

**SENATE BILL No. 171**

By Committee on Utilities

2-3

1 AN ACT concerning the department of health and environment; relating to  
2 radiation protection and control; authorizing the secretary of health and  
3 environment to license nuclear fusion systems; establishing such  
4 licensure fee; authorizing the secretary to impose late fees for any  
5 expired radiation protection and control license; amending K.S.A. 2024  
6 Supp. 48-1603 and 48-1606 and repealing the existing sections.

7  
8 *Be it enacted by the Legislature of the State of Kansas:*

9 Section 1. K.S.A. 2024 Supp. 48-1603 is hereby amended to read as  
10 follows: 48-1603. As used in this act:

11 (a) "By-product material" means: (1) Any radioactive material, except  
12 special nuclear material, yielded in or made radioactive by exposure to the  
13 radiation incident to the process of producing or utilizing special nuclear  
14 material;

15 (2) the tailings or wastes produced by the extraction or concentration  
16 of uranium or thorium from any ore processed primarily for its source  
17 material content;

18 (3) (A) any discrete source of radium-226 that is produced, extracted  
19 or converted after extraction for use for a commercial, medical or research  
20 activity; or

21 (B) any material that:

22 (i) Has been made radioactive by use of a particle accelerator; and

23 (ii) is produced, extracted or converted after extraction for use for a  
24 commercial, medical or research activity; or

25 (4) any discrete source of naturally occurring radioactive material,  
26 other than source material, that:

27 (A) The secretary declares by order would pose a threat to the public  
28 health and safety or the common defense and security similar to the threat  
29 posed by a discrete source of radium-226 after the United States nuclear  
30 regulatory commission, or any successor thereto, determines the same; and

31 (B) is extracted or converted after extraction for use in a commercial,  
32 medical or research activity.

33 (b) "Department" means the Kansas department of health and  
34 environment.

35 (c) "Civil penalty" means any monetary penalty levied on a licensee  
36 or registrant because of violations of statutes, regulations, licenses or

1 registration certificates, but does not include criminal penalties.

2 (d) "Closure" or "site closure" means all activities performed at a  
3 waste disposal site, such as stabilization and contouring, to assure that the  
4 site is in a stable condition so that only minor custodial care, surveillance  
5 and monitoring are necessary at the site following termination of licensed  
6 operation.

7 (e) "Decommissioning" means final operational activities at a facility  
8 to dismantle site structures, to decontaminate site surfaces and remaining  
9 structures, to stabilize and contain residual radioactive material and to  
10 carry out any other activities to prepare the site for postoperational care.

11 (f) "Disposal of low-level radioactive waste" means the isolation of  
12 such waste from the biosphere.

13 (g) "Electronic product" means any manufactured or assembled:

14 (1) Product which, when in operation, contains or acts as part of an  
15 electronic circuit and emits, or in the absence of effective shielding or  
16 other controls would emit, electronic product radiation; or

17 (2) article ~~which~~ that is intended for use as a component part, or  
18 accessory of a product described in this subsection and ~~which~~ that in  
19 operation emits, or in the absence of effective shielding or other controls  
20 would emit, such radiation.

21 (h) "Electronic product radiation" means any ionizing or nonionizing,  
22 electromagnetic or particulate radiation, or any sonic, infrasonic, or  
23 ultrasonic wave, ~~which~~ that is emitted from an electronic product as the  
24 result of the operation of an electronic circuit in such product.

25 (i) "General license" means a license effective pursuant to rules and  
26 regulations promulgated by the secretary of health and environment,  
27 without the filing of an application to transfer, acquire, own, possess or use  
28 quantities of, or devices or equipment utilizing by-product, source, special  
29 nuclear materials, or other radioactive material occurring naturally or  
30 produced artificially.

31 (j) "High-level radioactive waste" means:

32 (1) Irradiated reactor fuel;

33 (2) liquid wastes resulting from the operation of the first cycle solvent  
34 extraction system, or equivalent, and the concentrated wastes from  
35 subsequent extraction cycles, or equivalent, in a facility for uranium  
36 processing irradiated reactor fuel; and

37 (3) solids into which such liquid wastes have been converted.

38 (k) "Low-level radioactive waste" means radioactive waste not  
39 classified as:

40 (1) NORM waste or TENORM waste at concentrations and from  
41 sources established in rules and regulations adopted by the secretary on or  
42 before July 1, 2016;

43 (2) high-level radioactive waste;

1 (3) transuranic waste;

2 (4) spent nuclear fuel; or

3 (5) by-product material as defined in subsection (a)(2).

4 (l) "Person" means any individual, corporation, partnership, firm,  
5 association, trust, estate, public or private institution, group, agency,  
6 political subdivision of this state; or any other state or political subdivision  
7 or agency thereof, and any legal successor, representative, agency; or  
8 agency of the foregoing, ~~other than~~. "Person" does not include the United  
9 States nuclear regulatory commission; or any successor thereto, ~~and other~~  
10 ~~than or any federal government agencies~~ agency licensed by the United  
11 States nuclear regulatory commission; or any successor thereto.

12 (m) "Radiation" means:

13 (1) Ionizing radiation including gamma rays, X-rays, alpha particles,  
14 beta particles; and including neutrons;

15 (2) any electromagnetic radiation other than ionizing radiation ~~which~~  
16 ~~that~~ is generated during the operation of an electronic product; or

17 (3) any sonic, ultrasonic; or infrasonic wave ~~which that~~ is emitted  
18 from an electronic product as a result of the operation of an electronic  
19 circuit in such product.

20 (n) "Radioactive material" means any material, solid, liquid or gas,  
21 ~~which that~~ emits ionizing radiation spontaneously. ~~It~~ "Radioactive  
22 material" includes accelerator produced, by-product, naturally occurring,  
23 source and special nuclear materials.

24 (o) "Secretary" means the secretary of the Kansas department of  
25 health and environment.

26 (p) "Source material" means:

27 (1) Uranium, thorium or any other material ~~which that~~ the secretary  
28 declares by order to be source material after the United States nuclear  
29 regulatory commission, or any successor thereto, has determined the  
30 material to be such; or

31 (2) ores containing one or more of the foregoing materials, in such  
32 concentration as the secretary declares by order to be source material after  
33 the United States nuclear regulatory commission, or any successor thereto,  
34 has determined the material in such concentration to be source material.

35 (q) "Source material mill tailings" means the tailings or waste  
36 produced by the extraction or concentration of uranium or thorium from  
37 any ore processed primarily for its source material content, including  
38 discrete surface wastes resulting from underground solution extraction  
39 processes but not including underground ore bodies depleted by such  
40 solution extraction process.

41 (r) "Source material milling" means any processing of ore, including  
42 underground solution extraction of unmined ore, primarily for the purpose  
43 of extracting or concentrating uranium or thorium therefrom ~~and which~~

1 *that* results in the production of source material mill tailings.

2 (s) "Sources of radiation" means, collectively, radioactive material  
3 and radiation generating equipment.

4 (t) "Special nuclear material" means:

5 (1) Plutonium, uranium 233, uranium enriched in the isotope 233 or  
6 in the isotope 235, and any other material ~~which~~ *that* the secretary declares  
7 by order to be special nuclear material after the United States nuclear  
8 regulatory commission, or any successor thereto, has determined the  
9 material to be such, but does not include source material; or

10 (2) any material artificially enriched by any of the foregoing, but does  
11 not include source material.

12 (u) "Specific license" means a license issued after application, to use,  
13 manufacture, produce, transfer, receive, acquire, own or possess quantities  
14 of, or devices or equipment utilizing by-product, source, special nuclear  
15 materials; or other radioactive material occurring naturally or produced  
16 artificially.

17 (v) "Spent nuclear fuel" means irradiated nuclear fuel that has  
18 undergone at least one year's decay since being used as a source of energy  
19 in a power reactor. "Spent nuclear fuel" includes the special nuclear  
20 material, by-product material, source material and other radioactive  
21 material associated with fuel assemblies.

22 (w) "Transuranic waste" means radioactive waste containing alpha  
23 emitting transuranic elements, with radioactive half-lives greater than five  
24 years, in excess of 10 nanocuries per gram.

25 (x) "Naturally occurring radioactive material" or "NORM" means any  
26 nuclide that is radioactive in the nuclide's natural physical state. "NORM"  
27 does not include accelerator produced, by-product, source or special  
28 nuclear material.

29 (y) "NORM waste" means solid waste as defined in K.S.A. 65-3402,  
30 and amendments thereto, that is contaminated with NORM.

31 (z) "Technologically enhanced NORM" or "TENORM" means  
32 NORM whose radionuclide concentrations are increased by or as a result  
33 of past or present human practices. "TENORM" does not include  
34 accelerator produced, by-product, source or special nuclear material.

35 (aa) "TENORM waste" means solid waste as defined in K.S.A. 65-  
36 3402, and amendments thereto, that is contaminated with TENORM.

37 (bb) *"Fusion system" means a system that, through use of byproduct*  
38 *material or production of byproduct material, induces fusion reactions.*  
39 *"Fusion system" includes particle accelerators that induce fusion*  
40 *reactions and any radiation, radioactive material and supporting*  
41 *structures, systems and components that are used to contain, process or*  
42 *control radiation and radioactive materials used in or resulting from*  
43 *fusion reactions.*

1       Sec. 2. K.S.A. 2024 Supp. 48-1606 is hereby amended to read as  
 2 follows: 48-1606. (a) The secretary of health and environment shall be  
 3 responsible for state radiation control.

4       (b) The secretary, for the protection of the public health and safety,  
 5 shall develop programs for evaluation of hazards associated with use of  
 6 sources of radiation.

7       (c) The secretary may:

8       (1) Advise, consult and cooperate with other agencies of the state, the  
 9 federal government, other states and interstate agencies, political  
 10 subdivisions and with groups concerned with control of sources of  
 11 radiation;

12       (2) accept and administer grants or gifts, conditional or otherwise, in  
 13 furtherance of its functions, from the federal government and from other  
 14 sources, public or private;

15       (3) collect and disseminate information relating to control of sources  
 16 of radiation;

17       (4) encourage, participate in, or conduct studies, investigations,  
 18 training, research and demonstrations relating to control of sources of  
 19 radiation;

20       (5) in accordance with the laws of the state, employ, compensate and  
 21 prescribe the powers and duties of such individuals as may be necessary to  
 22 carry out the responsibilities set forth herein;

23       (6) institute training programs for the purpose of qualifying personnel  
 24 to carry out the provisions of this act, and make personnel available for  
 25 participation in any program or programs of the federal government, other  
 26 states or interstate agencies in furtherance of the purposes of this act;

27       (7) fix, charge and collect fees for licenses and registrations, and  
 28 renewals thereof, issued under the nuclear energy development and  
 29 radiation control act to cover all or any part of the cost of administering  
 30 such act; and

31       (8) receive any moneys in the form of grants, gifts, licensing or  
 32 registration fees, or as paid under an agreement with the secretary or as  
 33 reimbursement for remedial action costs.

34       (d) Subject to the following limitations, the secretary may assess a fee  
 35 for the following categories of radiation protection services:

36 **Fee Category:**

37 **1. Special nuclear material**

38       A. Licenses for possession and use of special nuclear material in  
 39 sealed sources contained in devices used in industrial  
 40 measuring systems

41       Maximum annual fee.....\$950

42       B. Any licenses not otherwise specified in this table for  
 43 possession and use of special nuclear material, except licenses

- 1 authorizing special nuclear material in unsealed form in  
 2 combination that would constitute a critical mass  
 3 Maximum annual fee.....\$2,250
- 4 **2. Source material**
- 5 A. Licenses that authorize only the possession, use and/or  
 6 installation of source material for shielding  
 7 Maximum annual fee.....\$365
- 8 B. All other source material licenses not otherwise specified in  
 9 this table  
 10 Maximum annual fee.....\$5,700
- 11 **3. Radioactive or byproduct material**
- 12 A. Licenses of broad scope for possession and use of radioactive  
 13 or byproduct material issued for processing or manufacturing  
 14 of items containing radioactive or byproduct material for  
 15 commercial distribution  
 16 Maximum annual fee.....\$10,900
- 17 B. Other licenses for possession and use of radioactive or  
 18 byproduct material issued for processing or manufacturing of  
 19 items containing radioactive or byproduct material for  
 20 commercial distribution  
 21 Maximum annual fee.....\$3,300
- 22 C. Licenses authorizing the processing or manufacturing and  
 23 distribution or redistribution of radiopharmaceuticals,  
 24 generators, reagent kits and/or sources and devices containing  
 25 radioactive or byproduct material. This category also includes  
 26 the possession and use of source material for shielding when  
 27 included on the same license  
 28 Maximum annual fee.....\$5,450
- 29 D. Licenses and approvals authorizing distribution or  
 30 redistribution of radiopharmaceuticals, generators, reagent kits  
 31 and/or sources or devices not involving processing of  
 32 radioactive or byproduct material. This category also includes  
 33 the possession and use of source material for shielding when  
 34 included on the same license  
 35 Maximum annual fee.....\$2,350
- 36 E. Licenses for possession and use of radioactive or byproduct  
 37 material in sealed sources for irradiation of materials in which  
 38 the source is not removed from its shield (self-shielded units)  
 39 Maximum annual fee.....\$1,800
- 40 F. Licenses for possession and use of less than 10,000 curies of  
 41 radioactive or byproduct material in sealed sources for  
 42 irradiation of materials in which the source is exposed for  
 43 irradiation purposes. This category also includes underwater

1		irradiators for irradiation of materials in which the source is	
2		not exposed for irradiation purposes	
3		Maximum annual fee.....	\$3,300
4	G.	Licenses for possession and use of 10,000 curies or more of	
5		radioactive or byproduct material in sealed sources for	
6		irradiation of materials in which the source is exposed for	
7		irradiation purposes. This category also includes underwater	
8		irradiators for irradiation of materials in which the source is	
9		not exposed for irradiation purposes	
10		Maximum annual fee.....	\$12,050
11	H.	Licenses issued to distribute items containing radioactive or	
12		byproduct material that require device review to persons	
13		exempt from licensing, except specific licenses authorizing	
14		redistribution of items that have been authorized for	
15		distribution to persons exempt from licensing	
16		Maximum annual fee.....	\$3,000
17	I.	Licenses issued to distribute items containing radioactive or	
18		byproduct material or quantities of radioactive or byproduct	
19		material that do not require device review to persons exempt	
20		from licensing, except for specific licenses authorizing	
21		redistribution of items that have been authorized for	
22		distribution to persons exempt from licensing	
23		Maximum annual fee.....	\$3,050
24	J.	Licenses issued to distribute items containing radioactive or	
25		byproduct material that require sealed source and/or device	
26		review to persons generally licensed, except specific licenses	
27		authorizing redistribution of items that have been authorized	
28		for distribution to persons generally licensed	
29		Maximum annual fee.....	\$1,100
30	K.	Licenses issued to distribute items containing radioactive or	
31		byproduct material or quantities of radioactive or byproduct	
32		material that do not require sealed source and/or device review	
33		to persons generally licensed, except specific licenses	
34		authorizing redistribution of items that have been authorized	
35		for distribution to persons generally licensed	
36		Maximum annual fee.....	\$700
37	L.	Licenses of broad scope for possession and use of radioactive	
38		or byproduct material issued for research and development that	
39		do not authorize commercial distribution	
40		Maximum annual fee.....	\$5,900
41	M.	Other licenses for possession and use of radioactive or	
42		byproduct material issued for research and development that	
43		do not authorize commercial distribution	

1		Maximum annual fee.....	\$2,800
2	N.	Licenses that authorize services for other licensees, except (1)	
3		Licenses that authorize only calibration and/or leak testing	
4		services are subject to the fees specified in fee category 3P;	
5		and (2) licenses that authorize waste disposal services are	
6		subject to the fees specified in fee categories 4A, 4B and 4C	
7		Maximum annual fee.....	\$3,050
8	O.	Licenses for possession and use of radioactive or byproduct	
9		material for industrial radiography operations. This category	
10		also includes the possession and use of source material for	
11		shielding when authorized on the same license	
12		Maximum annual fee.....	\$6,100
13	P.	All other specific radioactive or byproduct material licenses	
14		not otherwise specified in this table	
15		Maximum annual fee.....	\$1,250
16	Q.	Registration of generally licensed devices or sources	
17		Maximum annual fee.....	\$225

18 **4. Waste disposal and processing**

19	A.	Licenses authorizing the possession and use of waste	
20		radioactive, by-product, source or special nuclear material for a	
21		commercial low-level radioactive waste disposal facility.	
22		Maximum annual fee.....	Full cost
23	i.	Amendment to license concerning safety and environmental	
24		questions	
25		Maximum amendment fee.....	Full cost
26	ii.	Amendment to license concerning administration questions	
27		(no safety or environment questions)	
28		Maximum amendment fee.....	Full cost
29	B.	Licenses specifically authorizing the receipt of waste	
30		radioactive or byproduct material, source material or special	
31		nuclear material from other persons for the purpose of	
32		packaging or repackaging the material. The licensee will	
33		dispose of the material by transfer to another person authorized	
34		to receive or dispose of the material	
35		Maximum annual fee.....	\$5,150
36	C.	Licenses specifically authorizing the receipt of prepackaged	
37		waste radioactive or byproduct material, source material or	
38		special nuclear material from other persons. The licensee will	
39		dispose of the material by transfer to another person authorized	
40		to receive or dispose of the material	
41		Maximum annual fee.....	\$3,700

42 **5. Well logging**

43	A.	Licenses for possession and use of radioactive or byproduct	
----	----	---	--



- 1 material, source material and/or special nuclear material for  
 2 well logging, well surveys and tracer studies other than field  
 3 flooding tracer studies  
 4 Maximum annual fee.....\$2,350
- 5 B. Licenses for possession and use of radioactive or byproduct  
 6 material for field flooding tracer studies  
 7 Maximum annual fee.....\$2,350
- 8 **6. Nuclear laundries**
- 9 A. Licenses for commercial collection and laundry of items  
 10 contaminated with radioactive or byproduct material, source  
 11 material or special nuclear material  
 12 Maximum annual fee.....\$11,550
- 13 **7. Medical licenses**
- 14 A. Licenses issued for human use of radioactive or byproduct  
 15 material, source material or special nuclear material in sealed  
 16 sources contained in teletherapy devices. This category also  
 17 includes the possession and use of source material for shielding  
 18 when authorized on the same license  
 19 Maximum annual fee.....\$5,500
- 20 B. Licenses of broad scope issued to medical institutions or two  
 21 or more physicians authorizing research and development,  
 22 including human use of radioactive or byproduct material  
 23 except licenses for radioactive or byproduct material, source  
 24 material or special nuclear material in sealed sources contained  
 25 in teletherapy devices. This category also includes the  
 26 possession and use of source material for shielding when  
 27 authorized on the same license. Separate annual fees will not  
 28 be assessed for pacemaker licenses issued to medical  
 29 institutions who also hold nuclear medicine licenses under  
 30 categories 7B or 7C  
 31 Maximum annual fee.....\$12,350
- 32 C. Other license issued for human use of radioactive or byproduct  
 33 material, source material and/or special nuclear material except  
 34 licenses for radioactive or byproduct material, source material  
 35 or special nuclear material in sealed sources contained in  
 36 teletherapy devices. This category also includes the possession  
 37 and use of source material for shielding when authorized on  
 38 the same license. Separate annual fees will not be assessed for  
 39 pacemaker licenses issued to medical institutions who also  
 40 hold nuclear medicine licenses under categories 7B or 7C  
 41 Maximum annual fee.....\$2,300
- 42 **8. Civil defense**
- 43 A. Licenses for possession and use of radioactive or byproduct

- 1 material, source material or special nuclear material for civil  
 2 defense activities  
 3 Maximum annual fee.....\$650
- 4 **9. Device, product or sealed source safety evaluation**
- 5 A. Safety evaluation review of devices or products containing  
 6 radioactive or byproduct material, source material or special  
 7 nuclear material, except reactor fuel devices, for commercial  
 8 distribution. This fee shall apply to each device or product  
 9 Maximum annual fee.....\$3,500
- 10 B. Safety evaluation review of devices or products containing  
 11 radioactive or byproduct material, source material or special  
 12 nuclear material manufactured in accordance with the unique  
 13 specifications of, and for use by, a single applicant, except  
 14 reactor fuel devices. This fee shall apply to each device or  
 15 product  
 16 Maximum annual fee.....\$3,500
- 17 C. Safety evaluation of sealed sources containing radioactive or  
 18 byproduct material, source material or special nuclear material,  
 19 except reactor fuel, for commercial distribution. This fee shall  
 20 apply to each device or product  
 21 Maximum annual fee.....\$1,100
- 22 D. Registrations issued for the safety evaluation of sealed sources  
 23 containing radioactive or byproduct material, source material  
 24 or special nuclear material, manufactured in accordance with  
 25 the unique specifications of, and for use by, a single applicant.  
 26 This fee shall apply to each device or product  
 27 Maximum annual fee.....\$365
- 28 **10. Special projects**
- 29 A. Hourly rate for radiation control program activities for which  
 30 there is not an established fee category or for radiation  
 31 protection services provided to nonlicensees and nonregistrants  
 32 Maximum hourly rate.....\$79
- 33 **11. Reciprocity**
- 34 A. Licensees who conduct activities under a reciprocal agreement  
 35 Maximum annual fee.....\$750
- 36 B. Registrants who conduct activities under a reciprocal  
 37 agreement  
 38 Maximum annual fee.....\$200
- 39 **12. X-ray machines**
- 40 A. Base registration fee per facility  
 41 Maximum annual fee.....\$200
- 42 B. Registration fee for each x-ray tube at a facility. This fee is in  
 43 addition to the base registration fee

- 1                   Maximum annual fee per x-ray tube.....\$50
- 2 **13. Accelerators**
- 3       A. Particle accelerators
- 4                   Maximum annual fee.....\$300
- 5 **14. New license and registration applications**
- 6       A. New license and registration applications. Equal to annual fee
- 7                   of applicable category
- 8 **15. Fusion system**
- 9       A. *Licenses that authorize only the possession, use*
- 10                   *or installation of a fusion system*
- 11                   Maximum annual fee ..... \$40,000

12 For licenses or registrations that authorize more than one activity, an  
 13 annual fee shall be assessed for each of the applicable categories.

14 (e) (1) An additional fee up to 50% of the maximum annual fee shall  
 15 be assessed for each noncontiguous site where radioactive material is  
 16 stored or used under the same license, per category.

17 (2) As used in this subsection, "noncontiguous site" means a location  
 18 more than one mile away from the main safety office where licensure  
 19 records are maintained.

20 (f) *The secretary may assess a late fee for any license or registration*  
 21 *that is not timely renewed. Such late fee may be assessed as follows:*

22 (1) *For any license or registration that is renewed one to 30 days*  
 23 *after the expiration date of a license or registration, the secretary may*  
 24 *assess a maximum late fee in an amount not to exceed 25% of the annual*  
 25 *license or registration fee; and*

26 (2) *for any license or registration that is renewed 31 days or more*  
 27 *after the expiration date of a license or registration, the secretary may*  
 28 *assess a maximum late fee in an amount not to exceed 50% of the annual*  
 29 *license or registration fee.*

30 (g) The secretary shall adopt rules and regulations fixing the fees for  
 31 the radiation protection services provided under this act and shall  
 32 periodically increase or decrease such fees consistent with the need to  
 33 cover all or any part of the cost of administering such act.

34 Sec. 3. K.S.A. 2024 Supp. 48-1603 and 48-1606 are hereby repealed.

35 Sec. 4. This act shall take effect and be in force from and after its  
 36 publication in the statute book.