



# House of Representatives

General Assembly

**File No. 381**

February Session, 2012

Substitute House Bill No. 5130

*House of Representatives, April 12, 2012*

The Committee on Environment reported through REP. ROY of the 119th Dist., Chairperson of the Committee on the part of the House, that the substitute bill ought to pass.

## ***AN ACT CONCERNING THE DAM SAFETY PROGRAM.***

Be it enacted by the Senate and House of Representatives in General Assembly convened:

1 Section 1. Section 22a-401 of the general statutes is repealed and the  
2 following is substituted in lieu thereof (*Effective October 1, 2012*):

3 All dams, dikes, reservoirs and other similar structures, with their  
4 appurtenances, without exception and without further definition or  
5 enumeration herein, which, by breaking away or otherwise, might  
6 endanger life or property, shall be subject to the jurisdiction conferred  
7 by this chapter. The Commissioner of Energy and Environmental  
8 Protection shall formulate all rules, definitions and regulations  
9 necessary to carry out the provisions of this chapter and not  
10 inconsistent therewith. The commissioner or his authorized  
11 representatives may enter upon private property to make such  
12 investigations and gather such data concerning dams, watersheds,  
13 sites, structures and general conditions as may be necessary in the  
14 public interest for a proper inspection, review and study of the design  
15 and construction of such structures and of the environmental impact of

16 such structures on the inland wetlands of the state. The commissioner  
17 may, when necessary, employ or make such agreements with  
18 geologists, other engineers, expert consultants and such assistants as  
19 may be reasonably necessary to carry out the provisions of this  
20 chapter. [The owner of any dam, dike or similar structure under the  
21 jurisdiction conferred by this chapter shall notify the commissioner, by  
22 registered or certified mail return receipt requested, of the transfer of  
23 ownership of any such dam, dike or similar structure not later than ten  
24 days after the date of such transfer.]

25 Sec. 2. Subsection (b) of section 22a-403 of the general statutes is  
26 repealed and the following is substituted in lieu thereof (*Effective*  
27 *October 1, 2012*):

28 (b) The commissioner or his representative, engineer or consultant  
29 shall determine the impact of the construction work on the  
30 environment, on the safety of persons and property and on the tidal  
31 wetlands and inland wetlands and watercourses of the state in  
32 accordance with the provisions of sections [22a-36] 22a-28 to 22a-45,  
33 inclusive, and shall further determine the need for a fishway in  
34 accordance with the provisions of section 26-136, and shall examine the  
35 documents and inspect the site, and, upon approval thereof, the  
36 commissioner shall issue a permit authorizing the proposed  
37 construction work under such conditions as the commissioner may  
38 direct. The commissioner shall send a copy of the permit to the town  
39 clerk in any municipality in which the structure is located or any  
40 municipality which will be affected by the structure. An applicant for a  
41 permit issued under this section to alter, rebuild, repair or remove an  
42 existing dam shall not be required to obtain a permit under sections  
43 [22a-36] 22a-28 to 22a-45a, inclusive, or section 22a-342, 22a-361 or 22a-  
44 368. An applicant for a permit issued under this section to construct a  
45 new dam shall not be required to obtain a permit under sections [22a-  
46 36] 22a-28 to 22a-45a, inclusive, for such construction. An applicant for  
47 a dam safety permit shall not be required to obtain approval of a  
48 certification under section 25-68d.

49 Sec. 3. Section 22a-404 of the general statutes is repealed and the  
50 following is substituted in lieu thereof (*Effective October 1, 2012*):

51 The [commissioner or his representative] dam owner or his or her  
52 representative supervising the work on any dam or other like structure  
53 subject to the commissioner's jurisdiction pursuant to this chapter shall  
54 [inspect the work or cause it] cause the work to be inspected by a  
55 registered professional engineer licensed in the state of Connecticut to  
56 the extent necessary to determine whether the structure will be safe  
57 and secure. [The] Not later than thirty days after the date the work is  
58 completed, the dam owner shall submit to the commissioner a sworn  
59 statement from the engineer who completed such inspection. Such  
60 sworn statement shall (1) attest that such engineer inspected the work  
61 and determined the dam or like structure to be safe within the  
62 parameters of the design of such dam or like structure, (2) attest that  
63 all appurtenances to such dam or like structure were built, repaired,  
64 altered or removed in conformance with plans, specifications and  
65 drawings approved by the commissioner pursuant to a permit for  
66 construction or an order issued pursuant to section 22a-402, and (3)  
67 bear the engineer's professional seal. For a high or significant hazard  
68 dam, or if the commissioner determines a sensitive ecological  
69 condition exists, the commissioner may [, when in his judgment  
70 circumstances warrant,] place a competent inspector on the work, and  
71 the compensation for such inspector shall be shared equally by the  
72 state and by the owner. When the work has been completed to the  
73 satisfaction of the commissioner, the owner shall file with the  
74 commissioner plans and descriptions of the work as actually  
75 constructed, together with any other pertinent data.

76 Sec. 4. Section 22a-409 of the general statutes is repealed and the  
77 following is substituted in lieu thereof (*Effective October 1, 2012*):

78 (a) The commissioner shall cause a survey and maps to be made of  
79 each town showing the location of any dams or similar structures  
80 within such town, and shall file a copy of such map with the town  
81 clerk. On and after October 1, 2007, the owner of real property where a

82 high hazard or significant hazard dam is located shall cause to be  
83 recorded on the land records in the municipality where the property is  
84 located a document that identifies the existence of the dam and  
85 whether the dam is categorized as a high hazard dam or a significant  
86 hazard dam. The commissioner shall publish a standardized form to  
87 be used for such purposes.

88 (b) The owner of any dam or similar structure not already registered  
89 shall register on or before [July 1, 1984] October 1, 2014, with the  
90 Commissioner of Energy and Environmental Protection on a form  
91 prescribed by [him] the commissioner, the location and dimensions of  
92 such dam or structure and such other information as the commissioner  
93 may require. The fee for registration shall be as follows: (1) Dams or  
94 similar structures five feet or more in height but less than fifteen feet,  
95 fifty dollars; (2) dams or similar structures fifteen feet or more in  
96 height but less than twenty-five feet, one hundred dollars; and (3)  
97 dams or similar structures twenty-five feet or more in height, two  
98 hundred dollars. Dams or similar structures less than five feet in  
99 height shall be registered without fee. As used in this subsection,  
100 "height" means the vertical distance from the crest of a dam or similar  
101 structure to the downstream toe of such dam or similar structure. The  
102 owner of any dam or similar structure shall notify the commissioner  
103 by registered or certified mail, return receipt requested, of a transfer of  
104 ownership of such dam or similar structure not later than ten days  
105 after the date of such transfer.

106 (c) The owner of any dam or similar structure registered pursuant to  
107 subsection (b) of this section shall cause such structure to be inspected  
108 in accordance with regulations adopted pursuant to this subsection by  
109 a registered professional engineer licensed in the state of Connecticut  
110 and shall submit the results of such inspection to the commissioner on  
111 a form prescribed by him or her. The commissioner shall periodically  
112 inspect dams registered pursuant to subsection (b) of this section for  
113 quality assurance when an owner fails to undertake a regularly  
114 scheduled inspection and as necessary after a flood event. The fee for  
115 any such inspection shall be six hundred sixty dollars until such time

116 as regulations are adopted concerning such inspection fees. Any dam  
117 which impounds less than three acre-feet of water or any dam which  
118 the commissioner finds has a potential for negligible damage in the  
119 event of a failure, after an initial inspection, shall be exempt from the  
120 provisions of this subsection except upon determination by the  
121 commissioner that such dam poses a unique hazard. The  
122 commissioner shall adopt regulations in accordance with the  
123 provisions of chapter 54 establishing (1) a schedule for the frequency of  
124 and procedures for inspection of dams, (2) the inspection fees for  
125 [regularly scheduled] inspections undertaken by the department,  
126 sufficient to cover the reasonable cost of such inspections, (3)  
127 procedures for registration and criteria for waiver of registration and  
128 inspection fees, and (4) criteria for determining whether a dam has a  
129 potential for negligible damage in the event of a failure.

130 (d) The commissioner may audit any inspection report submitted  
131 pursuant to this section by the owner of a dam or similar structure.  
132 When conducting such audit, the commissioner may request, in  
133 writing, any information the commissioner deems necessary to carry  
134 out such audit, including additional information or field inspections. If  
135 the commissioner determines that the inspection report is materially  
136 inaccurate, incomplete or misleading, the commissioner may require  
137 that another inspection be independently undertaken by a  
138 disinterested registered professional engineer licensed in the state of  
139 Connecticut. For purposes of this subsection, "disinterested" means  
140 that such engineer (1) does not have any financial interest other than  
141 the expectation of reasonable compensation for his or her services, (2)  
142 did not engage in any activities associated with the development or  
143 preparation of the inspection being audited, and (3) is not under the  
144 same employ as the owner of the dam or similar structure or the  
145 engineer who performed the inspection being audited. Such  
146 independent inspection shall be performed at the expense of the owner  
147 of the dam or similar structure. The commissioner shall adopt  
148 regulations in accordance with the provisions of chapter 54  
149 establishing the manner in which the owner of the dam or similar  
150 structure shall receive notice and appeal the cost of an independent

151 inspection.

152       Sec. 5. (NEW) (*Effective October 1, 2012*) The owner of any high or  
 153 significant hazard dam or similar structure shall develop and  
 154 implement an emergency action plan. The emergency action plan shall  
 155 be updated every two years and copies shall be filed with the  
 156 Commissioner of Energy and Environmental Protection and the chief  
 157 executive officer of any municipality that would potentially be affected  
 158 in the event of an emergency. The Commissioner of Energy and  
 159 Environmental Protection shall adopt regulations, in accordance with  
 160 the provisions of chapter 54 of the general statutes, establishing the  
 161 content of such emergency action plans, including, but not limited to,  
 162 (1) criteria and standards for inundation studies and inundation zone  
 163 mapping; (2) procedures for monitoring the dam or structure during  
 164 periods of heavy rainfall and runoff, including personnel assignments  
 165 and features of the dam to be inspected at given intervals during such  
 166 periods; and (3) a formal notification system to alert appropriate local  
 167 officials who are responsible for the warning and evacuation of  
 168 residents in the inundation zone in the event of an emergency.

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>October 1, 2012</i>	22a-401
Sec. 2	<i>October 1, 2012</i>	22a-403(b)
Sec. 3	<i>October 1, 2012</i>	22a-404
Sec. 4	<i>October 1, 2012</i>	22a-409
Sec. 5	<i>October 1, 2012</i>	New section

**ENV**       *Joint Favorable Subst.*

---

The following Fiscal Impact Statement and Bill Analysis are prepared for the benefit of the members of the General Assembly, solely for purposes of information, summarization and explanation and do not represent the intent of the General Assembly or either chamber thereof for any purpose. In general, fiscal impacts are based upon a variety of informational sources, including the analyst's professional knowledge. Whenever applicable, agency data is consulted as part of the analysis, however final products do not necessarily reflect an assessment from any specific department.

---

**OFA Fiscal Note**

**State Impact:** None

**Municipal Impact:** None

**Explanation**

The bill requires an owner of a high or significant hazard dam to develop and implement an emergency action plan. The state and municipalities own 240 high hazard or significant hazard dams. There is no fiscal impact, as the state and municipalities have already developed emergency action plans.

The bill also makes other changes which are not anticipated to result in a fiscal impact to the state or municipalities.

**The Out Years**

**State Impact:** None

**Municipal Impact:** None

**OLR Bill Analysis****sHB 5130*****AN ACT CONCERNING THE DAM SAFETY PROGRAM.*****SUMMARY:**

By law, the Department of Energy and Environmental Protection (DEEP) commissioner has jurisdiction over dams, dikes, and similar structures whose failure might endanger life or property. This bill makes several changes to the laws on dams and dam inspections. Specifically, it:

1. requires owners of unregistered dams or similar structures to register them with the DEEP commissioner by October 1, 2014 (§ 4);
2. establishes construction and regular inspection requirements for owners of registered dams or similar structures (§§ 3 & 4);
3. creates an audit procedure and independent inspection process for inspection reports that are materially inaccurate, incomplete, or misleading (§ 4);
4. requires an owner of a high or significant hazard dam or similar structure to develop and implement an emergency action plan (§ 5);
5. requires DEEP to consider the impact on tidal wetlands when issuing a permit for construction work on a dam or similar structure and exempts permittees from needing to secure certain other permits (§ 2); and
6. eliminates a requirement that the owner of a dike (an embankment for controlling floodwaters or erosion) notify the DEEP commissioner within 10 days of a transfer in ownership



(§§ 1 & 4).

EFFECTIVE DATE: October 1, 2012

#### **§ 4 — DAM SAFETY PROGRAM**

##### ***Registrations***

The bill gives the owner of any dam or similar structure unregistered with the DEEP commissioner until October 1, 2014 to register it.

##### ***Inspection Requirements***

The bill requires, with certain exceptions, an owner of a registered dam or similar structure to (1) have it inspected by a Connecticut-licensed registered professional engineer according to regulations and (2) submit the inspection results to the DEEP commissioner on a DEEP form.

Current law requires the DEEP commissioner to periodically inspect certain registered dams but under the bill, he must conduct such inspections for quality assurance (1) when an owner fails to undertake a regularly scheduled inspection and (2) it is necessary after a flood. Until regulations are adopted concerning inspection fees, the fee for such an inspection is \$ 660, the fee under current law.

By law, the DEEP commissioner must adopt regulations establishing (1) a frequency schedule for inspection, (2) fees for regularly scheduled inspections that cover their reasonable cost, (3) registration procedures and criteria for waiving registration and inspection fees, and (4) criteria for determining if a dam has potential for negligible damage. The bill requires that the regulations also address dam inspection procedures and fees for department inspections only, instead of fees for regularly scheduled inspections.

##### ***Audit Procedure***

The bill allows the DEEP commissioner to audit an inspection report submitted by the owner of a dam or similar structure. He may request, in writing, any information he needs to perform the audit, such as

additional information or field inspections.

It permits the DEEP commissioner to require an independent inspection if he determines the inspection report is materially inaccurate, incomplete, or misleading. The independent inspection must be (1) performed by a disinterested registered professional engineer licensed in the state and (2) at the owner's expense. Under the bill, "disinterested" means that the engineer (1) has no financial interest except the expectation of reasonable compensation for services, (2) did not participate in preparing or developing the inspection to be audited, and (3) is not employed by the owner or the engineer who performed the inspection to be audited.

The bill requires the DEEP commissioner to adopt regulations establishing procedures for an owner to (1) receive notice and (2) appeal an independent inspection's cost.

## **§ 2 & 3 — DAM CONSTRUCTION**

### ***Permit Requirement***

By law, anyone constructing, altering, rebuilding, substantially repairing, adding to, replacing, or removing a dam or similar structure must obtain a permit from the DEEP commissioner.

The bill requires the DEEP commissioner or his representative, engineer, or consultant to determine the proposed construction's impact on tidal wetlands before issuing a permit, in addition to determining its impact on the (1) environment, (2) safety of people and property, and (3) inland wetlands and watercourses, as required under current law.

### ***Exemptions***

Under the bill, an applicant seeking to alter, rebuild, repair, or remove an existing dam need not obtain permits to (1) conduct a regulated activity in tidal wetlands or (2) dredge, erect structures, or place fill, obstructions, or encroachments in tidal, coastal, or navigable waters. Existing law exempts such permit applicants from permit requirements for (1) stream channel encroachment, (2) diversion, and

(3) regulated activity in an inland wetland and watercourse.

The bill also exempts permit applicants for new dam construction from the permit required to conduct a regulated activity in a tidal wetland. The law already exempts them from needing a similar permit in inland wetlands and watercourses.

The bill specifies that permit applicants are exempt from needing to obtain flood management certification approval from the DEEP commissioner. By law, a state agency seeking to perform an activity in or affecting a floodplain must obtain his approval or an exemption from approval.

### ***Inspections***

The bill requires a dam owner or its representative supervising work on a dam or similar structure under DEEP's jurisdiction, to have it inspected by a Connecticut-licensed registered professional engineer to determine if it will be safe and secure. Under current law, the DEEP commissioner or his representative must have it inspected.

The bill requires a dam owner to submit a sworn statement from the inspecting engineer to the DEEP commissioner within 30 days of completing work. The statement must attest that (1) the engineer inspected the work and determined the dam or similar structure to be safe within its design parameters and (2) all appurtenances were built, repaired, altered, or removed according to the plans, specifications, and drawings approved by the DEEP commissioner under a permit or order. The sworn statement must bear the engineer's professional seal.

The bill allows the DEEP commissioner to place a competent inspector on construction work of a dam or similar structure if it involves (1) a high or significant hazard dam or (2) he determines a sensitive ecological condition exists. Current law allows him to do so when he believes circumstances warrant it. Unchanged by the bill, the law requires that such inspector's compensation is shared equally by the state and the owner.

---

**§ 5 — EMERGENCY ACTION PLAN**

The bill requires the owner of a high or significant hazard dam or similar structure to develop and implement an emergency action plan. The plan must be updated every two years. Copies of it must be filed with the (1) DEEP commissioner and (2) chief executive officer of a municipality that may be affected in an emergency.

It also requires the DEEP commissioner to adopt regulations establishing the content of an emergency action plan, including:

1. criteria and standards for inundation studies and zone mapping,
2. procedures for monitoring the dam or structure during heavy rainfall and runoff periods such as (a) personnel assignments and (b) dam features to be inspected at given intervals, and
3. a formal notification system to alert appropriate local officials responsible for warning and evacuating residents in the inundation zone during an emergency.

**BACKGROUND*****High or Significant Hazard Dam***

State regulations classify dams by the hazards they would pose if they failed. A high hazard dam is one whose failure would result in (1) probable loss of life; (2) major damage to habitable structures, homes, hospitals, convalescent homes, or schools; (3) damage to main highways; or (4) great economic loss. A significant hazard dam is one whose failure would result in (1) possible loss of life; (2) minor damage to habitable structures, homes, hospitals, convalescent homes, or schools; (3) damage to, or interruption of, utility service; (4) damage to primary roadways or railroads; or (5) significant economic loss (Conn. Agencies Reg. § 22a-409-2(d)).

**COMMITTEE ACTION**

Environment Committee

Joint Favorable Substitute

Yea 29 Nay 0 (03/23/2012)