4207. Fees.

- 139 (a) The Department may establish an application fee not to exceed \$500.00.
- 140 (b) Any fees collected under this Chapter are hereby appropriated to the Department to carry out the purposes of
141 this Chapter. The Secretary shall report through the annual budget process the receipt, proposed use and
142 disbursement of these funds.

143 § 4208 Rules.

144 The Secretary shall develop and adopt regulations and standards in conjunction with a regulatory advisory
145 committee, appointed by the Secretary, which include public and private dam owners, as well as appropriate State and
146 federal agencies, conservation districts, and other governmental subdivisions of the State. Dam safety regulations and
147 standards shall include but not be limited to definitions, permit-by-rule, general requirements and prohibitions,
148 application procedures, dam classification, design criteria, construction requirements, operation and maintenance
149 requirements and inspection requirements.

150 § 4209. Supervision By Qualified Engineers; Reports And Modifications During Work.

- 151 (a) Any project for which the Department's approval is required under §§ 4204, 4205 and 4206 of this Chapter
152 and any project undertaken pursuant to an order of the Department issued pursuant to this Chapter or § 4212
153 of this Chapter shall be designed and the construction supervised by a licensed professional engineer in the
154 State of Delaware with related experience in dam design and construction.
- 155 (b) During the construction, enlargement, repair, alteration, or removal of any dam to which this Chapter applies,
156 the Department may require such progress reports from the supervising engineer responsible for design and
157 construction quality assurance, as it deems necessary.
- 158 (c) If, based on inspection reports, construction inspections or other information, the Department finds that the
159 work is not in compliance with the provisions of the approval and the approved plans and specifications, it
160 shall give written notice to the person who received the approval and to the person in charge of construction
161 of the dam. The notice shall state the particulars in which compliance has not been made, and shall order
162 immediate compliance with the terms of approval, and the approved plans and specifications. The
163 Department may order that no further construction work be undertaken until such compliance has been
164 effected and approved by the Department. A failure to comply with the approval and the approved plans and
165 specifications shall render the approval revocable unless compliance is made after notice as provided in this
166 Chapter.

167 § 4210. Notice of Completion; Certification of Final Approval.

- 168 (a) Within seven (7) days of completion of construction, reconstruction, enlargement, repair, alteration or
169 removal of any dam to which this Chapter applies, notice of completion shall be given to the Department.
170 Within sixty (60) days thereafter supplementary drawings or descriptive matter showing or describing the
171 dam as actually constructed in compliance with the approval and the approved plans and specifications shall
172 be filed with the Department in such detail as the Department may require.

- 173 (b) Upon completion of the project, the supervising engineers, having inspected the work during construction
174 and upon finding that the work has been done as required and that the dam is safe, shall file with the
175 Department a certificate and as-built plans demonstrating that the work has been completed in accordance
176 with the approved design plans, specifications, and other requirements. After review of the supervising
177 engineer's Certificate and as-built plans, unless the Department has reason to believe that the dam is unsafe
178 or is not in compliance with any applicable rule or law, the Department shall grant final approval of the work
179 in accordance with the Certificate, subject to such terms as it deems necessary for the protection of life and
180 property.
- 181 (c) Pending issuance of the Department's final approval, the dam shall not be filled except on written consent of
182 the Department, subject to conditions it may impose.

183 § 4211. Operation and Maintenance of Dams.

184 The Department shall require that dam owners and operators develop, use and update as necessary an
185 Operation and Maintenance Plan which provides guidance and instruction to personnel for the proper operation and
186 maintenance of any reservoir or dam to which this Chapter applies to safeguard life and property. The Operation and
187 Maintenance Plan shall be subject to the approval of the Department and may be reviewed, modified or amended by
188 the Department as deemed necessary to safeguard life and property. The Secretary may adopt, amend, modify or
189 repeal standards for the maintenance and operation of dams as may be necessary for the purposes of this Section. The
190 Department may vary the standards applicable to the various dams giving due consideration to the type and location of
191 the structure, the hazards to which it may be exposed, and the peril of life and property in the event of a failure or mis-
192 operation of the dam.

193 § 4212. Inspection of Dams.

194 The Department shall require regular inspection of any dam to which this Chapter applies to safeguard life
195 and property. The Secretary may adopt, amend, modify or repeal standards for the inspection of dams as may be
196 necessary for the purposes of this Section. The Department may vary the standards applicable to the various dams
197 giving due consideration to the type and location of the structure, the hazards to which it may be exposed, and the
198 peril of life and property in the event that a dam fails to perform its function. The Department shall inform the
199 Delaware Emergency Management Agency of any dam presenting a risk of peril of life and property in the event that
200 the dam fails.

201 § 4213. Appeals.

202 (a) Except as otherwise provided in this Chapter, any action or determination by the Department under this
203 Chapter shall be subject to appeal to the Environmental Appeals Board in accordance with the provisions of 7
204 Del. C. § 6008.

205 (b) Appeals of decisions by the Environmental Appeals Board shall be conducted pursuant to 7 Del. C. § 6009.
206 § 4214. Investigations by the Department.

207 The Department shall make investigations and assemble such data as it deems necessary for a proper review
208 and study of the design and construction of any dams, reservoirs and appurtenances to which this Chapter applies, and
209 for such purposes the Department or its agents may enter upon private property. The Department may employ or make
210 such agreements with geologists, engineers, or other expert consultants and such assistants, as it deems necessary to
211 carry out the provisions of this Chapter.

212 § 4215. Liability for Damages.

213 No action shall be brought against the State of Delaware, the Department, or any agent of the Department or
214 any employee of the State of Delaware or the Department for damages sustained through the partial or total failure of
215 any dam, mis-operation or its maintenance by reason of any supervision or other action taken pursuant to or under this
216 Chapter. Nothing in this Chapter shall relieve an owner or operator of a dam from the legal duties, obligations and
217 liabilities arising from such ownership and operation.

218 § 4216. Enforcement Procedures.

219 (a) Any person who violates any rule, regulation, order, or condition imposed in an approved document or other
220 provision of this Chapter shall be fined not less than \$200.00 or more than \$2000 for each offense. Each day
221 that the violation continues shall constitute a separate offense. The Justice of the Peace Courts shall have
222 jurisdiction of offenses brought under this subsection.

223 (b) Any person who intentionally, knowingly, and after written notice to comply, violates any rule, regulation,
224 order, or condition imposed in an approved document or other provision of this Chapter shall be fined not
225 less than \$500.00 or more than \$10,000.00 for each offense. Each day the violation continues shall constitute
226 a separate offense. The Superior Court shall have jurisdiction over offenses brought under this subsection.

227 § 4217. Rights of Investigation, Entry, Access, Inspection and Protective Action.

228 (a) The Department shall have the right to direct the conduct of such investigations as it may reasonably deem
229 necessary to carry out its duties prescribed in this Chapter and the Department shall have the right to conduct
230 such investigations, and for the purpose of inspections the employees of the Department and agents of the

231 Department have the right to enter at reasonable times on any property, public or private, for the purpose of
232 investigating the condition, construction or operation of any dam or associated equipment facility or
233 property, and to require written statements or the filing of reports under oath, with respect to pertinent
234 questions relating to the construction or operation of any dam. No person shall refuse entry or access to any
235 authorized representative of the Department who requests entry for purposes of inspection, and who presents
236 appropriate credentials, nor shall any person obstruct, hamper or interfere with any representative while in
237 the process of carrying out his/her official duties.

- 238 (c) Notwithstanding any other provisions of this Chapter, the Department, upon receipt of information that any
239 dam may present an imminent and substantial hazard to the public health, safety or welfare, may take such
240 actions as it determines to be necessary to protect the public health, safety or welfare. The Department may
241 direct the owner or custodian of the dam to take such actions as are necessary to prevent, eliminate or reduce
242 the hazard. In the event the owner or custodian fails to take such actions, the Department shall have the right
243 to take all appropriate or necessary action including, but not limited to, breaching or draining. The
244 Department may initiate legal proceedings to recover the emergency costs from the dam owner.”.

245 Section 2. Effective Date.

246 The program shall become effective when provided for in the Annual State Operating FY XX Budget by a
247 specific appropriation.

SYNOPSIS

This legislation establishes a dam safety program in the Department of Natural Resources and Environmental Control to ensure that construction of new dams, or repairs, alterations or removals of existing dams are conducted in accordance with procedures under the Act. The legislation also authorizes the Department to adopt standards for maintenance and operation of publicly owned dams and to conduct dam inspections. Under the Federal classification system, there are three types of dams that are rated according to the potential damage that could be caused if the dams fail. Those types are high hazard, significant hazard and low hazard. This legislation exempts low hazard dams from requirements of the bill. The bill would become effective upon availability of funding.