PROPOSED REGULATION OF

THE STATE BOARD OF HEALTH

LCB File No. R021-18

May 23, 2018

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

AUTHORITY: §§1, 2 and 27, NRS 439.200; §3, NRS 439.200 and 449.165; §4, NRS 439.200 and 449.448; §§5-19, 21-26 and 8, NRS 459.201; 20, NRS 439.150 and 459.201.

A REGULATION relating to health; prescribing the requirements for the operation of invasive intervention radiation machines that are used to perform radiography which is exempt from the requirements of the federal regulations adopted pursuant to the Mammography Quality Standards Act of 1992, as amended; prescribing the qualifications for persons who operate invasive intervention radiation machines to perform such federally exempt radiography; prescribing the fee for obtaining a duplicate registration certificate for a radiation machine or for a person installing, servicing or repairing radiation machines; revising provisions governing a license or registration authorizing the possession and use of radioactive materials; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing regulations set forth the time limit for a person to file an appeal with a hearing officer appointed by the Administrator of the Division of Public and Behavioral Health of the Department of Health and Human Services to contest proposed disciplinary action by the Division. (NAC 439.346) **Sections 1, 2 and 25** of this regulation make conforming changes.

Existing law requires the State Board of Health to adopt regulations for the: (1) general or specific licensing of persons to receive, possess or transfer radioactive materials, or devices or equipment utilizing such materials, including, without limitation, for the amendment, suspension or revocation of such licenses; (2) licensing and regulation of by-product materials, source materials, special nuclear materials and other radioactive materials, including radioactive waste; and (3) control of other sources of ionizing radiation. (NRS 459.201) Existing law further provides that the Division is designated as the state radiation control agency, and is authorized to take all action necessary or appropriate to carry out the provisions of NRS 459.010 to 459.290, inclusive, which govern the control of radiation by the State. (NRS 459.020)

The federal regulations adopted pursuant to the Mammography Quality Standards Act of 1992, as amended, exempt "radiography of the breast performed during invasive interventions for localization or biopsy procedures" from the requirements of the federal regulations. (21 C.F.R. § 900.2(aa)(1)) **Sections 4-11** of this regulation set forth requirements for the operation of invasive intervention radiation machines that are used to perform federally exempt radiography.

Specifically, **section 6** of this regulation requires an applicant for a registration certificate for an invasive intervention radiation machine to submit to the Division documentation evidencing that each person who will operate the invasive intervention radiation machine to perform federally exempt radiography satisfies the requirements set forth in **section 7** of this regulation. **Section 8** of this regulation sets forth the duties of the registrant for an invasive intervention radiation machine with regard to ensuring the safe operation of each such machine for which the Division has issued a registration certificate. **Section 9** of this regulation sets forth the process for conducting examinations of an invasive intervention radiation machine to determine whether the machine is operating in accordance with the specifications of the manufacturer of the machine and whether the machine satisfies the requirements of certain standards set forth in the federal regulations adopted pursuant to the Mammography Quality Standards Act. **Section 10** of this regulation requires the posting of a copy of the techniques chart for each examination performed on a patient with an invasive intervention radiation machine. **Section 11** of this regulation prohibits, with certain limited exceptions, the use of an invasive intervention radiation machine to perform screening or diagnostic mammography services. **Sections 13, 15 and 16** of this regulation make conforming changes.

Section 14 of this regulation revises provisions relating to exemptions from existing regulations governing the control of radiation for certain carriers with regard to transporting and storing sources of radiation in the regular course of carriage for another or storage incident thereto.

Section 17 of this regulation revises the time limit before which a registrant is required to file his or her application for renewal of a registration certificate for a radiation machine or to install, service or repair radiation machines and the appropriate fee to avoid expiration of the registration certificate while the status of the registration certificate is pending with the Division.

Section 18 of this regulation authorizes the Division to charge $25 for a duplicate registration certificate for a radiation machine or for the person installing, servicing or repairing radiation machines.

Section 19 of this regulation revises the requirements for a license for radioactive material from which certain quantities of source material are exempt.

Sections 20, 24 and 26 of this regulation revise provisions which adopt by reference certain federal regulations.

Section 21 of this regulation deletes provisions in that section relating to specific licenses to initially transfer source material as those provisions are moved to **section 12** of this regulation.

Section 22 of this regulation revises the requirement relating to the periodic measurements of the exposure rate limits for fluoroscopic X-ray systems.

Section 23 of this regulation makes a technical change.

Section. 1. NAC 449.99911 is hereby amended to read as follows:

449.99911 1. If the facility fails to pay a monetary penalty, the Division may suspend the license of the facility.

2. The Division shall, in accordance with the requirements of NAC 439.345, provide notice of its intention to suspend the license of the facility.

3. If the facility fails to pay the monetary penalty, including any additional costs incurred in collection of the penalty, within ~~[10]~~ ***20 business*** days after receipt of the notice, the Division shall suspend the license of the facility. The suspension must not be stayed during the pendency of any administrative appeal.

Sec. 2. NAC 449.999488 is hereby amended to read as follows:

449.999488 1. If the outpatient facility fails to pay a monetary penalty, the Division may suspend the permit of the outpatient facility.

2. The Division shall, in accordance with the requirements of NAC 439.345, provide notice of its intention to suspend the permit of the outpatient facility.

3. If the outpatient facility fails to pay the monetary penalty, including any expenses set forth in NAC 449.999487, in collection of the penalty, within ~~[10]~~ ***20 business*** days after receipt

of the notice, the Division shall suspend the permit of the outpatient facility. The suspension must not be stayed during the pendency of any administrative appeal.

Sec. 3. Chapter 459 of NAC is hereby amended by adding thereto the provisions set forth as sections 4 to 12, inclusive, of this regulation.

Sec. 4. ***"Federally exempt radiography" means radiography of the breast which is performed during invasive interventions for localization or biopsy procedures and which is exempt, pursuant to the provisions of 21 C.F.R. § 900.2(aa)(1), from the requirements of the federal regulations adopted pursuant to the Mammography Quality Standards Act of 1992, Pub. L. 102-539, as amended.***

Sec. 5. ***"Invasive intervention radiation machine" means a radiation machine that is used to perform federally exempt radiography, whether or not the radiation machine is used exclusively for that purpose.***

Sec. 6. ***1. In addition to any other requirements for obtaining a registration certificate for an invasive intervention radiation machine issued by the Division pursuant to NAC 459.156, an applicant for such a registration certificate must submit to the Division documentation evidencing that each person who will operate the invasive intervention radiation machine to perform federally exempt radiography satisfies the requirements set forth in section 7 of this regulation.***

2. As part of the notification required pursuant to NAC 459.162, the registrant for an invasive intervention radiation machine shall notify the Division if:

(a) A person for whom documentation was submitted pursuant to subsection 1 will no longer be operating the invasive intervention radiation machine to perform federally exempt radiography; or

(b) A person for whom documentation was not submitted pursuant to subsection 1 will be operating the invasive intervention radiation machine to perform federally exempt radiography. The registrant must retain documentation evidencing that the person who will operate the invasive intervention radiation machine to perform federally exempt radiography satisfies the requirements set forth in section 7 of this regulation and provide the documentation to the Division upon request.

Sec. 7. *A person is qualified to operate an invasive intervention radiation machine to perform federally exempt radiography if the person:*

1. Is currently certified by the American Registry of Radiologic Technologists;

2. Has a current certificate of authorization to operate a radiation machine for mammography issued by the Division pursuant to NRS 457.183; or

3. Has:

(a) Documentation evidencing that the person received training which consisted of performing at least five hands-on procedures using the type of invasive intervention radiation machine for which registration is sought while supervised by a person who:

(1) Satisfied the qualifications set forth in subsection 1 or 2; or

(2) Was trained in the operation of the type of invasive intervention radiation machine for which registration is sought by a person who satisfied the qualifications set forth in subsection 1 or 2; or

(b) If the training was received before March 8, 2017, completed an attestation, approved by the Division, which states that the person performed at least five hands-on procedures using the type of invasive intervention radiation machine for which registration is sought.

➥ The hands-on procedures described in this subsection must have included the proper use and operation of the compression device of the type of invasive intervention radiation machine for which registration is sought.

Sec. 8. *The registrant for an invasive intervention radiation machine shall:*

1. Establish and maintain policies and procedures to ensure the safe operation of each invasive intervention radiation machine for which the Division has issued a registration certificate to the registrant pursuant to NAC 459.156. The policies and procedures established pursuant to this subsection must require that tests of an invasive intervention radiation machine are performed in accordance with the frequency required and consistent with the requirements of the manufacturer of the radiation machine.

2. Ensure that:

(a) The results of the tests required by subsection 1 are analyzed to determine if there are any problems requiring correction;

(b) The necessary corrective action is taken whenever the results of a test for quality assurance indicate that such action is required; and

(c) If necessary corrective action is taken, the action is taken before the radiation machine is used to perform any examination on a patient.

3. Ensure that a medical physicist who satisfies the qualifications set forth in 21 C.F.R. § 900.12(a)(3) performs:

(a) Surveys in accordance with the frequency and requirements described in 21 C.F.R. § 900.12(e)(9) and which include the testing described in 21 C.F.R. § 900.12(e)(4)(iii); and

(b) The examinations required by section 9 of this regulation.

4. Ensure that records of the tests required by subsection 1, the survey required by subsection 3 and the examinations required by section 9 of this regulation are retained until the Division authorizes disposal of the records.

Sec. 9. *1. An invasive intervention radiation machine must be examined to verify that the invasive intervention radiation machine is operating in accordance with the specifications of the manufacturer of the invasive intervention radiation machine and that the invasive intervention radiation machine satisfies the requirements of the standards set forth in 21 C.F.R. § 900.12(b) and 21 C.F.R. § 900.12(e) that would apply to the invasive intervention radiation machine if the invasive intervention radiation machine were used to perform mammography as defined in 21 C.F.R. § 900.2(aa):*

(a) Before the invasive intervention radiation machine is placed into service and at least annually thereafter;

(b) After the invasive intervention radiation machine is disassembled and reassembled at the same or a new location; and

(c) After a major component of the invasive intervention radiation machine is changed or repaired.

2. The medical physicist performing the examination shall make a written record of his or her findings and submit the record to the registrant for an invasive intervention radiation machine within 30 days after the examination.

3. If the registrant for an invasive intervention radiation machine does not receive the written record within the period prescribed in subsection 2, the registrant shall remove the machine from service until he or she receives the record.

4. If the registrant for an invasive intervention radiation machine receives a written record pursuant to subsection 2 which indicates problems with the invasive intervention radiation machine requiring correction, the registrant shall ensure that the necessary corrective action is taken before the invasive intervention radiation machine is used to perform any examination on a patient.

Sec. 10. *A copy of the techniques chart described in 21 C.F.R. § 900.12(e)(5) must be posted by the control console of an invasive intervention radiation machine, for each examination performed on a patient.*

Sec. 11. *An invasive intervention radiation machine may not be used to perform screening or diagnostic mammography services unless:*

1. The registrant for the invasive intervention radiation machine has a valid certificate of authorization issued pursuant to NRS 457.184 for the invasive intervention radiation machine; and

2. The invasive intervention radiation machine satisfies the requirements for a radiation machine for mammography set forth in chapter 457 of NRS and chapter 457 of NAC.

Sec. 12. *1. An application for a specific license to initially transfer source material for use pursuant to NAC 459.212, or equivalent regulations of the Nuclear Regulatory Commission or an agreement state, 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.

2. Each person issued a license pursuant to subsection 1 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."

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

(c) Provide the information specified in this paragraph to each person to whom source material is transferred for use pursuant to NAC 459.212, or equivalent regulations of the Nuclear Regulatory Commission or an agreement state. This information must be provided 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 459.312, or equivalent regulations of the Nuclear Regulatory Commission or an agreement state.

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

(d) Report transfers as follows:

(1) File a report with the Division which must include the following information:

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

(II) For each general license issued pursuant to NAC 459.212, or equivalent regulations of the Nuclear Regulatory Commission or an agreement state, to whom greater

than 50 grams (0.11 pounds) 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 or position and telephone number, of the general licensee to whom the material was distributed, 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 recipients identified pursuant to sub-subparagraph (II).

(2) File a report with the Nuclear Regulatory Commission or each responsible agency of the agreement state that identifies all persons, operating under provisions equivalent to NAC 459.212, to whom greater than 50 grams (0.11 pounds) of source material has been transferred within a single calendar quarter. The report must include the following information specific to those transfers made to the Nuclear Regulatory Commission or agreement state with which the report is filed:

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

(II) The name and address of the general licensee to whom source material was distributed, a responsible agent, by name or position and telephone 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 under the jurisdiction of the Nuclear Regulatory Commission or within the agreement state, as appropriate.

(3) Submit the reports required by this paragraph 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 regulations of the Nuclear Regulatory Commission or an agreement state during the current period, a report must be submitted to the Division so indicating. If no transfers have been made to general licensees under the jurisdiction of the Nuclear Regulatory Commission or in a particular agreement state during the reporting period, the required information must be reported to the Nuclear Regulatory Commission or the responsible agency of the agreement state upon the request of the agency.

(e) 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, the Nuclear Regulatory Commission or the responsible agency of the agreement state.

Sec. 13. NAC 459.010 is hereby amended to read as follows:

459.010 As used in NAC 459.010 to 459.950, inclusive, ***and sections 4 to 12, inclusive, of this regulation,*** unless the context otherwise requires, the words and terms defined in NAC 459.012 to 459.116, inclusive, ***and sections 4 and 5 of this regulation*** have the meanings ascribed to them in those sections.

Sec. 14. NAC 459.120 is hereby amended to read as follows:

459.120 1. The Division may, upon application or its own initiative, grant exemptions or exceptions from the requirements of NAC 459.010 to 459.950, inclusive, ***and sections 4 to 12, inclusive, of this regulation,*** as it determines will not result in undue hazard to public health and safety or property.

2. Common and contract carriers, freight forwarders and warehousemen and the United States Postal Service are exempt from ***the provisions of*** NAC 459.010 to 459.950, inclusive, ***and sections 4 to 12, inclusive, of this regulation which correspond to the exemptions from federal regulations described in 10 C.F.R. § 30.13*** 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. ~~[Private carriers who are subject to the regulations of the United States Department of Transportation are exempt from NAC 459.010 to 459.950, inclusive, to the extent that they transport sources of radiation. Private carriers who are not subject to the regulations of the United States Postal Service are subject to applicable sections of NAC 459.010 to 459.950, inclusive.]~~

3. Any contractor or subcontractor of the United States Department of Energy or the Nuclear Regulatory Commission who is in one of the following categories and operating within this State is exempt from NAC 459.010 to 459.950, inclusive, ***and sections 4 to 12, inclusive, of this regulation*** to the extent that, under his or her contract, he or she receives, possesses, uses, transfers or acquires sources of radiation:

(a) Any prime contractor performing work for the United States Department of Energy at sites owned or controlled by the United States Government, transporting sources of radiation to or from such sites, or performing contract services during temporary interruptions of such transportation.

(b) Any prime contractor of the United States Department of Energy performing research in, or development, manufacture, storage, testing or transportation of atomic weapons or components thereof.

(c) Any prime contractor of the United States Department of Energy using or operating a nuclear reactor or other nuclear device in a vehicle or vessel owned by the United States Government.

(d) Any other prime contractor or subcontractor of the United States Department of Energy or of the Nuclear Regulatory Commission when the State and the Nuclear Regulatory Commission jointly determine that:

(1) The exemption of the prime contractor or subcontractor is authorized by law; and

(2) Under the terms of the contract or subcontract there is adequate assurance that the work thereunder can be accomplished without undue risk to public health or safety.

Sec. 15. NAC 459.134 is hereby amended to read as follows:

459.134 All communications and reports concerning the provisions of NAC 459.010 to 459.950, inclusive, ***and sections 4 to 12, inclusive, of this regulation,*** and copies of regulatory guides and applications filed under those provisions should be addressed to the Radiation Control Program, Division of Public and Behavioral Health, at the current applicable mailing address provided on the ***Internet*** website for the Radiation Control Program at ~~[http://health.nv.gov/hcqc_Radiological.htm.]~~ ***http://dpbh.nv.gov/Reg/Radiation_Control_Programs/.***

Sec. 16. NAC 459.150 is hereby amended to read as follows:

459.150 1. NAC 459.150 to 459.166, inclusive, ***and sections 6 to 11, inclusive, of this regulation*** provide for the registration of radiation machines and registration of persons who install or perform service upon radiation machines.

2. Except as otherwise provided in subsection 3, a radiation machine registered in this State must be maintained in the form in which it was manufactured except that modifications may be made to the radiation machine as authorized by the manufacturer of the radiation machine or the United States Food and Drug Administration.

3. Except as otherwise provided in paragraph (b) of subsection 5, all parts of an X-ray system must be maintained on a radiation machine registered in this State in the form in which they were manufactured except that modifications may be made to an X-ray system on such a radiation machine if prior written approval is obtained from the Division.

4. No person may repair, maintain or install radiation machines unless he or she is registered in conformance with the ~~[requirement]~~ ***requirements*** of NAC 459.150 to 459.166, inclusive ~~[.]~~ ***, and sections 6 to 11, inclusive, of this regulation.***

5. A person who is registered with the Division to install, service or repair radiation machines shall not:

(a) Install:

(1) A radiation machine in a facility for human use unless the radiation machine has been certified by the United States Food and Drug Administration for human use; or

(2) A radiation machine that produces ionizing radiation unless he or she provides written notice to the Division before the installation; or

(b) Make any modifications to an X-ray system on a radiation machine which affect the field size or output unless prior approval is obtained from the manufacturer, the United States Food and Drug Administration or the Division. Such approval must be in writing and must be maintained on the premises of the registrant of the radiation machine.

6. 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.

Sec. 17. NAC 459.160 is hereby amended to read as follows:

459.160 1. An application for renewal of registration must be filed in accordance with NAC 459.154.

2. If a registrant files an application for renewal of his or her registration accompanied by the appropriate fee at least ~~[10]~~ ***30*** days before its expiration, his or her registration does not expire until the status of his or her registration has been determined by the Division.

Sec. 18. NAC 459.161 is hereby amended to read as follows:

459.161 1. Except as otherwise provided in subsection 6, an application for the registration of a radiation machine submitted pursuant to NAC 459.154 must be accompanied by a nonrefundable fee for each X-ray tube, electron source or source of ionizing radiation which is installed in the radiation machine, as follows:

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

(b) Veterinary use, $150.

(c) Dental use, $140.

(d) Industrial use, $200.

(e) Academic use, $150.

(f) Accelerator, $550.

2. Except as otherwise provided in subsections 3 and 6, 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 nonrefundable renewal fee in an amount equal to the appropriate fee set forth in subsection 1.

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. ***Except as otherwise provided in subsection 6, an application for the issuance of a duplicate registration certificate for a radiation machine or for the person installing, servicing or repairing radiation machines must be accompanied by a nonrefundable fee of $25.***

5. 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. Except as otherwise provided in subsection 6, an application for a certificate of authorization for a radiation machine must be accompanied by a nonrefundable fee for each machine as required pursuant to NAC 457.295.]~~

6. If a payment was made in error, the Division will refund the fee collected pursuant to this section, after deducting an amount calculated to cover the administrative costs directly related to issuing the refund.

Sec. 19. NAC 459.182 is hereby amended to read as follows:

459.182 1. Any person is exempt from NAC 459.180 to 459.313, inclusive, ***and section 12 of this regulation*** to the extent that he or she receives, possesses, uses, owns or transfers source material in any chemical mixture, compound, solution or alloy in which the source material is by weight less than 0.05 percent of the mixture, compound, solution or alloy.

2. Any person is exempt from NAC 459.180 to 459.313, inclusive, ***and section 12 of this regulation*** to the extent that he or she receives, possesses, uses or transfers unrefined and unprocessed ore containing source material. Except as authorized in a specific license, such a person may not refine or process such ore.

3. Any person is exempt from the requirements for a license set forth in NAC 459.180 to ~~[459.313,]~~ ***459.374,*** inclusive, ***and section 12 of this regulation and NAC 459.780 to 459.794, inclusive,*** to the extent that he or she receives, possesses, uses or transfers any of the following:

(a) Any quantities of thorium contained in:

(1) Incandescent gas mantles;

(2) Vacuum tubes;

(3) Welding rods;

(4) Electric lamps for illuminating purposes if each lamp does not contain more than 50 milligrams of thorium;

(5) Germicidal lamps, sunlamps and lamps for outdoor or industrial lighting if each lamp does not contain more than 2 grams of thorium;

(6) Rare earth metals and compounds, mixtures and products containing not more than 0.25 percent by weight thorium, uranium or any combination of these; or

(7) Personnel neutron dosimeters if each dosimeter does not contain more than 50 milligrams of thorium.

(b) Source material contained in the following products:

(1) Glazed ceramic tableware manufactured before August 27, 2013, 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, 2013, 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

(3) Piezoelectric ceramic containing not more than 2 percent by weight source material.

(c) Photographic film, negatives and prints containing uranium or thorium.

(d) Any finished product or part which is fabricated of or contains tungsten-thorium or magnesium-thorium alloys if the thorium content of the alloy does not exceed 4 percent by weight. This exemption does not authorize the chemical, physical, or metallurgical treatment or processing of any such product or part.

(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) Each counterweight has been impressed with the following legend clearly legible through the plating or other covering: “DEPLETED URANIUM”; and

(2) Each counterweight is durably and legibly labeled or marked with the identification of the manufacturer and the statement: “UNAUTHORIZED ALTERATIONS PROHIBITED.”

➥ The exemption contained in this paragraph does not authorize the chemical, physical or metallurgical treatment or processing of any such counterweights other than repair or restoration of any plating or other covering. The requirements specified in subparagraphs (1) and (2) need not be met by counterweights manufactured before December 31, 1969, provided that such counterweights were manufactured under a specific license issued by the Atomic Energy Commission and were impressed with the legend required by the provisions of ~~[subparagraph (2)]~~ ***10 C.F. R. § 40.13(c)(5)(ii)*** in effect on June 30, 1969.

(f) Natural or depleted uranium metal used as shielding in any shipping container if:

(1) The shipping container is conspicuously and legibly impressed with the legend "CAUTION - RADIOACTIVE SHIELDING - URANIUM"; and

(2) The uranium metal is encased in mild steel or an equally fire resistant metal with a wall thickness of one-eighth of an inch.

(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 of thorium or uranium or, for lenses manufactured before August 27, 2013, 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 mirrors or manufacturing processes other than the assembly of such lenses or mirrors into optical systems and devices without any alteration of the lenses or mirrors; 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.

(h)

Thorium contained in any finished aircraft engine part containing nickel-thoria alloy if:

(1) The thorium is dispersed in the nickel-thoria alloy in the form of finely divided thoria (thorium dioxide); and

(2) The thorium content in the nickel-thoria alloy does not exceed 4 percent by weight.

4. The exemptions in subsection 3 do not authorize the manufacture of any of the products described.

5. No person may initially transfer for sale or distribution a product containing source material to persons exempt under subsection 3 or the equivalent regulations of the Nuclear Regulatory Commission or an agreement state, unless authorized by a license issued under 10 C.F.R. § 40.52 to initially transfer such products for sale or distribution. Persons:

(a) Initially distributing source material in products covered by the exemptions in subsection 3 before August 27, 2013, without specific authorization may continue such distribution through August 27, 2014. Initial distribution may also be continued until the Nuclear Regulatory Commission takes final action on a pending application for license or license amendment to specifically authorize distribution submitted on or before August 27, 2014.

(b) Authorized to manufacture, process or produce those 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 C.F.R. § 40.52 for distribution only and are exempt from the requirements of NAC ~~[459.320]~~ ***459.316*** to 459.374, inclusive, 459.780 to 459.794, inclusive, and paragraphs (a) and (b) of subsection 1 of NAC 459.238.

Sec. 20. NAC 459.1997 is hereby amended to read as follows:

459.1997 1. The provisions of 10 C.F.R. §§ 71.0(c), 71.1(a), 71.3, 71.4, ***71.14(a),*** 71.15, 71.17, 71.21, 71.22, 71.23, 71.47, 71.83 to 71.89, inclusive, ***71.91(c), 71.91(d),*** 71.97, 71.101(a), 71.101(b), 71.101(c), 71.101(g), ***71.103(a), 71.103(b),*** 71.105, ***71.106,*** 71.127 to 71.137, inclusive, and Appendix A to Part 71 are hereby adopted by reference, subject to the following:

(a) The exclusion of the following definitions from 10 C.F.R. § 71.4:

(1) "Close reflection by water";

(2) "Licensed material";

(3) "Optimum interspersed hydrogenous moderation";

(4) "Spent nuclear fuel or spent fuel"; and

(5) "State."

(b) The substitution of the following rule references:

(1) "NAC 459.737" for "§ 34.31(b) of this chapter" as found in 10 C.F.R. § 71.101(g);

(2) "Subsection 1 of NAC 459.339" for "10 C.F.R § 20.1502";

(3) "NAC 459.3062" for "10 C.F.R. Part 35";

(4) "Subsection 6 of NAC 459.3585" for "10 C.F.R. § 20.1906(e)";

(5) "NAC 459.181" for "10 C.F.R. § 71.5";

(6) "10 C.F.R. §§ 71.101(a), 71.101(b), 71.101(c)(1), 71.101(g), 71.105 and 71.127 to 71.137, inclusive," for "subpart H of this part" or "subpart H," except in 10 C.F.R. §§ 71.17(b), 71.21(b), 71.22(b) and 71.23(b);

(7) "10 C.F.R. §§ 71.0(c), 71.1(a), 71.3, 71.4, 71.17(c)(2), 71.21(d)(2), 71.83 to 71.89, inclusive, 71.97, 71.101(a), 71.101(b), 71.101(c)(1), 71.101(g), 71.105 and 71.127 to 71.137, inclusive," for "subparts A, G and H of this part";

(8) "10 C.F.R. § 71.47" for "subparts E and F of this part"; and

(9) "10 C.F.R. §§ 71.101(a), 71.101(b), 71.101(c)(1), 71.101(g), 71.105 and 71.127 to 71.137, inclusive," for "§§ 71.101 through 71.137."

(c) The substitution of the following terms:

(1) "Division" for:

(I) "Commission" in 10 C.F.R. §§ 71.0(c), 71.17(a), 71.21(a), 71.22(a), 71.23(a) and 71.101(c)(1);

(II) "Director, Division of Nuclear Security ~~[,]~~ ***Policy,*** Office of Nuclear Security and Incident Response" in 10 C.F.R. §§ 71.97(c)(1) and 71.97(f)(1);

(III) "Director, Division of ~~[Intergovernmental Liaison]~~ ***Material Safety, State, Tribal,*** and Rulemaking ~~[,]~~ ***Programs,*** Office of ~~[Federal and State Materials and Environmental Management Programs,]~~ ***Nuclear Material Safety and Safeguards,*** U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001" in 10 C.F.R. § 71.97(c)(3)(iii); and

(IV) "NRC" in 10 C.F.R. § 71.101(f);

(2) "The Nuclear Regulatory Commission or an agreement state" for "Commission" in 10 C.F.R. § 71.3;

(3) "The Governor of Nevada" for:

(I) "The governor of a State" in 10 C.F.R. § 71.97(a);

(II) "Each appropriate governor" in 10 C.F.R. § 71.97(c)(1);

(III) "The governor" in 10 C.F.R. § 71.97(c)(3);

(IV) "The governor of the State" in 10 C.F.R. § 71.97(e);

(V) "The governor of each State" in 10 C.F.R. § 71.97(f)(1); and

(VI) "A governor" in 10 C.F.R. § 71.97(e);

(4) "State of Nevada" for "State" in 10 C.F.R. §§ 71.97(a), 71.97(b)(2) and 71.97(d)(4);

(5) "The Governor of Nevada's" for:

(I) "The governor's" in 10 C.F.R. §§ 71.97(a), 71.97(c)(3), 71.97(e) and 71.97(f)(1);

(II) "Governor's" in 10 C.F.R. §§ 71.97(c)(1) and 71.97(e); and

(III) "Governors'" in 10 C.F.R. § 71.97(c)(3)(iii);

(6) "Specific or general" for "NRC" in 10 C.F.R. § 71.0(c);

(7) "The Division" for "ATTN: Document Control Desk, Director, Division of Spent Fuel ~~[Storage and Transportation,]~~ ***Management,*** Office of Nuclear Material Safety and Safeguards" in 10 C.F.R. § 71.101(c)(1);

(8) "Each" for "Using an appropriate method listed in § 71.1(a), each" in 10 C.F.R. § 71.101(c)(1);

(9) "The material must be contained in a Type A package meeting the requirements of 49 C.F.R. § 173.417(a)" for "The fissile material need not be contained in a package which meets the standards of subparts E and F of this part; however, the material must be contained in a Type A package. The Type A package must also meet the DOT requirements of 49 C.F.R. 173.417(a)" as found in 10 C.F.R. §§ 71.22(a) and 71.23(a);

(10) "Licensee" for "licensee, certificate holder, and applicant for a CoC"; and

(11) "Licensee is" for "licensee, certificate holder, and applicant for a CoC are."

2. A copy of the publication that contains 10 C.F.R. Part 71 may be obtained by mail from the Superintendent of Documents, United States Government ~~[Printing]~~ ***Publishing*** Office, P.O. Box 979050, St. Louis, Missouri 63197-9000, or by toll-free telephone at (866) 512-1800, at the

price of $64, or free of charge at the Internet address ~~[http://www.gpoaccess.gov/cfr/index.html.]~~ ***https://www.ecfr.gov/.***

Sec. 21. NAC 459.212 is hereby amended to read as follows:

459.212 1. A general license is hereby issued authorizing commercial and industrial firms, research, educational and medical institutions and federal, state and local governmental 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) Not more than 1.5 kilograms (3.3 pounds) of uranium and thorium in dispersible forms, including, without limitation, gaseous, liquid and powder forms, 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 kilograms (15.4 pounds) of uranium and thorium in any 1 calendar year. Persons possessing source material in excess of these limits on August 27, 2013, may:

(1) Continue to possess up to 7 kilograms (15.4 pounds) of uranium and thorium at any one time through August 27, 2014, or until the Division takes final action on a pending application submitted on or before August 27, 2014, for a specific license for such material; and

(2) Receive up to 70 kilograms (154 pounds) of uranium or thorium in any 1 calendar year until December 31, 2014, or until the Division takes final action on a pending application submitted on or before August 27, 2014, for a specific license for such material; and

(b) Not more than one of the following:

(1) A total of 7 kilograms (15.4 pounds) of uranium and thorium at any one time. A person authorized to possess, use and transfer source material under this subsection may not receive more than a total of 70 kilograms (154 pounds) of uranium and thorium in any 1 calendar year. A person may not alter the chemical or physical form of the source material possessed under this subsection unless it is accounted for under the limits of paragraph (a).

(2) Seven kilograms (15.4 pounds) of uranium, removed during the treatment of drinking water, at any one time. A person may not remove more than 70 kilograms (154 pounds) of uranium from drinking water during a calendar year under this subsection.

(3) Seven kilograms (15.4 pounds) 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 subsection may not receive more than a total of 70 kilograms (154 pounds) of source material in any 1 calendar year.

2. Any person who receives, possesses, uses or transfers source material in accordance with the general license issued in subsection 1:

(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:

(1) A cumulative total of 0.5 kilogram (1.1 pounds) of source material in a solid, nondispersible form may be transferred each calendar year, by a person authorized to receive, possess, use and transfer source material under the general license to persons receiving the

material for permanent disposal. The recipient of source material transferred under the provisions of this subparagraph is exempt from the requirements to obtain a license under this section to the extent the source material is permanently disposed. This subparagraph 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 ~~[,]~~ ***, and section 12 of this regulation;*** or

(2) In accordance with NAC 459.359.

(c) Is subject to the provisions of NAC 459.010 to 459.116, inclusive, ***and sections 4 and 5 of this regulation,*** 459.124, 459.126, 459.128, 459.134, 459.135, 459.180, 459.196, 459.198, 459.208, 459.312, 459.373 and 459.792.

(d) Shall respond to written requests from the Division to provide information relating to the general license within 30 calendar days after the date of the request, or such other time as 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 C.F.R. Part 110.

3. Any person who receives, possesses, uses or transfers source material in accordance with subsection 1 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 set forth in NAC 459.3178.

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]~~ ***459.316*** 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 to the extent necessary to meet the provisions of paragraph (b) of subsection 2 and subsection 3. This exemption does not apply to any person who also possesses a specific license issued pursuant to NAC 459.180 to 459.313, inclusive ~~[.]~~ ***, and section 12 of this regulation.***

5. Except as otherwise provided in this subsection, no person may initially transfer or distribute source material to persons generally licensed under paragraph (a) of subsection 1, or equivalent regulations of the Nuclear Regulatory Commission or an agreement state, unless authorized by a specific license issued in accordance with ~~[NAC 459.180 to 459.313, inclusive,]~~ ***section 12 of this regulation*** or equivalent provisions of the Nuclear Regulatory Commission or an agreement state. 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 (a) of subsection 1 before August 27, 2013, without specific authorization may continue through August 27, 2014. Distribution may also be continued until the Division takes final action on a pending application for a license or license amendment to specifically authorize distribution submitted on or before August 27, 2014.

6. [An application for a specific license to initially transfer source material for use pursuant to subsections 1 to 5, inclusive, or equivalent regulations of the Nuclear Regulatory Commission or an agreement state, 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.

7. Each person issued a license pursuant to subsection 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."

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

(c) Provide the information specified in this paragraph to each person to whom source material is transferred for use pursuant to subsections 1 to 5, inclusive, or equivalent regulations of the Nuclear Regulatory Commission or an agreement state. This information must be provided 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 this section and NAC 459.312, or equivalent regulations of the Nuclear Regulatory Commission or an agreement state.

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

(d) Report transfers as follows:

(1) File a report with the Division which must include the following information:

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

~~(II) For each general license issued pursuant to this section or equivalent regulations of the Nuclear Regulatory Commission or an agreement state to whom greater than 50 grams (0.11 pounds) 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 or position and telephone number, of the general licensee to whom the material was distributed, 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 recipients identified pursuant to sub-subparagraph (II).~~

~~(2) File a report with the Nuclear Regulatory Commission or each responsible agency of the agreement state that identifies all persons, operating under provisions equivalent to this section, to whom greater than 50 grams (0.11 pounds) of source material has been transferred within a single calendar quarter. The report must include the following information specific to those transfers made to the Nuclear Regulatory Commission or agreement state with which the report is filed:~~

~~(I) The name, address and license number of the person who transferred the source material.~~

~~(II) The name and address of the general licensee to whom source material was distributed, a responsible agent, by name or position and telephone 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 under the jurisdiction of the Nuclear Regulatory Commission or within the agreement state or, as appropriate.~~

~~(3) Submit the reports required by this paragraph by January 31 of each year covering all transfers for the previous calendar year. If no transfers were made to persons generally licensed under this section or equivalent regulations of the Nuclear Regulatory Commission or an agreement state during the current period, a report must be submitted to the Division so indicating. If no transfers have been made to general licensees under the jurisdiction of the Nuclear Regulatory Commission or in a particular agreement state during the reporting period, the required information must be reported to the Nuclear Regulatory Commission or the responsible agency of the agreement state upon the request of the agency.~~

~~(e) 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, the Nuclear Regulatory Commission or the responsible agency of the agreement state.~~

~~8.]~~ A general license is also issued authorizing the receipt of title to source material without regard to quantity. This general license does not authorize any person to receive, possess, use or transfer source material.

Sec. 22. NAC 459.570 is hereby amended to read as follows:

459.570 1. The exposure measured at the point where the center of the useful beam enters the patient must not exceed 10 roentgens (100 millisieverts) per minute, except during recording of fluoroscopic images or when provided with optional high level control.

2. When provided with optional high level control, the equipment must not be operable at any combination of tube potential and current which will result in an exposure rate, measured at the point where the center of the useful beam enters the patient, in excess of:

(a) Five roentgens (50 millisieverts) per minute if the high level control is not activated; and

(b) Twenty roentgens (200 millisieverts) per minute if the high level control is activated and the unit was manufactured on or after May 19, 1995.

➥ Special means of activation of high level controls, such as additional pressure applied continuously by the operator, will be required to avoid accidental use. A continuous signal audible to the fluoroscopist must indicate activation and use of the high level control.

3. Any new equipment installed after February 28, 1980, which does not incorporate an automatic exposure control, for example, an automatic brightness control or ionization chamber control, must not be operable at any combination of tube potential and current which will result in an exposure rate in excess of 5 roentgens (50 millisieverts) per minute at the point where the center of beam enters the patient except during recording of fluoroscopic images or when provided with an optional high level control.

4. Compliance with this section is determined as follows:

(a) If the source is below the table, exposure rate must be measured 1 centimeter above the tabletop or cradle.

(b) If the source is above the table, the exposure rate must be measured at 30 centimeters above the tabletop with the end of the beam-limiting device or spacer positioned as closely as possible to the point of measurement.

(c) In a C-arm type of fluoroscope, the exposure rate must be measured 30 centimeters from the input surface of the fluoroscopic imaging assembly.

(d) In a miniature C-arm type of fluoroscope, the exposure rate must be measured with the end of the beam-limiting device or spacer positioned as closely as possible to the point of measurement.

(e) In a lateral type of fluoroscope, the exposure rate must be measured at a point 15 centimeters from the centerline of the tabletop and in the direction of the X-ray source, with the end of the beam-limiting device or spacer positioned as closely as possible to the point of measurement. If the tabletop is movable, it must be positioned as closely as possible to the lateral X-ray source.

5. Periodic measurements of the exposure rate must be made annually ***, at intervals not to exceed 12 months after the date of the last measurement,*** or after any maintenance of the system which might affect the exposure rate. If the equipment is provided with optional high level control, measurements of the exposure rates must be made both with and without the high level control activated.

6. Results of these measurements must be made available at a place where any fluoroscopist will have ready access to them while using that fluoroscope. Results of the measurements must include the maximum possible r/minute, as well as the physical factors used to determine all data, the name of the person performing the measurements and the date the measurements were performed.

7. Use of monitoring devices, for example, commercially available film badges, thermoluminescence dosimeters or low energy dosimeters, may be used to perform the test if the measurements are made as in subsection 8.

8. The measurement must be made under the conditions that satisfy the requirements of subsection 4:

(a) The kVp must be the peak kV that the X-ray system is capable of producing;

(b) If determining the maximum dose rate below 5 roentgens (50 millisieverts) per minute, the high level control, if present, must not be activated;

(c) The X-ray system that incorporates automatic exposure control, for example, automatic brightness control, must have sufficient material, for example, lead or lead equivalent, placed in the useful beam to produce the maximum radiation output of the X-ray system; and

(d) The X-ray system that does not incorporate automatic exposure control must utilize the maximum milliamperage of the X-ray system. The material, for example, an attenuation block, must be placed in the useful beam to protect the imaging system.

Sec. 23. NAC 459.8231 is hereby amended to read as follows:

459.8231 1. A waste generator, waste collector or waste processor who transports or offers for transportation low-level radioactive waste intended for ultimate disposal at a licensed land disposal facility for low-level radioactive waste must, except as otherwise provided in subsection 2, prepare a manifest that includes the information requested on NRC Forms 540, 540A, 541 and 542, as applicable. NRC Forms 540 and 540A must be completed by the waste generator, waste collector or waste processor and must accompany the shipment. Upon agreement between the waste generator, waste collector or waste processor and the consignee,

NRC Forms 541, 541A, 542 and 542A may be completed, transmitted and stored in electronic media with the capability of producing legible, accurate and complete records of the forms in the format of a uniform manifest.

2. A licensee is not required to comply with subsection 1 if the licensee ships:

(a) Low-level waste for processing and expects return of the waste before it is disposed of at a licensed land disposal facility;

(b) Low-level waste that is being returned to the licensee who is the generator; or

(c) Material that is contaminated with radioactivity to a waste processor and the waste becomes the residual waste of the waste processor.

3. A licensee who ships the radioactive waste shall provide the following information on the uniform manifest for each disposal container in the shipment:

(a) The name, address and telephone number of the licensee shipping the waste;

(b) A declaration of whether the licensee is acting as a waste generator, waste collector, waste processor or any combination thereof for the shipment;

(c) The name, address, telephone number and Environmental Protection Agency identification number of the carrier transporting the waste;

(d) The date of the shipment;

(e) The total number of packages and containers;

(f) The total volume and weight of the shipment;

(g) The total radionuclide activity in the shipment;

(h) The identity and activity of each of the radionuclides contained in the shipment, including, without limitation, the activity of any H-3, C-14, Tc-99 and I-129 contained in the shipment;

(i) The total masses of U-233, U-235 and plutonium in the material shipped, including in any special nuclear material;

(j) The total mass of uranium and thorium in the material shipped, including in any source material;

(k) The alphabetic or numeric identification that uniquely identifies each disposal container in the shipment;

(l) A physical description of the disposal container, including, without limitation, the name of the manufacturer and model of any high integrity container;

(m) The volume displaced by the disposal container;

(n) The gross weight of the disposal container and the waste contained therein;

(o) For waste consigned to a disposal facility, the maximum radiation level at the surface of each disposal container;

(p) A physical and chemical description of the waste;

(q) The total percentage by weight of the chelating agent for any waste containing more than 0.1 percent by weight of a chelating agent and the name of the principal chelating agent;

(r) The approximate volume of waste within the container;

(s) The sorbing media or solidification media, if any, and the identity of the vendor and name of the brand of any solidification media;

(t) For discrete waste types, including, without limitation, activated materials, contaminated equipment, mechanical filters, sealed sources and devices and wastes in solidification media or stabilization media, the identities and activities of individual radionuclides associated with or contained in the waste types;

(u) The total radioactivity within each container;

(v) For waste that is consigned to a disposal facility, the classification of the waste as set forth in NAC 459.8265; and

(w) The name of any waste that does not meet the structural stability requirements as set forth in NAC 459.8305.

4. A licensee who ships radioactive waste that is delivered without a disposal container must provide the following information on the manifest:

(a) The approximate volume and weight of the waste;

(b) A physical and chemical description of the waste;

(c) The total percentage by weight of the chelating agent for any waste containing more than 0.1 percent by weight of a chelating agent and the name of the principal chelating agent;

(d) For waste that is consigned to a disposal facility:

(1) The classification of the waste as set forth in NAC 459.8265; and

(2) The maximum radiation levels at the surface of the waste;

(e) The name of any waste that does not meet the structural stability requirements as set forth in NAC 459.8305; and

(f) The identities and activities of individual radionuclides contained in the waste, the masses of U-233, U-235 and plutonium in the special nuclear material and the masses of uranium and thorium in the source material.

5. A licensee who ships disposal containers of mixtures of waste originating from different waste generators or mixtures of waste shipped without a container for which portions of the mixture within the shipment originate from different waste generators shall provide the following information on the manifest:

(a) For homogeneous mixtures of waste, including, without limitation, ash from an incinerator, the waste description applicable to the mixture and the volume of the waste attributed to each waste generator.

(b) For heterogeneous mixtures of waste, including, without limitation, the combined products from a large compactor, the identification of each waste generator contributing waste to the disposal container.

(c) For discrete waste types, including, without limitation, activated materials, contaminated equipment, mechanical filters, sealed sources and devices, and wastes in solidification media or stabilization media, the identities and activities of individual radionuclides contained in the waste types.

(d) For each waste generator:

(1) The volume of waste within the disposal container;

(2) A physical and chemical description of the waste, including, without limitation, the solidification media, if any;

(3) The total percentage by weight of the chelating agent for any disposal container containing more than 0.1 percent by weight of a chelating agent and the name of the principal chelating agent;

(4) The sorbing media or solidification media, if any, and the identity of the vendor and name of the brand of any solidification media if the media is claimed to meet stability requirements as set forth in NAC 459.8305; and

(5) The identities and activities of any radionuclides contained in the waste, the masses of U-233, U-235 and plutonium in special nuclear material and the masses of uranium and thorium in source material in the waste.

6. A licensee who ships radioactive waste shall ensure that an authorized representative certifies, by signing and dating the shipment manifest, that the materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable regulations of the United States Department of Transportation and the Division. By signing the certification, a waste collector certifies that the collected waste has not been tampered with in any manner that would invalidate the certification of the authorized representative of the licensee.

7. A licensee who ships radioactive waste shall provide on the required Environmental Protection Agency forms any information regarding hazardous, medical or other waste that is required to comply with Environmental Protection Agency regulations, as codified in 40 C.F.R. Parts 260, 261 and 263, as those provisions existed on January 26, 1999. The required Environmental Protection Agency forms must accompany the uniform manifest required by this section.

8. Copies of the manifests required by this section may be legible carbon copies, photocopies or computer printouts that reproduce the data in the format of the uniform manifest. NRC Forms 540, 540A, 541, 541A, 542 and 542A and their instructions may be obtained at no charge ***by mail*** from the Information and Records Management Branch, Office of ~~[Information Resources Management,]~~ ***the Chief Information Officer,*** U.S. Nuclear Regulatory Commission, Washington, D.C. ~~[20555,]~~ ***20555-0001, or by toll-free*** telephone ~~[(301) 415-7232.]~~ ***at (800) 397-4209, or at the Internet address https://www.nrc.gov/reading-rm/doc-collections/forms/.***

9. As used in this section:

(a) "EPA identification number" means the number received pursuant to 40 C.F.R. Part 263, as those provisions existed on January 26, 1999.

(b) "High integrity container" means a container used to meet the structural stability requirements of NAC 459.830 and the United States Department of Transportation requirements for shipping a package that contains a type A quantity of radioactive waste.

(c) "Waste description" means the physical, chemical and radiological description of the waste that is required on NRC Form 541.

Sec. 24. NAC 459.910 is hereby amended to read as follows:

459.910 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. The State Board of Health 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]~~ ***Publishing*** Office, P.O. Box 979050, St. Louis, Missouri 63197-9000, or by toll-free telephone at (866) 512-1800, at a price of $75, or free of charge at the Internet address ~~[http://www.gpoaccess.gov/cfr/index.html.]~~ ***https://www.ecfr.gov/.***

(b) The regulations of the Nuclear Regulatory Commission concerning the packaging and transport of radioactive material ***which are set forth*** in 10 C.F.R. Part 71 ~~[. 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 $64, or free of charge at the Internet address **http://www.gpoaccess.gov/cfr/index.html.**]~~ ***, and which are adopted by reference pursuant to NAC 459.1997.***

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.

Sec. 25. NAC 652.580 is hereby amended to read as follows:

652.580 1. If the laboratory fails to pay a monetary penalty on or before the date on which the penalty is due, the Division may suspend the license of the laboratory.

2. If the Division determines to suspend the license of a laboratory pursuant to subsection 1, the Division must, in accordance with the requirements of NAC 439.345, provide notice of its intention to suspend the license of the laboratory.

3. If the laboratory fails to pay the monetary penalty, including any additional costs incurred in collection of the penalty, within ~~[10]~~ ***20 business*** days after receipt of the notice described in subsection 2, the Division must suspend the license of the laboratory. The suspension must not be stayed during the pendency of any administrative appeal.

Sec. 26. Section 7 of LCB File No. R144-13, is hereby amended to read as follows:

Section 7. 1. The provisions of 10 C.F.R. Part 37, are hereby adopted by reference, subject to the following:

(a) The exclusion of the following definitions from 10 C.F.R. § 37.5:

(1) "Act";

(2) "Commission";

(3) "Government agency"; and

(4) "License."

(b) Any reference in 10 C.F.R. Part 37 to:

(1) "Byproduct material" shall be deemed a reference to "radioactive material."

(2) "Commission" or "NRC" shall be deemed a reference to ~~["Division."]~~ ***"Division" except for the use of those terms in:***

(I) 10 C.F.R. § 37.25(b), 10 C.F.R. § 37.27(a) and (c) and 10 C.F.R. § 37.29(a); and

(II) The definition of "person" as set forth in 10 C.F.R. § 37.5.

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

(4) "Commission's regulations," "federal regulations" or "NRC regulations" shall be deemed a reference to "NAC 459.010 to 459.950, inclusive ~~[."]~~ ***, and sections 4 to 12, inclusive, of this regulation."***

(5) "NRC license" shall be deemed a reference to "license issued by the Division pursuant to NAC 459.010 to 459.950, inclusive ~~[."]~~ ***, and sections 4 to 12, inclusive, of this regulation."***

(6) "NRC Operations Center," "NRC Regional Office listed in § 30.6(a)(2)" or "Director, ***Division of Security Policy,*** Office of Nuclear ~~[Material Safety and Safeguards"]~~ ***Security and Incident Response"*** shall be deemed a reference to "the ~~[provisions of NAC 459.134]~~ ***Radiation Control Program*** and the contact information described in ~~[the State of Nevada Radiological Emergency Response Plan."]~~ ***NAC 459.134."***

(7) "NRC's license verification system" shall be deemed a reference to "Division, NRC's license verification system or the license issuing authority."

(c) The following sections of 10 C.F.R. Part 37 are not adopted by reference:

(1) Section 37.1;

(2) Section 37.3;

(3) Section 37.7;

(4) Section 37.9;

(5) Section 37.11(b);

(6) Section 37.13;

(7) Section 37.77(f);

(8) Section 37.107; and

(9) Section 37.109.

2. A copy of the publication that contains 10 C.F.R. Part 37 may be obtained by mail from the Superintendent of Documents, United States Government ~~[Printing]~~ ***Publishing*** Office, P.O. Box 979050, St. Louis, Missouri 63197-9000, or by toll-free telephone at (866) 512-1800, at the price of $67, or free of charge at the Internet address ~~[http://www.gpoaccess.gov/cfr/index.html.]~~ ***https://www.ecfr.gov/.***