

**PROPOSED REGULATION OF THE
STATE BOARD OF HEALTH**

LCB File No. R055-14

RADIATION CONTROL PROGRAM
HEALTH STATISTICS, PLANNING & RESPONSE
DIVISION OF PUBLIC & BEHAVIORAL HEALTH

675 Fairview Drive, Suite 218
Carson City, NV 89701

JANUARY 23, 2014

EXPLANATION - Matter in *italics* is new; matter in brackets ~~{omitted material}~~ is material to be omitted.

Titles 457 & 459 of NAC are hereby amended by adding thereto the provisions set forth as sections 1 to 63, inclusive, of this regulation.

Section 1

NAC 457.010 is hereby amended to read as following:

- 1. NAC 457.010 Definitions.** (NRS 457.065, 457.240) As used in NAC 457.010 to 457.150, inclusive, unless the context otherwise requires:
1. “Cancer” has the meaning ascribed to it in NRS 457.020.
 2. “Health care facility” has the meaning ascribed to it in NRS 457.020.
 3. “Health Division” means the ~~{Health Division}~~ *Division of Public and Behavioral Health* of the Department of Health and Human Services.

Section 2

NAC 459.030 is hereby amended to read as following:

NAC 459.030 “Division” defined. (NRS 459.201) “Division” means the ~~{Health Division}~~ *Division of Public and Behavioral Health* of the Department of Health and Human Services.

Section 3

NAC 459.058 is hereby amended to read as following:

NAC 459.058 “Person” defined. (NRS 459.201) ~~{“Person” has the meaning ascribed in subsection 5 of NRS 459.010.}~~

Person means—(1) Any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, Government agency other than the Nuclear Regulatory Commission or the DOE (except that the Department shall be considered a person within the meaning of the regulations in 10 CFR chapter I to the extent that its facilities and activities are subject to the licensing and related regulatory authority of the Nuclear Regulatory Commission under section 202 of the Energy Reorganization Act of 1974 (88 Stat. 1244), the Uranium Mill Tailings Radiation Control Act of 1978 (92 Stat. 3021), the Nuclear Waste

Policy Act of 1982 (96 Stat. 2201), and section 3(b)(2) of the Low-Level Radioactive Waste Policy Amendments Act of 1985 (99 Stat. 1842)), or its successor, any State or the United States or any federal agency licensed by the Nuclear Regulatory Commission or any successor to such a federal agency, any political subdivision of or any political entity within a State, any foreign government or nation or any political subdivision of any such government or nation, or other entity; and

(2) Any legal successor, representative, agent, or agency of the foregoing.

Section 4

NAC 459.112 is hereby amended to read as following:

NAC 459.112 “Unrefined and unprocessed ore” defined. (NRS 459.201)

“Unrefined and unprocessed ore” means ore in its natural form before any processing, such as grinding, roasting, beneficiating or refining. *Processing does not include sieving or encapsulation of ore or preparation of samples for laboratory analysis.*

Section 5

NAC 459.120 is hereby amended to read as following:

NAC 459.120.2 Exemptions:

2. Common and contract carriers, freight forwarders and warehousemen, *and ~~who are subject to the regulations of the United States Department of Transportation or~~ the United States Postal Service, ~~[39 C.F.R. Parts 14 and 15]~~*, are exempt from NAC 459.010 to 459.950, inclusive, to the extent that they transport or store sources of radiation in the regular course of their carriage for another or store the sources as an incident to such transportation.

Section 6

NAC 459.124 is hereby amended to read as following:

NAC 459.124 Records. (NRS 459.030, 459.060, 459.201) 1. In addition to other records required by NAC 459.010 to 459.950, inclusive, each licensee and registrant shall maintain records showing his or her receipt, transfer and disposal of all sources of radiation~~†~~, *as follows:*

(a) The licensee shall retain each record of receipt of radioactive material as long as the material is possessed and for three years following transfer or disposal of the material.

(b) (i) The licensee who transferred radioactive material shall retain each record of transfer for three years after each transfer unless a specific requirement in another part of the regulations dictates otherwise.

(ii) The licensee who transferred source material shall retain each record of transfer until the Division terminates each license that authorizes the activity that is subject to the recordkeeping requirement.

(c) The licensee who disposed of radioactive material shall retain each record of disposal of radioactive material until the Division terminates each license that authorizes disposal of the material.

(d) If source or byproduct material is combined or mixed with other licensed material and subsequently treated in a manner that makes direct correlation of a receipt record with a transfer, export, or disposition record impossible, the licensee may use evaluative techniques (such as first-in-first-out), to make the records that are required by this section account for 100 percent of the material received.

(e) The licensee shall retain each record that is required by the regulations in this section or by license condition for the period specified by the appropriate regulation or license condition. If a retention period is not otherwise specified by regulation or license condition, the record must be retained until the Division terminates each license that authorizes the activity that is subject to the recordkeeping requirement.

(f) If there is a conflict between the regulations in NAC 459.010 to 459.950 and a license condition, or other written approval or authorization pertaining to the retention period for the same type of record, the retention period specified in the regulations in NAC 459 for such records shall apply, unless the Division, pursuant to NAC 459.120, has granted a specific exemption from the record retention requirements specified in the regulations in this chapter.

2. A licensee authorized to possess, in an unsealed form, radioactive material with a half-life greater than 120 days shall:

(a) Before his or her license terminates, forward to the Division:

(1) All records of licensed radioactive material disposed of by the licensee pursuant to NAC 459.3595 to 459.3615, inclusive, including burials authorized before January 28, 1981; and

(2) All records required by paragraph (d) of subsection 2 of NAC 459.3645; and

(b) If the licensee transfers or assigns any licensed activities to another licensee, *in accordance with NAC 459.198.2*, transfer to the other licensee:

(1) All records of licensed material disposed of by the licensee pursuant to NAC 459.3595 to 459.3615, inclusive, including burials authorized before January 28, 1981; and

(2) All records required by paragraph (d) of subsection 2 of NAC 459.3645.

3. A licensee to whom records are transferred pursuant to paragraph (b) of subsection 2 shall maintain the records until the termination of his or her license.

4. A licensee whose license is being terminated shall, before his or her license terminates, forward to the Division the records required by subsection 12 of NAC 459.1955.

Section 7

NAC 459.134 is hereby amended to read as following:

NAC 459.134 Communications with Division. (NRS 459.201) All communications and reports concerning the provisions of NAC 459.010 to 459.950, inclusive, and copies of regulatory guides and applications filed under those provisions should be addressed to the ~~[Radiological Health Section, Health Division, 4150 Technology Way, Suite 300, Carson City, Nevada 89706.]~~ *Radiation Control Program at the current mailing address provided on the website.*

Section 8

NAC 459.136 is hereby amended to read as following:

7. NAC 459.136 Procedure for review of actions taken by Division; appeals. (NRS 459.201)

1. Any licensee or registrant who has reason to believe that an action by the Division or one or more of the Division's staff members pursuant to NAC 459.118 to 459.950, inclusive, concerning him or her has been incorrect or based on inadequate knowledge may, within 10 business days after receiving notice of the action, request an informal discussion with the employee responsible for the action and the immediate supervisor of the employee.

2. If the informal discussion does not resolve the problem, the aggrieved person may, within 10 business days after the date scheduled for the informal discussion, submit a written request to

the ~~{Bureau}~~ *Division* for an informal conference. The informal conference must be scheduled for a date, place and time mutually agreed upon by the aggrieved person and the ~~{Bureau}~~ *Division*, except that the informal conference must be held no later than 60 days after the date on which the ~~{Bureau}~~ *Division* received the written request.

3. Except as otherwise provided in subsection 4, the determination of the ~~{Bureau}~~ *Division* resulting from the informal conference cannot be appealed and is the final remedy available to the aggrieved person.

4. An applicant for or holder of a license or registration issued pursuant to NAC 459.118 to 459.950, inclusive, who is aggrieved by the Division taking any disciplinary action pursuant to NRS 459.010 to 459.290, inclusive, may appeal that action in accordance with NAC 439.300 to 439.395, inclusive, after exhausting the informal procedures set forth in this section, except that the ~~{Bureau}~~ *Division* may waive the informal procedures, or any portion thereof, by giving written notice to the aggrieved person.

5. As used in this section, “~~{Bureau}~~ *Division*” has the meaning ascribed to it in NAC 459.030. ~~{means the Bureau of Health Protection Services of the Division }or its successor.}~~

Section 9

NAC 459.150 is hereby amended to read as following:

8. NAC 459.150 Scope of provisions; registration required. (NRS 459.201)

1. NAC 459.150 to 459.166, inclusive, provide for the registration of radiation machines and registration of persons who install or perform service upon radiation machines.

2. No person may repair, maintain or install radiation machines unless he or she is registered in conformance with the requirement of NAC 459.150 to 459.166, inclusive~~{}~~, *and provides written notice to the Division of any installation of any and all types of ionizing equipment.*

3. A person may operate a radiation machine only if there is a valid registration or the operator is registered with the Division to install, service or repair the machine.

Section 10

NAC 459.152 is hereby amended to read as following:

9. NAC 459.152 Exemptions from requirements. (NRS 459.201)

1. Electronic equipment that produces radiation incidental to its operation for other purposes is exempt from the requirements of registration and notification in NAC 459.150 to 459.166, inclusive, if the dose equivalent rate, averaged over an area of 10 square centimeters, does not exceed 0.5 mrem per hour at 5 cm from any accessible surface of the equipment. The production, testing or factory servicing of the equipment is not exempt.

2. *(a) A radiation machine is considered to be in storage if it is safely stored in an inoperable status, with no supplied power.*

(b) A radiation machine is considered to be disassembled if it has been rendered inoperable by means of physical disassembly of the machine components and structure.

~~{2}~~. 3. Radiation machines which:

(a) Are in transit or in storage incident to transportation; or

(b) Have been previously registered and are disassembled or in storage, are exempt from the requirements of NAC 459.150 to 459.166, inclusive.

~~{3}~~. 4. Domestic television receivers are exempt from the requirements of NAC 459.150 to 459.166, inclusive.

5. *Operational machines registered that are not in practical service for the registered purpose and are effectively secured from unauthorized use or accidental exposure are not to be held to specific requirements of this chapter pertaining to electronic equipment, until such time as they are released for actual service as intended. Nothing in this regulation is an exemption from licensing requirements as applicable to the possession and use of radioactive materials.*

Section 11

NAC 459.154 is hereby amended to read as following:

NAC 459.154 Applications for registration; temporary use of portable machine. (NRS 439.150, 459.201)

1. Except as otherwise provided in subsection 2, each person who controls an unregistered, operational radiation machine, *not dependent on being in actual service as intended*, shall apply to the Division for registration of the machine within 30 days after installing the machine.

Section 12

NAC 459.166 is hereby amended to read as following:

NAC 459.166 Transfer, loan, disposal, assembly or installation of machine, supplies or equipment. (NRS 459.201)

1. Any person who sells, leases, transfers, lends, disposes, assembles or installs radiation machines in this State or sells, leases, transfers or disposes of a radiation machine currently registered in this State shall, within 15 days, notify the Division of:
 - (a) The name and address of each person who has received such a machine;
 - (b) The manufacturer, model and serial number of each control console and X-ray tube *installed, transferred, disassembled or disposed*~~;~~~~and~~~~;~~
 - (c) *The type of service performed; and*
 - (d) The date of transfer, *installation, disassembly, or disposal* of each machine.
2. A person shall not make, sell, lease, transfer, lend, assemble or install any radiation machine or the supplies and equipment used in connection with such a machine unless the machine and any supplies and equipment, when properly placed in operation and used, meet the applicable requirements of NAC 459.010 to 459.950, inclusive.

Section 13

NAC 459.182 is hereby amended to read as following:

NAC 459.182.3 Exemptions for source materials:

3. Any person is exempt from *the requirements for a license set forth in* NAC 459.180 to 459.313, inclusive, to the extent that he or she receives, possesses, uses or transfers any of the following:

Section 14

NAC 459.182.3.(b)(1) is hereby amended to read as following:

NAC 459.182.3.(b)(1) Exemptions for source materials.

- (b) Source material contained in the following products:
 - (1) Glazed ceramic tableware, *manufactured before August 27, 2016*, if the glaze contains not more than 20 percent by weight source material;

- (2) Glassware containing *not more than 2 percent by weight source material or, for glassware manufactured before August 27, 2016*, not more than 10 percent by weight source material, but not including commercially manufactured glass brick, pane glass, ceramic tile or other glass, glass enamel or ceramic used in construction; or

Section 15

NAC 459.182.3.(e)(1) is hereby removed to read as following:

NAC 459.182.3.(e)(1)

- 3.(e) Uranium contained in counterweights installed in aircraft, rockets, projectiles and missiles, or stored or handled in connection with installation or removal of counterweights if:
- ~~{(1) The counterweights are manufactured in accordance with a specific license issued by the Nuclear Regulatory Commission authorizing distribution by the licensee pursuant to 10 C.F.R. Part 40;}~~

Section 16

NAC 459.182.(e) (1), (2) is hereby amended to read as following:

NAC 459.182.3.(e) (1), (2)

- 3.(e) Uranium contained in counterweights installed in aircraft, rockets, projectiles and missiles, or stored or handled in connection with installation or removal of counterweights if:
- ~~{(1) The counterweights are manufactured in accordance with a specific license issued by the Nuclear Regulatory Commission authorizing distribution by the licensee pursuant to 10 C.F.R. Part 40;}~~
- (1) ~~{(2)}~~ Each counterweight has been impressed with the following legend clearly legible through the plating or other covering: “DEPLETED URANIUM”; and
- (2) ~~{(3)}~~ Each counterweight is durably and legibly labeled or marked with the identification of the manufacturer and the statement: “UNAUTHORIZED ALTERATIONS PROHIBITED.”

Section 17

NAC 459.182.(g) (1), (2) is hereby amended to read as following:

NAC 459.182.3.(g) (1), (2) Exemptions for source materials.

- (g) Thorium *or uranium* contained in *or on* finished optical lenses *and mirrors*, if each lens *or mirror does not contain more than 10 percent by weight thorium or uranium or, for lenses manufactured before August 27, 2016*, does not contain more than 30 percent by weight of thorium. The exemption contained in this paragraph does not authorize either:
- (1) The shaping, grinding or polishing of such lenses or manufacturing processes other than the assembly of such lenses *or mirror* into optical systems and devices without any alteration of the lenses *or mirror*; or
- (2) The receipt, possession, use or transfer of *uranium or* thorium contained in contact lenses, in spectacles, or in eyepieces in binoculars or other optical instruments.

Section 18

NAC 459.182 is hereby amended to read as following:

NAC 459.182.5

5. No person may initially transfer for sale or distribution a product containing source material to persons exempt under subsection 3, or equivalent regulations of an Agreement State, unless authorized by a license issued under 10 CFR§ 40.52 to initially transfer such products for sale or distribution.

(i) Persons initially distributing source material in products covered by the exemptions in this subsection 3, before August 27, 2016, without specific authorization may continue such distribution for 1 year beyond this date. Initial distribution may also be continued until the Commission takes final action on a pending application for license or license amendment to specifically authorize distribution submitted no later than 1 year beyond this date.

(ii) Persons authorized to manufacture, process, or produce these materials or products containing source material by an Agreement State, and persons who import finished products or parts, for sale or distribution must be authorized by a license issued under 10 CFR § 40.52 for distribution only and are exempt from the requirements of NAC 459. 320-374 & 459.780-794 of this chapter, and NAC 459.238.1.(a) & (b).

Section 19

NAC 459.182. 3.(h): is hereby amended to read as following:

NAC 459.182.3.(h): REMOVED

~~***{(h) Uranium contained in detector heads for use in fire detection units if each detector head contains not more than 0.005 microcurie of uranium.}***~~

Section 20

NAC 459.182.3.(e) (4) is hereby amended to read as following:

NAC 459.182.3.(e) (4) Exemptions for source materials.

(4)The requirements specified in subparagraphs ~~{(2)}~~ (1) and ~~{(3)}~~ (2) need not be met by counterweights manufactured before December 31, 1969, provided that *that such counterweights were manufactured under a specific license issued by the Nuclear Regulatory Commission and were impressed with the legend required by subsection 3.(e)(2), in effect on June 30, 1969.* ~~{such counterweights are impressed with the legend, "CAUTION—RADIOACTIVE MATERIAL—URANIUM," as previously required by the regulations of the State Board of Health before February 28, 1980}.~~

Section 21

NAC 459.190 is hereby amended to read as following:

NAC 459.190.1.(j)(1)-(3): Miscellaneous exemptions: Certain timepieces, lock illuminators, precision balances, automobile shift quadrants, marine navigational instruments, ionization chamber smoke detectors, thermostats, electron tubes and ionizing radiation measuring instruments. (NRS 459.030, 459.201)

1. Except for persons who apply radioactive material to, or persons who incorporate radioactive material into, the following products, any person is exempt from NAC

459.010 to 459.950, inclusive, to the extent that he or she receives, possesses, uses, transfers, owns or acquires the following products:

- (j)(1) Static elimination devices which contain, as a sealed source or sources, byproduct material consisting of a total of not more than 18.5 MBq (500 µCi) of polonium-210 per device.*
- (2) Ion generating tubes designed for ionization of air that contain, as a sealed source or sources, byproduct material consisting of a total of not more than 18.5 MBq (500 µCi) of polonium-210 per device or of a total of not more than 1.85 GBq (50 mCi) of hydrogen-3 (tritium) per device.*
- (3) Such devices authorized before October 23, 2012 for use under the general license then provided in § 31.3 and equivalent regulations of Agreement States and manufactured, tested, and labeled by the manufacturer in accordance with the specifications contained in a specific license issued by the Nuclear Regulatory Commission.*

Section 22

NAC 459.192 is hereby amended to read as following:

NAC 459.192.1:

1. *(a)* Except for persons who manufacture, process or produce self-luminous products containing tritium, krypton-85 or promethium-147, any person is exempt from the provisions of NAC 459.010 to 459.950, inclusive, to the extent that he or she receives, possesses, uses, transfers, owns or acquires tritium, krypton-85 or promethium-147 in self-luminous products manufactured, processed, produced, imported or transferred in accordance with a specific license issued by the Nuclear Regulatory Commission pursuant to 10 C.F.R. § 32.22, which license authorizes the transfer of the product to persons who are exempt from regulatory requirements.

(b) Any person who desires to manufacture, process, or produce, or initially transfer for sale or distribution self-luminous products containing tritium, krypton-85, or promethium-147 for use under paragraph (a) of this section, should apply for a license under 10 CFR Part § 32.22 and for a certificate of registration in accordance with 10 CFR § 32.210.

(c) The exemption in this subsection for self-luminous products does not apply to tritium, krypton-85 or promethium-147 used in products for frivolous purposes or in toys or adornments.

Section 23

NAC 459.192 is hereby amended to read as following:

NAC 459.192.3(b):

3. *(a)* Except for persons who manufacture, process, produce or initially transfer for sale or distribution gas and aerosol detectors containing radioactive material, any person is exempt from the provisions of NAC 459.010 to 459.950, inclusive, to the extent that he or she receives, possesses, uses, transfers, owns or acquires radioactive material in gas and aerosol detectors designed to protect ~~life~~ *health, safety* or property from fires and airborne hazards if the detectors containing radioactive material have been manufactured, processed, produced or initially transferred in accordance with a specific license issued by the Division, the Nuclear Regulatory

Commission or any other agreement state pursuant to 10 C.F.R. § 32.26 or its equivalent, which authorizes the initial transfer of the detectors for use. This exemption also applies to gas and aerosol detectors manufactured or distributed before November 30, 2010, in accordance with a specific license issued by a state under comparable provisions to 10 C.F.R. § 32.26 authorizing distribution to persons exempt from regulatory requirements. The following also apply to gas and aerosol detectors containing radioactive material:

~~(a)(1)~~ The provisions of subsection 2 of NAC 459.190 apply to this subsection.

~~(b)(2)~~ Any gas and aerosol detector which contains by-product material, or naturally occurring and accelerator-produced radioactive material, and which was previously manufactured and distributed to general licensees in accordance with a specific license issued by an agreement state, pursuant to provisions comparable to 10 C.F.R. § 32.26, is exempt under this subsection if the device is labeled in accordance with the specific license and if the device meets the requirements of NAC 459.280.

(b) Any person who desires to manufacture, process, or produce gas and aerosol detectors containing byproduct material, or to initially transfer such products for use under paragraph (a) of this section, shall apply for a license under NAC 459.280 and for a certificate of registration in accordance with NAC 459.3075.

Section 24

NAC 459.192 is hereby amended to read as following:

NAC 459.192.5:

5. (a) Except for persons who manufacture, process, produce, or initially transfer for sale or distribution industrial devices containing byproduct material designed and manufactured for the purpose of detecting, measuring, gauging or controlling thickness, density, level, interface location, radiation, leakage, or qualitative or quantitative chemical composition, or for producing an ionized atmosphere, any person is exempt from the provisions of NAC 459.010 to 459.950, inclusive, to the extent that such person receives, possesses, uses, transfers, owns, or acquires byproduct material, in these certain detecting, measuring, gauging, or controlling devices and certain devices for producing an ionized atmosphere, and manufactured, processed, produced, or initially transferred in accordance with a specific license issued under 10 CFR § 32.30, which license authorizes the initial transfer of the device for use under this section. This exemption does not cover sources not incorporated into a device, such as calibration and reference sources.

(b) Any person who desires to manufacture, process, produce, or initially transfer for sale or distribution industrial devices containing byproduct material for use under paragraph (a) of this subsection, shall apply for a specific license issued by the Nuclear Regulatory Commission pursuant to 10 CFR § 32.30 and for a certificate of registration in accordance with NAC 459.3075.

Section 25

NAC 459.196 is hereby amended to read as following:

NAC 459.196.2 - Issuance of specific licenses:

2. The Division may incorporate in any license at the time of issuance *or thereafter, by appropriate rule, regulation or order*, additional requirements and conditions with respect to the licensee's receipt, possession, use and transfer of radioactive material subject to [NAC 459.180](#) to [459.313](#), inclusive, as it deems appropriate or necessary in order to:

(a) Minimize danger to public health and safety or property;

Section 26

NAC 459.210.3.(b)(1) is hereby amended to read as following:

NAC 459.210 Reciprocal recognition of licenses:

3. Before a licensee may use radioactive material at a temporary job site in another state or at a federal facility, the licensee must obtain authorization, if the job site is:

(a) In another state, from:

(1) That state, if that state is an agreement state; or

(2) The Nuclear Regulatory Commission, by filing for reciprocity or a specific license, if the state is not an agreement state or the job site is within an area of exclusive federal jurisdiction.

(b) At a federal facility, from the Nuclear Regulatory Commission by:

(1) Filing an NRC Form 241 in accordance with 10 C.F.R. § 150.20(b), ~~as those provisions existed on December 17, 2007;~~ or

(2) Filing for a specific license.

Section 27

NAC 459.212.1 is hereby amended to read as following:

NAC 459.212.1 General licenses: *Small Quantities of* Source material. (NRS 459.201)

~~1. A general license is issued authorizing the use and transfer of not more than 15 pounds of source material at any one time by persons in the following categories:~~

- ~~— (a) Pharmacists using the source material solely for the compounding of medicinals;~~
- ~~— (b) Physicians using the source material for medicinal purposes;~~
- ~~— (c) Persons receiving possession of source material from pharmacists and physicians in the form of medicinals or drugs;~~
- ~~— (d) Commercial and industrial firms, and research, educational and medical institutions for research, development, educational or commercial purposes; and~~
- ~~— (e) If the person so licensed does not receive more than a total of 150 pounds of source material in any 1 calendar year.~~

1. A general license is hereby issued authorizing commercial and industrial firms; research, educational, and medical institutions; and Federal, State, and local government agencies to receive, possess, use, and transfer uranium and thorium, in their natural isotopic concentrations and in the form of depleted uranium, for research, development, educational, commercial, or operational purposes in the following forms and quantities:

(a) No more than 1.5 kg (3.3 lb) of uranium and thorium in dispersible forms (e.g., gaseous, liquid, powder, etc.) at any one time. Any material processed by the general licensee that alters the chemical or physical form of the material containing source material must be accounted for as a dispersible form. A person

authorized to possess, use, and transfer source material under this paragraph may not receive more than a total of 7 kg (15.4 lb) of uranium and thorium in any one calendar year. Persons possessing source material in excess of these limits as of August 27, 2016, may continue to possess up to 7 kg (15.4 lb) of uranium and thorium at any one time for one year beyond this date, or until the Division takes final action on a pending application submitted on or before August 27, 2017, for a specific license for such material; and receive up to 70 kg (154 lb) of uranium or thorium in any one calendar year until December 31, 2017, or until the Division takes final action on a pending application submitted on or before August 27, 2017, for a specific license for such material; and

(b) No more than a total of 7 kg (15.4 lb) of uranium and thorium at any one time. A person authorized to possess, use, and transfer source material under this paragraph may not receive more than a total of 70 kg (154 lb) of uranium and thorium in any one calendar year. A person may not alter the chemical or physical form of the source material possessed under this paragraph unless it is accounted for under the limits of paragraph (a)(1) of this section; or

(c) No more than 7 kg (15.4 lb) of uranium, removed during the treatment of drinking water, at any one time. A person may not remove more than 70 kg (154 lb) of uranium from drinking water during a calendar year under this paragraph; or

(d) No more than 7 kg (15.4 lb) of uranium and thorium at laboratories for the purpose of determining the concentration of uranium and thorium contained within the material being analyzed at any one time. A person authorized to possess, use, and transfer source material under this paragraph may not receive more than a total of 70 kg (154 lb) of source material in any one calendar year.

Section 28

NAC 459.212.2 is hereby amended to read as following:

NAC 459.212.2-

2. Any person who receives, possesses, uses, or transfers source material in accordance with the general license in paragraph 1 of this section:

(a) Is prohibited from administering source material, or the radiation therefrom, either externally or internally, to human beings except as may be authorized by the Division in a specific license.

(b) Shall not abandon such source material. Source material may be disposed of as follows:

(i) A cumulative total of 0.5 kg (1.1 lb) of source material in a solid, non-dispersible form may be transferred each calendar year, by a person authorized to receive, possess, use, and transfer source material under this general license to persons receiving the material for permanent disposal. The recipient of source material transferred under the provisions of this paragraph is exempt from the requirements to obtain a license under this part to the extent the source material is permanently disposed. This provision does not apply to any person who is in possession of source material under a specific license issued pursuant to NAC 459.180 to 459.313, inclusive; or

(ii) In accordance with NAC 459.359 of this chapter.

- (c) Is subject to the provisions in 10 CFR § 40.3- 40.5, 40.7, 40.9, 40.10, 40.41(a) - (c),(e) (2)-(4), 40.46, 40.51, 40.56, 40.60 through 40.63 and 40.71.*
- (d) Shall respond to written requests from the Division to provide information relating to the general license within 30 calendar days of the date of the request, or other time specified in the request. If the person cannot provide the requested information within the allotted time, the person shall, within that same time period, request a longer period to supply the information, by providing the Division, in accordance with NAC 459.134, a written justification for the request;*
- (e) Shall not export such source material except in accordance with 10 CFR Part 110.*

Section 29

NAC 459.212.3, 4, 5, 6 & 7 are hereby amended to read as following:

NAC 459.212.3 –

3. Any person who receives, possesses, uses, or transfers source material in accordance with paragraph 1 of this section shall conduct activities so as to minimize contamination of the facility and the environment. When activities involving such source material are permanently ceased at any site, if evidence of significant contamination is identified, the general licensee shall notify the Division, in accordance with NAC 459.134, about such contamination and may consult with the Division as to the appropriateness of sampling and restoration activities to ensure that any contamination or residual source material remaining at the site where source material was used under this general license is not likely to result in exposures that exceed the limits in NAC 459.3178.

NAC 459.212.4 –

~~2~~ *4. A person who receives, possesses, uses or transfers source material pursuant to the general license issued under this section is exempt from the provisions of NAC 459.320 to 459.374, inclusive, and 459.780 to 459.794, inclusive, to the extent that the activities are within the terms of the general license, **except that such person shall comply with the provisions of §§ NAC 459.3178 and 459.359 of this chapter to the extent necessary to meet the provisions of paragraphs 2.(b) and 3 of this section.** This exemption does not apply to any person who also possesses source material under a specific license issued pursuant to NAC 459.180 to 459.313, inclusive.*

NAC 459.212.5 –

5. No person may initially transfer or distribute source material to persons generally licensed under paragraph 1.(a) or (b) of this section, or equivalent regulations of an Agreement State, unless authorized by a specific license issued in accordance with NAC 459.180 to 459.313, inclusive or equivalent provisions of an Agreement State or the Nuclear Regulatory Commission. This prohibition does not apply to analytical laboratories returning processed samples to the client who initially provided the sample. Initial distribution of source material to persons generally licensed by paragraph 1 of this section before August 27, 2016, without specific authorization may continue for 1 year beyond this date. Distribution may also be continued until the Division takes final action on a pending application for license or

license amendment to specifically authorize distribution submitted on or before August 27, 2017.

NAC 459.212.6:

6. An application for a specific license to initially transfer source material for use under NAC 459.212. 1-5, or equivalent regulations of an Agreement State or the Nuclear Regulatory Commission, will be approved if:(a) The applicant satisfies the general requirements specified in NAC 459.238; and

(b) The applicant submits adequate information on, and the Division approves the methods to be used for quality control, labeling, and providing safety instructions to recipients.

NAC 459.212.7(a):

7. Each person licensed under NAC 459.212.6 shall

(a) Label the immediate container of each quantity of source material with the type of source material and quantity of material and the words, "radioactive material."

NAC 459.212.7(b):

(b) Ensure that the quantities and concentrations of source material are as labeled and indicated in any transfer records.

NAC 459.212.7(c):

(c) Provide the information specified in this paragraph to each person to whom source material is transferred for use under NAC 459.212.1-5 or equivalent provisions in Agreement State or the Nuclear Regulatory Commission regulations. This information must be transferred before the source material is transferred for the first time in each calendar year to the particular recipient. The required information includes:

(1) A copy of NAC 459.212 and NAC 459.312, or relevant equivalent regulations of the Agreement State or the Nuclear Regulatory Commission.

(2) Appropriate radiation safety precautions and instructions relating to handling, use, storage, and disposal of the material.

NAC 459.212.7(d):

(d) Each person licensed under NAC 459.212.6 shall report transfers as follows:

(1) File a report with the Division. The report shall include the following information:

(i) The name, address, and license number of the person who transferred the source material;

(ii) For each general licensee under NAC 459.212 or equivalent Agreement State or the Nuclear Regulatory Commission provisions to whom greater than 50 grams (0.11 lb) of source material has been transferred in a single calendar quarter, the name and address of the general licensee to whom source material is distributed; a responsible agent, by name and/or position and phone number, of the general

licensee to whom the material was sent; and the type, physical form, and quantity of source material transferred; and

(iii) The total quantity of each type and physical form of source material transferred in the reporting period to all such generally licensed recipients.

(2) File a report with each responsible Agreement State agency that identifies all persons, operating under provisions equivalent to NAC 459.212, to whom greater than 50 grams (0.11 lb) of source material has been transferred within a single calendar quarter. The report shall include the following information specific to those transfers made to the Agreement State being reported to:

(i) The name, address, and license number of the person who transferred the source material; and

(ii) The name and address of the general licensee to whom source material was distributed; a responsible agent, by name and/or position and phone number, of the general licensee to whom the material was sent; and the type, physical form, and quantity of source material transferred.

(iii) The total quantity of each type and physical form of source material transferred in the reporting period to all such generally licensed recipients within the Agreement State.

(3) Submit each report by January 31 of each year covering all transfers for the previous calendar year. If no transfers were made to persons generally licensed under NAC 459.212 or equivalent Agreement State or the Nuclear Regulatory Commission provisions during the current period, a report shall be submitted to the Division indicating so. If no transfers have been made to general licensees in a particular Agreement State during the reporting period, this information shall be reported to the responsible Agreement State agency upon request of the agency.

NAC 459.212.7(e):

(e) Each person licensed under NAC 459.212.6 shall maintain all information that supports the reports required by this section concerning each transfer to a general licensee for a period of 1 year after the event is included in a report to the Division or an Agreement State agency.

Section 30

NAC 459.214 is hereby amended to read as following:

NAC 459.214 will be repealed.

~~NAC 459.214 General licenses: Certain devices designed for use as static eliminators or for ionization of air. (NRS 459.201)~~

~~—1. A general license is issued to transfer, receive, acquire, own, possess and use radioactive material incorporated in the following devices or equipment which have been manufactured, tested and labeled by the manufacturer in accordance with a specific license issued to the manufacturer by the Nuclear Regulatory Commission for use pursuant to 10 C.F.R. § 31.3. This general license is subject to the provisions of NAC 459.124 to 459.134, inclusive, subsection 3 of NAC 459.184, NAC 459.198, 459.208, 459.312 and 459.320 to 459.374, inclusive, relating to the labeling of containers, and NAC 459.780 to 459.794, inclusive.~~

~~—2. The devices included in this license are:~~

- ~~—(a) Devices designed for use as static eliminators which contain, as a sealed source or sources, radioactive material consisting of a total of not more than 500 microcuries of polonium-210 per device; and~~
- ~~—(b) Devices designed for ionization of air which contain, as a sealed source or sources, radioactive material consisting of a total of not more than 500 microcuries of polonium-210 per device or a total of not more than 50 millicuries of hydrogen-3 (tritium) per device.~~

Section 31

NAC 459.236 is hereby amended to read as following:

NAC 459.236.7(d),(e):

NAC 459.236 Specific licenses: Application. (NRS 459.201)

1. Applications for specific licenses must be filed on a form prescribed by the Division and accompanied by the appropriate fee as prescribed in NAC 459.310.
2. The Division may at any time after the filing of the original application, and before the expiration of the license, require further statements in order to enable the Division to determine whether the application should be granted or denied or whether a license should be modified or revoked.
3. Each application must be signed by the applicant or licensee or a person duly authorized to act for and on his or her behalf.
4. An application for a license may include a request for a license authorizing one or more activities.
5. In his or her application, the applicant may incorporate by reference information contained in previous applications, statements or reports filed with the Division provided such references are clear and specific.
6. Applications and documents submitted to the Division may be made available for public inspection except that the Division may withhold any document or part thereof from public inspection if disclosure of its content is not required in the public interest and would adversely affect the interest of a person concerned.
7. An application for a specific license to use radioactive material in the form of a sealed source or in a device that contains a sealed source must:
 - (a) Identify the source or device by manufacturer and model number as registered with the Nuclear Regulatory Commission, or for a source or device which contains radium-226 or accelerator-produced radioactive material, pursuant to the provisions of NAC 459.289, 459.2895 or 459.3075 or 10 C.F.R. § 32.210 or registered with an agreement state pursuant to an equivalent regulation of the agreement state;
 - (b) Contain the information identified in NAC 459.289, 459.2895 or 459.3075, 10 C.F.R. § 32.210 or an equivalent regulation of an agreement state; or
 - (c) For a source or device which contains naturally occurring or accelerator-produced radioactive material which was manufactured before the effective date of this regulation, which is not registered with the Division pursuant to NAC 459.3075, the Nuclear Regulatory Commission pursuant to 10 C.F.R. § 32.210 or an agreement state pursuant to an equivalent regulation of the agreement state, and for which the applicant cannot provide all the information specified in 10 C.F.R. § 32.210(c):
 - (1) Include all available information identified in 10 C.F.R. § 32.210(c) which concerns the source and, if applicable, the device; and

(2) Include sufficient additional information to demonstrate with reasonable assurance that the radiation safety properties of the source or device are adequate to protect health and minimize danger to life and property, including, without limitation, a description of the source or device, a description of the radiation safety features, the intended use and associated operating experience of the licensee and the results of a recent leak test of the source or device.

(d) For sealed sources and devices allowed to be distributed without registration of safety information in accordance with 10 CFR § 32.210(g)(1), the applicant may supply only the manufacturer, model number, and radionuclide and quantity.

(e) If it is not feasible to identify each sealed source and device individually, the applicant may propose constraints on the number and type of sealed sources and devices to be used and the conditions under which they will be used, in lieu of identifying each sealed source and device.

Section 32

NAC 459.282 is hereby amended to read as following:

NAC 459.282.6: Specific licenses: Manufacture or distribution of devices. (NRS 459.201)

An application for a specific license to manufacture or distribute devices containing radioactive material, excluding special nuclear material, to persons generally licensed under NAC 459.216 or equivalent regulations of the Nuclear Regulatory Commission or an agreement state will be approved if:

5. Each device described in paragraph (a) of subsection 13 of NAC 459.218 bears a permanent label, including, without limitation, an embossed, etched, engraved or a stamped label, affixed to the source housing if separable or to the device if the source housing is not separable, which contains the words “CAUTION - RADIOACTIVE MATERIAL” and the radiation symbol described in NAC 459.355, if practicable.

6. The device has been registered in the Sealed Source and Device Registry.

Section 33

NAC 459.290 is hereby amended to read as following:

19. NAC 459.290: Specific licenses: Manufacture, assembly or repair of luminous safety devices for use in aircraft. (NRS 459.201) An application for a specific license to manufacture, assemble or repair luminous safety devices containing tritium or promethium 147 for use in aircraft, for distribution to persons generally licensed under NAC 459.220, will be approved subject to the following conditions:

1. The applicant satisfies the general requirements specified in NAC 459.238; and
2. The applicant satisfies the requirements of 10 C.F.R. §§ 32.53-32.56 ~~and 32.101~~ or their equivalent.

Section 34

NAC 459.292 is hereby amended to read as following:

20. NAC 459.292: Specific licenses: Manufacture of calibration and reference sources. (NRS 459.201) An application for a specific license to manufacture calibration and reference sources containing americium 241, plutonium or radium 226 to persons

generally licensed under NAC 459.224 will be approved subject to the following conditions:

1. The applicant satisfies the general requirement of NAC 459.238; and
3. The applicant satisfies the requirements of 10 C.F.R. §§ 32.57-32.59 ~~and 32.102~~ and 10 C.F.R. § 70.39 or their equivalent.

Section 35

NAC 459.2923.4.(b): is hereby amended to read as following:

21. NAC 459.2923.4.(b): Specific licenses: Manufacture or initial transfer of calibration or reference sources. (NRS 459.201)

4. If the Division determines, for any source which contains more than 0.005 microcurie (185 becquerels) of americium-241 or radium-226 that:

(a) The method of incorporation and binding of the americium-241 or radium-226 in the source is such that the americium-241 or radium-226 will not be released or removed from the source under normal conditions of use and handling of the source; and

(b) The source has been subjected to, and has passed in a satisfactory manner, ~~the prototype tests prescribed by 10 C.F.R. § 32.102, Schedule C, as it existed on November 30, 2007, or an equivalent regulation of an agreement state.~~ appropriate tests required by paragraph 5 of this section.

Section 36

NAC 459.2923.5 is hereby added to read as following:

NAC 459. 2923:5:

5. The applicant shall subject at least five prototypes of each source that is designed to contain more than 0.185 kilobecquerel (0.005 microcurie) of americium-241 or radium-226 to tests as follows:

(a) The initial quantity of radioactive material deposited on each source is measured by direct counting of the source.

(b) The sources are subjected to tests that adequately take into account the individual, aggregate, and cumulative effects of environmental conditions expected in service that could adversely affect the effective containment or binding of americium-241 or radium-226, such as physical handling, moisture, and water immersion.

(c) The sources are inspected for evidence of physical damage and for loss of americium-241 or radium-226, after each stage of testing, using methods of inspection adequate for determining compliance with the criteria in paragraph 5.(d) of this section.

(d) Source designs are rejected for which the following has been detected for any unit: Removal of more than 0.185 kilobecquerel (0.005 microcurie) of americium-241 or radium-226 from the source or any other evidence of physical damage.

Section 37

NAC 459.2927 is hereby amended to read as following:

23. **NAC 459.2927:** Specific licenses: Holder of license issued pursuant to NAC 459.2923 to perform dry wipe test before transferring source. (NRS 459.201)

1. Before transferring a source containing more than 0.1 microcurie (3.7 kilobecquerels) of americium-241 or radium-226 to a person who holds a general license issued pursuant to NAC 459.224, a person who holds a specific license issued pursuant to NAC 459.2923 shall perform a dry wipe test on the source. The test must be performed by wiping with moderate pressure the entire radioactive surface of the source with a filter paper.

2. The radioactivity of the filter paper after the dry wipe test must be measured by a radiation detection instrument which is capable of detecting 0.005 microcurie (185 becquerels) of americium-241 or radium-226.

3. If the test discloses more than 0.005 microcurie (185 becquerels) of radioactive material, the source shall be deemed to be leaking americium-241 or radium-226 *and the source must be rejected* and must not be transferred to a general licensee pursuant to NAC 459.224, 10 C.F.R. § 31.8 or an equivalent regulation of an agreement state.

Section 38

NAC 459.298 is hereby amended to read as following:

NAC 459.298 Specific licenses: Manufacture and distribution of ice detection devices.

(NRS 459.201) An application for a specific license to manufacture and distribute ice detection devices to persons generally licensed under NAC 459.232 will be approved subject to the following conditions:

1. The applicant satisfies the general requirements of NAC 459.238; and
2. The criteria of 10 C.F.R. §§ 32.61 ~~H~~ & 32.62 ~~& 32.103~~ are met.

Section 39

NAC 459.306 is hereby amended to read as following:

NAC 459.306.4: Specific licenses: Manufacture and distribution of sources and devices for medical use. (NRS 459.201): An application for a specific license to manufacture and distribute sources and devices containing radioactive material to persons licensed pursuant to 10 C.F.R. Part 35 or equivalent regulations of an agreement state, for use as a calibration, transmission or reference source or for the uses listed in 10 C.F.R. §§ 35.400, 35.500, 35.600 and 35.1000 or equivalent regulations of an agreement state, will be approved if:

1. The applicant satisfies the general requirements in NAC 459.238;
 2. The applicant submits sufficient information regarding each type of source or device pertinent to an evaluation of its radiation safety, including:
 - (a) The radioactive material contained, its chemical and physical form, and amount;
 - (b) Details of design and construction of the source or device;
 - (c) Procedures for, and results of, prototype tests to demonstrate that the source or device will maintain its integrity under stresses likely to be encountered in normal use and in accidents;
 - (d) For devices containing radioactive material, the radiation profile of a prototype device;
 - (e) Details of quality control procedures to ensure that production sources and devices meet the standards of the design and prototype tests;
 - (f) Procedures and standards for calibrating sources and devices;
 - (g) Legends and methods for labeling sources and devices as to their radioactive content;
- and

(h) Instructions for handling and storing the source or device from the radiation safety standpoint, which instructions must be included on a durable label attached to the source or device or attached to a permanent storage container for the source or device, provided that instructions which are too lengthy for the label may be summarized on the label and printed in detail on a brochure which is referenced on the label; and

3. The label affixed to the source, device or permanent storage container for the source or device contains information on the radionuclide, quantity and date of assay, and a statement that the source or device is approved by the Division for distribution to persons licensed to use radioactive material identified in 10 C.F.R. §§ 35.65, 35.400, 35.500 and 35.600 or to persons who hold equivalent licenses of the Nuclear Regulatory Commission or an agreement state.

(4) The source or device has been registered in the Sealed Source and Device Registry.

Section 40

NAC 459.307 is hereby amended to read as following:

NAC 459.307 Testing sealed sources for leakage. (NRS 459.030, 459.201)

1. Any licensee who possesses sealed sources shall have each sealed source containing radioactive material tested for leakage at intervals not to exceed 6 months, unless a longer interval is authorized by the Division, the Nuclear Regulatory Commission or an agreement state in the Sealed Source and Device Registry maintained by the Nuclear Regulatory Commission. In the absence of a certificate from a transferor indicating that a test has been made within 6 months before the transfer, the sealed sources should not be used until tested, but no leak tests are required when:

- (a) The source contains only radioactive material with a half-life of less than 30 days;
- (b) The source contains only radioactive material as a gas;
- (c) The source contains 100 microcuries (3.7 megabecquerels) or less of beta- or gamma-emitting material or 10 microcuries (370 kilobecquerels) or less of alpha-emitting material;
- (d) The sealed source is stored and is not being used. The sources must be tested for leakage before any use or transfer unless they have been leak tested within 6 months before the date of use or transfer; or
- (e) The source is seeds of iridium-192 encased in nylon ribbon.

2. The leak test must be capable of detecting the presence of 0.005 microcurie (185 becquerels) of radioactive material on the test sample. The test sample must be taken from the sealed source or from the surfaces of the device in which the sealed source is permanently mounted or stored on which contamination might be expected to accumulate. Records of leak test results must be maintained for ~~5 years~~ **3 years** for inspection by the Division and, for persons licensed pursuant to the provisions of this chapter for the medical use of radioactive material, must include, without limitation:

Section 41

NAC 459.3075 is hereby amended to read as following:

NAC 459.3075 Sealed source or device containing sealed source intended for use under specific license: Request for evaluation and registration; manufacture and distribution. (NRS 459.201)

NAC 459.3075:Sealed source or device containing sealed source intended for use under specific license: Request for evaluation and registration; manufacture and distribution. (NRS 459.201)

1. A manufacturer or initial distributor of a sealed source or device containing a sealed source whose product is intended for use under a specific license may submit a request to the Nuclear Regulatory Commission or an agreement state for evaluation of the radiation safety information concerning its product and for registration of the product.

2. A request for review submitted pursuant to subsection 1 must be sent to the ~~{Office of Nuclear Material Safety and Safeguards}~~ *Office of Federal and State Materials and Environmental Management Programs, ATTN: SDDR*, of the United States Nuclear Regulatory Commission by a method listed in 10 C.F.R. § 30.6(a) or to the equivalent agency of an agreement state.

3. A request for review of a sealed source submitted pursuant to subsection 1 must include, without limitation, sufficient information concerning the:

- (a) Design of the sealed source;
- (b) Manufacture of the sealed source;
- (c) Prototype testing of the sealed source;
- (d) Quality control program proposed for the sealed source;
- (e) Labeling of the sealed source;
- (f) Proposed uses of the sealed source; and
- (g) Leak testing of the source,

to provide reasonable assurance that the radiation safety properties of the sealed source are adequate to protect health and minimize the danger to life and property.

4. A request for review of a device containing a sealed source submitted pursuant to subsection 1 must include, without limitation, sufficient information concerning the:

- (a) Design of the device;
- (b) Manufacture of the device;
- (c) Prototype testing of the device;
- (d) Quality control program proposed for the device;
- (e) Labeling of the device;
- (f) Proposed uses of the device;
- (g) Leak testing of the device;
- (h) Installation of the device;
- (i) Service and maintenance of the device;
- (j) Operating and safety instructions concerning the device; and
- (k) Potential hazards associated with the device,

to provide reasonable assurance that the radiation safety properties of the device are adequate to protect health and minimize the danger to life and property.

4. The NRC normally evaluates a sealed source or a device using radiation safety criteria in accepted industry standards. If these standards and criteria do not readily apply to a particular case, the NRC formulates reasonable standards and criteria with the help of the manufacturer or distributor. The NRC shall use criteria and standards sufficient to ensure that the radiation safety properties of the device or sealed source are adequate to protect health and minimize danger to life and property. Subpart A of 10 CFR Part 32 includes specific criteria that apply to certain exempt products and

subpart B of 10 CFR Part 32 includes specific criteria applicable to certain generally licensed devices. Subpart C of 10 CFR Part 32 includes specific provisions that apply to certain specifically licensed items.

5. If the Nuclear Regulatory Commission or agreement state completes an evaluation pursuant to a request made pursuant to subsection 1 and issues a certificate of registration to the manufacturer or initial distributor of a sealed source or device containing a sealed source who made the request pursuant to subsection 1, *the certificate of registration acknowledges the availability of the submitted information for inclusion in an application for a specific license proposing use of the product, or concerning use under an exemption from licensing or general license as applicable for the category of certificate, and* the manufacturer or initial distributor shall manufacture and distribute the product in accordance with:

- (a) The statements and representations, including, without limitation, the quality control program, contained in the request submitted pursuant to subsection 1; and
- (b) The provisions of the certificate of registration.

6. *Authority to manufacture or initially distribute a sealed source or device to specific licensees may be provided in the license without the issuance of a certificate of registration in the following cases:*

(a) *Calibration and reference sources containing no more than:*

- (i) *37 MBq (1 mCi), for beta and/or gamma emitting radionuclides; or*
- (ii) *0.37 MBq (10 μ Ci), for alpha emitting radionuclides; or*

(b) *The intended recipients are qualified by training and experience and have sufficient facilities and equipment to safely use and handle the requested quantity of radioactive material in any form in the case of unregistered sources or, for registered sealed sources contained in unregistered devices, are qualified by training and experience and have sufficient facilities and equipment to safely use and handle the requested quantity of radioactive material in unshielded form, as specified in their licenses; and*

(i) *The intended recipients are licensed under part 33 of this chapter or comparable provisions of an Agreement State; or*

(ii) *The recipients are authorized for research and development; or*

(iii) *The sources and devices are to be built to the unique specifications of the particular recipient and contain no more than 740 GBq (20 Ci) of tritium or 7.4 GBq (200 mCi) of any other radionuclide.*

7. *After the certificate is issued, the Commission may conduct an additional review as it determines is necessary to ensure compliance with current regulatory standards. In conducting its review, the Commission will complete its evaluation in accordance with criteria specified in this section. The Commission may request such additional information as it considers necessary to conduct its review and the certificate holder shall provide the information as requested.*

8. (a). *A certificate holder who no longer manufactures or initially transfers any of the sealed source(s) or device(s) covered by a particular certificate issued by the Commission shall request inactivation of the registration certificate. Such a request must be made to the NRC's Office of Federal and State Materials and Environmental Management Programs, ATTN: SDDR by an appropriate method listed in § 30.6(a) of this chapter and must normally be made no later than two years after initial*

distribution of all of the source(s) or device(s) covered by the certificate has ceased. However, if the certificate holder determines that an initial transfer was in fact the last initial transfer more than two years after that transfer, the certificate holder shall request inactivation of the certificate within 90 days of this determination and briefly describe the circumstances of the delay.

(b) If a distribution license is to be terminated in accordance with § 30.36 of this chapter, the licensee shall request inactivation of its registration certificates associated with that distribution license before the Commission will terminate the license. Such a request for inactivation of certificate(s) must indicate that the license is being terminated and include the associated specific license number.

(c) A specific license to manufacture or initially transfer a source or device covered only by an inactivated certificate no longer authorizes the licensee to initially transfer such sources or certificate, including in the case of an inactive certificate.

Section 42

NAC 459.312 is hereby amended to read as following:

NAC 459.312 Transfer of material. (NRS 459.201)

1. A licensee may transfer radioactive material only as authorized in this section.
2. Except as otherwise provided in his or her license and subject to the provisions of subsections 3 and 4, any licensee may transfer radioactive material:
 - (a) To the Division but only after receiving prior approval from the Division;
 - (b) To the United States Department of Energy;
 - (c) To any person exempt from the provisions of NAC 459.180 to 459.313, inclusive, to the extent permitted under the exemption;

(d) To any person in an Agreement State subject to the jurisdiction of that State who has been exempted from the licensing requirements and regulations of that State, to the extent permitted under such exemptions;

~~+(e)~~ *(e)* To any person authorized to receive the material under terms of a general license or its equivalent, or a specific license or equivalent licensing document, issued by the Division, the Nuclear Regulatory Commission or any agreement state, or to any person otherwise authorized to receive material by the Federal Government or any agency thereof, the Division or any agreement state; or

~~+(e)~~ *(f)* As otherwise authorized by the Division in writing.

3. Before transferring radioactive material to a specific licensee of the Division, the Nuclear Regulatory Commission, an agreement state, or to a general licensee who is required to register with the Nuclear Regulatory Commission or an agreement state before receipt of the radioactive material, the licensee transferring the material shall verify that the transferee's license authorizes the receipt of the type, form and quantity of radioactive material to be transferred.

4. The following methods for the verification required by subsection 3 are acceptable:

- (a) The transferor may have in his or her possession, and read, a current copy of the transferee's specific license or registration certificate;
- (b) The transferor may have in his or her possession a written certification by the transferee that he or she is authorized by license or registration certificate to receive the

type, form and quantity of radioactive material to be transferred, specifying the license or registration certificate number, issuing agency and expiration date;

(c) For emergency shipments, the transferor may accept oral certification confirmed in writing within 10 days by the transferee that he or she is authorized by license or registration certificate to receive the type, form and quantity of radioactive material to be transferred, specifying the license or registration certificate number, issuing agency and expiration date;

(d) The transferor may obtain other sources of information compiled by a reporting service from official records of the Division, the Nuclear Regulatory Commission or the licensing agency of an agreement state as to the identity of licensees and the scope and expiration dates of licenses and registration; or

(e) When none of the methods of verification described in paragraphs (a) to (d), inclusive, are readily available or when a transferor desires to verify that information received by one of such methods is correct or up to date, the transferor may obtain and record confirmation from the Division, the Nuclear Regulatory Commission or the licensing agency of an agreement state that the transferee is licensed to receive the radioactive material.

Section 43

NAC 459.312 is hereby amended to read as following:

NAC 459.3178 Property of decommissioned facility: Eligibility for release for unrestricted use. (NRS 459.030) The property of a decommissioned facility is eligible for release for unrestricted use if the residual radiation, distinguishable from background radiation, including groundwater sources of drinking water:

1. Results in the average member of the critical group receiving a total effective dose equivalent that does not exceed 25 millirem (0.25 millisievert) per year; and
2. Is as low as is reasonably achievable (*ALARA*). *Determination of the levels which are ALARA must take into account consideration of any detriments, such as deaths from transportation accidents, expected to potentially result from decontamination and waste disposal.*

Section 44

NAC 459.3205 is hereby amended to read as following:

NAC 459.3205 Adoption by reference of certain provisions of federal regulations. (NRS 459.201) The State Board of Health hereby adopts by reference appendices A, B and C to 10 C.F.R. §§ 20.1001 to 20.2402, inclusive, ~~as those provisions existed on October 13, 1999. A copy of the volume containing these appendices may be purchased by mail from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 979050, St. Louis, Missouri 63197-9000, or by toll-free telephone at (866) 512-1800, for the price of \$39, or are~~ *is* available, free of charge, at ~~the Internet address <http://www.gpoaccess.gov/cfr/index.html>.~~ <http://www.nrc.gov/reading-rm/doc-collections/cfr/part020/full-text.html>.

Section 45

NAC 459.3585 is hereby amended to read as following:

NAC 459.3585 Precautionary procedures: Receiving, monitoring and opening packages. (NRS 459.201)

1. Each licensee who expects to receive a package containing quantities of radioactive material in excess of a type A quantity, as defined in 10 C.F.R. § 71.4, ~~as that section existed on November 14, 2007~~, shall make arrangements to receive:

- (a) The package when the carrier offers it for delivery; or
- (b) Notification of the arrival of the package at the terminal of the carrier and to take possession of the package expeditiously.

2. Each licensee shall—

(a) Monitor the external surfaces of a labeled package for radioactive contamination unless the package contains only radioactive material in the form of a gas or in special form as defined in 10 CFR 71.4;

(b) Monitor the external surfaces of a labeled package for radiation levels unless the package contains quantities of radioactive material that are less than or equal to the Type A quantity, as defined in 10 CFR 71.4 and appendix A to 10 CFR Part 71; and

(c) Monitor all packages known to contain radioactive material for radioactive contamination and radiation levels if there is evidence of degradation of package integrity, such as packages that are crushed, wet, or damaged.

~~12~~3. Except as otherwise provided in subsections **2 and 7**, ~~16~~, each licensee shall monitor the external surfaces of a package known to contain radioactive material for radioactive contamination and radiation levels if the package:

- (a) Is labeled as containing radioactive material; or
- (b) Has evidence of potential contamination.

~~13~~4. The licensee shall perform the monitoring required by subsection 2 as soon as practicable after receipt of the package, but not later than 3 hours after the package is received at the facility of the licensee if the package is received during the normal working hours of the licensee. If the package is received after the normal working hours of the licensee, the monitoring must be performed not later than 3 hours after the beginning of the next normal working day of the licensee.

~~14~~5. A licensee shall immediately notify the carrier who made the final delivery of a package and, by telephone and telegram, mailgram or facsimile, the Division if:

- (a) Removable radioactive contamination on the surface of the package is detected that exceeds 22,000 disintegrations per minute per 100 square centimeters of package surface; or
- (b) The radiation level at 1 meter from the surface of the package exceeds 10 milliroentgens per hour.

~~15~~6. Each licensee shall:

- (a) Establish, maintain and retain written procedures for safely opening packages in which radioactive material is received; and
- (b) Ensure that the procedures established pursuant to paragraph (a) are followed and that consideration is given to any special instructions for the type of package being opened.

~~16~~7. A licensee transferring a source of radiation in a special form in a motor vehicle owned or operated by the licensee to and from a work site is not required to comply with the requirements of subsection 2, but shall ensure that the source of radiation is still properly lodged in its shield.

Section 46

NAC 459.359 is hereby amended to read as following

NAC 459.359 Disposal of waste: General requirements. ([NRS 459.201](#))

1. A licensee shall dispose of licensed radioactive material only:
 - (a) By transfer to an authorized recipient as provided in NAC 459.180 to 459.313, inclusive, and 459.8231 to 459.950, inclusive;
 - (b) By decay in storage;
 - (c) By release in effluents within the limits specified in NAC 459.335; or
 - (d) As authorized pursuant to NAC 459.3595 to 459.3615, inclusive.
2. A person must be licensed by the Division to receive waste containing licensed radioactive material from other persons for:
 - (a) Treatment before disposal;
 - (b) Treatment or disposal by incineration;
 - (c) Decay in storage;
 - (d) Disposal at a land disposal facility licensed pursuant to NAC 459.806 to 459.8225, inclusive; or
 - (e) Storage until it is transferred to a storage or disposal facility authorized to receive the waste.
 - (f) Disposal at a geologic repository under 10 CFR Part 60 or Part 63.*

Section 47

NAC 459.363 is hereby amended to read as following:

NAC 459.363 Authorized forms of records for purposes of legibility; safeguards.
(NRS 459.201)

1. Each record required by NAC 459.010 to 459.950, inclusive, must be legible throughout the specified period of retention. The record must be:
 - (a) The original;
 - (b) A reproduced copy or a microform, if the copy or microform is authenticated by authorized personnel and, if microform is used, the microform is capable of producing a clear copy throughout the specified period of retention; or
 - (c) Stored in electronic media with the capability for producing legible, accurate and complete records during the specified period of retention.
 - (d) Letters, drawings or specifications, must include all pertinent information such as stamps, initials, and signatures.*
2. A licensee or registrant shall maintain adequate safeguards to prevent tampering with and the loss of records.

Section 48

NAC 459.712 is hereby amended to read as following:

NAC 459.712 Equipment control: Radiation survey instruments. (NRS 459.030, 459.201)

1. The registrant shall maintain sufficient calibrated and operable radiation survey instruments at each location where ~~radioactive~~ *radiation* producing equipment is used. ~~to make the radiation surveys as required by NAC 459.337 and 459.737.~~ Instrumentation required by this section must have a range such that 2 millirems (0.02 millisievert) per hour through 1 rem (0.01 sievert) per hour can be measured.
2. Each radiation survey instrument must be calibrated:

- (a) Against appropriate energy at intervals not exceeding 6 months and, except for battery changes, after each servicing of the instrument;
 - (b) So that accuracy within plus or minus 20 percent can be demonstrated at each point checked; and
 - (c) At two or more widely separated points, other than zero, on each scale, as follows:
 - (1) For linear scale instruments, at two points located approximately one-third and two-thirds of full scale on each scale;
 - (2) For logarithmic scale instruments, at the mid-range of each decade and at two points of at least one decade; and
 - (3) For digital instruments, at 3 points between 2 millirems (0.02 millisievert) per hour and 1 rem (0.01 sievert) per hour.
3. Records of these calibrations must be maintained for at least 3 years after the calibration date for inspection by the Division.

Section 49

NAC 459.7641 is hereby amended to read as following:

NAC 459.7641 Approval of operation required; submission of information to Division. (NRS 459.201)

- 1. A person shall not perform a well logging operation without;
 - (a) A reciprocal recognition general license and* prior approval of the Division; *or*
 - (b) Possess a specific license from the Division permitting the operation.*
- 2. A person who wishes to perform a well logging operation shall submit to the Division a description of the operation which contains:
 - (a) A designation of the township, range and section in which the well is located;
 - (b) The distance in feet from the well to two different section lines;
 - (c) The name or number assigned to the well;
 - (d) The depth of the well and the surface casing in feet;
 - (e) The location and distance of any freshwater aquifers within 3 miles of the well which is to be logged and a determination of whether the well penetrates an aquifer; and
 - (f) The location and identification of any wells within 3 miles of the well which is to be logged that are producing water for human or animal consumption or irrigation and the depths of those wells and the depths of their surface casings.

3. A person licensed by the division to perform a well logging operation shall maintain record of the items in subsection 2 above for a period of at least 3 years for inspection by the Division.

Section 50

NAC 459.769 is hereby amended to read as following:

NAC 459.769 Use of sealed source in well without surface casing. (NRS 459.201)

- A licensee may use a sealed source to log a well that does not have a surface casing if:
- 1. The well does not penetrate a fresh water aquifer; ~~and~~ *or*
 - 2. The licensee follows a procedure which has been approved by the Division for reducing the probability of the source becoming lodged in the well.

Section 51

NAC 459.910 is hereby amended to read as following:

NAC 459.910 Duties of licensee. (NRS 459.201) A licensee:

1. Shall carry out his or her own written program for ensuring the quality of the packaging of the radioactive waste and radioactive material.
2. Shall package the radioactive waste and radioactive material in accordance with:
 - (a) The regulations of the Secretary of Transportation concerning the transportation of hazardous materials in 49 C.F.R. Parts 171 to 177, inclusive, ~~revised as of October 1, 1987~~. The Board hereby incorporates those regulations by reference. ~~Those regulations are contained in one volume of the Code of Federal Regulations and may be obtained by mail from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 979050, St. Louis, Missouri 63197-9000, or by toll free telephone at (866) 512-1800, at a price of \$25.~~ *These regulations may be obtained free of cost at http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title49/49cfrv2_02.tpl.*
 - (b) The regulations of the Nuclear Regulatory Commission concerning the packaging and transport of radioactive material in 10 C.F.R. Part 71. ~~revised as of March 31, 1987~~. The State Board of Health hereby incorporates those regulations by reference. ~~Those regulations may be obtained by mail from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 979050, St. Louis, Missouri 63197-9000, or by toll free telephone at (866) 512-1800, at a price of \$1.44.~~ *These regulations may be obtained free of cost at: <http://www.nrc.gov/reading-rm/doc-collections/cfr/part071/>.*
3. May ship only solid radioactive waste to the state-owned disposal area. Any liquid radioactive waste must, before shipment, be solidified by a method, other than by using urea formaldehyde, which will ensure that there will not be any liquid in the shipping containers upon their arrival at the disposal area.
4. Shall not ship solid waste contaminated with radium 226 to the state-owned disposal area.

Sections 52 – 63 deal with changes to R144-13RP1

KEY

Blue – NEWLY ADDED

~~Red~~ – NEWLY REDACTED

Blue – ALREADY PRESENT IN R144-13RP1

~~Red~~ – ALREADY REDACTED IN R144-13RP1 (will not appear)

EXPLANATION - Matter in *italics* is new; matter in brackets ~~omitted material~~ is material to be omitted.

Section 52

R144-13RP1 – Section 1 - NAC 457.295 is hereby amended to read as following:

457.295 The Division shall charge and collect the following *nonrefundable fees, except if the payment was sent in error, in which case, the Program will refund the fees after deducting an amount that will be the assessed cost charged to the Program for refunding fees:*

1. For the issuance or renewal of a certificate for a machine, \$551.

2. For the issuance or renewal of a mammographer's certificate, \$88.

Section 53

R144-13RP1 – Section 9 is hereby amended to read as following:

R144-13 RP1 - Sec. 9. 1. A radiation safety officer for a license for *radioactive* material that involves the use of a portable gauge must have successfully completed:

(a) A course of training in portable gauges provided by the manufacturer for users of portable gauges or radiation safety officers; or

(b) An equivalent course that meets the criteria set forth in subsection 2.

2. An equivalent course must:

(a) Be taught by an instructor who meets the qualifications set forth in subsection 3;

(b) Include at least 1 1/2 hours of training in radiation safety and regulatory requirements, emphasizing practical subjects relating to the safe use of a portable gauge, including, without limitation, training in:

(1) The difference between radiation and radioactive contamination;

(2) The difference between internal and external exposure to radiation;

(3) The use of the methods involving time, distance and shielding to minimize exposure to radiation;

(4) The control and surveillance of a portable gauge;

(5) The location of a sealed source within a portable gauge;

(6) Inventory concerning portable gauges;

(7) Recordkeeping concerning portable gauges;

(8) Handling incidents involving radiation which compromise safety;

(9) Licensing and inspection of radioactive materials by the Division;

(10) Maintaining complete and accurate information as it relates to a license for byproduct material that involves the use of a portable gauge;

(11) The protection of employees who provide information concerning an alleged violation of the Atomic Energy Act of 1954 or the Energy Reorganization Act of 1974; and

(12) The meaning of deliberate misconduct as it relates to a license for *radioactive* material that involves the use of a portable gauge and possible enforcement actions relating to such deliberate misconduct;

(c) Include at least 1 1/2 hours of practical training in portable gauge theory and operation, including, without limitation:

(1) Training in operating, emergency, maintenance and transportation procedures; and

(2) Field training emphasizing radiation safety, including, without limitation, practical tests

which involve:

(I) Setting up and making measurements with the portable gauge;

(II) Controlling and maintaining surveillance of the portable gauge;

(III) Performing routine cleaning and lubrication of the portable gauge;

(IV) Packaging and transporting the portable gauge;

(V) Storing the portable gauge; and

(VI) Following emergency procedures concerning the portable gauge; and

(d) Require each proposed radiation safety officer to pass a closed-book examination with a score of not less than 70 percent. The examination must:

(1) Consist of at least 25 questions that place an emphasis on radiation safety as it relates to the storage, use, maintenance and transportation of portable gauges and the location of sealed sources within portable gauges;

(2) Be administered by an instructor who meets the qualifications set forth in subsection 3; and

(3) Be reviewed with the proposed radiation safety officer immediately following the scoring of the examination to ensure that the proposed radiation safety officer knows the correct answers to any questions incorrectly answered on the examination.

3. An instructor is qualified to teach the course and administer the examination described in subsection 2 if he or she:

(a) Has:

(1) Received a bachelor's degree, master's degree or more advanced degree in the physical or life sciences or in engineering;

(2) Successfully completed a course of training in portable gauges provided by the manufacturer for users of portable gauges;

(3) Successfully completed a course in radiation safety that consists of at least 8 hours of instruction; and

(4) At least 8 hours of hands-on experience with portable gauges; or

(b) Has:

(1) Successfully completed a course of training in portable gauges provided by the manufacturer for users of portable gauges;

(2) Successfully completed a course in radiation safety that consists of at least 40 hours of instruction; and

(3) At least 30 hours of hands-on experience with portable gauges.

Section 54

R144-13RP1 – Section 10 is hereby amended to read as following:

B. R144-13 RP1 - Sec. 10. 1. A radiation safety officer for a license for *radioactive* material that involves the use of a fixed gauge must have successfully completed:

(a) A course of training in fixed gauges provided by the manufacturer or distributor for users of fixed gauges or radiation safety officers; or

(b) An equivalent course that meets the criteria set forth in subsection 2.

2. An equivalent course must include, without limitation:

(a) Classroom training in radiation safety emphasizing practical subjects relating to the safe use of a fixed gauge, including, without limitation, training in:

(1) The difference between radiation and radioactive contamination;

(2) The difference between internal and external exposure to radiation;

(3) The biological effects of radiation;

(4) The types and relative hazards of the radioactive material possessed by the licensee;

(5) The concept of keeping exposure to radiation as low as is reasonably achievable;

(6) The use of the methods involving time, distance and shielding to minimize exposure to radiation; and

(7) The location of a sealed source within a fixed gauge;

(b) Classroom training in regulatory requirements, including, without limitation, training relating to:

(1) The applicable state and federal regulations;

- (2) The conditions of, amendments to and renewal of a license;
 - (3) The physical location at which radioactive materials are used and stored;
 - (4) The control of and accountability relating to radioactive materials;
 - (5) An annual audit of a radiation safety program;
 - (6) The transfer and disposal of radioactive materials;
 - (7) Recordkeeping concerning fixed gauges;
 - (8) Any reports or studies describing prior accidents or problems involving fixed gauges;
 - (9) Handling incidents involving radiation which compromise safety;
 - (10) Recognizing and ensuring that signs warning of radiation are visible and legible;
 - (11) Licensing and inspection of radioactive materials by the Division;
 - (12) Maintaining complete and accurate information as it relates to a license for byproduct material that involves the use of a fixed gauge;
 - (13) The protection of employees who provide information concerning an alleged violation of the Atomic Energy Act of 1954 or the Energy Reorganization Act of 1974; and
 - (14) The meaning of deliberate misconduct as it relates to a license for *radioactive* material that involves the use of a fixed gauge and possible enforcement actions relating to such deliberate misconduct;
- (c) Practical training in fixed gauge theory and operation, including, without limitation, training in:
- (1) Operating and emergency procedures;
 - (2) The difference between and requirements related to routine and nonroutine maintenance; and
 - (3) Lockout procedures;
- (d) On-the-job training under the supervision of a radiation safety officer or a person who is authorized to use and supervise the use of *radioactive* material that involves the use of a fixed gauge which includes, without limitation, hands-on experience performing:
- (1) Operating procedures;
 - (2) Practical tests which involve following emergency procedures;
 - (3) Routine maintenance; and
 - (4) Lockout procedures; and
- (e) An evaluation by a management official concerning whether the proposed radiation safety officer is qualified to work independently with and is knowledgeable of the radiation safety aspects of each type of fixed gauge that is possessed by the licensee. This evaluation may be accomplished by a written or oral examination or by observation.
3. The classroom training required by subsection 2 may be in the form of lecture, videotape or self-study.
4. In addition to the training required by subsection 1, if the proposed radiation safety officer is appointed for a radiation safety program that includes nonroutine operations, the proposed radiation safety officer must have successfully completed a course of training in nonroutine operations related to fixed gauges provided by the manufacturer or distributor. As used in this subsection, “nonroutine operations” include, without limitation:
- (a) Repairs involving or potentially affecting components related to radiological safety of the fixed gauge, such as the source, source holder, source drive mechanism, shutter, shutter control or shielding; and
 - (b) Any other activities during which personnel may receive doses of radiation exceeding safe limits, including, without limitation, the installation of the fixed gauge, the initial radiation

survey of the fixed gauge, a relocation of the fixed gauge and the removal of the fixed gauge from service.

Section 55

R144-13RP1 – Section 11 is hereby amended to read as following:

R144-13 RP1 - Sec. 11. 1. A radiation safety officer for a license for *radioactive* material that involves the use of a category 1 irradiator must have successfully completed:

(a) Training in radiation safety emphasizing practical subjects relating to the safe use of category 1 irradiators, including, without limitation, training in:

- (1) The difference between radiation and radioactive contamination;
- (2) The difference between internal and external exposure to radiation;
- (3) The biological effects of radiation;
- (4) The types and relative hazards of the radioactive material possessed by the licensee;
- (5) The concept of keeping exposure to radiation as low as is reasonably achievable;
- (6) The use of the methods involving time, distance and shielding to minimize exposure to radiation; and

(7) The use of radiation detection instruments;

(b) Training in regulatory requirements, including, without limitation, training relating to:

- (1) The conditions of, amendments to and renewal of a license;
- (2) The physical location at which radioactive materials are used and stored;
- (3) The control of and accountability relating to radioactive materials;
- (4) An annual audit of a radiation safety program;
- (5) The transfer and disposal of radioactive materials;
- (6) Recordkeeping concerning category 1 irradiators;
- (7) Handling incidents involving radiation which compromise safety;
- (8) Licensing and inspection of radioactive materials by the Division;
- (9) Maintaining complete and accurate information as it relates to a license for byproduct material that involves the use of a category 1 irradiator;

(10) The protection of employees who provide information concerning an alleged violation of the Atomic Energy Act of 1954 or the Energy Reorganization Act of 1974; and

(11) The meaning of deliberate misconduct as it relates to a license for *radioactive* material that involves the use of a category 1 irradiator and possible enforcement actions relating to such deliberate misconduct;

(c) Practical training in the theory and operation of each category 1 irradiator possessed by the licensee, including, without limitation, training in:

- (1) Operating and emergency procedures;
- (2) The difference between and requirements related to routine and nonroutine maintenance; and

(3) Any reports or studies describing prior accidents or problems involving category 1 irradiators; and

(d) An evaluation by a management official concerning whether the proposed radiation safety officer is qualified to work independently with each type of category 1 irradiator that is possessed by the licensee. This evaluation may be accomplished by a written or oral examination or by observation.

2. The training required by subsection 1 may be in the form of a lecture, videotape, selfstudy or hands-on experience.

Section 56

R144-13RP1 – Section 12 is hereby amended to read as following:

R144-13 RP1 - Sec. 12. 1. A radiation safety officer for a license for *radioactive* material that involves the use of an irradiator, other than a category 1 irradiator, must have:

(a) At least 3 months of full-time experience at the irradiator of the applicant for the license or at another irradiator of a similar type, which may include, without limitation, preoperational involvement with the irradiator, including, without limitation, testing while the irradiator is being constructed to ensure that the irradiator meets the design specifications;

(b) Except as otherwise provided in subsection 2, successfully completed at least 40 hours of training in radiation safety generally that:

(1) Includes, without limitation, training in:

(I) Radioactivity and the decay of radioactive material;

(II) The interaction of radiation with matter;

(III) The biological effects of radiation;

(IV) The detection of radiation through the use of radiation detection instruments and dosimeters;

(V) The use of basic principles for protection against radiation protection and good safety practices, including, without limitation, the use of the methods involving time, distance and shielding to minimize exposure to radiation; and

(VI) The state and federal regulations governing protection against radiation; and

(2) Includes a written examination or evaluation of the proposed radiation safety officer's comprehension of the topics; and

(c) If the previous experience of the radiation safety officer was with an irradiator of a similar type as the irradiator of the applicant for the license or if the radiation safety officer was trained as an irradiation operator but does not have experience working at an irradiator, at least 40 hours of training that includes, without limitation:

(1) Training in radiation safety for operating irradiators, including, without limitation, training in:

(I) The difference between radiation and radioactive contamination;

(II) The difference between internal and external exposure to radiation;

(III) The biological effects of radiation, including, without limitation, the reasons for avoiding large doses of radiation;

(IV) The units of radiation dose and quantities;

(V) The types and relative hazards of the radioactive material possessed by the licensee;

(VI) The concept of keeping exposure to radiation as low as is reasonably achievable;

(VII) The use of the methods involving time, distance and shielding to minimize exposure to radiation; and

(VIII) The use of survey meters and personnel dosimeters;

(2) Training in regulatory requirements, including, without limitation, training relating to:

(I) The applicable state and federal regulations, including, without limitation, 10 C.F.R. Parts 20 and 36;

(II) The dose limits authorized by the Division pursuant to NAC 459.335;

(III) The conditions of, amendments to and renewal of a license;

(IV) The physical location at which radioactive materials are used and stored;

- (V) The control of and accountability relating to radioactive materials;
 - (VI) An annual audit of a radiation safety program;
 - (VII) The transfer and disposal of radioactive materials;
 - (VIII) Recordkeeping concerning irradiators;
 - (IX) Any reports or studies describing prior accidents or problems involving irradiators;
 - (X) Handling incidents involving radiation which compromise safety;
 - (XI) Recognizing and ensuring that signs warning of radiation are visible and legible;
 - (XII) Licensing and inspection of radioactive materials by the Division;
 - (XIII) Maintaining complete and accurate information as it relates to a license for *radioactive* material that involves the use of an irradiator, other than a category 1 irradiator;
 - (XIV) The protection of employees who provide information concerning an alleged violation of the Atomic Energy Act of 1954 or the Energy Reorganization Act of 1974; and
 - (XV) The meaning of deliberate misconduct as it relates to a license for *radioactive* material that involves the use an irradiator, other than a category 1 irradiator, and possible enforcement actions relating to such deliberate misconduct;
- (3) Practical training in theory and operation for irradiators, including, without limitation, training in:
- (I) The basic function of an irradiator;
 - (II) The radiation safety features of an irradiator;
 - (III) Operating and emergency procedures which the radiation safety officer is responsible for performing;
 - (IV) The difference between and requirements related to routine and nonroutine maintenance;
 - (V) Lockout procedures; and
 - (VI) The methods used in the design of an irradiator to prevent contamination;
- (4) On-the-job training under the supervision of a qualified irradiator operator that includes, without limitation, hands-on experience performing:
- (I) Operating procedures which the radiation safety officer is responsible for performing;
 - (II) Practical tests which involve following emergency procedures;
 - (III) Routine maintenance; and
 - (IV) Lockout procedures; and
- (5) A requirement that each proposed radiation safety officer pass a closed-book examination with a score of not less than 70 percent. The examination must:
- (I) Consist of at least 25 questions that place an emphasis on radiation safety as it relates to irradiator operations and maintenance, operating and emergency procedures which the radiation safety officer is responsible for performing and other operations which are necessary for operating the irradiator safely and without supervision; and
 - (II) Be reviewed with the proposed radiation safety officer immediately following the scoring of the examination to ensure that the proposed radiation safety officer knows the correct answers to any questions incorrectly answered on the examination.
2. Formal training in health physics or certification by the American Board of Health Physics may be substituted for the training required by paragraph (b) of subsection 1 upon approval by the Division.

3. The training required by paragraph (c) of subsection 1 may be in the form of self-study or directed study.

Section 57

R144-13RP1 – Section 13 is hereby amended to read as following:

R144-13 RP1 - Sec. 13. 1. A radiation safety officer for a license which authorizes the use of *radioactive* materials in academic research or other research and development must have received:

(a) A college degree at the bachelor level or equivalent training and experience in the physical, chemical or biological sciences or in engineering; and

(b) Training and experience in radiation protection principles, the characteristics of ionizing radiation, units of radiation dose and quantities, radiation detection instrumentation and biological hazards of exposure to radiation appropriate to the type and forms of radioactive material to be used, applicable state and federal regulations and hands-on use of radioactive materials.

2. As determined by the Division, the length of training and experience required by subsection 1:

(a) Will depend on the type, form, quantity and proposed use of the radioactive material specified in the application for the license or registration; and

(b) Must be sufficient to enable the radiation safety officer to identify and control the anticipated radiation hazards.

3. The training required by subsection 1 must be obtained from training courses designed for radiation safety officers and consist of classroom and laboratory training. Such courses may be obtained from academic institutions, commercial radiation safety consulting companies or other appropriate professional organizations.

Section 58

R144-13RP1 – Section 14 is hereby amended to read as following:

R144-13 RP1 - Sec. 14. 1. A radiation safety officer for a license for *radioactive* material that involves the use of gas chromatographs must have received:

(a) A college degree at the bachelor level or equivalent training and experience in the physical, chemical or biological sciences or in engineering; and

(b) Training and experience in radiation protection principles, the characteristics of ionizing radiation, units of radiation dose and quantities, radiation detection instrumentation and biological hazards of exposure to radiation appropriate to the type and forms of radioactive material to be used, applicable state and federal regulations and hands-on use of radioactive materials.

2. As determined by the Division, the length of training and experience required by subsection 1:

(a) Will depend on the type, form, quantity and proposed use of the radioactive material specified in the application for the license or registration; and

(b) Must be sufficient to enable the radiation safety officer to identify and control the anticipated radiation hazards.

3. The training required by subsection 1 must be obtained from training courses designed for radiation safety officers and consist of classroom and laboratory training. Such courses may be

obtained from academic institutions, commercial radiation safety consulting companies or other appropriate professional organizations.

Section 59

R144-13RP1 – Section 15 is hereby amended to read as following:

R144-13 RP1 - Sec. 15. 1. A radiation safety officer for a license for *radioactive* material that involves X-ray fluorescence analysis must have received:

(a) A college degree at the bachelor level or equivalent training and experience in the physical, chemical or biological sciences or in engineering; and

(b) Training and experience in radiation protection principles, the characteristics of ionizing radiation, units of radiation dose and quantities, radiation detection instrumentation and biological hazards of exposure to radiation appropriate to the type and forms of radioactive material to be used, applicable state and federal regulations and hands-on use of radioactive materials.

2. As determined by the Division, the length of training and experience required by subsection 1:

(a) Will depend on the type, form, quantity and proposed use of the radioactive material specified in the application for the license or registration; and

(b) Must be sufficient to enable the radiation safety officer to identify and control the anticipated radiation hazards.

3. The training required by subsection 1 must be obtained from training courses designed for radiation safety officers and consist of classroom and laboratory training. Such courses may be obtained from academic institutions, commercial radiation safety consulting companies or other appropriate professional organizations.

Section 60

R144-13RP1 – Section 33 is hereby amended to read as following:

R144-13RP1 - Sec. 33. NAC 459.154.8 is hereby amended to read as follows:

8. Each application for registration by a person to install, service or repair radiation machines must be accompanied by an annual fee of \$140, or the application must not be acted upon by the Division. *The fee is nonrefundable except if the payment was sent in error, in which case, the Program will refund the fees after deducting an amount that will be the assessed cost charged to the Program for refunding fees.*

Section 61

R144-13RP1 – Section 34 is hereby amended to read as following:

R144-13RP1 - Sec. 34. NAC 459.161 is hereby amended to read as follows:

459.161 1. (a) An application for the registration of a radiation machine submitted pursuant to NAC 459.154 must be accompanied by a fee for each X-ray tube, electron source or source of ionizing radiation which is installed in the radiation machine, as follows:

(i) *Electronic brachytherapy device – refer to NAC 459.5931*

(ii) ~~(a)~~ Medical use, other than mammography, \$500.

(iii) ~~(b)~~ Veterinary use, \$150.

(iv) ~~(e)~~ Dental use, \$140.

(v) ~~(d)~~ Industrial use, \$200.

(vi) ~~(e)~~ Academic use, \$150.

(vii) ~~(\$)~~ Accelerator, \$550.

(b) The fee is nonrefundable except if the payment was sent in error, in which case, the Program will refund the fees after deducting an amount that will be the assessed cost charged to the Program for refunding fees.

2. Except as otherwise provided in subsection 3, if the Division issues a registration certificate pursuant to NAC 459.156, the registrant must, for each year the certificate is valid, submit to the Division a renewal fee in an amount equal to the appropriate fee set forth in subsection 1 *(a)*, *subject to subsection 1 (b)*.

3. The renewal fee must be received by the Division not later than the date on which the registration expires. If the fee is not received by that date, the registrant shall:

(a) Stop operating the radiation machine which does not have a valid registration on or before the date the registration expires; or

(b) Submit to the Division within 5 days after the registration expires:

(1) An application for renewal of the registration;

(2) A fee in an amount that is equal to the appropriate fee set forth in subsection 1; and

(3) A fee for late payment of \$56 per registration.

4. Any application for registration or renewal of registration which is not accompanied by the appropriate fees will not be acted upon by the Division until such fees are paid.

5. An application for a certificate of authorization for a radiation machine must be accompanied by a fee, *subject to subsection 1.(b)*, for each machine as required pursuant to NAC 457.295.

Section 62

R144-13RP1 – Section 38 is hereby amended to read as following:

R114-12RP1- Sec. 38. NAC 459.198 is hereby amended to read as follows:

459.198 1. *(a)* Each license issued pursuant to NAC 459.180 to 459.950, inclusive, and sections 4 to 21, inclusive, of this regulation is subject to all the provisions of chapter 459 of NRS, now or hereafter in effect, and to all regulations and orders of the Division.

(b) Except as otherwise provided in the license, a license issued pursuant to the regulations in this part shall carry with it the right to receive, possess, and use radioactive material. Preparation for shipment and transport of radioactive material shall be in accordance with the provisions of NAC 459.1997.

2. No license issued or granted under NAC 459.180 to 459.950, inclusive, and sections 4 to 21, inclusive, of this regulation, or right to possess or utilize radioactive material granted by any license issued pursuant to those provisions, may be transferred, assigned or in any manner disposed of, either voluntarily or involuntarily, directly or indirectly, through transfer of control of any license to any person unless the Division, after securing full information, finds that the transfer is in accordance with the provisions of chapter 459 of NRS and gives its consent in writing.

3. A person licensed by the Division pursuant to NAC 459.180 to 459.950, inclusive, and sections 4 to 21, inclusive, of this regulation may apply to the Division to transfer his or her license to another person. The application for such a transfer must include, without limitation:

(a) The identity and technical qualifications of the proposed transferee;

(b) The financial qualifications of the proposed transferee as determined by the Division based on the financial reports or certified financial statements of the proposed transferee; and

(c) The information concerning financial assurance for decommissioning required by NAC 459.1955.

4. Each person licensed by the Division pursuant to NAC 459.180 to 459.950, inclusive, and sections 4 to 21, inclusive, of this regulation, or each person seeking a license, shall:

(a) Confine his or her use and possession of the material licensed to the locations and purposes authorized in the license.

(b) Inform the Division in writing before the sale or lease of his or her business if the transaction involves the transfer of a source of radiation to another person.

(c) (i) Inform the Division, in writing, immediately following the filing of a voluntary or involuntary petition for bankruptcy under Title 11 of the United States Code or the appropriate chapter of NRS by or against:

(1) The licensee;

(2) An entity, as that term is defined in 11 U.S.C. § 101(~~15~~14), which controls the licensee or which lists the *licensee or the* licensee as a property of the estate of the entity; or

(3) An affiliate, as that term is defined in 11 U.S.C. § 101(2), of the licensee.

(ii) This notification must indicate the bankruptcy court in which the petition for bankruptcy was filed; and the date of the filing of the petition.

(d) Keep records of information important to the safe and effective decommissioning of the facility where the radioactive material is located in a location identified to the Division until the license is terminated by the Division. If records of information relevant to decommissioning are kept for other purposes, references to those records and their locations may be used. Such information must include:

(1) Records of spills or other unusual occurrences involving the spread of contamination in or around the facility, the equipment of the facility or the site of the facility. The records may be limited to instances when contamination remains after any cleanup procedures or when there is a reasonable likelihood that contaminants may have spread to inaccessible areas, including possible seepage into porous materials such as concrete. The records must include any information known to the licensee on the identification of nuclides, quantities, forms and concentrations involved.

(2) Any available drawings of structures and equipment of the facility, as originally built and as modified, which are located in restricted areas where radioactive materials are used or stored, and of locations of inaccessible areas to which contaminants may spread, such as buried pipes which may be subject to contamination. If drawings are not available, the licensee shall provide to the Division other appropriate records of information concerning these areas.

(3) Records of any performance of an estimate of the costs of decommissioning for incorporation in a plan for financing the decommissioning and any records of the method used for assuring the availability of money for the costs of decommissioning the facility.

5. Each person licensed by the Division pursuant to NAC 459.180 to 459.950, inclusive, and sections 4 to 21, inclusive, of this regulation who uses a portable gauge shall, when the gauge is not under the control and constant surveillance of the licensee, use:

(a) A minimum of two independent physical controls that form tangible barriers to secure the portable gauge from unauthorized removal; and

(b) A source-locking mechanism to prevent accidental exposure to radiation.

6. Each person licensed by the Division pursuant to NAC 459.180 to 459.950, inclusive, and sections 4 to 21, inclusive, of this regulation shall conduct a physical inventory every 6 months to account for all sources of radiation received and possessed under his or her license.

The licensee must retain records of the physical inventory for 3 years after the date of the inventory for inspection by the Division. The records of the physical inventory must indicate, without limitation, the quantity and kind of radioactive material, the location of each source of radiation, the model number and the name of the manufacturer of each source of radiation and the date of the inventory.

7. Each person licensed by the Division pursuant to NAC 459.180 to 459.950, inclusive, and sections 4 to 21, inclusive, of this regulation who prepares technetium-99m radiopharmaceuticals from molybdenum-99 and technetium-99m generators or who prepares rubidium-82 from strontium-82 and rubidium-82 generators shall:

(a) Test the generator eluates for molybdenum-99 breakthrough or contamination by strontium-82 and strontium-85, respectively, pursuant to 10 C.F.R. § 35.204;

(b) Record the results of each test and retain each record for at least 3 years after the record is made; and

(c) Report to the Division and to the manufacturer of the generator the levels of molybdenum-99, strontium-82 and strontium-85 that are above the permissible limits set forth in 10 C.F.R. § 35.204.

8. Each person licensed by the Division pursuant to NAC 459.300 who is required to appoint a radiation safety officer described in section 20 of this regulation shall ensure that the radiation safety officer:

(a) Has the authority to terminate any activity relating to the license if such activity is deemed necessary to protect health and minimize danger to the public health and safety without consulting the management of the licensee; and (b) Has sufficient time and commitment from the management of the licensee to fulfill his or her duties and responsibilities with regard to ensuring that radioactive materials are possessed and used in a safe manner.

9. Each licensee authorized pursuant to NAC 459.236 to produce positron emission tomography radioactive drugs for noncommercial distribution to medical use licensees in its consortium shall:

(a) Satisfy the labeling requirements in paragraph (d) of subsection 1 of NAC 459.300 for each positron emission tomography radioactive drug, transport radiation shield and each syringe, vial or other container used to hold the positron emission tomography radioactive drug;

(b) Possess and use instrumentation to measure the radioactivity of the positron emission tomography radioactive drug and meet the procedures, radioactivity measurement, instrument test, instrument check and instrument adjustment requirements pursuant to subsection 3 of NAC 459.300;

(c) If the licensee is a pharmacy, ensure that any person who prepares positron emission tomography radioactive drugs:

(1) Is an authorized nuclear pharmacist who meets the requirements of paragraph (b) of subsection 2 of NAC 459.300; or

(2) Is under the supervision of an authorized nuclear pharmacist pursuant to 10 C.F.R. § 35.27; and

(d) If the licensee is a pharmacy that allows a person to work as an authorized nuclear pharmacist, it shall meet the requirements of paragraph (d) of subsection 2 of NAC 459.300. Any authorization obtained pursuant to NAC 459.236 to produce positron emission tomography radioactive drugs for noncommercial distribution to medical use licensees in a consortium does not relieve the licensee from the requirement to comply with any applicable regulations of the

United States Food and Drug Administration, or other federal and state laws or regulations governing radioactive drugs.

Section 63

R144-13RP1 – Section 50 is hereby amended to read as following:

R144-13RP1 - Sec. 50. NAC 459.310 is hereby amended to read as follows:

459.310 Except as otherwise provided in NAC 459.203, the Division will not issue a new specific license or a renewed specific license to a person until the appropriate nonrefundable fee has been paid to the Division, as prescribed in the following table:

Material and use Fee

1. Special nuclear material:	
(a) As sealed source	\$2,000
(b) In unsealed form	2,000
2. Source materials for other than milling operations	\$2,200
<i>3. Naturally Occurring Radioactive Materials (NORM) which are discrete or diffuse....</i>	<i>\$1,000</i>
3. <i>4. By-product material, artificially produced radioactive material and radium:</i>	
(a) Manufacturing or distribution, or both	\$2,200
(b) Nuclear pharmacy	6,600
(c) Industrial radiography	5,500
(d) Category 1 (self-shielded) irradiator	1,650
(e) Irradiator, other than a category 1 irradiator	1,650
(f) Academic, broad scope	8,800
(g) Academic, other research and development	1,320
(h) Service or laboratory.....	1,760
(i) Fixed gauge	1,100
(j) Gas chromatograph	496
(k) In vitro	105
(l) Portable gauge or X-ray fluorescence analyzer	1,320
<i>(m) Therapeutic or diagnostic veterinary use.....</i>	<i>1,760</i>
<i>(n) In Linear Accelerators (with operational energies capable of exceeding 10 MeV), possession license for incidentally activated products.....</i>	<i>\$1,000</i>
<i>(o) Cyclotron use to manufacture PET radiochemicals</i>	<i>\$2,200</i>
(m) <i>(p)</i> All other uses of radioactive material except those set forth in subsections 4 to 8, inclusive	1,000
4. Well logging	\$3,300
5. Medical use for veterinary use of radioactive material:	
(a) Medical use for veterinary use	\$4,400
(b) General license for in vitro use	125
6. Civil defense	\$276
7. Registration of devices generally licensed pursuant to paragraph (a) of subsection 13 of NAC 459.218	\$250
8. Any use of radioactive material by a person who holds a specific license issued by the Nuclear Regulatory Commission or any agreement state	See

SECTIONS 64 - 67 ARE NEW SECTIONS

EXPLANATION - Matter in *italics* is new; matter in brackets ~~{omitted material}~~ is material to be omitted.

Section 64 is hereby newly added to read as:

NAC 459. xxx

“Depleted uranium” defined: Depleted uranium means the source material uranium in which the isotope uranium-235 is less than 0.711 weight percent of the total uranium present. Depleted uranium does not include special nuclear material.

Section 65 is hereby newly added to read as:

NAC 459. xxy Public inspections, exemptions, requests for withholding.

(a) Subject to the provisions of paragraphs (b), (d), (e), and (f) of this section, final Radiation Control Program records and documents, including but not limited to correspondence to and from the Radiation Control Program regarding the issuance, denial, amendment, transfer, renewal, modification, suspension, revocation, or violation of a license, permit, order, or standard design approval, or regarding a rulemaking proceeding subject to NAC 459, shall not, in the absence of a Radiation Control Program determination of a compelling reason for nondisclosure after a balancing of the interests of the person or agency urging nondisclosure and the public interest in disclosure, be exempt from disclosure and will be made available for inspection and copying at the, Radiation Control Program’s current physical location as given at the Radiation Control Program’s website , except for matters that are:

(1)(i) Specifically authorized under criteria established by an NRC order to be kept secret in the interest of national defense or foreign policy; and

(ii) Are in fact properly classified under that NRC order;

(2) Related solely to the internal personnel rules and practices of the Radiation Control Program;

(3) Specifically exempted from disclosure by statute other than NRS 239, but only if that statute requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or establishes particular criteria for withholding or refers to particular types or matters to be withheld.

(4) Trade secrets and commercial or financial information obtained from a person and privileged or confidential;

(5) Interagency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the Radiation Control Program;

(6) Personnel and medical files and similar files, the disclosure of which would constitute a clearly unwarranted invasion of personal privacy;

(7) Records or information compiled for law enforcement purposes, but only to the extent that the production of such law enforcement records or information:

(i) Could reasonably be expected to interfere with enforcement proceedings;

(ii) Would deprive a person of a right to a fair trial or an impartial adjudication;

(iii) Could reasonably be expected to constitute an unwarranted invasion of personal privacy;

(iv) Could reasonably be expected to disclose the identity of a confidential source, including a State, local agency or authority, or any private institution which furnished information on a confidential basis, and, in the case of a record or information compiled by a criminal law enforcement authority in the course of a criminal investigation, or by an agency conducting a lawful national security intelligence investigation, information furnished by a confidential source;

(v) Would disclose techniques and procedures for law enforcement investigations or prosecutions, or would disclose guidelines for law enforcement investigations or prosecutions if such disclosure could reasonably be expected to risk circumvention of the law; or

(vi) Could reasonably be expected to endanger the life or physical safety of any individual;

(8) Contained in or related to examination, operating, or condition reports prepared by, on behalf of, or for the use of an agency responsible for the regulation or supervision of financial institutions; or

(9) Geological and geophysical information and data, including maps, concerning wells.

(b) The procedures in this section must be followed by anyone submitting a document to the Radiation Control Program who seeks to have the document, or a portion of it, withheld from public disclosure because it contains trade secrets, privileged, or confidential commercial or financial information.

(1) The submitter shall request withholding at the time the document is submitted and shall comply with the document marking and affidavit requirements set forth in this paragraph. The NRC Radiation Control Program has no obligation to review documents not so marked to determine whether they contain information eligible for withholding under paragraph (a) of this section. Any documents not so marked may be made available to the public at the Radiation Control Program's current physical location as given at the Radiation Control Program's website

(i) The submitter shall ensure that the document containing information sought to be withheld is marked as follows:

(A) The first page of the document, and each successive page containing such information, must be marked so as to be readily visible, at the top, or by electronic watermark or other suitable marking on the body of the page, with language substantially similar to: "confidential information submitted under NAC 459.xxy," "withhold from public disclosure under NAC 459.xxy," or "proprietary," to indicate that it contains information the submitter seeks to have withheld.

(B) Each document or page, as appropriate, containing information sought to be withheld from public disclosure must indicate, adjacent to the information, or as specified in paragraph (b)(1)(i)(A) of this section if the entire page is affected, the basis (i.e., trade secret, personal privacy, etc.) for proposing that the information be withheld from public disclosure under paragraph (a) of this section.

(ii) The Radiation Control Program may waive the affidavit requirements on request, or on its own initiative, in circumstances the Radiation Control Program, in its discretion, deems appropriate. Otherwise, except for personal privacy information, which is not subject to the affidavit requirement, the request for withholding must be accompanied by an affidavit that--

(A) Identifies the document or part sought to be withheld;

(B) Identifies the official position of the person making the affidavit;

(C) Declares the basis for proposing the information be withheld, encompassing considerations set forth in NAC 459.xxy.(a);

(D) Includes a specific statement of the harm that would result if the information sought to be withheld is disclosed to the public; and

(E) Indicates the location(s) in the document of all information sought to be withheld.

(iii) In addition, an affidavit accompanying a withholding request based on paragraph (a)(4) of this section must contain a full statement of the reason for claiming the information should be withheld from public disclosure. This statement must address with specificity the considerations listed in paragraph (b)(4) of this section. In the case of an affidavit submitted by a company, the affidavit shall be executed by an officer or upper-level management official who has been specifically delegated the function of reviewing the information sought to be withheld and authorized to apply for its withholding on behalf of the company. The affidavit shall be executed by the owner of the information, even though the information sought to be withheld is submitted to the Radiation Control Program by another person. The application and affidavit shall be submitted at the time of filing the information sought to be withheld. The information sought to be withheld shall be incorporated, as far as possible, into a separate document. The affiant must designate with appropriate markings information submitted in the affidavit as a trade secret, or confidential or privileged commercial or financial information within the meaning of 10 CFR § 9.17(a)(4), and such information shall be subject to disclosure only in accordance with the provisions of 10 CFR§ 9.19, , with the following revisions:

A. "NRC" shall refer to the State of Nevada Radiation Control Program.

B. 5 USC.552(a)(2) shall refer to NRS 239

(2) A person who submits commercial or financial information believed to be privileged or confidential or a trade secret shall be on notice that it is the policy of the Radiation Control Program to achieve an effective balance between legitimate concerns for protection of competitive positions and the right of the public to be fully apprised as to the basis for and effects of licensing or rulemaking actions, and that it is within the discretion of the Radiation Control Program to withhold such information from public disclosure.

(3) The Radiation Control Program shall determine whether information sought to be withheld from public disclosure under this paragraph:

(i) Is a trade secret or confidential or privileged commercial or financial information; and (ii) If so, should be withheld from public disclosure.

(4) In making the determination required by paragraph (b)(3)(i) of this section, the Radiation Control Program will consider:

(i) Whether the information has been held in confidence by its owner;

(ii) Whether the information is of a type customarily held in confidence by its owner and, except for voluntarily submitted information, whether there is a rational basis therefor;

(iii) Whether the information was transmitted to and received by the Radiation Control Program in confidence;

(iv) Whether the information is available in public sources;

(v) Whether public disclosure of the information sought to be withheld is likely to cause substantial harm to the competitive position of the owner of the information, taking into account the value of the information to the owner; the amount of effort or money, if any,

expended by the owner in developing the information; and the ease or difficulty with which the information could be properly acquired or duplicated by others.

(5) If the Radiation Control Program determines, under paragraph (b)(4) of this section, that the record or document contains trade secrets or privileged or confidential commercial or financial information, the Radiation Control Program will then determine whether the right of the public to be fully apprised as to the bases for and effects of the proposed action outweighs the demonstrated concern for protection of a competitive position, and whether the information should be withheld from public disclosure under this paragraph. If the record or document for which withholding is sought is deemed by the Radiation Control Program to be irrelevant or unnecessary to the performance of its functions, it will be returned to the applicant.

(6) Withholding from public inspection does not affect the right, if any, of persons properly and directly concerned to inspect the document. Either before a decision of the Radiation Control Program on the matter of whether the information should be made publicly available or after a decision has been made that the information should be withheld from public disclosure, the Radiation Control Program may require information claimed to be a trade secret or privileged or confidential commercial or financial information to be subject to inspection under a protective agreement by contractor personnel or government officials other than Radiation Control Program officials, by the presiding officer in a proceeding, and under protective order by the parties to a proceeding. In camera sessions of hearings may be held when the information sought to be withheld is produced or offered in evidence. If the Radiation Control Program subsequently determines that the information should be disclosed, the information and the transcript of such in camera session will be made publicly available.

(c) The Radiation Control Program either may grant or deny a request for withholding under this section.

(1) If the request is granted, the Radiation Control Program will notify the submitter of its determination to withhold the information from public disclosure.

(2) If the Radiation Control Program denies a request for withholding under this section, it will provide the submitter with a statement of reasons for that determination. This decision will specify the date, which will be a reasonable time thereafter, when the document will be available at the Radiation Control Program's current physical location as given at the Radiation Control Program's website. The document will not be returned to the submitter.

(3) Whenever a submitter desires to withdraw a document from Radiation Control Program consideration, it may request return of the document, and the document will be returned unless the information--

(i) Forms part of the basis of an official agency decision, including but not limited to, a rulemaking proceeding or licensing activity;

(ii) Was revealed, or relied upon, in an open Radiation Control Program meeting held in accordance with NRS 241. (Note to LCB : Please confirm if this is the equivalent of 10 CFR Part 9, subpart C);

(iii) Has been requested in a Freedom of Information Act request; or

(iv) Has been obtained during the course of an investigation conducted by the Radiation Control Program.

(d) The following information is considered commercial or financial information within the meaning of 10 CFR § 9.17(a)(4) and is subject to disclosure only in accordance with the provisions of 10 CFR § 9.19: Correspondence and reports to or from the Radiation Control

Program which contain information or records concerning a licensee's or applicant's physical protection, classified matter protection, or material control and accounting program for special nuclear material not otherwise designated as Safeguards Information or classified as National Security Information or Restricted Data.

(e) Submitting information to the Radiation Control Program for consideration in connection with Radiation Control Program licensing or regulatory activities shall be deemed to constitute authority for the Radiation Control Program to reproduce and distribute sufficient copies to carry out the Radiation Control Program's official responsibilities.

(f) The presiding officer, if any, or the Radiation Control Program may, with reference to the Radiation Control Program records and documents, excluding handwritten notes and drafts, made available pursuant to this section, issue orders consistent with the provisions of this section and 10 CFR § 2.705(c).

1 Such records and documents do not include handwritten notes and drafts.

Section 66 is hereby newly added to read as:

NAC 459.xxZ Adoption by reference and revision of certain provisions of federal regulations: "Physical Protection of Byproduct Material":

1. The provisions of 10 C.F.R. Part 37, are hereby adopted by reference, subject to the following:

10 C.F.R. §§ 37.1, 37.3 – 37.5 Definitions: Act, Commission, Government Agency, License, 37.7, 37.9, 37.11(b), 37.13, 37.43(d)(9), 37.77(f), 37.107, 37.109 , are not adopted by reference.

"Byproduct material" shall be deemed a reference to "radioactive material."

"Commission" or "NRC" shall be deemed a reference to "Division."

"Commission's regulations," "federal regulations" or "NRC regulations" shall be deemed a reference to "NAC 459.010 to 459.950, inclusive.

"NRC license" shall be deemed a reference to "license issued by the Division pursuant to NAC 459.010 to 459.950, inclusive."

"NRC Operations Center," "NRC Regional Office listed in § 30.6" or "Director, Office of Nuclear Material Safety and Safeguards" shall be deemed a reference to "the provisions of NAC 459.134 and the contact information described in the State of Nevada Radiological Emergency Response Plan."

"Commission or an Agreement State" shall be deemed a reference to "Division, Nuclear Regulatory Commission or an agreement state."

A copy of the volume containing 10 C.F.R. Part 37 may be obtained by mail from the Superintendent of Documents, U.S. Government Printing Office, P.O. Box 979050, St. Louis, Missouri 63197-9000, or by toll-free telephone at (866) 512-1800, at a cost of \$67, or free of charge at the Internet address: <http://www.ecfr.gov/cgi-bin/text->

[idx?c=ecfr&SID=330ff24bd5b874b207d94a74d978a6e3&rgn=div5&view=text&node=10:1.0.1.1.27&idno=10](http://www.ecfr.gov/cgi-bin/ECFR?c=ecfr&SID=330ff24bd5b874b207d94a74d978a6e3&rgn=div5&view=text&node=10:1.0.1.1.27&idno=10)

Section 67 is hereby newly added to read as:

Chapter 459 of NAC is hereby amended by adding thereto the provisions set forth as sections 1 to 5, inclusive, of this regulation.

Sec.1. “Administrative Monetary Penalty” defined: “Administrative monetary penalty” means a monetary fine that does not require the filing of civil or criminal charges.

Sec.2. The Division shall enforce the provisions of NAC 459.010 to 459.950 inclusive, Chapter 459 of the NRS, any applicable state or federal laws, or any rules, regulations and orders or any terms, conditions or limitations adopted pursuant to those sections.

Sec. 3. In addition to the grounds for disciplinary action set forth in chapter 459 of NRS, the Division may deny, withdraw or suspend an application for renewal of a license, registration or certificate, if any person, licensee or registrant or employee, contractor or subcontractor of a person, licensee or registrant or an employee of a contractor or subcontractor of a person, licensee or registrant, who receives, possesses, uses, transfers, owns or acquires any source of radiation or operates a radiation producing machine except as otherwise specifically provided in NAC 459.010 to 459.950, inclusive:

(a) Violates the provisions of this chapter, chapter 459 of the NRS, or any other applicable state or federal laws or regulations;

(b) Violates any rule, regulation, or order issued pursuant to the provisions of NAC 459.010 to NAC 459.950, inclusive and chapter 459 of the NRS or any other applicable state or federal laws or regulations;

(c) Violates any term, condition, or limitation of any license issued under the provisions of NAC 459.010 to NAC 459.950, inclusive and chapter 459 of the NRS or any other applicable state or federal laws or regulations;

(d) Permits an employee or contractor or subcontractor or an employee of a contractor or subcontractor, of a person, licensee or registrant, who is under the supervision of the person, licensee or registrant to violate the provisions of this chapter, chapter 459 of the NRS, or any other applicable state or federal laws or regulations;

(e) Fails or refuses to cooperate with the Division during an investigation, evaluation or inspection;

(f) Fails or refuses to comply with a written request from the Division, the United States Nuclear Regulatory Commission or any applicable local or national accreditation ` body for records, reports or other materials;

(g) Provides false or misleading or otherwise inaccurate information on an application for a license or for renewal of a license;

(h) Has been disciplined by any applicable federal agency, local or national accreditation body or has otherwise been found by the Division to have committed unprofessional conduct, including, without limitation, a violation of the code of ethics or professional code of conduct of the federal agency or accreditation body;

(i) Held a license issued by the Division or by the appropriate agency in another jurisdiction and the license was withdrawn, revoked, terminated or suspended; or

(j) Fails to obtain a required license, registration or certificate required by the provisions of this chapter, chapter 459 of the NRS or any other applicable state or federal laws or regulations.

Sec. 4.

1. Violations are identified through inspections, evaluations and investigations. All violations are subject to enforcement action. There are three primary enforcement actions: notices of violation, monetary penalties, and orders.

2. A Notice of violation (NOV) is a written notice that concisely identifies a violation of any state or federal law and describes how such laws were allegedly violated. It is required that the person, licensee or registrant submit a written explanation or statement in reply within 20 days of the date of notice or other time specified in the Notice. The staff may allow additional time to respond upon a showing of good cause.

3. An Administrative Monetary Penalty is a monetary fine that is used to emphasize compliance in a manner that deters future violations and focuses the person's, licensee's or registrant's attention on significant violations, without the filing of civil or criminal charges.

4. Orders are used to modify, suspend, or revoke licenses or require specific actions by persons, licensees or registrants. Orders are also used to impose monetary penalties.

Sec. 5.

1. The Division may impose an administrative monetary penalty, not to exceed \$2,000, per violation, per day, against any person, licensee or registrant or employee, contractor or subcontractor of a person, licensee or registrant or an employee of a contractor or subcontractor of a person, licensee or registrant, responsible for a violation of the provisions of NAC 459.010 to NAC 459.950 inclusive and NRS 459, inclusive, or for a violation of any rule, regulation, or order or any term, condition, or limitation of any license issued pursuant to the provisions of NAC 459.010 to NAC 459.950, inclusive and NRS 459 inclusive, or any other applicable state or federal laws or regulations. If the violation is of a continuing nature, each day during which it continues constitutes an additional, separate and distinct offense.

2. The Division may impose an administrative monetary penalty for a Health and Safety violation, not to exceed \$5,000, per violation, per day, against any person, licensee or registrant or employee, contractor or subcontractor of a person, licensee or registrant or an employee of a contractor or subcontractor of a person, licensee or registrant, responsible for a violation of the provisions of NAC 459.010 to NAC 459.950 inclusive and NRS 459, inclusive, or for a violation of any rule, regulation, or order or any term, condition, or limitation of any license issued pursuant to the provisions of NAC 459.010 to NAC 459.950, inclusive and any other applicable state or federal laws or regulations. If the violation is of a continuing nature, each day during which it continues constitutes an additional, separate and distinct offense.

3. The Division may recover actual expenses which result from a violation, in addition to the penalty provided in subsections 1 and 2. The expenses may include but are not limited to expenses incurred by the Division in removing, correcting, cleaning up or terminating any adverse effects which resulted from the violation.

4. No penalty may be levied until after notification to the violator by certified mail or personal service. The notice must include a reference to the section of the statute, regulation, order or condition of a permit violated, a concise statement of the facts alleged to constitute the violation, a statement of the amount of the civil penalties to be imposed and a statement of

the violator's right to a hearing. The violator has 20 days after receipt of the notice within which to deliver to the Division a written request for a hearing. After the hearing, if requested, and upon a finding that a violation has occurred, the Administrator of the Division may issue a final order and assess the amount of the fine. If no hearing is requested, the notice becomes a final order upon the expiration of the 20-day period. Payment of the penalty is due when a final order is issued or when the notice becomes a final order. The authority to levy a monetary penalty is in addition to all other provisions for enforcement of Chapter 459 of the NRS, and the payment of a monetary penalty does not affect the availability of any other provision for enforcement in connection with the violation for which the penalty is levied.

5. Any money collected as a result of monetary penalties imposed pursuant to subsections 1, 2 and 3, must be accounted for separately and used for education, outreach and training, involving ionizing radiation, radiation producing machines and radioactive materials, for all licensees and registrants.

6. The administrative monetary penalty will be reduced, at the discretion of the Division, if there is evidence to show that the person, licensee or registrant or employee, contractor or subcontractor of a person, licensee or registrant or an employee of a contractor or subcontractor of a person, licensee or registrant, has initiated, in good faith, comprehensive corrective measures and or training related to radiation safety and preparedness, over and above that required as a response to the violation, valued at at least 1.5 times the amount of monetary penalty imposed.

7. Administrative Monetary Penalty for Inadequate Notice for Reciprocity:

In violation of the terms of NAC 459.210.1.(b), if an out-of-state person, licensee or registrant or employee, contractor or subcontractor of a person, licensee or registrant or an employee of a contractor or subcontractor of a person, licensee or registrant, fails to notify the Division, in writing, at least 3 business days before engaging in the proposed activity, an additional fee of \$500.00 must be paid to process the request on an expedited basis.

8. Administrative Monetary Penalty for failure to obtain Reciprocity before entering the State of Nevada:

In violation of the terms of NAC 459.210.1.(b), if an out-of-state person, licensee or registrant or employee, contractor or subcontractor of a person, licensee or registrant or an employee of a contractor or subcontractor of a person, licensee or registrant, fails to receive written permission from the Division to proceed with the proposed activity in the State of Nevada, before entering the state, a monetary penalty equal to the fee amount must be paid in addition to the fee for the proposed activity.
