



State of Utah

GARY R. HERBERT
Governor

SPENCER J. COX
Lieutenant Governor

Department of
Environmental Quality

Alan Matheson
Executive Director

DIVISION OF WASTE MANAGEMENT
AND RADIATION CONTROL
Scott T. Anderson
Director

May 9, 2017

Daniel S. Collins, Director
Division of Material Safety, State, Tribal and Rulemaking Programs
Office of Nuclear Material Safety and Safeguards
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555-0001

RE: Passed Utah Legislation – S.B. 79, Financial Surety Amendments

Dear Mr. Collins:

In a letter dated January 12, 2017 (ML17013A559), I transmitted a copy of a bill (S.B. 79) being considered by the Utah Legislature and requested the Nuclear Regulatory Commission's (NRC) review of and comment on that bill. S.B. 79 specifically addresses the NRC's finding and recommendation in the final IMPEP report issued in December 2015 regarding the incompatibility of a provision of Utah's law enacted in 2015 addressing financial surety for a radioactive disposal facility.

In a letter dated February 14, 2017 (ML17018A171), the NRC commented on S.B. 79 and recommended a specific change in the text. I am pleased to report that NRC's recommended amendment was made and S.B. 79 was passed by our state legislature and signed into law by Governor Herbert. The effective date of the legislation is May 8, 2017.

I have enclosed the enrolled copy of the final bill for your information and to document that Utah's statute has been revised and, in our opinion, resolves the incompatibility finding of the 2015 IMPEP review. We anticipate that the periodic meeting scheduled for later this year will find the appropriate revision has been made to our statute and note its compatibility with NRC's corresponding financial surety requirements.

(Over)

I appreciate the NRC's prompt attention to and assistance with this important legislation. Please feel to contact me with any questions or comments you or your staff may have.

Sincerely,

A handwritten signature in black ink, appearing to read 'Scott T. Anderson', with a large, stylized flourish at the end.

Scott T. Anderson, Director
Division of Waste Management and Radiation Control

STA/rl

Enclosure: Enrolled S.B. 79, 2017 General Session, Utah State Legislature (DRC-2017-003392)

c: Paul Michalak, NRC, NMSS, MSTR, ASPB
Michelle Beardsley, NRC, NMSS, MSTR, ASPB, SRRC
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Alan Matheson, Executive Director, UDEQ

1 **WASTE MANAGEMENT AMENDMENTS**

2 2017 GENERAL SESSION

3 STATE OF UTAH

4 **Chief Sponsor: J. Stuart Adams**

5 House Sponsor: Mike K. McKell

6

7 **LONG TITLE**

8 **General Description:**

9 This bill modifies provisions of the Radiation Control Act.

10 **Highlighted Provisions:**

11 This bill:

- 12 ▶ defines "unlicensed facility" and "radioactive waste facility";
- 13 ▶ modifies financial assurance requirements for a licensed and an unlicensed facility;
- 14 and
- 15 ▶ makes technical and conforming changes.

16 **Money Appropriated in this Bill:**

17 None

18 **Other Special Clauses:**

19 None

20 **Utah Code Sections Affected:**

21 AMENDS:

22 **19-3-102**, as last amended by Laws of Utah 2015, Chapter 451

23 **19-3-104**, as last amended by Laws of Utah 2015, Chapters 441 and 451

24 **19-3-105**, as last amended by Laws of Utah 2015, Chapter 451

25

26 *Be it enacted by the Legislature of the state of Utah:*

27 Section 1. Section **19-3-102** is amended to read:

28 **19-3-102. Definitions.**

29 As used in this chapter:

30 (1) "Board" means the Waste Management and Radiation Control Board created under
31 Section 19-1-106.

32 (2) (a) "Broker" means a person who performs one or more of the following functions
33 for a generator:

- 34 (i) arranges for transportation of the radioactive waste;
- 35 (ii) collects or consolidates shipments of radioactive waste; or
- 36 (iii) processes radioactive waste in some manner.

37 (b) "Broker" does not include a carrier whose sole function is to transport the
38 radioactive waste.

39 (3) "Byproduct material" [~~has the same meaning as~~] means the same as that term is
40 defined in 42 U.S.C. Sec. 2014(e)(2).

41 (4) "Class B and class C low-level radioactive waste" [~~has the same meaning as~~] means
42 the same as that term is defined in 10 [~~CFR~~] C.F.R. Sec. 61.55.

43 (5) "Director" means the director of the Division of Waste Management and Radiation
44 Control.

45 (6) "Division" means the Division of Waste Management and Radiation Control,
46 created in Subsection 19-1-105(1)(d).

47 (7) "Generator" means a person who:

- 48 (a) possesses any material or component:
 - 49 (i) that contains radioactivity or is radioactively contaminated; and
 - 50 (ii) for which the person foresees no further use; and
- 51 (b) transfers the material or component to:
 - 52 (i) a commercial radioactive waste treatment or disposal facility; or
 - 53 (ii) a broker.

54 (8) (a) "High-level nuclear waste" means spent reactor fuel assemblies, dismantled
55 nuclear reactor components, and solid and liquid wastes from fuel reprocessing and

56 defense-related wastes.

57 (b) "High-level nuclear waste" does not include medical or institutional wastes,
58 naturally[=] occurring radioactive materials, or uranium mill tailings.

59 (9) (a) "Low-level radioactive waste" means waste material [~~which~~] that contains
60 radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or
61 quantities [~~which~~] that exceed applicable federal or state standards for unrestricted release.

62 (b) "Low-level radioactive waste" does not include waste containing more than 100
63 nanocuries of transuranic contaminants per gram of material, nor spent reactor fuel, nor material
64 classified as either high-level waste or waste which is unsuited for disposal by near-surface
65 burial under any applicable federal regulations.

66 (10) "Radiation" means ionizing and nonionizing radiation, including gamma rays,
67 X-rays, alpha and beta particles, high speed electrons, and other nuclear particles.

68 (11) "Radioactive" means any solid, liquid, or gas which emits radiation spontaneously
69 from decay of unstable nuclei.

70 (12) "Unlicensed facility" means a structure, road, or property:

71 (a) adjacent to, but outside of, a licensed or permitted area; and

72 (b) that is not used for waste disposal or waste management.

73 Section 2. Section **19-3-104** is amended to read:

74 **19-3-104. Registration and licensing of radiation sources by department --**

75 **Assessment of fees -- Rulemaking authority and procedure -- Siting criteria -- Indirect**
76 **and direct costs.**

77 (1) As used in this section:

78 (a) "Decommissioning" includes financial assurance.

79 (b) "Source material" and "byproduct material" [~~have the same definitions as~~] mean the
80 same as those terms are defined in the Atomic Energy Act of 1954, 42 U.S.C. Sec. 2014, as
81 amended.

82 (2) The division may require the registration or licensing of radiation sources that

83 constitute a significant health hazard.

84 (3) All sources of ionizing radiation, including ionizing radiation producing machines,
85 shall be registered or licensed by the department.

86 (4) In accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act, the
87 board may make rules:

88 (a) necessary for controlling exposure to sources of radiation that constitute a
89 significant health hazard;

90 (b) to meet the requirements of federal law relating to radiation control to ensure the
91 radiation control program under this part is qualified to maintain primacy from the federal
92 government;

93 (c) to establish certification procedure and qualifications for persons who survey
94 mammography equipment and oversee quality assurance practices at mammography facilities;
95 and

96 (d) as necessary regarding the possession, use, transfer, or delivery of source and
97 byproduct material and the disposal of byproduct material to establish requirements for:

98 (i) the licensing, operation, decontamination, and decommissioning, including financial
99 assurances; and

100 (ii) the reclamation of sites, structures, and equipment used in conjunction with the
101 activities described in this Subsection (4).

102 (5) (a) On and after January 1, 2003, a fee is imposed for the regulation of source and
103 byproduct material and the disposal of byproduct material at uranium mills or commercial waste
104 facilities, as provided in this Subsection (5).

105 (b) On and after January 1, 2003, through March 30, 2003:

106 (i) \$6,667 per month for uranium mills or commercial sites disposing of or reprocessing
107 byproduct material; and

108 (ii) \$4,167 per month for those uranium mills the director has determined are on
109 standby status.

110 (c) On and after March 31, 2003, through June 30, 2003, the same fees as in Subsection
111 (5)(b) apply, but only if the federal Nuclear Regulatory Commission grants to Utah an
112 amendment for agreement state status for uranium recovery regulation on or before March 30,
113 2003.

114 (d) If the Nuclear Regulatory Commission does not grant the amendment for state
115 agreement status on or before March 30, 2003, fees under Subsection (5)(e) do not apply and
116 are not required to be paid until on and after the later date of:

117 (i) October 1, 2003; or

118 (ii) the date the Nuclear Regulatory Commission grants to Utah an amendment for
119 agreement state status for uranium recovery regulation.

120 (e) For the payment periods beginning on and after July 1, 2003, the department shall
121 establish the fees required under Subsection (5)(a) under Section 63J-1-504, subject to the
122 restrictions under Subsection (5)(d).

123 (f) The division shall deposit fees it receives under this Subsection (5) into the
124 Environmental Quality Restricted Account created in Section 19-1-108.

125 (6) (a) The division shall assess fees for registration, licensing, and inspection of
126 radiation sources under this section.

127 (b) The division shall comply with the requirements of Section 63J-1-504 in assessing
128 fees for licensure and registration.

129 (7) (a) Except as provided in Subsection (8), and in accordance with Title 63G, Chapter
130 3, Utah Administrative Rulemaking Act, the board may not adopt rules, for the purpose of the
131 state assuming responsibilities from the United States Nuclear Regulatory Commission with
132 respect to regulation of sources of ionizing radiation, that are more stringent than the
133 corresponding federal regulations which address the same circumstances.

134 (b) In adopting those rules, the board may incorporate corresponding federal
135 regulations by reference.

136 (8) (a) The board may adopt rules more stringent than corresponding federal

137 regulations for the purpose described in Subsection (7) only if it makes a written finding after
138 public comment and hearing and based on evidence in the record that corresponding federal
139 regulations are not adequate to protect public health and the environment of the state.

140 (b) Those findings shall be accompanied by an opinion referring to and evaluating the
141 public health and environmental information and studies contained in the record which form the
142 basis for the board's conclusion.

143 (9) (a) In accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act,
144 the board shall by rule:

145 (i) authorize independent qualified experts to conduct inspections required under this
146 chapter of x-ray facilities registered with the division; and

147 (ii) establish qualifications and certification procedures necessary for independent
148 experts to conduct these inspections.

149 (b) Independent experts under this Subsection (9) are not considered employees or
150 representatives of the division or the state when conducting the inspections.

151 (10) (a) In accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act,
152 the board may by rule establish criteria for siting commercial low-level radioactive waste
153 treatment or disposal facilities, subject to the prohibition imposed by Section 19-3-103.7.

154 (b) Subject to Subsection 19-3-105(10), any facility under Subsection (10)(a) for which
155 a radioactive material license is required by this section shall comply with those criteria.

156 (c) Subject to Subsection 19-3-105(10), a facility may not receive a radioactive material
157 license until siting criteria have been established by the board. The criteria also apply to
158 facilities that have applied for but not received a radioactive material license.

159 (11) In accordance with Title 63G, Chapter 3, Utah Administrative Rulemaking Act,
160 the board shall make rules that:

161 (a) establish financial assurance requirements for closure and postclosure care of
162 radioactive waste land disposal facilities[-]; and

163 (b) establish financial assurance requirements for closure and postclosure care of an

164 unlicensed facility.

165 (12) The rules described in Subsection (11) shall include the following provisions:

166 (a) the financial assurance shall be based on an annual ~~[calculation]~~ estimate and shall
167 include ~~[the costs of]~~ closure and postclosure ~~[care of radioactive waste land disposal facilities]~~
168 costs in all areas subject to the licensed or permitted portions of the facility;

169 (b) financial assurance ~~[for closing the areas within the disposal embankments shall be~~
170 ~~limited to the cost of closing areas where waste has been disposed; and]~~ for an unlicensed
171 facility that supports the operation of a licensed or permitted facility shall include the estimated
172 cost of:

173 ~~[(c) at the option of the licensee or permittee, the financial assurance requirements shall~~
174 ~~be based on:]~~

175 (i) the removal of structures;

176 (ii) the testing of structures, roads, and property to ensure no radiological
177 contamination has occurred outside of the licensed area; and

178 (iii) stabilization and water infiltration control;

179 (c) financial assurance cost estimates for a single approved waste disposal unit for
180 which the volume of waste already placed and proposed to be placed in the unit within the
181 surety period is less than the full waste capacity of the unit shall reflect the closure and
182 postclosure costs for a waste disposal unit smaller than the approved waste disposal unit, if the
183 unit could be reduced in size, meet closure requirements, and reduce closure costs;

184 (d) financial assurance cost estimates for two approved adjacent waste disposal units
185 that have been approved to be combined into a single unit and for which the combined volume
186 of waste already placed and proposed to be placed in the units within the surety period is less
187 than the combined waste capacity for the two separate units shall reflect either two separate
188 waste disposal units or a single combined unit, whichever has the lowest closure and
189 postclosure costs;

190 (e) the licensee or permittee shall annually propose closure and postclosure costs upon

191 which financial assurance amounts are based, including costs of potential remediation at the
192 licensed or permitted facility and, notwithstanding the obligations described in Subsection
193 (12)(b), any unlicensed facility;

194 (f) to provide the information in Subsection (12)(e), the licensee or permittee shall
195 provide:

196 (i) [~~an annual calculation~~] a proposed annual cost estimate using the current edition of
197 RS Means Facilities Construction Cost Data or using a process, including an indirect cost
198 multiplier, previously agreed to between the licensee or permittee and the director; or

199 (ii) (A) for an initial financial assurance determination and for each financial assurance
200 determination every five years thereafter, a proposed competitive site-specific [~~bid~~] estimate for
201 closure and postclosure care of the facility at least once every five years; and

202 (B) for each year between a financial assurance determination [~~as~~] described in
203 Subsection [~~(12)(c)(ii)(A);~~] (12)(f)(ii)(A), a proposed financial assurance estimate that accounts
204 for current site conditions and that includes an annual inflation adjustment to the financial
205 assurance determination using the Gross Domestic Product Implicit Price Deflator of the
206 Bureau of Economic Analysis, United States Department of Commerce, calculated by dividing
207 the latest annual deflator by the deflator for the previous year[-]; and

208 (g) the director shall:

209 (i) annually review the licensee's or permittee's proposed closure and postclosure
210 estimate; and

211 (ii) approve the estimate if the director determines that the estimate would be sufficient
212 to provide for closure and postclosure costs.

213 (13) Subject to the financial assurance requirements described in Subsections (11) and
214 (12), if the director and the licensee or permittee do not agree on a final financial assurance
215 determination made by the director, the licensee or permittee may appeal the determination in:

216 (a) an arbitration proceeding governed by Title 78B, Chapter 11, Utah Uniform
217 Arbitration Act, with the costs of the arbitration to be split equally between the licensee or

218 permittee and the division, if both the licensee or permittee and the director agree in writing to
219 arbitration; or

220 (b) a special adjudicative proceeding under Section 19-1-301.5.

221 Section 3. Section 19-3-105 is amended to read:

222 **19-3-105. Definitions -- Legislative and gubernatorial approval required for**
223 **radioactive waste license -- Exceptions -- Application for new, renewed, or amended**
224 **license.**

225 (1) As used in this section:

226 (a) "Alternate feed material" has the same definition as provided in Section 59-24-102.

227 (b) "Approval application" means an application by a radioactive waste facility
228 regulated under this chapter or Title 19, Chapter 5, Water Quality Act, for a permit, license,
229 registration, certification, or other authorization.

230 (c) (i) "Class A low-level radioactive waste" means:

231 (A) radioactive waste that is classified as class A waste under 10 C.F.R. 61.55; and

232 (B) radium-226 up to a maximum radionuclide concentration level of 10,000 picocuries
233 per gram.

234 (ii) "Class A low-level radioactive waste" does not include:

235 (A) uranium mill tailings;

236 (B) naturally occurring radioactive materials; or

237 (C) the following radionuclides if classified as "special nuclear material" under the
238 Atomic Energy Act of 1954, 42 U.S.C. 2014:

239 (I) uranium-233; and

240 (II) uranium-235 with a radionuclide concentration level greater than the concentration
241 limits for specific conditions and enrichments established by an order of the Nuclear Regulatory
242 Commission:

243 (Aa) to ensure criticality safety for a radioactive waste facility in the state; and

244 (Bb) in response to a request, submitted prior to January 1, 2004, from a radioactive

245 waste facility in the state to the Nuclear Regulatory Commission to amend the facility's special
246 nuclear material exemption order.

247 (d) (i) "Radioactive waste facility" or "facility" means a facility that [~~receives, transfers,~~
248 ~~stores,]~~ decays radioactive waste in storage, treats radioactive waste, or disposes of radioactive
249 waste:

250 (A) commercially for profit; or

251 (B) generated at locations other than the radioactive waste facility.

252 (ii) "Radioactive waste facility" does not include a facility that receives:

253 (A) alternate feed material for reprocessing; or

254 (B) radioactive waste from a location in the state designated as a processing site under
255 42 U.S.C. 7912(f).

256 (e) "Radioactive waste license" or "license" means a radioactive material license issued
257 by the director under Subsection 19-3-108(2)(d), to own, construct, modify, or operate a
258 radioactive waste facility.

259 (2) The provisions of this section are subject to the prohibition under Section
260 19-3-103.7.

261 (3) Subject to Subsection (8), a person may not own, construct, modify, or operate a
262 radioactive waste facility without:

263 (a) having received a radioactive waste license for the facility;

264 (b) meeting the requirements established by rule under Section 19-3-104;

265 (c) the approval of the governing body of the municipality or county responsible for
266 local planning and zoning where the radioactive waste is or will be located; and

267 (d) subsequent to meeting the requirements of Subsections (3)(a) through (c), the
268 approval of the governor and the Legislature.

269 (4) Subject to Subsection (8), a new radioactive waste license application, or an
270 application to renew or amend an existing radioactive waste license, is subject to the
271 requirements of Subsections (3)(b) through (d) if the application, renewal, or amendment:

272 (a) specifies a different geographic site than a previously submitted application;
273 (b) would cost 50% or more of the cost of construction of the original radioactive
274 waste facility or the modification would result in an increase in capacity or throughput of a
275 cumulative total of 50% of the total capacity or throughput which was approved in the facility
276 license as of January 1, 1990, or the initial approval facility license if the initial license approval
277 is subsequent to January 1, 1990; or

278 (c) requests approval to [~~receive, transfer, store,~~] decay radioactive waste in storage,
279 treat radioactive waste, or dispose of radioactive waste having a higher radionuclide
280 concentration limit than allowed, under an existing approved license held by the facility, for the
281 specific type of waste to be [~~received, transferred, stored,~~] decayed in storage, treated, or
282 disposed of.

283 (5) The requirements of Subsection (4)(c) do not apply to an application to renew or
284 amend an existing radioactive waste license if:

285 (a) the radioactive waste facility requesting the renewal or amendment has received a
286 license prior to January 1, 2004; and

287 (b) the application to renew or amend its license is limited to a request to approve the
288 receipt, transfer, storage, decay in storage, treatment, or disposal of class A low-level
289 radioactive waste.

290 (6) A radioactive waste facility [~~which~~] that receives a new radioactive waste license
291 after May 3, 2004, is subject to the requirements of Subsections (3)(b) through (d) for any
292 license application, renewal, or amendment that requests approval to [~~receive, transfer, store,~~]
293 decay radioactive waste in storage, treat radioactive waste, or dispose of radioactive waste not
294 previously approved under an existing license held by the facility.

295 (7) If the board finds that approval of additional radioactive waste license applications,
296 renewals, or amendments will result in inadequate oversight, monitoring, or licensure
297 compliance and enforcement of existing and any additional radioactive waste facilities, the board
298 shall suspend acceptance of further applications for radioactive waste licenses. The board shall

299 report the suspension to the Legislative Management Committee.

300 (8) The requirements of Subsections (3)(c) and (d) and Subsection 19-3-104(10) do not
301 apply to:

302 (a) a radioactive waste license that is in effect on December 31, 2006, including all
303 amendments to the license that have taken effect as of December 31, 2006;

304 (b) a license application for a facility in existence as of December 31, 2006, unless the
305 license application includes an area beyond the facility boundary approved in the license
306 described in Subsection (8)(a); or

307 (c) an application to renew or amend a license described in Subsection (8)(a), unless the
308 renewal or amendment includes an area beyond the facility boundary approved in the license
309 described in Subsection (8)(a).

310 (9) (a) The director shall review an approval application to determine whether the
311 application complies with the requirements of this chapter and the rules of the board.

312 (b) Within 60 days after the day on which the director receives an approval application
313 described in Subsection (10)(a)(ii) or (iii), the director shall:

314 (i) determine whether the application is complete and contains all the information
315 necessary to process the application for approval; and

316 (ii) (A) issue a notice of completeness to the applicant; or

317 (B) issue a notice of deficiency to the applicant and list the additional information
318 necessary to complete the application.

319 (c) The director shall review information submitted in response to a notice of deficiency
320 within 30 days after the day on which the director receives the information.

321 (10) The board shall make rules, in accordance with Title 63G, Chapter 3, Utah
322 Administrative Rulemaking Act, to:

323 (a) categorize approval applications as follows:

324 (i) approval applications that:

325 (A) are administrative in nature;

- 326 (B) require limited scrutiny by the director; and
- 327 (C) do not require public input;
- 328 (ii) approval applications that:
- 329 (A) require substantial scrutiny by the director;
- 330 (B) require public input; and
- 331 (C) are not described in Subsection (10)(a)(iii); and
- 332 (iii) approval applications for:
- 333 (A) the granting or renewal of a radioactive waste license;
- 334 (B) the granting or renewal of a groundwater permit issued by the director for a
- 335 radioactive waste facility;
- 336 (C) an amendment to a radioactive waste license, or a groundwater permit, that allows
- 337 the design and approval of a new disposal cell;
- 338 (D) an amendment to a radioactive waste license or groundwater discharge permit for a
- 339 radioactive waste facility to eliminate groundwater monitoring; and
- 340 (E) a radioactive waste facility closure plan;
- 341 (b) provide time periods for the director to review, and approve or deny, an application
- 342 described in Subsection (10)(a) as follows:
- 343 (i) for applications categorized under Subsection (10)(a)(i), within 30 days after the day
- 344 on which the director receives the application;
- 345 (ii) for applications categorized under Subsection (10)(a)(ii), within 180 days after the
- 346 day on which the director receives the application;
- 347 (iii) for applications categorized under Subsection (10)(a)(iii), as follows:
- 348 (A) for a new radioactive waste license, within 540 days after the day on which the
- 349 director receives the application;
- 350 (B) for a new groundwater permit issued by the director for a radioactive waste facility
- 351 consistent with the provisions of Title 19, Chapter 5, Water Quality Act, within 540 days after
- 352 the day on which the director receives the application;

353 (C) for a radioactive waste license renewal, within 365 days after the day on which the
354 director receives the application;

355 (D) for a groundwater permit renewal issued by the director for a radioactive waste
356 facility, within 365 days after the day on which the director receives the application;

357 (E) for an amendment to a radioactive waste license, or a groundwater permit, that
358 allows the design and approval of a new disposal cell, within 365 days after the day on which
359 the director receives the application;

360 (F) for an amendment to a radioactive waste license, or a groundwater discharge
361 permit, for a radioactive waste facility to eliminate groundwater monitoring, within 365 days
362 after the day on which the director receives the application; and

363 (G) for a radioactive waste facility closure plan, within 365 days after the day on which
364 the director receives the application;

365 (c) toll the time periods described in Subsection (10)(b):

366 (i) while an owner or operator of a facility responds to the director's request for
367 information;

368 (ii) during a public comment period; or

369 (iii) while the federal government reviews the application; and

370 (d) require the director to prepare a detailed written explanation of the basis for the
371 director's approval or denial of an approval application.