

LEGISLATURE OF NEBRASKA  
ONE HUNDRED SECOND LEGISLATURE  
SECOND SESSION  
**LEGISLATIVE BILL 794**  
Final Reading

Introduced by Lambert, 2.

Read first time January 05, 2012

Committee: Health and Human Services

A BILL

1 FOR AN ACT relating to the Radiation Control Act; to amend section  
2 71-3503, Reissue Revised Statutes of Nebraska; to  
3 redefine a term; and to repeal the original section.  
4 Be it enacted by the people of the State of Nebraska,

1                   Section 1. Section 71-3503, Reissue Revised Statutes of  
2 Nebraska, is amended to read:

3                   71-3503 For purposes of the Radiation Control Act, unless  
4 the context otherwise requires:

5                   (1) Radiation means ionizing radiation and nonionizing  
6 radiation as follows:

7                   (a) Ionizing radiation means gamma rays, X-rays, alpha  
8 and beta particles, high-speed electrons, neutrons, protons, and  
9 other atomic or nuclear particles or rays but does not include sound  
10 or radio waves or visible, infrared, or ultraviolet light; and

11                   (b) Nonionizing radiation means (i) any electromagnetic  
12 radiation which can be generated during the operations of electronic  
13 products to such energy density levels as to present a biological  
14 hazard to occupational and public health and safety and the  
15 environment, other than ionizing electromagnetic radiation, and (ii)  
16 any sonic, ultrasonic, or infrasonic waves which are emitted from an  
17 electronic product as a result of the operation of an electronic  
18 circuit in such product and to such energy density levels as to  
19 present a biological hazard to occupational and public health and  
20 safety and the environment;

21                   (2) Radioactive material means any material, whether  
22 solid, liquid, or gas, which emits ionizing radiation spontaneously.  
23 Radioactive material includes, but is not limited to, accelerator-  
24 produced material, byproduct material, naturally occurring material,  
25 source material, and special nuclear material;

1                   (3) Radiation-generating equipment means any manufactured  
2 product or device, component part of such a product or device, or  
3 machine or system which during operation can generate or emit  
4 radiation except devices which emit radiation only from radioactive  
5 material;

6                   (4) Sources of radiation means any radioactive material,  
7 any radiation-generating equipment, or any device or equipment  
8 emitting or capable of emitting radiation or radioactive material;

9                   (5) Undesirable radiation means radiation in such  
10 quantity and under such circumstances as determined from time to time  
11 by rules and regulations adopted and promulgated by the department;

12                   (6) Person means any individual, corporation,  
13 partnership, limited liability company, firm, association, trust,  
14 estate, public or private institution, group, agency, political  
15 subdivision of this state, any other state or political subdivision  
16 or agency thereof, and any legal successor, representative, agent, or  
17 agency of the foregoing;

18                   (7) Registration means registration with the department  
19 pursuant to the Radiation Control Act;

20                   (8) Department means the Department of Health and Human  
21 Services;

22                   (9) Administrator means the administrator of radiation  
23 control designated pursuant to section 71-3504;

24                   (10) Electronic product means any manufactured product,  
25 device, assembly, or assemblies of such products or devices which,

1 during operation in an electronic circuit, can generate or emit a  
2 physical field of radiation;

3 (11) License means:

4 (a) A general license issued pursuant to rules and  
5 regulations adopted and promulgated by the department without the  
6 filing of an application with the department or the issuance of  
7 licensing documents to particular persons to transfer, acquire, own,  
8 possess, or use quantities of or devices or equipment utilizing  
9 radioactive materials;

10 (b) A specific license, issued to a named person upon  
11 application filed with the department pursuant to the Radiation  
12 Control Act and rules and regulations adopted and promulgated  
13 pursuant to the act, to use, manufacture, produce, transfer, receive,  
14 acquire, own, or possess quantities of or devices or equipment  
15 utilizing radioactive materials; or

16 (c) A license issued to a radon measurement specialist,  
17 radon mitigation specialist, radon measurement business, or radon  
18 mitigation business;

19 (12) Byproduct material means:

20 (a) Any radioactive material, except special nuclear  
21 material, yielded in or made radioactive by exposure to the radiation  
22 incident to the process of producing or utilizing special nuclear  
23 material; ~~and~~

24 (b) The tailings or wastes produced by the extraction or  
25 concentration of uranium or thorium from any ore processed primarily

1 for its source material content, including discrete surface wastes  
2 resulting from uranium or thorium solution extraction processes.  
3 Underground ore bodies depleted by such solution extraction  
4 operations do not constitute byproduct material;

5 (c)(i) Any discrete source of radium-226 that is  
6 produced, extracted, or converted after extraction for use for a  
7 commercial, medical, or research activity; or

8 (ii) Any material that (A) has been made radioactive by  
9 use of a particle accelerator and (B) is produced, extracted, or  
10 converted after extraction for use for a commercial, medical, or  
11 research activity; and

12 (d) Any discrete source of naturally occurring  
13 radioactive material, other than source material, that:

14 (i) The United States Nuclear Regulatory Commission, in  
15 consultation with the Administrator of the United States  
16 Environmental Protection Agency, the United States Secretary of  
17 Energy, the United States Secretary of Homeland Security, and the  
18 head of any other appropriate federal agency, determines would pose a  
19 threat similar to the threat posed by a discrete source of radium-226  
20 to the public health and safety or the common defense and security;  
21 and

22 (ii) Is extracted or converted after extraction for use  
23 in a commercial, medical, or research activity;

24 (13) Source material means:

25 (a) Uranium or thorium or any combination thereof in any

1 physical or chemical form; or

2 (b) Ores which contain by weight one-twentieth of one  
3 percent or more of uranium, thorium, or any combination thereof.

4 Source material does not include special nuclear material;

5 (14) Special nuclear material means:

6 (a) Plutonium, uranium 233, or uranium enriched in the  
7 isotope 233 or in the isotope 235 and any other material that the  
8 United States Nuclear Regulatory Commission pursuant to the  
9 provisions of section 51 of the federal Atomic Energy Act of 1954, as  
10 amended, determines to be special nuclear material but does not  
11 include source material; or

12 (b) Any material artificially enriched by any material  
13 listed in subdivision (14)(a) of this section but does not include  
14 source material;

15 (15) Users of sources of radiation means:

16 (a) Physicians using radioactive material or radiation-  
17 generating equipment for human use;

18 (b) Natural persons using radioactive material or  
19 radiation-generating equipment for education, research, or  
20 development purposes;

21 (c) Natural persons using radioactive material or  
22 radiation-generating equipment for manufacture or distribution  
23 purposes;

24 (d) Natural persons using radioactive material or  
25 radiation-generating equipment for industrial purposes; and

1           (e) Natural persons using radioactive material or  
2 radiation-generating equipment for any other similar purpose;

3           (16) Civil penalty means any monetary penalty levied on a  
4 licensee or registrant because of violations of statutes, rules,  
5 regulations, licenses, or registration certificates but does not  
6 include criminal penalties;

7           (17) Closure means all activities performed at a waste  
8 handling, processing, management, or disposal site, such as  
9 stabilization and contouring, to assure that the site is in a stable  
10 condition so that only minor custodial care, surveillance, and  
11 monitoring are necessary at the site following termination of  
12 licensed operation;

13           (18) Decommissioning means final operational activities  
14 at a facility to dismantle site structures, to decontaminate site  
15 surfaces and remaining structures, to stabilize and contain residual  
16 radioactive material, and to carry out any other activities to  
17 prepare the site for postoperational care;

18           (19) Disposal means the permanent isolation of low-level  
19 radioactive waste pursuant to the Radiation Control Act and rules and  
20 regulations adopted and promulgated pursuant to such act;

21           (20) Generate means to produce low-level radioactive  
22 waste when used in relation to low-level radioactive waste;

23           (21) High-level radioactive waste means:

24           (a) Irradiated reactor fuel;

25           (b) Liquid wastes resulting from the operation of the

1 first cycle solvent extraction system or equivalent and the  
2 concentrated wastes from subsequent extraction cycles or the  
3 equivalent in a facility for reprocessing irradiated reactor fuel;  
4 and

5 (c) Solids into which such liquid wastes have been  
6 converted;

7 (22) Low-level radioactive waste means radioactive waste  
8 not defined as high-level radioactive waste, spent nuclear fuel, or  
9 byproduct material as defined in subdivision (12)(b) of this section;

10 (23) Management of low-level radioactive waste means the  
11 handling, processing, storage, reduction in volume, disposal, or  
12 isolation of such waste from the biosphere in any manner;

13 (24) Source material mill tailings or mill tailings means  
14 the tailings or wastes produced by the extraction or concentration of  
15 uranium or thorium from any ore processed primarily for its source  
16 material content, including discrete surface wastes resulting from  
17 underground solution extraction processes, but not including  
18 underground ore bodies depleted by such solution extraction  
19 processes;

20 (25) Source material milling means any processing of ore,  
21 including underground solution extraction of unmined ore, primarily  
22 for the purpose of extracting or concentrating uranium or thorium  
23 therefrom and which results in the production of source material and  
24 source material mill tailings;

25 (26) Spent nuclear fuel means irradiated nuclear fuel

1 that has undergone at least one year of decay since being used as a  
2 source of energy in a power reactor. Spent nuclear fuel includes the  
3 special nuclear material, byproduct material, source material, and  
4 other radioactive material associated with fuel assemblies;

5 (27) Transuranic waste means radioactive waste material  
6 containing alpha-emitting radioactive elements, with radioactive  
7 half-lives greater than five years, having an atomic number greater  
8 than 92 in concentrations in excess of one hundred nanocuries per  
9 gram;

10 (28) Licensed practitioner means a person licensed to  
11 practice medicine, dentistry, podiatry, chiropractic, osteopathic  
12 medicine and surgery, or as an osteopathic physician;

13 (29) X-ray system means an assemblage of components for  
14 the controlled production of X-rays, including, but not limited to,  
15 an X-ray high-voltage generator, an X-ray control, a tube housing  
16 assembly, a beam-limiting device, and the necessary supporting  
17 structures. Additional components which function with the system are  
18 considered integral parts of the system;

19 (30) Licensed facility operator means any person or  
20 entity who has obtained a license under the Low-Level Radioactive  
21 Waste Disposal Act to operate a facility, including any person or  
22 entity to whom an assignment of a license is approved by the  
23 Department of Environmental Quality; and

24 (31) Deliberate misconduct means an intentional act or  
25 omission by a person that (a) would intentionally cause a licensee,

1 registrant, or applicant for a license or registration to be in  
2 violation of any rule, regulation, or order of or any term,  
3 condition, or limitation of any license or registration issued by the  
4 department under the Radiation Control Act or (b) constitutes an  
5 intentional violation of a requirement, procedure, instruction,  
6 contract, purchase order, or policy under the Radiation Control Act  
7 by a licensee, a registrant, an applicant for a license or  
8 registration, or a contractor or subcontractor of a licensee,  
9 registrant, or applicant for a license or registration.

10           Sec. 2. Original section 71-3503, Reissue Revised  
11 Statutes of Nebraska, is repealed.