



House of Representatives

General Assembly

File No. 206

January Session, 2021

Substitute House Bill No. 6499

House of Representatives, March 30, 2021

The Committee on Environment reported through REP. BORER of the 115th Dist., Chairperson of the Committee on the part of the House, that the substitute bill ought to pass.

AN ACT CONCERNING RADIATION SECURITY.

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

1 Section 1. Section 22a-151 of the general statutes is repealed and the
2 following is substituted in lieu thereof (*Effective October 1, 2021*):

3 As used in sections 22a-151 to 22a-158, inclusive:

4 (1) "By-product material" [means radioactive material as defined in
5 Section 11e of Public Law 85-256 (Act of September 2, 1957) and Public
6 Law 89-645 (Act of October 13, 1966), as amended or as interpreted or
7 modified by duly promulgated regulations of the United States Atomic
8 Energy Commission pursuant thereto] has the same meaning as
9 provided in 42 USC 2014, as amended from time to time;

10 (2) "Ionizing radiation" means gamma rays and x-rays, alpha and beta
11 particles, high speed electrons, neutrons, protons and other nuclear
12 particles, but not sound or radio waves, or visible, infrared or ultra
13 violet light. The Commissioner of Energy and Environmental Protection

14 shall be empowered to make regulations amending or modifying this
15 definition;

16 (3) "General license" means a license effective pursuant to regulations
17 promulgated by the Commissioner of Energy and Environmental
18 Protection without the filing of an application for, or issuance of a
19 licensing document for, the transfer, transport, acquisition, ownership,
20 possession or use of quantities of, or devices or equipment utilizing by-
21 product, source, special nuclear materials or other radioactive material
22 occurring naturally or produced artificially;

23 (4) "Specific license" means a license, issued after application, to use,
24 manufacture, produce, transfer, transport, receive, acquire, own, or
25 possess quantities of, or devices or equipment utilizing by-product,
26 source, special nuclear materials or other radioactive material occurring
27 naturally or produced artificially;

28 (5) "Person" means any individual, corporation, limited liability
29 company, partnership, firm, association, trust, estate, public or private
30 institution, group, agency, political subdivision of this state, any other
31 state or political subdivision or agency thereof, and any legal successor,
32 representative, agent or agency of any of the foregoing, other than the
33 United States [Atomic Energy] Nuclear Regulatory Commission or any
34 successor thereto, and other than agencies of the government of the
35 United States licensed by the United States [Atomic Energy] Nuclear
36 Regulatory Commission or any successor thereto;

37 (6) "Registration" means registration in conformance with the
38 requirements of section 22a-148, as amended by this act. The issuance of
39 a specific license pursuant to sections 22a-151 to 22a-158, inclusive, shall
40 be deemed to satisfy fully any registration requirements set forth in said
41 section;

42 (7) "Source material" [means material as defined in Section 11z of
43 Public Law 85-256 (Act of September 2, 1957) and Public Law 89-645
44 (Act of October 13, 1966), as amended or as interpreted or modified by
45 duly promulgated regulations of the United States Atomic Energy

46 Commission pursuant thereto] has the same meaning as provided in 42
47 USC 2014, as amended from time to time;

48 (8) "Special nuclear material" [means material as defined in Section
49 11aa of Public Law 85-256 (Act of September 2, 1957) and Public Law 89-
50 645 (Act of October 13, 1966), as amended or as interpreted or modified
51 by duly promulgated regulations of the United States Atomic Energy
52 Commission pursuant thereto.] has the same meaning as provided in
53 section 42 USC 2014, as amended from time to time;

54 (9) "Radioactive materials" means any solid, liquid or gas that emits
55 ionizing radiation spontaneously;

56 (10) "Commissioner" means the Commissioner of Energy and
57 Environmental Protection or the commissioner's designee or agent.

58 Sec. 2. Section 22a-153 of the general statutes is repealed and the
59 following is substituted in lieu thereof (*Effective October 1, 2021*):

60 (a) The Commissioner of Energy and Environmental Protection shall
61 supervise and regulate in the interest of the public health and safety the
62 use of ionizing radiation within the state.

63 (b) Said commissioner may employ, subject to the provisions of
64 chapter 67, and prescribe the powers and duties of such persons as may
65 be necessary to carry out the provisions of sections 22a-151 to 22a-158,
66 inclusive, as amended by this act.

67 (c) Said commissioner shall [make such regulations as may be
68 necessary to carry out the provisions of said sections] adopt regulations,
69 in accordance with the provisions of chapter 54, concerning sources of
70 ionizing radiation and radioactive materials, including, but not limited
71 to, regulations:

72 (1) Necessary to secure agreement state status from the United States
73 Nuclear Regulatory Commission pursuant to section 274 of the Atomic
74 Energy Act of 1954, 42 USC 2021, as amended from time to time;

75 (2) Relating to the construction, operation, control, tracking, security

76 or decommissioning of sources of ionizing radiation, including, but not
77 limited to, any modification or alteration of such sources;

78 (3) Relating to the production, transportation, use, storage,
79 possession, management, treatment, disposal or remediation of
80 radioactive materials;

81 (4) Relating to planning for and responding to terrorist or other
82 emergency events, or the potential for such events, that involve or may
83 include radioactive materials;

84 (5) Necessary to carry out the provisions of sections 22a-151 to 22a-
85 158, inclusive, as amended by this act;

86 (6) Establishing fees for the licensure of sources of ionizing radiation,
87 that, in conjunction with the fees collected pursuant to section 22a-148,
88 as amended by this act, shall be sufficient for the administration,
89 implementation and enforcement of an ionizing radiation program; and

90 (7) To reciprocate in the recognition of specific licenses issued by the
91 United States Nuclear Regulatory Commission (NRC) or another state
92 that has reached agreement with the NRC pursuant to 42 USC 2021(b),
93 as amended from time to time.

94 (d) The Governor, or the commissioner, is authorized to employ such
95 consultants, experts and technicians as [he shall deem] are necessary for
96 the purpose of conducting investigations and reporting [to him] on
97 matters connected with the implementation of the provisions of [said]
98 sections 22a-148 to 22a-158, inclusive, as amended by this act.

99 (e) Any fees collected in accordance with section 22a-148, as amended
100 by this act, or 22a-150, or any regulations adopted pursuant to
101 subsection (c) of this section, shall be deposited in the General Fund.

102 (f) The commissioner may establish radiation exposure guidelines for
103 emergency responders and the public for the management of
104 emergencies involving radioactive materials. Any such guidelines may
105 be based upon the recommendations of the federal government and the

106 National Council on Radiation Protection and Measurements.

107 Sec. 3. Subsection (a) of section 22a-154 of the general statutes is
108 repealed and the following is substituted in lieu thereof (*Effective October*
109 *1, 2021*):

110 (a) The Commissioner of Energy and Environmental Protection [may
111 provide by regulation for] shall adopt regulations, in accordance with
112 the provisions of chapter 54, for the general or specific licensing of [by-
113 product, source, special nuclear materials and other] sources of ionizing
114 radiation, [or devices or equipment utilizing such materials, and for
115 amendment, suspension, or revocation of licenses issued pursuant
116 thereto] The commissioner may issue, deny, renew, modify, suspend or
117 revoke such licenses and may include such terms and conditions in such
118 licenses that the commissioner deems necessary.

119 Sec. 4. Section 22a-157 of the general statutes is repealed and the
120 following is substituted in lieu thereof (*Effective October 1, 2021*):

121 No person shall construct, operate, use, manufacture, produce,
122 transport, transfer, receive, acquire, decommission, own or possess any
123 source of ionizing radiation, unless [exempt, licensed or registered in
124 accordance with the provisions of sections 22a-148 to 22a-158, inclusive]
125 such activity is in compliance with all requirements of this chapter,
126 including any regulation adopted, or registration or license issued
127 pursuant to this chapter. No person shall produce, transport, store,
128 possess, manage, treat, remediate, distribute, sell, install, repair or
129 dispose of any radioactive materials, unless such activity is in
130 compliance with all requirements of this chapter, including any
131 regulation adopted, or registration or license issued pursuant to this
132 chapter. No person shall fail to register a source of ionizing radiation
133 required to be registered under this chapter, including as required by
134 any regulation adopted, or registration or license issued pursuant to this
135 chapter.

136 Sec. 5. (NEW) (*Effective October 1, 2021*) (a) The Commissioner of
137 Energy and Environmental Protection may take steps that the

138 commissioner deems necessary to protect human health and the
139 environment, including, but not limited to, investigating, monitoring,
140 abating, containing, mitigating or removing any hazard, potential
141 hazard, pollution, contamination or potential pollution or
142 contamination if: (1) Any person causes or is responsible for any
143 exposure hazard or potential exposure hazard from radioactive
144 materials, radioactive waste or a source of ionizing radiation, or causes
145 or is responsible for pollution, contamination or potential pollution or
146 contamination of any land, water, air or other natural resource of the
147 state through a discharge, spillage, uncontrolled loss, release, leakage,
148 seepage or filtration of radioactive material or radioactive waste, and
149 does not act immediately to prevent, abate, contain, mitigate or remove
150 such hazard, potential hazard, pollution, contamination, or potential
151 pollution or contamination, to the satisfaction of the commissioner, or
152 (2) the person responsible is unknown, and such hazard, potential
153 hazard, pollution, contamination, or potential pollution or
154 contamination, is not being prevented, abated, contained, mitigated or
155 removed by the federal government, any state agency, any municipality
156 or any regional or interstate authority. The commissioner may enter into
157 a contract with any person for the purpose of carrying out the provisions
158 of this subsection.

159 (b) Any person who causes or is responsible for any exposure hazard
160 or potential exposure hazard from radioactive materials, radioactive
161 waste or a source of ionizing radiation or who causes or is responsible
162 for pollution, contamination, or potential pollution or contamination of
163 any land, water, air or other natural resource of the state through a
164 discharge, spillage, uncontrolled loss, release, leakage, seepage or
165 filtration of radioactive material or radioactive waste shall be liable for
166 all costs and expenses incurred by the commissioner in accordance with
167 subsection (a) of this section, including all costs and expenses to restore
168 the air, water, land and other natural resources of the state, and shall be
169 liable for all attorneys' fees, court costs and any other legal expenses
170 incurred by the state regarding the recovery of such costs. Nothing in
171 this subsection shall preclude the commissioner from seeking additional
172 compensation or such other relief that a court may award, including

173 punitive damages. When such hazard, potential hazard, pollution,
174 contamination or potential pollution or contamination results from the
175 action or inaction of more than one person, each person shall be held
176 jointly and severally liable for such costs. Upon request of the
177 commissioner, the Attorney General shall bring a civil action to recover
178 all such costs and expenses from the person who caused or is
179 responsible for any such hazard, potential hazard, pollution,
180 contamination or potential pollution or contamination.

181 (c) Any person who prevents, abates, contains, removes or mitigates
182 any (1) exposure hazard or potential exposure hazard from radioactive
183 materials, radioactive waste or a source of ionizing radiation that is not
184 authorized by a provision of the general statutes, any regulation,
185 registration or license, or (2) any pollution or contamination or potential
186 pollution or contamination of any land, water, air or other natural
187 resources of the state through a discharge, spillage, uncontrolled loss,
188 release, leakage, seepage or filtration of radioactive material or
189 radioactive waste that is not authorized by a provision of the general
190 statutes, any regulation, registration or license, shall be entitled to
191 reimbursement of the reasonable costs incurred or expended for such
192 abatement, containment, removal or mitigation from any person whose
193 negligent, reckless, knowing or intentional action or inaction caused
194 such hazard, potential hazard, pollution, contamination or potential
195 pollution or contamination. When such hazard, potential hazard,
196 pollution, contamination or potential pollution or contamination results
197 from the action or inaction of more than one person, each such person
198 shall be held jointly and severally liable for such costs.

199 (d) Whenever the commissioner incurs contractual obligations in
200 carrying out the authority vested in the commissioner pursuant to
201 subsection (a) of this section and the person who causes or is responsible
202 for the hazard, potential hazard, pollution, contamination or potential
203 pollution or contamination does not assume the tasks and
204 responsibilities that are the subject of such contractual obligations, the
205 commissioner shall request the Attorney General to bring a civil action,
206 pursuant to subsection (b) of this section, to recover the costs and

207 expenses of such contractual obligations and other costs and expenses
208 provided for in subsection (b) of this section. If the person responsible
209 is unknown, the commissioner shall request the federal government to
210 assume such contractual obligations to the extent provided for by
211 federal law.

212 Sec. 6. Subsection (a) of section 22a-6a of the general statutes is
213 repealed and the following is substituted in lieu thereof (*Effective October*
214 *1, 2021*):

215 (a) Any person who knowingly or negligently violates any provision
216 of section 14-100b or 14-164c, subdivision (3) of subsection (b) of section
217 15-121, section 15-171, 15-172, 15-175, 22a-5, 22a-6 or 22a-7, chapter 440,
218 chapter 441, section 22a-69 or 22a-74, subsection (b) of section 22a-134p,
219 sections 22a-148 to 22a-150, inclusive, as amended by this act, section
220 22a-153, as amended by this act, 22a-154, as amended by this act, section
221 22a-157, as amended by this act, section 22a-158, section 22a-162, 22a-
222 171, 22a-174, 22a-175, 22a-177, 22a-178, 22a-181, 22a-183, 22a-184, 22a-
223 190, 22a-208, 22a-208a, 22a-209, 22a-213, 22a-220, 22a-225, 22a-231, 22a-
224 336, 22a-342, 22a-345, 22a-346, 22a-347, 22a-349a, 22a-358, 22a-359, 22a-
225 361, 22a-362, 22a-365 to 22a-379, inclusive, 22a-401 to 22a-411, inclusive,
226 22a-416, 22a-417, 22a-424 to 22a-433, inclusive, 22a-447, 22a-449, 22a-450,
227 22a-451, 22a-454, 22a-458, 22a-461, 22a-462 or 22a-471, or any regulation,
228 order or permit adopted or issued thereunder by the Commissioner of
229 Energy and Environmental Protection shall be liable to the state for the
230 reasonable costs and expenses of the state in detecting, investigating,
231 controlling and abating such violation. Such person shall also be liable
232 to the state for the reasonable costs and expenses of the state in restoring
233 the air, waters, lands and other natural resources of the state, including
234 plant, wild animal and aquatic life to their former condition insofar as
235 practicable and reasonable, or, if restoration is not practicable or
236 reasonable, for any damage, temporary or permanent, caused by such
237 violation to the air, waters, lands or other natural resources of the state,
238 including plant, wild animal and aquatic life and to the public trust
239 therein. Institution of a suit to recover for such damage, costs and
240 expenses shall not preclude the application of any other remedies.

241 Sec. 7. Section 16a-101 of the general statutes is repealed and the
242 following is substituted in lieu thereof (*Effective October 1, 2021*):

243 As used in this chapter:

244 (1) "Atomic energy" [means all forms of energy released in the course
245 of nuclear fission or nuclear transformation] has the same meaning as
246 provided in 42 USC 2014, as amended from time to time;

247 (2) "By-product material" [means any radioactive materials, except
248 special nuclear materials, yielded in or made radioactive by exposure to
249 the radiation incident to the process of producing or utilizing special
250 nuclear materials] has the same meaning as provided in 42 USC 2014, as
251 amended from time to time;

252 (3) "Production facility" [means (A) any equipment or device capable
253 of the production of special nuclear material in such quantity as to be of
254 significance to the common defense and security, or in such manner as
255 to affect the health and safety of the public; or (B) any important
256 component part especially designed for such equipment or device] has
257 the same meaning as provided in 42 USC 2014, as amended from time
258 to time;

259 (4) "Special nuclear material" [means (A) plutonium and uranium
260 enriched in the isotope 233 or in the isotope 235, and any other material
261 which the Governor declares by order to be special nuclear material
262 after the United States Atomic Energy Commission has determined the
263 material to be such; or (B) any material artificially enriched by any of the
264 foregoing] has the same meaning as provided in 42 USC 2014, as
265 amended from time to time;

266 (5) "Utilization facility" [means (A) any equipment or device, except
267 an atomic weapon, capable of making use of special nuclear materials
268 in such quantity as to be of significance to the common defense and
269 security, or in such manner as to affect the health and safety of the
270 public, or peculiarly adapted for making use of atomic energy in such
271 quantity as to be of significance to the common defense and security, or

272 in such manner as to affect the health and safety of the public; or (B) any
273 important component part especially designed for such equipment or
274 device.] has the same meaning as provided in 42 USC 2014, as amended
275 from time to time;

276 (6) "Radioactive material" has the same meaning as provided in 42
277 USC 2014, as amended from time to time;

278 (7) "Source material" has the same meaning as provided in 42 USC
279 2014, as amended from time to time.

280 Sec. 8. Subsection (b) of section 22a-148 of the general statutes is
281 repealed and the following is substituted in lieu thereof (*Effective October*
282 *1, 2021*):

283 (b) No person, firm, corporation, town, city or borough shall operate
284 or cause to be operated any source of ionizing radiation or shall
285 produce, transport, store, possess or dispose of radioactive materials
286 except under conditions which comply with regulations or with orders
287 imposed by the Commissioner of Energy and Environmental Protection
288 for the protection of the public health and preservation of the
289 environment. Such regulations or orders shall be based [to the extent
290 deemed practicable by said department] on the regulations of the
291 United States [Atomic Energy] Nuclear Regulatory Commission, issued
292 under authority granted to said commission by the Atomic Energy Act
293 of 1954, [and entitled "Standards for Protection against Radiation" or, if
294 such regulations should be deemed inappropriate by the Commissioner
295 of Energy and Environmental Protection, on the latest
296 recommendations of the National Committee on Radiation, as
297 published by the United States Department of Commerce, National
298 Bureau of Standards] as codified in 42 USC 2014, as amended from time
299 to time. No regulation pertaining to radiation sources and radioactive
300 materials proposed to be issued by the commissioner shall become
301 effective until thirty days after it has been submitted to the Coordinator
302 of Atomic Development Activities unless, upon a finding of emergency
303 need, the governor by order waives all or any part of said thirty-day
304 period. In no case shall any source of ionizing radiation be utilized

305 otherwise than at the lowest practical level consistent with the best use
306 of the radiation facilities or radioactive materials involved.

307 Sec. 9. Section 22a-152 of the general statutes is repealed and the
308 following is substituted in lieu thereof (*Effective October 1, 2021*):

309 The Governor, on behalf of this state, is authorized to enter into
310 agreements with the government of the United States providing for
311 [discontinuance] relinquishment of certain of the programs of the
312 government of the United States with respect to sources of ionizing
313 radiation and the assumption thereof by this state, as provided for in the
314 Atomic Energy Act of 1954, as amended.

This act shall take effect as follows and shall amend the following sections:		
Section 1	<i>October 1, 2021</i>	22a-151
Sec. 2	<i>October 1, 2021</i>	22a-153
Sec. 3	<i>October 1, 2021</i>	22a-154(a)
Sec. 4	<i>October 1, 2021</i>	22a-157
Sec. 5	<i>October 1, 2021</i>	New section
Sec. 6	<i>October 1, 2021</i>	22a-6a(a)
Sec. 7	<i>October 1, 2021</i>	16a-101
Sec. 8	<i>October 1, 2021</i>	22a-148(b)
Sec. 9	<i>October 1, 2021</i>	22a-152

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:

Agency Affected	Fund-Effect	FY 22 \$	FY 23 \$
Ag. Experiment Station; Department of Energy and Environmental Protection; Public Health, Dept.; Transportation, Dept.; UConn Health Ctr.	Various - Savings	119,500	119,500
Department of Energy and Environmental Protection	GF - Revenue Gain	1,275,000	1,275,000
Department of Energy and Environmental Protection	GF - Cost	307,724	316,956
State Comptroller - Fringe Benefits ¹	GF - Cost	127,090	130,903

Note: GF=General Fund; Various=Various

Municipal Impact: None

Explanation

The bill expands the Department of Energy and Environmental Protection (DEEP) commissioner's authority to regulate radiation sources.

Sections 1- 3 of the bill require DEEP to adopt regulations on sources of ionizing radiation and radioactive materials, and establish fees that are sufficient to administer, implement, and enforce an ionizing radiation program.

¹The fringe benefit costs for most state employees are budgeted centrally in accounts administered by the Comptroller. The estimated active employee fringe benefit cost associated with most personnel changes is 41.3% of payroll in FY 22 and FY 23.

The bill results in an estimated revenue gain to DEEP of \$1,275,000 annually associated with the newly established fees. Under the newly established state program, currently managed by the Nuclear Regulatory Commission (NRC), the regulated entities would remit fees to DEEP instead of the NRC.

Establishment of the new program would require DEEP to hire four additional staff to oversee the new licensing program, including a Supervising Radiation Control Physicist, an Environmental Analyst, and two Environmental Compliance Specialists. This results in costs to DEEP of \$307,724 in FY 22 and \$316,956 in FY 23, and associated fringe benefit costs of \$127,090 and \$130,903 respectively.

Additionally, the bill results in a savings of \$115,900 since various state agencies (the Agricultural Experiment Station, DEEP, The Departments of Public Health, Transportation, and the University of Connecticut Health Center) currently pay \$115,900 in aggregate to NRC each year for radioactive material license fees. Under the bill's provisions, these fees will be transferred to DEEP.

Sections 4 – 6 of the bill may result in a revenue gain associated with penalties as it: (1) expands current existing penalties for violations of the state's radioactive materials laws to currently prohibited acts, and (2) makes negligible or intentional violations of the radiation and radioactive materials law's prohibited acts.

Section 5 authorizes DEEP to take necessary actions to protect human health and the environment under certain circumstances and allows the agency to contract with anyone to address hazards, pollution, or contamination. To the extent DEEP chooses to contract with outside consultants, there may be costs for this purpose, which are expected to be covered by fees yielded under the bill.

The Out Years

The annualized ongoing fiscal impact identified above would continue into the future subject to inflation and the amount of penalties

remitted.

OLR Bill Analysis**sHB 6499*****AN ACT CONCERNING RADIATION SECURITY.*****SUMMARY**

This bill expands the Department of Energy and Environmental Protection (DEEP) commissioner's authority to regulate radiation sources. It does so by requiring her to adopt specific regulations on sources of ionizing radiation and radioactive materials, instead of only general regulations needed to carry out the ionizing radiation sources provisions under current law (see BACKGROUND). Under the bill, "radioactive materials" means any solid, liquid, or gas that emits ionizing radiation spontaneously.

By requiring the commissioner to adopt regulations on radioactive materials sources, the bill allows the state to pursue "agreement state status" from the U.S. Nuclear Regulatory Commission (NRC) (see BACKGROUND). The bill requires the regulations to include provisions on such things as (1) regulating ionizing radiation and radioactive materials sources; (2) planning for and responding to emergency events; (3) recognizing other state or NRC licenses; and (4) setting fees, which must be deposited into the General Fund.

The bill prohibits certain actions with respect to radioactive materials and extends existing penalties to those actions. It authorizes the commissioner to address exposure hazards and contamination from radiation and makes those responsible for the contamination liable for cleanup costs and expenses.

The bill also makes many minor, conforming, and technical changes, including several to effectuate the transition to "agreement state status" and update definitions to align with corresponding federal law (42 U.S.C. § 2014).

EFFECTIVE DATE: October 1, 2021

§§ 1-3 — DEEP REGULATORY AUTHORITY

General Regulations

The bill requires the commissioner to adopt regulations on sources of both ionizing radiation and radioactive materials. Under the bill, the regulations she must adopt are those that are:

1. needed to (a) secure “agreement state status” from NRC, pursuant to § 274 of the Atomic Energy Act of 1954, 42 U.S.C. § 2021, and (b) carry out the state radiation and radioactive materials law;
2. related to (a) constructing, operating, controlling, tracking, securing, or decommissioning ionizing radiation sources, including modifying or altering them, and (b) producing, transporting, using, storing, possessing, managing, treating, disposing of, or remediating radioactive materials;
3. related to planning for and responding to terrorist or other emergency events, or potential ones, that involve or may include radioactive materials (see “Guidelines,” below);
4. for reciprocating recognition of specific licenses that NRC or another state with “agreement state status” issues; and
5. concerning fees to license ionizing radiation sources that, with certain existing registration fees, are enough to administer, implement, and enforce an ionizing radiation program.

Licensing

Current law authorizes the commissioner to, through regulation, use general or specific licenses for ionizing radiation sources. The bill requires her to adopt regulations to license these sources, either through general or specific licenses. It allows her to (1) issue, deny, renew, modify, suspend, or revoke a license and (2) include terms and conditions in licenses as she deems necessary.

Guidelines

The bill allows the commissioner to establish radiation exposure guidelines for first responders and the public to manage emergencies involving radioactive materials, which may be based on recommendations from the federal government and the National Council on Radiation Protection and Measurements.

Outside Experts

The bill allows the commissioner, in addition to the governor as allowed under current law, to hire necessary consultants, experts, and technicians to investigate and report on matters related to implementing the state's radiation and radioactive materials law.

§§ 4 & 6 — PROHIBITED ACTS

Current law prohibits the following actions related to ionizing radiation sources unless the source is exempt or properly licensed or registered: using, manufacturing, producing, transporting, transferring, receiving, acquiring, owning, or possessing. The bill expands the prohibited actions to include constructing, operating, or decommissioning. It explicitly prohibits failing to register a source.

The bill prohibits the following actions with respect to radioactive materials, unless done in compliance with the law and any associated regulation, regulation, or license: producing, transporting, storing, possessing, managing, treating, remediating, distributing, selling, installing, repairing, or disposition.

The bill extends existing penalties for violations of the state's radioactive materials laws to these prohibited acts. By law, unchanged by the bill, the commissioner may, among other things, issue cease and desist orders. She may also, through the attorney general, seek injunctive relief related to violations or probable violations. Someone who knowingly commits certain actions or commits certain actions with criminal negligence is subject to fines, imprisonment, or both (CGS §§ 22a-158a to -158c).

The bill also makes someone liable to the state for reasonable costs if

they negligently or knowingly violate the radiation and radioactive materials law's prohibited acts; requirements for registration, licensing, and record keeping; or requirements tied to the new regulations, including any associated regulation or order. This includes costs to (1) detect, investigate, control, and abate the violation and (2) restore natural resources to their former condition, if practicable and reasonable. If restoration is not practicable or reasonable, the person is liable for damage caused by the violation. By law, a lawsuit to recover damages, costs, and expenses, does not prevent other remedies.

§ 5 — RADIATION CONTAMINATION REMEDIATION

Commissioner Actions

The bill authorizes the DEEP commissioner to take actions she deems necessary to protect human health and the environment if someone (1) causes or is responsible for certain exposures or contamination related to radioactive material and (2) does not immediately act to prevent, stop, or remedy it to the commissioner's satisfaction. She may investigate, monitor, abate, contain, mitigate, or remove the hazard, pollution, contamination, or potential hazard, pollution, or contamination. The bill allows her to contract with anyone to address the hazards, pollution, or contamination.

This applies to the following:

1. an exposure hazard, or potential one, from radioactive materials, radioactive waste, or an ionizing radiation source or
2. pollution, contamination, or potential pollution or contamination of natural resources (e.g., land, air, water) due to a discharge, spill, uncontrolled loss, release, leak, seep, or filtration of radioactive material or radioactive waste.

The bill allows the commissioner to take the same actions if the responsible person is unknown and the hazard, pollution, or contamination (or potential ones) is not being addressed by the federal government, a state agency, a municipality, or a regional or interstate authority.

Liability

To the State. The bill makes anyone who causes or is responsible for the exposure hazards, pollution, or contamination (or potential ones) described above, liable for the costs and expenses incurred by the commissioner to address the situation. It includes the costs and expenses for restoring the natural resources, attorney's fees, court costs, and other legal expenses. The bill allows the commissioner to seek additional compensation or other relief from the court, including punitive damages.

Under the bill, if the hazard, pollution, or contamination (or potential ones) is due to more than one person's action or failure to act, each person is jointly and severally liable. If the commissioner requests it, the bill requires the attorney general to bring a civil action to recover costs and expenses, including those from related contractual obligations, from the responsible person.

If the responsible party is unknown, the bill requires the commissioner to ask the federal government to assume the contractual obligations to the extent allowed under federal law.

To an Individual. Under certain circumstances, the bill entitles individuals who prevent, abate, contain, remove, or mitigate an exposure hazard, pollution, or contamination (or potential ones), as described above, to reimbursement of the reasonable costs they incur or spend for their actions. This applies when the exposure, pollution, or contamination (or potential ones) was due to someone's negligent, reckless, knowing, or intentional action or failing to act. If more than one person is responsible, each person is jointly severally liable.

BACKGROUND**Agreement State Status**

"Agreement state status" authorizes states to assume NRC responsibility for regulating and licensing byproduct materials (radioisotopes), source materials (uranium and thorium), and certain amounts of special nuclear materials. Among other things, to become an

agreement state, there must be an agreement between the governor of the state and the NRC chairman and supporting legislation and regulations. Governor Lamont submitted a letter of intent to become an agreement state to the NRC in December 2020.

Under federal law, NRC is responsible for regulating nuclear power plants (e.g., Millstone); uses of nuclear material, such as in nuclear medicine; and nuclear waste.

Ionizing Radiation

Ionizing radiation includes gamma rays, x-rays, alpha and beta particles, neutrons, protons, high-speed electrons, and other atomic or nuclear particles, but not sound or radio waves, or visible, infrared, or ultraviolet light.

COMMITTEE ACTION

Environment Committee

Joint Favorable Substitute

Yea 24 Nay 8 (03/12/2021)