

**SENATE BILL No. 125**

By Committee on Natural Resources

2-2

1 AN ACT concerning radioactive materials; relating to by-product material;  
2 low-level radioactive waste; naturally occurring radioactive material;  
3 amending K.S.A. 48-1603 and 48-1620 and repealing the existing  
4 sections.

5  
6 *Be it enacted by the Legislature of the State of Kansas:*

7 Section 1. K.S.A. 48-1603 is hereby amended to read as follows: 48-  
8 1603. As used in this act:

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

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

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

19 (4) *any material that:*

20 (A) *Has been made radioactive by use of a particle accelerator; and*

21 (B) *is produced, extracted or converted after extraction for use for a*  
22 *commercial, medical or research activity; or*

23 (5) *any discrete source of naturally occurring radioactive material,*  
24 *other than source material, that:*

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

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

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

34 (c) "Civil penalty" means any monetary penalty levied on a licensee  
35 or registrant because of violations of statutes, regulations, licenses or  
36 registration certificates, but does not include criminal penalties.

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

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

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

12 (g) "Electronic product" means any manufactured or assembled: (1)  
13 Product which, when in operation, contains or acts as part of an electronic  
14 circuit and emits, or in the absence of effective shielding or other controls  
15 would emit, electronic product radiation; or ~~any manufactured or~~  
16 ~~assembled~~ (2) article which is intended for use as a component part, or  
17 accessory of a product described in this subsection and which in operation  
18 emits, or in the absence of effective shielding or other controls would emit,  
19 such radiation.

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

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

30 (j) "High-level radioactive waste" means: (1) Irradiated reactor fuel;  
31 (2) liquid wastes resulting from the operation of the first cycle solvent  
32 extraction system, or equivalent, and the concentrated wastes from  
33 subsequent extraction cycles, or equivalent, in a facility for uranium  
34 processing irradiated reactor fuel; and (3) solids into which such liquid  
35 wastes have been converted.

36 (k) "Low-level radioactive waste" means radioactive waste not  
37 classified as:

38 (1) *NORM waste or TENORM waste at concentrations and from*  
39 *sources established in rules and regulations adopted by the secretary;*

40 (2) high-level radioactive waste;

41 (3) transuranic waste;

42 (4) spent nuclear fuel; or

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

1 (l) "Person" means any individual, corporation, partnership, firm,  
2 association, trust, estate, public or private institution, group, agency,  
3 political subdivision of this state, or any other state or political subdivision  
4 or agency thereof, and any legal successor, representative, agency, or  
5 agency of the foregoing, other than the United States nuclear regulatory  
6 commission, or any successor thereto, and other than federal government  
7 agencies licensed by the United States nuclear regulatory commission, or  
8 any successor thereto.

9 (m) "Radiation" means: (1) Ionizing radiation including gamma rays,  
10 X-rays, alpha particles, beta particles, and including neutrons; (2) any  
11 electromagnetic radiation other than ionizing radiation which is generated  
12 during the operation of an electronic product; or (3) any sonic, ultrasonic,  
13 or infrasonic wave which is emitted from an electronic product as a result  
14 of the operation of an electronic circuit in such product.

15 (n) "Radioactive material" means any material, solid, liquid or gas,  
16 which emits ionizing radiation spontaneously. It includes accelerator  
17 produced, by-product, naturally occurring, source and special nuclear  
18 materials.

19 (o) "Secretary" means the secretary of the Kansas department of  
20 health and environment.

21 (p) "Source material" means: (1) Uranium, thorium; or any other  
22 material which the secretary declares by order to be source material after  
23 the United States nuclear regulatory commission, or any successor thereto,  
24 has determined the material to be such; or (2) ores containing one or more  
25 of the foregoing materials, in such concentration as the secretary declares  
26 by order to be source material after the United States nuclear regulatory  
27 commission, or any successor thereto, has determined the material in such  
28 concentration to be source material.

29 (q) "Source material mill tailings" means the tailings or waste  
30 produced by the extraction or concentration of uranium or thorium from  
31 any ore processed primarily for its source material content, including  
32 discrete surface wastes resulting from underground solution extraction  
33 processes but not including underground ore bodies depleted by such  
34 solution extraction process.

35 (r) "Source material milling" means any processing of ore, including  
36 underground solution extraction of unmined ore, primarily for the purpose  
37 of extracting or concentrating uranium or thorium therefrom and which  
38 results in the production of source material mill tailings.

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

41 (t) "Special nuclear material" means: (1) Plutonium, uranium 233,  
42 uranium enriched in the isotope 233 or in the isotope 235, and any other  
43 material which the secretary declares by order to be special nuclear

1 material after the United States nuclear regulatory commission, or any  
2 successor thereto, has determined the material to be such, but does not  
3 include source material; or (2) any material artificially enriched by any of  
4 the foregoing, but does not include source material.

5 (u) "Specific license" means a license issued after application, to use,  
6 manufacture, produce, transfer, receive, acquire, own or possess quantities  
7 of, or devices or equipment utilizing by-product, source, special nuclear  
8 materials, or other radioactive material occurring naturally or produced  
9 artificially.

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

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

18 (x) *"Naturally occurring radioactive material" or "NORM" means*  
19 *any nuclide that is radioactive in the nuclide's natural physical state.*  
20 *"NORM" does not include accelerator produced, by-product, source or*  
21 *special nuclear material.*

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

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

28 (aa) *"TENORM waste" means solid waste as defined in K.S.A. 65-*  
29 *3402, and amendments thereto, that is contaminated with TENORM.*

30 Sec. 2. K.S.A. 48-1620 is hereby amended to read as follows: 48-  
31 1620. The ~~hazardous waste disposal facility approval board~~ *secretary* shall  
32 review and grant or deny final approval for each low-level radioactive  
33 waste disposal facility license in the same manner as provided in K.S.A.  
34 65-3433 et seq., and amendments thereto. The ~~board~~ *secretary* shall not  
35 approve any such license which would permit the disposal of low-level  
36 radioactive waste below the natural level of the disposal site unless the  
37 ~~board~~ *secretary*, subject to legislative approval, has determined that below  
38 grade disposal provides greater protection than above grade disposal for  
39 the environment and public health for the period of time for which such  
40 low-level radioactive waste may continue to pose a hazard to the  
41 environment and public health.

42 Sec. 3. K.S.A. 48-1603 and 48-1620 are hereby repealed.

43 Sec. 4. This act shall take effect and be in force from and after its

- 1 publication in the statute book.