

**Proposed Substitute
Bill No. 6499**

LCO No. 5013

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 Section 22a-151 of the general statutes is repealed and the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. The issuance of a specific license
39 pursuant to sections 22a-151 to 22a-158, inclusive, shall be deemed to
40 satisfy fully any registration requirements set forth in said section;

41 (7) "Source material" [means material as defined in Section 11z of
42 Public Law 85-256 (Act of September 2, 1957) and Public Law 89-645
43 (Act of October 13, 1966), as amended or as interpreted or modified by
44 duly promulgated regulations of the United States Atomic Energy
45 Commission pursuant thereto] has the same meaning as provided in 42
46 USC 2014, as amended from time to time;

47 (8) "Special nuclear material" [means material as defined in Section
48 11aa of Public Law 85-256 (Act of September 2, 1957) and Public Law 89-
49 645 (Act of October 13, 1966), as amended or as interpreted or modified

50 by duly promulgated regulations of the United States Atomic Energy
51 Commission pursuant thereto] has the same meaning as provided in
52 section 42 USC 2014, as amended from time to time;

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

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

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 Section 22a-153 of the general statutes is repealed and the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

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

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

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

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

74 (2) Relating to the construction, operation, control, tracking, security
75 or decommissioning of sources of ionizing radiation, including, but not
76 limited to, any modification or alteration of such sources;

77 (3) Relating to the production, transportation, use, storage,
78 possession, management, treatment, disposal or remediation of

79 radioactive materials;

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

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

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

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

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

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

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

106 Sec. 3. Subsection (a) of section 22a-154 of the general statutes is
107 repealed and the following is substituted in lieu thereof (*Effective October*

108 1, 2021):

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

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

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

135 Sec. 5. (NEW) (*Effective October 1, 2021*) (a) The Commissioner of
136 Energy and Environmental Protection may take steps that the
137 commissioner deems necessary to protect human health and the
138 environment, including, but not limited to, investigating, monitoring,
139 abating, containing, mitigating or removing any hazard, potential

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

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

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

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

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

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

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

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

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

242 As used in this chapter:

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

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

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

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

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

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

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

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

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

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

302 need, the governor by order waives all or any part of said thirty-day
303 period. In no case shall any source of ionizing radiation be utilized
304 otherwise than at the lowest practical level consistent with the best use
305 of the radiation facilities or radioactive materials involved.

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

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