



General Assembly

**Substitute Bill No. 6499**

January Session, 2021



**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 Section 22a-151 of the general statutes is repealed and the  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.

**FIN** Joint Favorable