

Stricken language would be deleted from and underlined language would be added to present law.

1 State of Arkansas  
2 93rd General Assembly  
3 Regular Session, 2021  
4

As Engrossed: H2/10/21

# A Bill

HOUSE BILL 1154

5 By: Representative Ladyman  
6 By: Senator D. Wallace  
7

## For An Act To Be Entitled

9 AN ACT TO AMEND AND UPDATE THE ARKANSAS CODE  
10 REGARDING REGULATION OF IONIZING RADIATION TO COMPLY  
11 WITH FEDERAL LAWS AND REGULATIONS; AND FOR OTHER  
12 PURPOSES.  
13  
14

## Subtitle

15 TO AMEND AND UPDATE THE ARKANSAS CODE  
16 REGARDING REGULATION OF IONIZING  
17 RADIATION TO COMPLY WITH FEDERAL LAWS AND  
18 REGULATIONS.  
19  
20  
21

22 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:  
23

24 SECTION 1. Arkansas Code § 20-21-202(3), concerning the purpose of the  
25 subchapter regarding ionizing radiation, amended to read as follows:

26 (3) To establish procedures for assumption and performance of  
27 certain regulatory responsibilities with respect to ~~by-product, source, and~~  
28 ~~special nuclear materials~~ radioactive materials and radiation equipment and  
29 to provide for registration of ~~persons providing radiation machine~~  
30 ~~installation~~ service personnel; and  
31

32 SECTION 2. Arkansas Code § 20-21-203 is amended to read as follows:  
33 20-21-203. Definitions.

34 As used in this subchapter:

35 (1) "Accelerator or particle accelerator, medical" means a  
36 device used to impart kinetic energy of not greater than one hundred



1 megaelectronvolts (100 MeV) to electrically charged particles such as  
2 electrons, protons, deuterons, and helium ions, and which is used for medical  
3 purposes;

4 (2) "Accelerator or particle accelerator, nonmedical" means a  
5 device used to impart kinetic energy of not greater than one hundred  
6 megaelectronvolts (100 MeV) to electrically charged particles such as  
7 electrons, protons, deuterons, and helium ions, and which is not used for  
8 medical purposes;

9 (3) "Accelerator-produced radioactive material" means any  
10 material made radioactive, so as to emit radiation spontaneously, by a  
11 particle accelerator;

12 ~~(4) [Repealed.]~~

13 ~~(5)~~(4) "Assembler" means any person who is engaged in the  
14 business of installing or offering to install radiation machines or  
15 components associated with radiation machines;

16 ~~(6) [Repealed.]~~

17 ~~(7)~~(5) "By-product material" means:

18 (A) Any ~~any~~ radioactive material, except special nuclear  
19 material, yielded in or made radioactive by exposure to the radiation  
20 incident to the process of producing or utilizing special nuclear material;

21 (B) The tailings or wastes produced by the extraction or  
22 concentration of uranium or thorium from ore processed primarily for its  
23 source material content, including discrete surface wastes resulting from  
24 uranium solution extraction processes. Underground ore bodies depleted by  
25 these solution extraction operations do not constitute by-product material  
26 within this definition;

27 (C)(i) Any discrete source of radium-226 that is produced,  
28 extracted, or converted after extraction, before, on or after August 8, 2005,  
29 for use for a commercial, medical, or research activity; or

30 (ii) Any material that:

31 (a) Has been made radioactive by use of a  
32 particle accelerator; and

33 (b) Is produced, extracted, or converted after  
34 extraction, before, on, or after August 8, 2005, for use for a commercial,  
35 medical, or research activity; and

36 (D) Any discrete source of naturally occurring radioactive

1 material, other than source material, that:

2 (i) The United States Nuclear Regulatory Commission,  
3 in consultation with the Administrator of the United States Environmental  
4 Protection Agency, the United States Secretary of Energy, the United States  
5 Secretary of Homeland Security, and the head of any other appropriate federal  
6 agency, determines would pose a threat similar to the threat posed by a  
7 discrete source of radium-226 to the public health and safety or the common  
8 defense and security; and

9 (ii) Before, on, or after August 8, 2005, is  
10 extracted or converted after extraction for use in a commercial, medical, or  
11 research activity;

12 ~~(8)(6)~~ “Calibration sources – consulting services” means any  
13 individual, group of individuals, or company possessing a sealed radioactive  
14 source used for the calibration of radiation-measuring instruments or  
15 ~~radiation machines~~ devices as authorized by a radioactive material license;

16 ~~(9)~~ “~~Category I-A hospital~~” means ~~a hospital or medical center~~  
17 ~~that meets one (1) of the following criteria:~~

18 ~~(A) Has a nuclear medicine department, one (1) or more X-~~  
19 ~~ray machines, and one (1) or more particle accelerator units; or~~

20 ~~(B) Has a nuclear medicine department, eleven (11) or more~~  
21 ~~X-ray machines, and one (1) or more teletherapy units;~~

22 ~~(10)~~ “~~Category I-B hospital~~” means ~~a hospital or medical center~~  
23 ~~that has a nuclear medicine department, has ten (10) or fewer X-ray machines,~~  
24 ~~and has one (1) or more teletherapy units;~~

25 ~~(11)~~ “~~Category II-A hospital~~” means ~~a hospital or medical center~~  
26 ~~that meets one (1) of the following criteria:~~

27 ~~(A) Has a nuclear medicine department and eleven (11) or~~  
28 ~~more X-ray machines;~~

29 ~~(B) Has a nuclear medicine department and one (1) or more~~  
30 ~~particle accelerator units;~~

31 ~~(C) Has one (1) or more X-ray machines and one (1) or more~~  
32 ~~particle accelerator units; or~~

33 ~~(D) Has eleven (11) or more X-ray machines and one (1) or~~  
34 ~~more teletherapy units;~~

35 ~~(12)~~ “~~Category II-B hospital~~” means ~~a hospital or medical center~~  
36 ~~that meets one (1) of the following criteria:~~

1                   ~~(A) Has a nuclear medicine department and ten (10) or~~  
2 ~~fewer X-ray machines;~~

3                   ~~(B) Has a nuclear medicine department and one (1) or more~~  
4 ~~teletherapy units; or~~

5                   ~~(C) Has ten (10) or fewer X-ray machines and one (1) or~~  
6 ~~more teletherapy units;~~

7                   ~~(13) "Category III hospital" means a hospital or medical center~~  
8 ~~that meets one (1) of the following criteria:~~

9                   ~~(A) Has a nuclear medicine department;~~

10                   ~~(B) Has one (1) or more X-ray machines; or~~

11                   ~~(C) Has one (1) or more teletherapy units;~~

12                   ~~(14) "Chiropractor" means a person licensed by the Arkansas~~  
13 ~~State Board of Chiropractic Examiners;~~

14                   ~~(15)~~(7) "Civil penalty" means any monetary penalty levied on a  
15 licensee or registrant because of violation of statutes, ~~regulations~~ rules,  
16 licenses, or registration certificates but does not include criminal  
17 penalties;

18                   (8) "Closure" means all activities performed at a waste disposal  
19 site, such as stabilization and contouring, to assure that the site is in a  
20 stable condition so that only minor custodial care, surveillance, and  
21 monitoring are necessary at the site following termination of licensed  
22 operation;

23                   ~~(16)~~(9) "Decommissioning" means final operational activities at  
24 a facility to dismantle site structures, to decontaminate site surfaces and  
25 remaining structures, to stabilize and contain residual radioactive material,  
26 and to carry out any other activities to prepare the site for post-  
27 operational care;

28                   ~~(17)~~(10) "Dental radiographic unit" means any X-ray device that  
29 is subject to the requirements for intraoral dental radiographic systems set  
30 forth in the rules for control of sources of ionizing radiation promulgated  
31 by the State Board of Health;

32                   ~~(18) [Repealed.]~~

33                   ~~(19)~~(11) "Gas chromatograph and X-ray fluorescence devices"  
34 means analytical laboratory instruments designed for qualitative and  
35 quantitative analysis using radioactive material as a component of the  
36 instrument detector or as a fluorescence excitation source;

1           ~~(20)(A)~~(12)(A) “General license” means a license effective  
2 pursuant to rules promulgated by the State Radiation Control Agency without  
3 the filing of an application with the Department of Health or the issuance of  
4 licensing documents to particular persons to transfer, acquire, own, possess,  
5 or use quantities of radioactive material or devices or equipment utilizing  
6 radioactive material.

7           (B) “Specific license” means a license issued to a named  
8 person upon application filed pursuant to rules promulgated under this  
9 subchapter to use, manufacture, produce, transfer, receive, acquire, own, or  
10 possess quantities of radioactive material or equipment utilizing radioactive  
11 material.

12           (C) “Academic broad license” means any radioactive  
13 material license issued to a college or university and subject to the special  
14 requirements for “specific licenses of broad scope” as set forth in the rules  
15 for control of sources of ionizing radiation promulgated by the State Board  
16 of Health.

17           (D) “Academic radioactive material license” means any  
18 radioactive material license issued to a college or university, excluding  
19 academic broad licenses;

20           ~~(21)~~(13) “High-level radioactive waste” means:

21           (A) Irradiated reactor fuel;

22           (B) Liquid wastes resulting from the operation of the  
23 first cycle solvent extraction system, or equivalent, and the concentrated  
24 wastes from subsequent extraction cycles, or equivalent, in a facility for  
25 reprocessing irradiated reactor fuel; and

26           (C) Solids into which such liquid wastes have been  
27 converted;

28           ~~(22)~~(14) “Industrial units” means X-ray machines used within the  
29 manufacturing industry and other industries and in industrial radiography;

30           ~~(23)~~(15) “In vitro laboratory testing” means nonhuman use of  
31 radioactive material for laboratory testing in accordance with a general  
32 license authorized by the rules for control of sources of ionizing radiation  
33 promulgated by the State Board of Health;

34           ~~(24)~~(16) “Ionizing radiation” means gamma rays and X-rays, alpha  
35 and beta particles, high-speed electrons, neutrons, protons, and other  
36 nuclear particles, but ~~it~~ does not include sound or radio waves or visible,

1 infrared, or ultraviolet light;

2 ~~(25)~~(17) "Irradiator" means a device or facility which contains  
3 and uses sealed sources for the irradiation of objects or materials;

4 ~~(26)~~(18) "Low-level radioactive waste" means radioactive waste  
5 not classified as high-level radioactive waste, transuranic waste, spent  
6 nuclear fuel, or by-product material as defined in Section 11e. (2) of the  
7 Atomic Energy Act of 1954;

8 ~~(27)~~(19) "Mobile nuclear medicine service" means the  
9 transportation and medical use of by-product material and diagnostic  
10 instrumentation;

11 ~~(28)~~(20) "Naturally occurring radioactive material" means any  
12 material of natural origin that emits radiation spontaneously, excluding  
13 uranium, thorium, and the tailings produced in their extraction or  
14 concentration;

15 ~~(29)~~(21) "Nuclear gauge" means a device that uses radioactive  
16 material as a means of measurement or testing;

17 ~~(30)~~(22) "Nuclear medicine" means human use of radioactive  
18 material for diagnostic or therapeutic purposes, not including radioisotope  
19 teletherapy;

20 ~~(31)~~(23) "Nuclear pharmacy" means a facility licensed by the  
21 Arkansas State Board of Pharmacy for the purpose of compounding and  
22 dispensing prescription drugs which contain or are intended to be used with  
23 radioactive material. In addition, the facility is intended to provide  
24 service for more than one (1) medical licensee;

25 ~~(32)~~ "Others", as used in the contexts of registration, means  
26 any X-ray machine which is not otherwise included in the definitions in this  
27 section;

28 ~~(33)~~(24) "Panoramic wet source storage irradiator" means a  
29 controlled human access irradiator in which the sealed source is contained in  
30 a storage pool, usually containing water, and in which the sealed source is  
31 fully shielded when not in use. The sealed source is exposed within a  
32 radiation room that is maintained as inaccessible during use by interlocked  
33 controls;

34 ~~(34)~~(25) "Person" means:

35 (A) Any ~~any~~ individual, corporation, partnership, firm,  
36 *association, trust, estate, public or private institution, group, agency of*

1 this state, political subdivision of this state, of any other state, or  
2 political subdivision or agency thereof; and

3 (B) Any any legal successor, representative, agent, or  
4 agency of the foregoing, other than the United States Atomic Energy  
5 Commission, or any successor thereto, and other than United States Government  
6 agencies licensed by the United States Atomic Energy Commission, or any  
7 successor thereto but not including United States Government agencies;

8 ~~(35)~~(26) "Physician" means ~~any individual possessing a valid~~  
9 ~~physician's and surgeon's certificate issued by this state~~ a doctor of  
10 medicine or doctor of osteopathy licensed by the Arkansas State Medical Board  
11 to prescribe drugs in the practice of medicine;

12 ~~(36)~~ "Podiatrist" means a person licensed by the Arkansas Board  
13 of Podiatric Medicine;

14 ~~(37)~~(27) "Private practice" means any use of radioactive  
15 material subject to the requirements for licensing of individual physicians  
16 for human use of radioactive materials as set forth in the rules for control  
17 of sources of ionizing radiation promulgated by the State Board of Health,  
18 ~~excluding those installations subject to the requirements for X-ray and~~  
19 ~~electron therapy systems with energies of one megaelectronvolt (1 MeV) and~~  
20 ~~above and for teletherapy as set forth in the same rules;~~

21 ~~(38)~~(28) "Radiation equipment" means any manufactured product or  
22 device, or component part of a product or device, or any machine or system  
23 which during operation can generate or emit ionizing radiation, except those  
24 which emit radiation only from radioactive material;

25 ~~(39)~~(29)(A) "Radioactive material" means any material, whether  
26 solid, liquid, or gas, which emits ionizing radiation spontaneously.

27 (B) "Radioactive material" includes ~~accelerator-produced,~~  
28 by-product, naturally occurring, source, and special nuclear materials;

29 ~~(40)~~(30) "Radioactive waste management" means storage,  
30 treatment, or disposal of radioactive wastes;

31 ~~(41)~~(31) "Radiography" means the examination of the macroscopic  
32 structure of materials by nondestructive methods utilizing sources of  
33 ionizing radiation;

34 ~~(42)~~(32)(A) "Radioisotope teletherapy" means the use of  
35 radiation from a sealed radioactive source for medical treatment.

36 (B) "Radioisotope teletherapy" ~~This~~ does not include

1 radiation from sealed radioactive sources implanted within individuals or on-  
2 surface contact with individuals;

3 ~~(43)~~(33) "Reciprocity" means the reciprocal recognition of  
4 licenses, registrations, or the equivalent issued by the United States  
5 Nuclear Regulatory Commission or any agreement state other than Arkansas,  
6 subject to provisions for reciprocal recognition of licenses, registrations,  
7 or the equivalent as set forth in the rules for control of sources of  
8 ionizing radiation promulgated by the State Board of Health;

9 ~~(44)~~(34) "Registration" means registration with the Department  
10 of Health ~~by any person possessing any source of ionizing radiation in~~  
11 accordance with rules ~~and standards adopted by the Department of Health~~  
12 promulgated by the State Board of Health;

13 ~~(45)~~(35) "Service personnel" means any person who is engaged in  
14 the business of offering or performing:

15 (A) Repair or service of radiation machines and associated  
16 radiation machine components;

17 (B) Repair or service of devices containing radioactive  
18 material;

19 ~~(B)~~(C) Calibration of radiation machines;

20 ~~(C)~~(D) Calibration of radiation instrumentation or  
21 devices; or

22 ~~(D)~~(E) Furnishing personnel dosimetry services to State  
23 Radiation Control Agency licensees or registrants;

24 (36)(A) "Source material" means:

25 (i) Uranium, thorium, or any combination thereof, in  
26 any physical or chemical form; or

27 (ii) Ores that contain by weight one-twentieth of  
28 one percent (0.05%) or more of uranium, thorium, or any combination thereof.

29 (B) "Source material" does not include special nuclear  
30 material;

31 (37) "Sources of radiation" means, collectively, radioactive  
32 material and radiation equipment;

33 ~~(46)~~(38) "Special nuclear material" means:

34 (A) Plutonium, ~~uranium-233~~ uranium-233, uranium enriched  
35 in the isotope 233 or in the isotope 235, and any other material ~~which the~~  
36 ~~Governor declares by order to be special nuclear material after~~ that the



1 ~~United States Atomic Energy Commission, or any successor thereto, has~~  
2 ~~determined the material to be such~~ Nuclear Regulatory Commission under the  
3 provisions of § 51 of the Atomic Energy Act of 1954, as amended, determines  
4 to be special nuclear material but does not include source material; or

5 (B) Any material artificially enriched by any of the  
6 foregoing but does not include source material;

7 (39)(A) "Spent nuclear fuel" means fuel that has been  
8 withdrawn from a nuclear reactor following irradiation, has undergone at  
9 least one (1) year's decay since being used as a source of energy in a power  
10 reactor, and has not been chemically separated into its constituent elements  
11 by reprocessing.

12 (B) "Spent nuclear fuel" includes special nuclear  
13 material, by-product material, source material, and other radioactive  
14 material associated with fuel assemblies;

15 ~~(47) "Source material" means:~~

16 ~~(A) Uranium, thorium, or any other material which the~~  
17 ~~Governor declares by order to be source material after the United States~~  
18 ~~Atomic Energy Commission, or any successor thereto, has determined the~~  
19 ~~material to be such; or~~

20 ~~(B) Ores containing one (1) or more of the foregoing~~  
21 ~~materials, in such concentration as the Governor declares by order to be~~  
22 ~~source material after the United States Atomic Energy Commission, or any~~  
23 ~~successor thereto, has determined the material in such concentration to be~~  
24 ~~source material;~~

25 ~~(48) "Sources of radiation" means, collectively, radioactive~~  
26 ~~material and radiation equipment;~~

27 (40) "Transuranic waste" means radioactive waste containing  
28 alpha-emitting transuranic elements, with radioactive half-lives greater than  
29 five (5) years, in excess of ten (10) nanocuries per gram;

30 ~~(49)~~(41) "Veterinary medicine radiographic systems" means any X-  
31 ray device that is subject to the requirements for veterinary medicine  
32 radiographic installations set forth in the rules for control of sources of  
33 ionizing radiation promulgated by the State Board of Health;

34 ~~(50)~~(42) "Wireline service operation" means any evaluation or  
35 mechanical service which is performed in ~~the well bore~~ a wellbore, using  
36 devices on a wireline; and

1           ~~(51)~~(43) "X-ray tube" means any electron tube which is designed  
2 to be used primarily for the production of X-rays.

3  
4           SECTION 3. Arkansas Code § 20-21-207 is amended to read as follows:  
5           20-21-207. State Radiation Control Agency – Powers and duties  
6 generally.

7           (a) For the protection of the occupational and public health and  
8 safety, the State Radiation Control Agency shall:

9           (1) Develop programs for evaluation and control of hazards  
10 associated with the use of sources of ionizing radiation;

11           (2) Develop programs, with due regard for compatibility with  
12 federal programs, for regulation of ~~by-product, source, and special nuclear~~  
13 ~~materials~~ radioactive material and for regulation of radiation equipment;

14           (3) Formulate, adopt, promulgate, and repeal codes and rules  
15 which may provide for licensing or registration relating to control, storage,  
16 or disposal of sources of ionizing radiation with due regard for  
17 compatibility with the regulatory programs of the United States Government;

18           (4) Issue such orders or modifications as may be necessary in  
19 *connection with proceedings under this subchapter. This power is intended*  
20 *for use in conjunction with any licensing or registration authority;*

21           (5) Advise, consult, and cooperate with other agencies of the  
22 state, the United States Government, other states and interstate agencies,  
23 political subdivisions, and groups concerned with control of sources of  
24 ionizing radiation;

25           (6) Have the authority to accept and administer loans, grants,  
26 or other funds or gifts, conditional or otherwise, in furtherance of its  
27 functions, from the United States Government and from other sources, public  
28 or private;

29           (7) Encourage, participate in, or conduct studies,  
30 investigations, training, research, and demonstrations relating to control of  
31 sources of ionizing radiation; and

32           (8) Collect and disseminate information relating to control of  
33 sources of ionizing radiation, including:

34           (A) Maintenance of a file of all license or registration  
35 applications, issuances, denials, amendments, transfers, renewals,  
36 modifications, suspensions, and revocations;

1 (B) Maintenance of a file of general license registrants  
2 possessing sources of ionizing radiation requiring registration under this  
3 subchapter and any administrative or judicial action pertaining thereto; and

4 (C) Maintenance of a file of all rules and regulations  
5 *relating to regulation of sources of ionizing ~~radiations~~ radiation, pending*  
6 *or promulgated, and proceedings thereon.*

7 ~~(9)(A)(b)(1)~~ Be The State Radiation Control Agency is authorized  
8 to acquire by purchase, acceptance, or condemnation, for and on behalf of the  
9 *State of Arkansas, any lands, buildings, and grounds where radioactive by-*  
10 *products and wastes produced by industrial, medical, agricultural,*  
11 *scientific, or other organizations can be concentrated, stored, or otherwise*  
12 *disposed of in a manner consistent with the public health and safety.*

13 ~~(B)(2)~~ The State Radiation Control Agency may exercise its  
14 power to condemn as prescribed by law for condemnation by the Arkansas  
15 *Department of Transportation in § 27-67-301 et seq.*

16 (3) The State Radiation Control Agency shall not approve any  
17 application for a license to receive radioactive waste from other persons for  
18 disposal on land not owned by the state or the United States Government.

19 ~~(10)(A)~~ ~~Allow the Secretary of the Department of Health or his~~  
20 ~~or her authorized representative to require the posting of a bond by~~  
21 ~~licensees to provide funds in the event of abandonment, default, or other~~  
22 ~~inability of the licensee to meet the requirements of the State Radiation~~  
23 ~~Control Agency. The State Radiation Control Agency may establish bonding~~  
24 ~~requirements by classes of licensee and by range of monetary amounts. In~~  
25 ~~establishing the requirements, the State Radiation Control Agency shall give~~  
26 ~~consideration to the potential for contamination, injury, cost of disposal,~~  
27 ~~and reclamation of the property.~~

28 (c)(1)(A) For licensed activities involving commercial burial of  
29 radioactive waste, the State Radiation Control Agency shall, and for other  
30 classes of licensed activity the State Radiation Control Agency may,  
31 establish by rule standards and procedures to ensure that the licensee will  
32 provide an adequate surety or other financial arrangement to permit the  
33 completion of all requirements established by the State Radiation Control  
34 Agency for the decontamination, closure, decommissioning, and reclamation of  
35 sites, structures, and equipment used in conjunction with such licensed  
36 activity, in case the licensee should default for any reason in performing

1 such requirements.

2 (B)(i) ~~The State Radiation Control Agency shall deposit~~  
3 ~~the proceeds from all forfeited bonds into a special fund known as and called~~  
4 ~~the "Radiation Reclamation Fund". All sureties required under subdivision~~  
5 ~~(c)(1)(A) of this section that are forfeited shall be paid to the State~~  
6 ~~Radiation Control Agency for deposit by the Treasurer of State in a special~~  
7 ~~fund called the "Radiation Site Closure and Reclamation Fund".~~

8 (ii) ~~All moneys in the Radiation Reclamation Fund~~  
9 ~~the Radiation Site Closure and Reclamation Fund are appropriated to the State~~  
10 ~~Radiation Control Agency for use in effectuating protection of public health~~  
11 ~~and safety and may be expended by the State Radiation Control Agency as~~  
12 ~~necessary to complete such requirements on which licensees have defaulted.~~

13 (iii) ~~Moneys in the Radiation Reclamation Fund the~~  
14 ~~Radiation Site Closure and Reclamation Fund shall not be used for normal~~  
15 ~~operating expenses of the State Radiation Control Agency.~~

16 (C) ~~A bond deemed acceptable in Arkansas shall be a bond~~  
17 ~~issued by a fidelity or surety company authorized to do business in Arkansas,~~  
18 ~~a personal bond secured by such collateral as the secretary deems~~  
19 ~~satisfactory, a cash bond, or a letter of credit.~~

20 (D)(i) ~~All state, local, or other governmental agencies or~~  
21 ~~subdivisions shall be exempt from the requirements of this subdivision (10).~~

22 (ii) ~~The secretary may exempt classes of licensees~~  
23 ~~from the requirements of this section when a finding is made that the~~  
24 ~~exemption will not result in a significant risk to the public health and~~  
25 ~~safety; and~~

26 (11)(A)(2)(A) ~~Allow~~ The State Radiation Control Agency shall  
27 allow the secretary Secretary of the Department of Health or his or her  
28 authorized representative to require a licensee to deposit funds on an  
29 annual, semiannual, or quarterly basis into a trust fund established for the  
30 exclusive purpose set out in this subdivision ~~(11)(c)(2).~~

31 (B) The Perpetual Maintenance Fund shall be defined so as  
32 to embrace each of the following:

33 (i) A source of revenue to provide for ~~perpetual~~  
34 care and the continuing long-term surveillance, maintenance, and other care  
35 of a radioactive waste concentration, storage, and disposal site as described  
36 in ~~subdivision (9) subsection (b)~~ of this section or a source of revenue to

1 provide for ~~perpetual care and~~ the continuing long-term surveillance,  
2 maintenance, and other care of a formerly licensed activity still containing  
3 or having associated with it radioactive material, the activity having ceased  
4 to operate by reason of default, abandonment, or decommissioning;

5 (ii) The Perpetual Maintenance Fund shall have two  
6 (2) inputs:

7 (a) Fees which are contributed by the lessee  
8 or licensee resulting from the operation of concentrating, storing, or  
9 disposing of radioactive material as set forth in ~~subdivision (9)~~ subsection  
10 (b) of this section; and

11 (b)(1) Moneys accrued as interest on a trust  
12 fund established by a licensee.

13 ~~(2) These funds~~ All trust fund moneys  
14 including moneys accrued as interest on the trust fund, shall be  
15 automatically transferred to the Perpetual Maintenance Fund in the event of  
16 default, abandonment, or decommissioning;

17 (iii) Moneys in the Perpetual Maintenance Fund shall  
18 be appropriated to the State Radiation Control Agency for use in a way  
19 consonant with this subchapter, including such items as ~~perpetual care,~~  
20 ~~maintenance, and surveillance~~ long-term site surveillance, maintenance, and  
21 other care; and

22 (iv) All licensee contributions to the Perpetual  
23 Maintenance Fund shall be payable to the secretary and deposited by the  
24 Treasurer of State.

25 ~~(B)(C)(i)~~ To provide for the proper care and surveillance  
26 of licensed sites subject to subdivision ~~(11)(A)~~ (c)(2)(B)(i) of this  
27 section, the state shall have the right to acquire by gift, transfer,  
28 purchase, or condemnation from another government agency or private person  
29 any lands, buildings, and grounds necessary to fulfill the purposes of this  
30 section.

31 (ii) Any gift, transfer, purchase, or condemnation  
32 shall be subsequently subject to be approved and accepted by the state.

33 ~~(C) To effectuate the provisions of this subchapter, the~~  
34 ~~State Radiation Control Agency, by lease or license with any person, may~~  
35 ~~provide for the operation of a site. Any lessee or licensee operating under~~  
36 ~~the provisions of this subdivision (11) shall be subject to subdivision (10)~~

1 ~~of this section.~~

2 (D)(i) The funds required by this subdivision ~~(11)~~ (c)(2)  
3 shall be established at such rate that interest on the sum of all funds  
4 reasonably anticipated as payable shall provide an annual amount equal to the  
5 anticipated reasonable costs necessary to maintain, monitor, and otherwise  
6 supervise and care for the lands and facilities as required in the interest  
7 of public health and safety.

8 (ii) In arriving at the rate of funds to be  
9 deposited, the State Radiation Control Agency shall consider the nature of  
10 the licensed material, size and type of activity, estimated future receipts,  
11 and estimated future expenses of maintenance, monitoring, and supervision.

12 (E)(i) Recognizing that ultimate responsibility to protect  
13 the public health and safety must be reposed in a solvent government, without  
14 regard to the existence of any particular agency or department ~~thereof~~, all  
15 lands, buildings, and grounds acquired by the state under subdivision ~~(11)(B)~~  
16 (c)(2)(C) of this section shall be owned in fee simple absolute by the state  
17 for purposes stated in subdivision ~~(11)(B)~~ (c)(2)(C) of this section.

18 (ii) All radioactive material received at the site  
19 and located therein at time of acquisition of ownership by the state becomes  
20 the property of the state.

21 (F)(i) If a person licensed by any governmental agency  
22 other than the State of Arkansas desires to transfer a site to the state for  
23 the purpose of administering or providing ~~perpetual~~ long-term care, a lump-  
24 sum deposit shall be made to a trust fund.

25 (ii) The amount of the deposit shall be determined  
26 by the secretary, taking into consideration the factors stated in subdivision  
27 ~~(11)(D)~~ (c)(2)(D) of this section.

28 (3) The sureties or other financial arrangements and funds  
29 required by subdivisions (c)(1) and (2) of this section shall be established  
30 in amounts sufficient to ensure compliance with those standards, if any,  
31 established by the United States Nuclear Regulatory Commission pertaining to  
32 closure, decommissioning, reclamation, and long-term site surveillance and  
33 care of such facilities and sites.

34 (4) All state, local, or other governmental agencies or  
35 subdivisions shall be exempt from the requirements of subdivisions (c)(1) and  
36 (2) of this section.

1                   (5) The State Radiation Control Agency may by contract,  
2 agreement, lease, or license with any person, including another state agency,  
3 provide for the decontamination, closure, decommissioning, reclamation,  
4 surveillance, or other care of a site subject to subsection (c) of this  
5 section as needed to carry out the purposes of this section.

6  
7           SECTION 4. Arkansas Code § 20-21-209 is amended to read as follows:

8           20-21-209. State Radiation Control Agency – Recognition of other  
9 licenses or registrations.

10           Rules promulgated pursuant to this subchapter may provide for  
11 recognition of other state or federal licenses or registrations, or  
12 equivalents, as the State Radiation Control Agency may deem desirable,  
13 subject to such licensing or registration requirements as the agency may  
14 prescribe.

15  
16           SECTION 5. Arkansas Code § 20-21-213 is amended to read as follows:

17           20-21-213. Licensing and registration requirements generally.

18           (a) The State Radiation Control Agency shall provide by rule for  
19 ~~general or specific~~ licensing of ~~accelerator-produced material, by-product~~  
20 ~~material, source material, special nuclear material~~ radioactive material, or  
21 devices or equipment utilizing such material, and for licensing or  
22 registration of radiation equipment.

23           (b) The rule shall provide for amendment, suspension, or revocation of  
24 licenses and registrations.

25           (c) The rule shall provide that:

26                   (1) Each application for a specific license, or license or  
27 registration of radiation equipment, shall be in writing and shall state such  
28 information as the agency by rule may determine to be necessary to decide the  
29 technical, ~~insurance~~, and financial qualifications or any other  
30 qualifications of the applicant as the agency may deem reasonable and  
31 necessary to protect the occupational and public health and safety;

32                   (2) The agency may at any time after the filing of the  
33 application and before the expiration of the license or registration require  
34 further written statements and may make such inspections as the agency may  
35 deem necessary in order to determine whether the license or registration  
36 should be granted or denied or whether the license or registration should be

1 modified, suspended, or revoked;

2 (3) All applications and statements shall be signed by the  
3 applicant, ~~or licensee, or registrant~~;

4 (4) The agency may require any applications or statements to be  
5 made under oath or affirmation;

6 (5) Each license or registration shall be in ~~such a~~ form and  
7 contain ~~such~~ terms and conditions as the agency may by rule prescribe;

8 (6) ~~No license issued under this subchapter and no right to~~  
9 ~~possess or utilize sources of ionizing radiation granted by any license shall~~  
10 ~~be assigned or in any manner disposed of~~ No license or registration issued  
11 under this subchapter nor any right under a license or registration shall be  
12 transferred, assigned, or in any manner disposed of unless the agency shall,  
13 after securing full information, find that the transfer is in accordance with  
14 the provisions of this subchapter and shall give its consent in writing;

15 (7) The terms and conditions of all licenses or registrations  
16 shall be subject to amendment, revision, or modification by rules or orders  
17 issued in accordance with this subchapter;

18 (8) Licenses issued by the agency shall:

19 ~~(A) Be nontransferable;~~

20 ~~(B)(A)~~ Be renewed every five (5) to ten (10) years based  
21 on risk factors as determined by the agency; and

22 ~~(C)(B)~~ Expire at a time specified by the agency; and

23 (9) Registrations issued shall:

24 ~~(A) Be nontransferable;~~

25 ~~(B)(A)~~ Be renewed at a time specified by the agency; and

26 ~~(C)(B)~~ Expire one (1) year after issuance or at a time  
27 specified by the agency.

28

29 SECTION 6. Arkansas Code §§ 20-21-215 – 20-21-218 are amended to read  
30 as follows:

31 20-21-215. Licensing and registration requirements – Recognition of  
32 other licenses or registrations.

33 *Rules promulgated pursuant to this subchapter may provide for*  
34 *recognition of other state or federal licenses or registrations, or*  
35 *equivalents, as the State Radiation Control Agency ~~shall~~ may deem desirable,*  
36 *subject to such licensing or registration requirements as the agency may*



1 prescribe.

2

3 ~~20-21-216. Licensing and registration requirements—Termination.~~

4 ~~(a) Any radioactive materials license issued or renewed after July 4,~~  
5 ~~1983, for any activity which results in the production of radioactive~~  
6 ~~material shall contain such terms and conditions as the State Radiation~~  
7 ~~Control Agency determines to be necessary to assure that before termination~~  
8 ~~of the license:~~

9 ~~(1) The licensee will comply with decontamination,~~  
10 ~~decommissioning, and reclamation standards prescribed by the agency, which~~  
11 ~~shall be equivalent to or more stringent than those of the United States~~  
12 ~~Nuclear Regulatory Commission or any successor thereto, for sites at which~~  
13 ~~ores were processed primarily for their source material content and at which~~  
14 ~~the radioactive material is deposited;~~

15 ~~(2) Ownership of any disposal site and the radioactive material~~  
16 ~~which resulted from the licensed activity shall be transferred to either the~~  
17 ~~United States or the state, if this state exercises the option to acquire~~  
18 ~~land used for the disposal of the radioactive material; and~~

19 ~~(3) Any license which is in effect on July 4, 1983, and which is~~  
20 ~~subsequently terminated without renewal shall comply with subdivisions (a)(1)~~  
21 ~~and (2) of this section upon termination.~~

22 ~~(b) The agency shall require by rule or order that, before the~~  
23 ~~termination of any license which is issued after July 4, 1983, title to the~~  
24 ~~land including any interests therein other than land held in trust by the~~  
25 ~~United States for any Indian tribe or owned by an Indian tribe subject to a~~  
26 ~~restriction against alienation imposed by the United States, or land already~~  
27 ~~owned by the United States or by this state, which is used pursuant to the~~  
28 ~~license for the disposal of radioactive material shall be transferred to~~  
29 ~~either the United States or to the state, unless the United States Nuclear~~  
30 ~~Regulatory Commission or any successor thereto determines before the~~  
31 ~~termination that transfer of title to the land and the material is not~~  
32 ~~necessary or desirable to protect the public health, safety, or welfare, or~~  
33 ~~to minimize danger to life or property.~~

34 ~~(c) If transfer of the title to the radioactive material and land to~~  
35 ~~the state is required, the agency, following the United States Nuclear~~  
36 ~~Regulatory Commission's determination that the licensee has complied with~~

1 applicable standards and requirements under his or her license, shall assume  
2 title to the material or land and maintain the material and land in such  
3 manner as will protect the public health and safety and the environment.

4 (d) The agency may undertake such monitoring, maintenance, and  
5 emergency measures as are necessary to protect the public health and safety  
6 for those materials and property for which it has assumed custody pursuant to  
7 this subchapter.

8 (e) The transfer of title to land or radioactive materials to the  
9 United States or to this state shall not relieve any licensee of liability  
10 for any fraudulent or negligent acts done before the transfer.

11 (f) Other than administrative and legal costs incurred by the United  
12 States or by this state in carrying out the transfer, radioactive materials  
13 or land transferred to the United States or to the state in accordance with  
14 this section shall be transferred without cost.

15  
16 20-21-217. Licensing and registration requirements - Compliance with  
17 standards - Fees.

18 (a) In licensing and regulation of radioactive material or of any  
19 activity which results in the production of radioactive materials so defined,  
20 the State Radiation Control Agency shall require compliance with applicable  
21 standards promulgated by the State Radiation Control Agency which are  
22 equivalent to or more stringent than standards adopted and enforced by the  
23 United States Nuclear Regulatory Commission for the same purpose, including  
24 requirements and standards promulgated by the United States Environmental  
25 Protection Agency.

26 (b)(a) Until the State Board of Health promulgates rules under  
27 subsection (d) (c) of this section, the State Radiation Control Agency may  
28 charge and collect the following annual fees associated with licensing and  
29 registration of sources of ionizing radiation:

- 30 (1) Hospitals or medical centers:
  - 31 (A) Category I-A .....\$900.00
  - 32 (B) Category I-B .....700.00
  - 33 (C) Category II-A .....650.00
  - 34 (D) Category II-B .....450.00
  - 35 (E) Category III .....200.00
- 36 (2) Radioactive material licenses:

- 1 (A) Private practice, other than teletherapy units or
- 2 particle accelerators .....\$100.00
- 3 (B) Radiography:
- 4 (i) In plant .....350.00 for first bay
- 5 .....500.00 for 2 or more bays
- 6 (ii) Field .....1,000.00
- 7 (C) Wireline service operation ..300.00 for 1 to 3 sources
- 8 .....500.00 for 4 or more sources
- 9 (D) Academic:
- 10 (i) Broad .....500.00
- 11 (ii) Other .....200.00
- 12 (E) Gas chromatograph devices and lead analyzers ..100.00
- 13 (F) Nuclear gauges .....300.00 for 1 to 5 gauges
- 14 .....500.00 for 6 or more gauges
- 15 (G) Particle accelerators, nonmedical .....200.00
- 16 (H) In vitro laboratory testing .....25.00
- 17 (I) Irradiators .....1,000.00
- 18 (J) Nuclear pharmacy .....1,000.00
- 19 (K) Mobile nuclear medicine service .....1,200.00
- 20 (L) Consultants .....250.00
- 21 (3) General licensed devices: Initial registration and annual
- 22 fees for the receipt, possession, or use of radioactive material under a
- 23 general license or a license obtained through reciprocity, as defined by the
- 24 State Radiation Control Agency, shall be as follows:
- 25 (A) Certain measuring, gauging, and controlling devices
- 26 .....\$300.00
- 27 (B) Generally licensed gas chromatographs .....200.00
- 28 (C) Static elimination devices .....100.00
- 29 (D) Source material devices .....500.00
- 30 (E) Devices containing depleted uranium .....500.00
- 31 (F) Public safety devices containing radioactive material
- 32 .....50.00
- 33 (G) All other general license registrations other than
- 34 those specified above .....150.00
- 35 (4) Other:
- 36 (A) Medical, therapy, nonhospital unit

- 1 .....\$250.00 for first unit
- 2 .....175.00 for each additional unit
- 3 (B) Particle accelerator, medical, nonhospital unit
- 4 .....450.00 for first unit
- 5 .....300.00 for each additional unit
- 6 (C) State Board of Health Rules ~~and Regulations~~ for
- 7 Control of Sources of Ionizing Radiation
- 8 .....0.00 for first copy
- 9 .....30.00 for each additional copy
- 10 (D) Naturally occurring radioactive material license
- 11 .....2,500.00
- 12 (E) Amendment to existing license .....50.00 per amendment
- 13 (5) Reciprocity:
- 14 (A) Naturally occurring radioactive material ....\$2,500.00
- 15 (B) Radiography, field .....1,000.00
- 16 (C) Wireline .....500.00
- 17 (D) Nuclear gauge .....500.00
- 18 (E) Consultant .....100.00

19 (6) Late fees: A late fee equal to ten percent (10%) of the  
 20 applicable fee shall be charged for fees not received within sixty (60) days  
 21 of the invoiced due date and for every sixty (60) days thereafter.

22 ~~(e)~~(b) The State Radiation Control Agency may charge and collect the  
 23 following annual fees associated with X-ray registrations:

- 24 (1) All X-ray units, sixty-five dollars (\$65.00) per tube up to
- 25 a maximum of two hundred sixty dollars ~~(\$260.00)~~ (\$260); and
- 26 (2) Vendor services providing radiation equipment services or
- 27 radiation safety services, or both, sixty-five dollars (\$65.00).

28 ~~(d)~~~~(1)~~(c)(1) For the fees under subsection ~~(b)~~ (a) of this section,  
 29 the board shall adopt rules to establish fees at a level to sustain  
 30 operations of the State Radiation Control Agency's mandated programs.

- 31 (2) The fees shall not:
- 32 (A) Conflict with federal program schedules; or
- 33 (B) Exceed twenty-five percent (25%) of the fees that
- 34 would be levied by the United States Nuclear Regulatory Commission if the
- 35 United States Nuclear Regulatory Commission were to regulate the State
- 36 Radiation Control Agency's mandated programs.

1       ~~(e)~~(d) Each application for reciprocal recognition of an out-of-state  
2 license or of an out-of-state registration shall be accompanied by the  
3 applicable annual fee, provided that no fee has been submitted during the  
4 calendar year of the application.

5       ~~(f)~~~~(1)~~(e)(1) The annual fee shall be based upon the calendar year,  
6 January 1 through December 31, with fees for any given year due by December  
7 31 of the previous year.

8               (2)(A) Applications for new licenses or registrations shall be  
9 accompanied by the appropriate fees.

10               (B) An applicant ~~The applicants~~ shall be charged for a  
11 full calendar year regardless of the month the license or registration is  
12 issued.

13               (3) Applications for amendments to licenses or registration  
14 certificates which result in a change to a more costly category shall be  
15 accompanied by a fee equal to the difference between the fee for the current  
16 category and the one to which the amended license or certificate will  
17 escalate.

18               (4) Fee payments shall be by check, draft, or money order made  
19 payable to the Department of Health.

20               (5) In any case in which the State Radiation Control Agency  
21 finds that an applicant for a new license or new certificate of registration  
22 has failed to pay the fee prescribed in this section, the State Radiation  
23 Control Agency shall not process that application until the fee is paid.

24               (6) In any case in which the State Radiation Control Agency  
25 finds that a person has failed to pay a fee prescribed by this section within  
26 ninety (90) days of the date due, the State Radiation Control Agency may  
27 issue an order to show cause why that registration, license, or other service  
28 should not be revoked, suspended, or terminated, as appropriate.

29       ~~(g)~~(f) Annual fees shall not be required for those applicants,  
30 licensees, registrants, or other applicable persons whose use of sources of  
31 radiation is certified as financed solely by the General Revenue Fund Account  
32 of the State Apportionment Fund.

33       ~~(h)~~(g) All fees levied and collected under this section are declared  
34 to be special revenues and shall be deposited into the State Treasury, there  
35 to be credited to the Public Health Fund.

36       ~~(i)~~(h) Subject to the rules as may be implemented by the Chief Fiscal

1 Officer of the State, the disbursing officer for the department may transfer  
2 all unexpended funds relative to licensing and registration for use of  
3 radioactive materials and X-ray equipment that pertain to fees collected, as  
4 certified by the Chief Fiscal Officer of the State, to be carried forward and  
5 made available for expenditures for the same purpose for any following fiscal  
6 year.

7

8 20-21-218. Records.

9 (a)(1) The State Radiation Control Agency shall require each person  
10 who manufactures, possesses, distributes, sells, installs, repairs, or uses a  
11 source of ionizing radiation to maintain records relating to its receipt,  
12 storage, transfer, or disposal and such other records as the agency may  
13 require subject to such exemptions as may be provided by rule.

14 (2) The agency shall require each person who manufactures,  
15 possesses, distributes, sells, installs, repairs, or uses a source of  
16 ionizing radiation, or who furnishes personnel dosimetry services for agency  
17 licensees or registrants to maintain appropriate records showing the  
18 radiation exposure of all individuals for whom personnel monitoring is  
19 required by rules of the agency.

20 (b)(1) Copies of all records required by subsection (a) of this  
21 section shall be submitted to the agency upon request. The agency shall  
22 obtain these required records from each person who manufactures, possesses,  
23 distributes, sells, installs, repairs, or uses a source of ionizing radiation  
24 and from service personnel.

25 ~~(2) Any person possessing or using a source of ionizing~~  
26 ~~radiation shall furnish to each~~ To each employee for whom personnel  
27 monitoring is required, a copy of the employee's personal exposure record, ~~as~~  
28 ~~follows:~~ shall be given at the frequency required by rule.

29 ~~(A) Annually;~~

30 ~~(B) At any time the employee has received excessive~~  
31 ~~exposure; and~~

32 ~~(C) Upon termination of employment.~~

33

34 SECTION 7. Arkansas Code § 20-21-222(a), concerning administrative  
35 proceedings related to ionizing radiation, is amended to read as follows:

36 (a) Under this subchapter:

1 (1) In any proceeding for the issuance or modification of rules  
2 relating to control of sources of ionizing radiation, the State Radiation  
3 Control Agency shall provide an opportunity for public participation through  
4 written comments or a public hearing, or both;

5 (2) In any proceeding for the denial of an application for a  
6 license or registration or for revocation, suspension, or modification of a  
7 license or registration, the agency shall provide to the applicant, ~~or~~  
8 licensee, or registrant an opportunity for a hearing on the record;

9 (3) In any proceeding for ~~licensing ores processed primarily for~~  
10 ~~their source material content or disposal of radioactive material or for~~  
11 licensing commercial burial of radioactive ~~wastes~~ waste, the agency shall  
12 provide:

13 (A) An opportunity, after public notice, for written  
14 comments and a public hearing with a transcript;

15 (B) An opportunity for cross examination; and

16 (C) A written determination of the action to be taken  
17 ~~which~~ that is based upon findings included in the determination and upon  
18 evidence presented during the public comment period;

19 (4)(A) In any proceeding for ~~licensing ores processed primarily~~  
20 ~~for their source material content, for disposal of radioactive material, or~~  
21 ~~for~~ licensing commercial burial of radioactive ~~wastes~~ waste, the agency shall  
22 prepare for each licensed activity that has a significant impact on the human  
23 environment a written analysis of the impact of the activity on the  
24 environment ~~for each licensed activity which has a significant impact on the~~  
25 ~~human environment.~~

26 (B) The environmental impact analysis shall be available  
27 to the public before the commencement of hearings held pursuant to  
28 subdivision (a)(3) of this section and shall include:

29 (A)(i) An assessment of the radiological and  
30 nonradiological impacts to the public health;

31 (B)(ii) An assessment of any impact on any waterway and  
32 groundwater;

33 (C)(iii) Consideration of alternatives, including  
34 alternative sites and engineering methods, to the activities to be conducted;  
35 and

36 (D)(iv) Consideration of the long-term impacts including

1 decommissioning, decontamination, and reclamation of facilities and sites  
2 associated with the licensed activities and management of any radioactive  
3 materials which will remain on the site after the decommissioning,  
4 decontamination, ~~or~~ and reclamation; and

5 (5) The agency shall prohibit any major construction with  
6 respect to any activity for which an environmental impact analysis is  
7 required by subdivision (a)(4) of this section before completion of such ~~an~~  
8 analysis.

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*/s/Ladyman*