



Arizona Administrative REGISTER

Published by the Department of State ~ Office of the Secretary of State

Vol. 24, Issue 31

~ Administrative Register Contents ~

August 3, 2018

Information 2148

Rulemaking Guide 2149

RULES AND RULEMAKING

Final Expedited Rulemaking, Notices of

 9 A.A.C. 7 Department of Health Services - Radiation Control 2151

Final Exempt Rulemaking, Notices of

 3 A.A.C. 2 Department of Agriculture - Animal Services Division 2219

 3 A.A.C. 3 Department of Agriculture - Environmental Services Division 2222

 3 A.A.C. 4 Department of Agriculture - Plant Services Division 2223

 3 A.A.C. 6 Department of Agriculture - Office of Commodity Development and Promotion 2226

 3 A.A.C. 10 Department of Agriculture - Citrus Fruit and Vegetable Division 2227

 9 A.A.C. 22 AHCCCS - Administration 2229

OTHER AGENCY NOTICES

Docket Opening, Notices of Rulemaking

 9 A.A.C. 25 Department of Health Services - Emergency Medical Services 2234

GOVERNOR'S OFFICE

Governor's Executive Order 2018-02

 Internal Review of Administrative Rules; Moratorium to Promote Job Creation and Customer-Service-Oriented Agencies 2236

INDEXES

 Register Index Ledger 2238

 Rulemaking Action, Cumulative Index for 2018 2239

 Other Notices and Public Records, Cumulative Index for 2018 2248

CALENDAR/DEADLINES

 Rules Effective Dates Calendar 2250

 Register Publishing Deadlines 2252

GOVERNOR'S REGULATORY REVIEW COUNCIL

 Governor's Regulatory Review Council Deadlines 2253

DIRECTOR
Administrative Rules Division
Scott Cancelosi

PUBLISHER
Secretary of State
MICHELE REAGAN

RULES MANAGING EDITOR
Arizona Administrative Register
Rhonda Paschal

From the Publisher

ABOUT THIS PUBLICATION

The paper copy of the *Administrative Register* (A.A.R.) is the official publication for rules and rulemaking activity in the state of Arizona.

Rulemaking is defined in Arizona Revised Statutes known as the Arizona Administrative Procedure Act (APA), A.R.S. Title 41, Chapter 6, Articles 1 through 10.

The Office of the Secretary of State does not interpret or enforce rules published in the *Arizona Administrative Register* or *Code*. Questions should be directed to the state agency responsible for the promulgation of the rule as provided in its published filing.

The *Register* is cited by volume and page number. Volumes are published by calendar year with issues published weekly. Page numbering continues in each weekly issue.

In addition, the *Register* contains the full text of the Governor's Executive Orders and Proclamations of general applicability, summaries of Attorney General opinions, notices of rules terminated by the agency, and the Governor's appointments of state officials and members of state boards and commissions.

ABOUT RULES

Rules can be: made (all new text); amended (rules on file, changing text); repealed (removing text); or renumbered (moving rules to a different Section number). Rules activity published in the *Register* includes: proposed, final, emergency, expedited, and exempt rules as defined in the APA.

Rulemakings initiated under the APA as effective on and after January 1, 1995, include the full text of the rule in the *Register*. New rules in this publication (whether proposed or made) are denoted with underlining; repealed text is stricken.

WHERE IS A "CLEAN" COPY OF THE FINAL OR EXEMPT RULE PUBLISHED IN THE REGISTER?

The *Arizona Administrative Code* (A.A.C.) contains the codified text of rules. The A.A.C. contains rules promulgated and filed by state agencies that have been approved by the Attorney General or the Governor's Regulatory Review Council. The *Code* also contains rules exempt from the rulemaking process.

The printed *Code* is the official publication of a rule in the A.A.C., and is prima facie evidence of the making, amendment, or repeal of that rule as provided by A.R.S. § 41-1012. Paper copies of rules are available by full Chapter or by subscription. The *Code* is posted online for free.

LEGAL CITATIONS AND FILING NUMBERS

On the cover: Each agency is assigned a Chapter in the *Arizona Administrative Code* under a specific Title. Titles represent broad subject areas. The Title number is listed first; with the acronym A.A.C., which stands for the *Arizona Administrative Code*; following the Chapter number and Agency name, then program name. For example, the Secretary of State has rules on rulemaking in Title 1, Chapter 1 of the *Arizona Administrative Code*. The citation for this chapter is 1 A.A.C. 1, Secretary of State, Rules and Rulemaking

Every document filed in the office is assigned a file number. This number, enclosed in brackets, is located at the top right of the published documents in the *Register*. The original filed document is available for 10 cents a page.

Arizona Administrative REGISTER

Vol. 24

Issue 31

PUBLISHER
SECRETARY OF STATE
Michele Reagan

**ADMINISTRATIVE RULES
STAFF**
DIRECTOR
Scott Cancelosi

RULES MANAGING EDITOR
Rhonda Paschal

ADMINISTRATIVE REGISTER
This publication is available online for
free at www.azsos.gov.

ADMINISTRATIVE CODE
A price list for the *Arizona
Administrative Code* is available
online. You may also request a paper
price list by mail. To purchase a paper
Chapter, contact us at
(602) 364-3223.

PUBLICATION DEADLINES
Publication dates are published in the
back of the *Register*. These dates
include file submittal dates with a
three-week turnaround from filing to
published document.

CONTACT US
Administrative Rules Division
Office of the Secretary of State
1700 W. Washington Street, Fl. 2
Phoenix, AZ 85007
(602) 364-3223

*The Office of the Secretary of State is
an equal opportunity employer.*



Participate in the Process

Look for the Agency Notice

Review (inspect) notices published in the *Arizona Administrative Register*. Many agencies maintain stakeholder lists and would be glad to inform you when they proposed changes to rules. Check an agency's website and its newsletters for news about notices and meetings.

Feel like a change should be made to a rule and an agency has not proposed changes? You can petition an agency to make, amend, or repeal a rule. The agency must respond to the petition. (See A.R.S. § 41-1033)

Attend a public hearing/meeting

Attend a public meeting that is being conducted by the agency on a Notice of Proposed Rulemaking. Public meetings may be listed in the Preamble of a Notice of Proposed Rulemaking or they may be published separately in the *Register*. Be prepared to speak, attend the meeting, and make an oral comment.

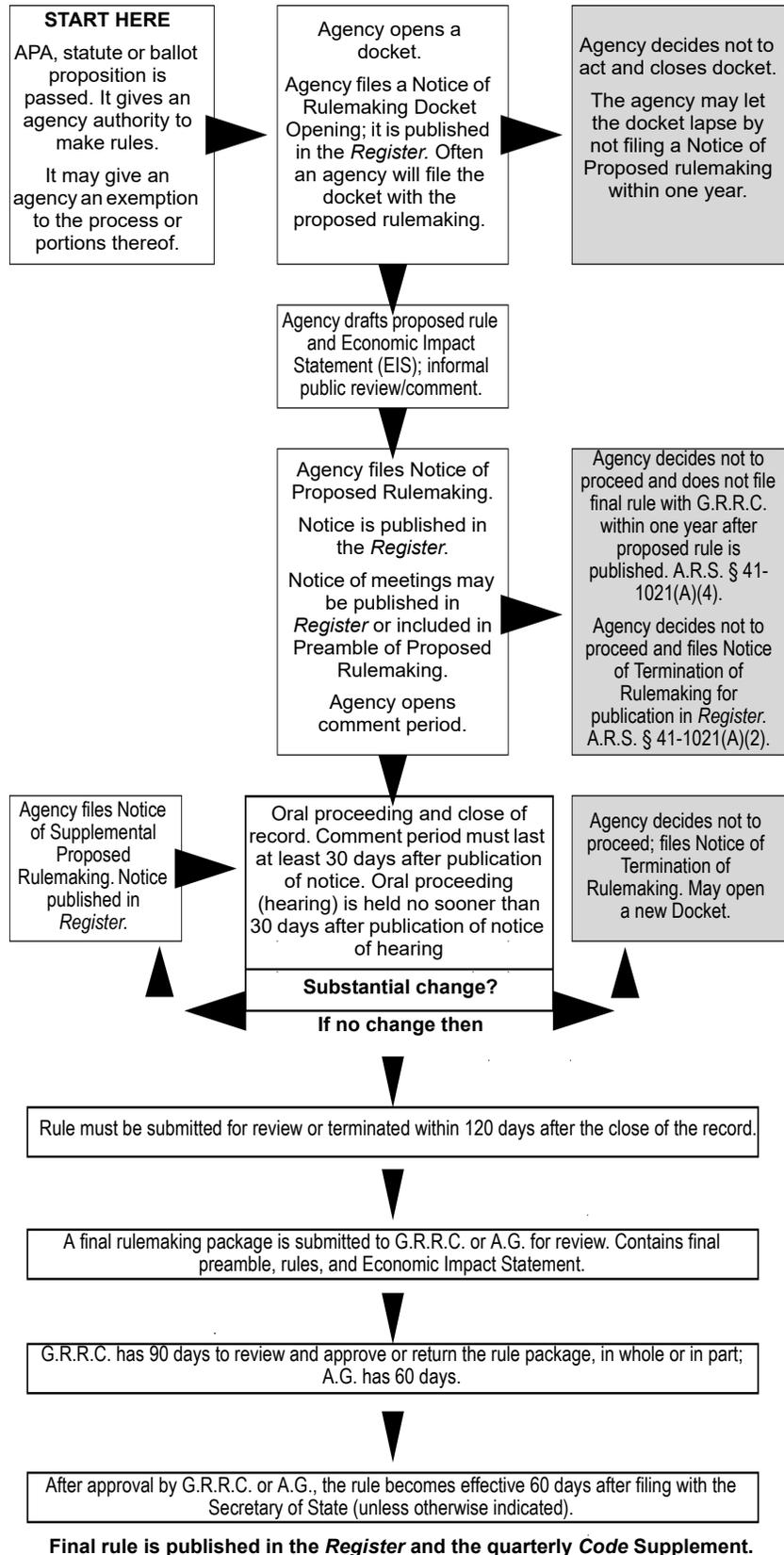
An agency may not have a public meeting scheduled on the Notice of Proposed Rulemaking. If not, you may request that the agency schedule a proceeding. This request must be put in writing within 30 days after the published Notice of Proposed Rulemaking.

Write the agency

Put your comments in writing to the agency. In order for the agency to consider your comments, the agency must receive them by the close of record. The comment must be received within the 30-day comment timeframe following the *Register* publication of the Notice of Proposed Rulemaking.

You can also submit to the Governor's Regulatory Review Council written comments that are relevant to the Council's power to review a given rule (A.R.S. § 41-1052). The Council reviews the rule at the end of the rulemaking process and before the rules are filed with the Secretary of State.

Arizona Regular Rulemaking Process



Definitions

Arizona Administrative Code (A.A.C.): Official rules codified and published by the Secretary of State's Office. Available online at www.azsos.gov.

Arizona Administrative Register (A.A.R.): The official publication that includes filed documents pertaining to Arizona rulemaking. Available online at www.azsos.gov.

Administrative Procedure Act (APA): A.R.S. Title 41, Chapter 6, Articles 1 through 10. Available online at www.azleg.gov.

Arizona Revised Statutes (A.R.S.): The statutes are made by the Arizona State Legislature during a legislative session. They are compiled by Legislative Council, with the official publication codified by Thomson West. Citations to statutes include Titles which represent broad subject areas. The Title number is followed by the Section number. For example, A.R.S. § 41-1001 is the definitions Section of Title 41 of the Arizona Administrative Procedures Act. The "§" symbol simply means "section." Available online at www.azleg.gov.

Chapter: A division in the codification of the *Code* designating a state agency or, for a large agency, a major program.

Close of Record: The close of the public record for a proposed rulemaking is the date an agency chooses as the last date it will accept public comments, either written or oral.

Code of Federal Regulations (CFR): The *Code of Federal Regulations* is a codification of the general and permanent rules published in the *Federal Register* by the executive departments and agencies of the federal government.

Docket: A public file for each rulemaking containing materials related to the proceedings of that rulemaking. The docket file is established and maintained by an agency from the time it begins to consider making a rule until the rulemaking is finished. The agency provides public notice of the docket by filing a Notice of Rulemaking Docket Opening with the Office for publication in the *Register*.

Economic, Small Business, and Consumer Impact Statement (EIS): The EIS identifies the impact of the rule on private and public employment, on small businesses, and on consumers. It includes an analysis of the probable costs and benefits of the rule. An agency includes a brief summary of the EIS in its preamble. The EIS is not published in the *Register* but is available from the agency promulgating the rule. The EIS is also filed with the rulemaking package.

Governor's Regulatory Review (G.R.R.C.): Reviews and approves rules to ensure that they are necessary and to avoid unnecessary duplication and adverse impact on the public. G.R.R.C. also assesses whether the rules are clear, concise, understandable, legal, consistent with legislative intent, and whether the benefits of a rule outweigh the cost.

Incorporated by Reference: An agency may incorporate by reference standards or other publications. These standards are available from the state agency with references on where to order the standard or review it online.

Federal Register (FR): The *Federal Register* is a legal newspaper published every business day by the National Archives and Records Administration (NARA). It contains federal agency regulations; proposed rules and notices; and executive orders, proclamations, and other presidential documents.

Session Laws or "Laws": When an agency references a law that has not yet been codified into the Arizona Revised Statutes, use the word "Laws" is followed by the year the law was passed by the Legislature, followed by the Chapter number using the abbreviation "Ch.," and the specific Section number using the Section symbol (§). For example, Laws 1995, Ch. 6, § 2. Session laws are available at www.azleg.gov.

United States Code (U.S.C.): The Code is a consolidation and codification by subject matter of the general and permanent laws of the United States. The Code does not include regulations issued by executive branch agencies, decisions of the federal courts, treaties, or laws enacted by state or local governments.

Acronyms

A.A.C. – *Arizona Administrative Code*

A.A.R. – *Arizona Administrative Register*

APA – *Administrative Procedure Act*

A.R.S. – *Arizona Revised Statutes*

CFR – *Code of Federal Regulations*

EIS – *Economic, Small Business, and Consumer Impact Statement*

FR – *Federal Register*

G.R.R.C. – *Governor's Regulatory Review Council*

U.S.C. – *United States Code*

About Preambles

The Preamble is the part of a rulemaking package that contains information about the rulemaking and provides agency justification and regulatory intent.

It includes reference to the specific statutes authorizing the agency to make the rule, an explanation of the rule, reasons for proposing the rule, and the preliminary Economic Impact Statement.

The information in the Preamble differs between rulemaking notices used and the stage of the rulemaking.



NOTICES OF FINAL EXPEDITED RULEMAKING

This section of the *Arizona Administrative Register* contains Notices of Final Expedited Rulemaking. The Office of the Secretary of State is the filing office and publisher of these rules.

Questions about the interpretation of the expedited rules should be addressed to the agency promulgating the rules. Refer to Item #5 to contact the person charged with the rulemaking.

**NOTICE OF FINAL EXPEDITED RULEMAKING
TITLE 9. HEALTH SERVICES
CHAPTER 7. RADIATION CONTROL**

[R18-139]

PREAMBLE

- | <u>1. Article, Part, or Section Affected (as applicable)</u> | <u>Rulemaking Action</u> |
|---|---------------------------------|
| R9-7-102 | Amend |
| R9-7-103 | Amend |
| R9-7-302 | Amend |
| R9-7-303 | Amend |
| R9-7-304 | Amend |
| R9-7-305 | Amend |
| R9-7-306 | Amend |
| R9-7-311 | Amend |
| R9-7-313 | Amend |
| R9-7-323 | Amend |
| R9-7-408 | Amend |
| R9-7-415 | Amend |
| R9-7-417 | Amend |
| R9-7-418 | Amend |
| R9-7-419 | Amend |
| R9-7-448 | Amend |
| R9-7-451 | Amend |
| R9-7-611.01 | Amend |
| R9-7-613 | Amend |
| R9-7-710 | Amend |
| R9-7-711 | Amend |
| R9-7-719 | Amend |
| R9-7-721 | Amend |
| Exhibit A | Amend |
| R9-7-1006 | Amend |
| R9-7-1507 | Amend |
| R9-7-1508 | Amend |
| R9-7-1510 | Amend |
| R9-7-1512 | Amend |
| R9-7-1515 | Amend |
| R9-7-1927 | Amend |
| R9-7-1943 | Amend |
| R9-7-1975 | Amend |
| R9-7-1977 | Amend |
| R9-7-19101 | Amend |
- 2. Citations to the agency's statutory authority for the rulemaking to include the authorizing statute (general) and the implementing statute (specific):**
 Authorizing statutes: A.R.S. §§ 30-654(B)(5) and 36-136(G)
 Implementing statutes: A.R.S. §§ 30-654, 30-656, 30-657, 30-671 through 30-672.01, 30-681 through 30-689, and 30-721
- 3. The effective date of the rules:**
 July 12, 2018
- 4. Citations to all related notices published in the Register that pertain to the record of the final expedited rulemaking:**
 Notice of Rulemaking Docket Opening: 24 A.A.R. 793, April 13, 2018
 Notice of Proposed Expedited Rulemaking: 24 A.A.R. 1325, May 4, 2018



Notice of Recodification: 24 A.A.R. 813, April 20, 2018

5. The agency's contact person who can answer questions about the rulemaking:

Name: Colby Bower, Assistant Director
 Address: Department of Health Services
 Public Health Licensing Services
 150 N. 18th Ave., Suite 510
 Phoenix, AZ 85007
 Telephone: (602) 542-6383
 Fax: (602) 364-4808
 E-mail: Colby.Bower@azdhs.gov
 or
 Name: Robert Lane, Chief
 Address: Arizona Department of Health Services
 Office of Administrative Counsel and Rules
 150 N. 18th Ave., Suite 200
 Phoenix, AZ 85007
 Telephone: (602) 542-1020
 Fax: (602) 364-1150
 E-mail: Robert.Lane@azdhs.gov

6. An agency's justification and reason why a rule should be made, amended, repealed or renumbered, under A.R.S. § 41-1027, to include an explanation about the rulemaking:

Arizona Revised Statutes (A.R.S.) § 30-654(B)(5), as revised by Laws 2017, Ch. 313, requires the Arizona Department of Health Services (Department) to make rules deemed necessary to administer A.R.S. Title 30, Chapter 4, Control of Ionizing Radiation. The Department recently recodified rules adopted in A.A.C. Title 12, Chapter 1 to implement the requirements in A.R.S. Title 30, Chapter 4 into A.A.C. Title 9, Chapter 7.

Arizona is an Agreement State by the Document negotiated between the United States Atomic Energy Commission (now U.S. Nuclear Regulatory Commission) and the Governor of Arizona in March of 1967 under A.R.S. § 30-656. In order to remain in compliance with the Agreement, Arizona must adopt regulations related to the control of radioactive material in a manner that is consistent with federal regulations. The U.S. Nuclear Regulatory Commission periodically issues changes, denoted as Regulation Toolbox: Review Summary Sheets for Regulation Amendments (RATS IDs), that are required to be incorporated by Agreement States. Several RATS IDs have not yet been incorporated into Arizona's rules related to the control of radioactive material. The Department is now revising the newly recodified rules in A.A.C. Title 9, Chapter 7, by expedited rulemaking, to conform to the RATS IDs under 10 CFR Chapter I. The Department is also making other changes to reduce the administrative burden of the rules by clarifying existing language in the rules, correcting cross-references, and making the rules easier to understand.

The Department believes that these changes are consistent with the purpose of A.R.S. § 41-1027 in that this rulemaking does not increase the cost of regulatory compliance, does not increase a fee, or reduce a procedural right of regulated persons, and either adopts or incorporates by reference, without material change, federal statutes and regulations, or clarifies language of a rule without changing its effect.

7. A reference to any study relevant to the rule that the agency reviewed and proposes either to rely on or not to rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

The Department did not review or rely on any study for this rulemaking.

8. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state.

Not applicable

9. A summary of the economic, small business, and consumer impact:

Under A.R.S. § 41-1055(D)(2), the Department is not required to provide an economic, small business, and consumer impact statement.

10. A description of any changes between the proposed expedited rulemaking, including supplemental notices, and the final expedited rulemaking:

Between when the proposed expedited rulemaking was posted by the Department on April 11, 2018 and when the Notice was published, the Department corrected a typographical error in R9-7-613. This correction, as well as changes made at the suggestion of Council staff, are included in the final expedited rulemaking.

11. Agency's summary of the public or stakeholder comments or objections made about the rulemaking and the agency response to the comments:

The Department did not receive public or stakeholder comments about the rulemaking.

12. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:

a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:

According to A.R.S. Title 30, Chapter 4, Article 2, as amended by Laws 2017, Ch. 313, the Department is authorized to



issue licenses and registrations for sources of ionizing radiation and those persons using these sources. This licensing and registration must be compatible with requirements in the Agreement. The rules refer to permits both general and specific. The general permit applies to certain levels of radioactive material, and specific permits are issued by rule for quantities and uses that are specific to the user and their training or scope of practice.

b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:

The rules are not more stringent than federal law.

c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:

No such analysis was submitted.

13. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:

In the rules being revised as part of this rulemaking, there are many incorporations by reference that are not being changed. These are listed below with the relevant rule Section:

R9-7-102:

10 CFR 35.50(a) or (c)(1) and 10 CFR 35.59 (January 1, 2010)
10 CFR 71, Appendix A, Table A-1 (January 1, 2013)
10 CFR 71, Subpart D (January 1, 2010)
10 CFR 71.4 (January 1, 2013)
10 CFR 71.75 (January 1, 2013)
21 CFR 1020.40 (April 1, 2013)
40 CFR 190 and 191 (July 1, 2013)
49 CFR 107, 171 through 180 (October 1, 2013)
49 CFR 173.403 (October 1, 2012)

R9-7-103:

39 CFR 111.1 (July 1, 2007)
49 CFR 107.109, 107.111, 107.113, 171.2, 171.3, 172.200, 173.1, 173.3, 173.4, 173.401, 175.3, 175.10, 176.3, 176.5, 176.11, 176.24, 176.27, and 177.801 (October 1, 2007)

R9-7-304:

10 CFR 30.3 (January 1, 2013)

R9-7-306:

10 CFR 31.5(b), (c), and (d) (January 1, 2013)
10 CFR 32.57 (January 1, 2013)
10 CFR 70.39 (January 1, 2013)
10 CFR 110 (January 1, 2013)
10 CFR 32.21 (January 1, 2013)
10 CFR 110 (January 1, 2013)

R9-7-311:

10 CFR 30.32(j) (January 1, 2013)
10 CFR 32.72 (January 1, 2013)
10 CFR 31.5(c)(13)(i) (January 1, 2013)
10 CFR 32.52 (January 1, 2013)
10 CFR 32.53 through 32.56 (January 1, 2015)
10 CFR 32.57, 32.58, 32.59, and 70.39 (January 1, 2015)
10 CFR 32.61 and 32.62 (January 1, 2015)
10 CFR 32.74 (January 1, 2015)
10 CFR 32.201 (January 1, 2013)

R9-7-323:

10 CFR 30.35, 40.36, and 70.25 (January 1, 2015)
10 CFR 30.36(g)(1), 40.42(g)(1), and 70.38(g)(1) (January 1, 2015)
10 CFR 30.36(i), 40.42(i), and 70.38(i) (January 1, 2015)
10 CFR 30.36(j), 40.42(j), and 70.38(j) (January 1, 2015)

R9-7-418:

NIST Handbook 150 (March 1994)
NIST Handbook 150-4 (August 1994)

R9-7-1507:

10 CFR 71, Subpart H (January 1, 2008)

R9-7-1508:

49 CFR 172.202 and 172.203(d) (October 1, 2007)

R9-7-1510:

10 CFR 71, Subparts A, G, and H (January 1, 2010)
10 CFR 71.22, (January 1, 2010)
10 CFR 71.43(g) (January 1, 2010)



- 10 CFR 71.45 (January 1, 2010)
- 10 CFR 71.47 (January 1, 2010)
- 10 CFR 71.71 and 71.73 (January 1, 2010)
- 10 CFR 71.4, revised January 1, 2010
- 10 CFR 71.85(c) (January 1, 2010)
- 49 CFR 173 and 178 (October 1, 2010)
- 49 CFR 173.403 (October 1, 2010)
- 49 CFR 173.443 (October 1, 2010)

R9-7-1512:
10 CFR 71.97 (January 1, 2015)

R9-7-1515:
10 CFR 71.14(a) (January 1, 2008)

R9-7-1927:
10 CFR 37.7 (January 1, 2015)
10 CFR part 73 (January 1, 2015)

In R9-7-1510(B)(1)(a) and (b), the citations to the incorporated 10 CFR 71.85(c) (January 1, 2010) and 49 CFR 173.403 (October 1, 2010) are being removed. In R9-7-1510(D)(1), the citation to 49 CFR 171.12 (October 1, 2010) is being corrected to 49 CFR 171.23 (October 1, 2010).

14. Whether the rule was previously made, amended, or repealed as an emergency rule. If so, cite the notice published in the Register as specified in R1-1-409(A). Also, the agency shall state where the text was changed between the emergency and the final rulemaking packages:

The rule was not previously made as an emergency rule.

15. The full text of the rule follows:

**TITLE 9. HEALTH SERVICES
CHAPTER 7. RADIATION CONTROL**

ARTICLE 1. GENERAL PROVISIONS

- Section
- R9-7-102. Definitions
- R9-7-103. Exemptions

ARTICLE 3. RADIOACTIVE MATERIAL LICENSING

- Section
- R9-7-302. Source Material; Exemptions
- R9-7-303. Radioactive Material Other Than Source Material; Exemptions
- R9-7-304. License Types
- R9-7-305. General Licenses – Source Material
- R9-7-306. General License – Radioactive Material Other Than Source Material
- R9-7-311. Special Requirements for a Specific License to Manufacture, Assemble, Repair, or Distribute Commodities, Products, or Devices that Contain Radioactive Material
- R9-7-313. Specific Terms and Conditions
- R9-7-323. Financial Assurance and Recordkeeping for Decommissioning

ARTICLE 4. STANDARDS FOR PROTECTION AGAINST IONIZING RADIATION

- Section
- R9-7-408. Occupational Dose Limits for Adults
- R9-7-415. Dose Equivalent to an Embryo or Fetus
- R9-7-417. Testing for Leakage or Contamination of Sealed Sources
- R9-7-418. Surveys and Monitoring
- R9-7-419. Conditions Requiring Individual Monitoring of External and Internal Occupational Dose
- R9-7-448. Additional Reporting
- R9-7-451. Termination of a Radioactive Material License or a Licensed Activity
- Appendix C. Quantities of Licensed or Registered Material Requiring Labeling

ARTICLE 6. USE OF X-RAYS IN THE HEALING ARTS

- Section
- R9-7-611.01. Electronic Brachytherapy to Deliver Interstitial and ~~Intracavity~~ Intracavitary Therapeutic Radiation Dosage
- R9-7-613. Veterinary Medicine Radiographic Systems

**ARTICLE 7. MEDICAL USES OF RADIOACTIVE MATERIAL**

Section

- R9-7-710. Radiation Safety Officer Training
R9-7-711. Authorized Medical Physicist Training
R9-7-719. Training for Uptake, Dilution, and Excretion Studies
R9-7-721. Training for Imaging and Localization Studies Not Requiring a Written Directive
Exhibit A. Medical Use Groups

ARTICLE 10. NOTICES, INSTRUCTIONS, AND REPORTS TO RADIATION WORKERS; INSPECTIONS

Section

- R9-7-1006. Consultation with Workers During Inspections

ARTICLE 15. TRANSPORTATION

Section

- R9-7-1507. Packaging Quality Assurance
R9-7-1508. Advance Notification of Nuclear Waste Transportation
R9-7-1510. Packaging
R9-7-1512. Advance Notification of Shipment of Irradiated Reactor Fuel and Nuclear Waste
R9-7-1515. Exemption for Low-level Radioactive Materials

ARTICLE 19. PHYSICAL PROTECTION OF CATEGORY 1 AND CATEGORY 2 QUANTITIES OF RADIOACTIVE MATERIAL

Section

- R9-7-1927. Requirements for Criminal History Records Checks of Individuals Granted Unescorted Access to Category 1 or Category 2 Quantities of Radioactive Material
R9-7-1943. General Security Program Requirements
R9-7-1975. Preplanning and Coordination of Shipment of Category 1 or Category 2 Quantities of Radioactive Material
R9-7-1977. Advance Notification of Shipment of Category 1 Quantities of Radioactive
R9-7-19101. Form of Records

ARTICLE 1. GENERAL PROVISIONS**R9-7-102. Definitions**

Terms defined in A.R.S. § 30-651 have the same meanings when used in this Chapter, unless the context otherwise requires. Additional subject-specific definitions are used in other Articles.

“A1” means the maximum activity of special form radioactive material permitted in a type A package. These values are either listed in 10 CFR 71, Appendix A, Table A-1, or may be derived in accordance with the procedures prescribed in 10 CFR 71, Appendix A, revised January 1, 2013, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.

“A2” means the maximum activity of radioactive material, other than special form radioactive material, low specific activity (LSA) material, and surface contaminated object (SCO) material, permitted in a Type A package. These values are either listed in 10 CFR 71, Appendix A, Table A-1, or may be derived in accordance with the procedure prescribed in 10 CFR 71, Appendix A, revised January 1, 2013, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.

“Absorbed dose” means the energy imparted by ionizing radiation per unit mass of irradiated material. The units of absorbed dose are the gray (Gy) and the rad.

“Accelerator” means any machine capable of accelerating electrons, protons, deuterons, or other charged particles in a vacuum and of discharging the resultant particulate or other radiation into a medium at energies usually in excess of 1 MeV. For purposes of this definition, “particle accelerator” is an equivalent term.

“Accelerator produced material” means any material made radioactive by irradiating it in a particle accelerator.

“Act” means A.R.S. Title 30, Chapter 4.

“Activity” means the rate of disintegration, transformation, or decay of radioactive material. The units of activity are the becquerel (Bq) and the curie (Ci).

“Adult” means an individual 18 or more years of age.

“Agreement State” means any state with which the United States Nuclear Regulatory Commission has entered into an effective agreement under Section 274(b) of the Atomic Energy Act of 1954, as amended (73 Stat. 689). “Nonagreement State” means any other state.

“Airborne radioactive material” means any radioactive material dispersed in the air in the form of aerosols, dusts, fumes, mists, vapors, or gases.

“Airborne radioactivity area” means a room, enclosure, or area in which airborne radioactive materials, composed wholly or partly of licensed radioactive material, exist in concentrations:

In excess of the derived air concentrations (DACs) specified in Appendix B, Table I of Article 4 of these rules; or



That an individual present in the area without respiratory protective equipment could exceed, during the hours an individual is present in a week, an intake of 0.6 percent of the annual limit on intake (ALI) or 12 DAC-hours.

“ALARA” means as low as is reasonably achievable, making every reasonable effort to maintain exposures to radiation as far below the dose limits in these rules as is practical, consistent with the purpose for which the licensed or registered activity is undertaken, taking into account the state of technology, the economics of improvements in relation to state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to utilization of nuclear energy and licensed or registered sources of radiation in the public interest.

“Analytical x-ray equipment” means equipment used for x-ray diffraction or x-ray-induced fluorescence analysis.

“Analytical x-ray system” means a group of components utilizing x-rays to determine the elemental composition or to examine the microstructure of materials.

“Annual” means done or performed yearly. For purposes of Chapter 1, any required activity done or performed within plus or minus two weeks of the annual due date is considered done or performed in a timely manner.

“Approved individual” means an individual whom the licensee has determined to be trustworthy and reliable for unescorted access in accordance with subpart B of this part and who has completed the training required by 10 CFR 37.43(c).

“Authorized medical physicist” means an individual who meets the requirements in R9-7-711; or is identified as an authorized medical physicist or teletherapy physicist on:

- A specific medical use license issued by the Department, the NRC, or another Agreement State;
- A medical use permit issued by a NRC master material licensee;
- A permit issued by the Department, the NRC, or another Agreement State broad scope medical use licensee; or
- A permit issued by a NRC master material license broad scope medical use permittee.

“Authorized nuclear pharmacist” means a pharmacist who meets the requirements in R9-7-712; or is ~~identified as an authorized nuclear pharmacist on:~~

- ~~A Identified as an authorized nuclear pharmacist on~~ a specific license issued by the Department, the NRC, or another Agreement State that authorizes medical use or the practice of nuclear pharmacy;
- ~~A Identified as an authorized nuclear pharmacist on~~ a permit issued by a NRC master material licensee that authorizes medical use or the practice of nuclear pharmacy;
- ~~A Identified as an authorized nuclear pharmacist on~~ a permit issued by the Department, the NRC, or another Agreement State broad scope medical use licensee that authorizes medical use or the practice of nuclear pharmacy; or
- ~~A Identified as an authorized nuclear pharmacist on~~ a permit issued by a NRC master material license broad scope medical use permittee that authorizes medical use or the practice of nuclear pharmacy; or
- ~~Is identified~~ Identified as an authorized nuclear pharmacist by a commercial nuclear pharmacy that has been authorized to identify authorized nuclear pharmacists; or
- ~~Is designated~~ Designated as an authorized nuclear pharmacist in accordance with R9-7-311(G).

“Authorized user” means a physician, dentist, or podiatrist who meets the requirements in R9-7-719, R9-7-723, R9-7-727, R9-7-728, or R9-7-744; or is identified as an authorized user on:

- The Department, NRC, or another Agreement State license that authorizes the medical use of radioactive material;
- A permit issued by a NRC master material licensee that is authorized to permit the medical use of radioactive material;
- A permit issued by the Department, the NRC, or another Agreement State specific licensee of broad scope that is authorized to permit the medical use of radioactive material; or
- A permit issued by a NRC master material license broad scope permittee that is authorized to permit the medical use of radioactive material.

“Background investigation” means an assessment of an individual’s prior actions and experience conducted by a licensee or applicant, to support the determination of the individual’s trustworthiness and reliability in accordance with 10 CFR 37.25.

“Background radiation” means radiation from cosmic sources; not technologically enhanced naturally occurring radioactive material, including radon (except as a decay product of source or special nuclear material); and global fallout as it exists in the environment from the testing of nuclear explosive devices or from past nuclear accidents, such as Chernobyl, that contribute to background radiation and are not under the control of a licensee. “Background radiation” does not include sources of radiation regulated by the Department.

“Becquerel” (Bq) means the International System (SI) unit for activity and is equal to 1 disintegration per second (dps or tps).

“Bioassay” means the determination of kinds, quantities, or concentrations, and in some cases, the locations of radioactive material in the human body, whether by direct measurement, in vivo counting, or by analysis and evaluation of materials excreted or removed from the human body. For purposes of these rules, “radiobioassay” is an equivalent term.

“Brachytherapy” means a method of radiation therapy in which an encapsulated source or group of sources is utilized to deliver beta or gamma radiation at a distance of up to a few centimeters, by surface, intracavitary or interstitial application.

“Byproduct material” means:

- Any radioactive material, except special nuclear material, yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material;



The tailings or wastes produced by the extraction or concentration of uranium or thorium from ore processed primarily for its source material content, including discrete surface wastes resulting from uranium or thorium solution extraction processes. Underground ore bodies depleted by these solution extraction operations do not constitute “byproduct material” within this definition;

Any discrete source of radium-226 that is produced, extracted, or converted after extraction, for use for a commercial, medical, or research activity; or any material that, has been made radioactive by use of a particle accelerator; and is produced, extracted, or converted after extraction, for use for a commercial, medical, or research activity; and

Any discrete source of naturally occurring radioactive material, other than source material, that the NRC, in consultation with the Administrator of the Environmental Protection Agency, the Secretary of Energy, the Secretary of Homeland Security, and the head of any other appropriate federal agency, determines would pose a threat similar to the threat posed by a discrete source of radium-226 to the public health and safety or the common defense and security and; before, on, or after August 8, 2005, is extracted or converted after extraction for use in a commercial, medical, or research activity.

“Calendar quarter” means not less than 12 consecutive weeks nor more than 14 consecutive weeks. The first calendar quarter of each year shall begin in January and subsequent calendar quarters shall be so arranged such that no day is included in more than one calendar quarter and no day in any one year is omitted from inclusion within a calendar quarter. A licensee or registrant shall not change the method of determining calendar quarters for purposes of this Chapter except at the beginning of a calendar year.

“Calibration” means the determination of:

The response or reading of an instrument relative to a series of known radiation values over the range of the instrument, or

The strength of a source of radiation relative to a standard.

“Carrier” means a person engaged in the transportation of passengers or property by land or water as a common, contract, or private carrier, or by civil aircraft.

“Certifiable cabinet x-ray system” means an existing uncertified x-ray system that meets or has been modified to meet the certification requirements specified in 21 CFR 1020.40, revised April 1, 2013, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.

“Certificate holder” means a person who has been issued a certificate of compliance or other package approval by the Department or NRC.

“Certificate of Compliance” (CoC) means the certificate issued by the NRC under 10 CFR 71, Subpart D, (Revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.), which authorizes the design of a package for the transportation of radioactive material.

“Certified cabinet x-ray system” means an x-ray system that has been certified in accordance with 21 CFR 1010.2, as being manufactured and assembled on or after April 10, 1975, in accordance with the provisions of 21 CFR 1020.40, both sections revised April 1, 2013, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.

“CFR” means Code of Federal Regulations.

“Chelating agent” means amine polycarboxylic acids, hydroxycarboxylic acids, gluconic acid, and polycarboxylic acids.

“Civil penalty” means the monetary fine which may be imposed on licensees by the Department, pursuant to A.R.S. § 30-687, for violations of the Act, this Chapter, or license conditions.

“Collective dose” means the sum of the individual doses received in a given period of time by a specified population from exposure to a specified source of radiation.

“Committed dose equivalent” (HT,50) means the dose equivalent to organs or tissues of reference (T) that will be received from an intake of radioactive material by an individual during the 50-year period following the intake.

“Committed effective dose equivalent” (HE,50) is the sum of the products of the weighting factors applicable to each of the body organs or tissues that are irradiated and the committed dose equivalent to each of these organs or tissues (HE,50 = $\sum w_T HT,50$).

“Consortium” means an association of medical use licensees and a PET radionuclide production facility in the same geographical area that jointly own or share in the operation and maintenance cost of the PET radionuclide production facility that produces PET radionuclides for use in producing radioactive drugs within the consortium for noncommercial distributions among its associated members for medical use. The PET radionuclide production facility within the consortium must be located at an educational institution or a federal facility or a medical facility.

“Contamination” means the presence of a radioactive substance on a surface in quantities in excess of 0.4 Bq/cm^2 ($1 \times 10^{-5} \text{ } \mu\text{Ci/cm}^2$) for beta and gamma emitters and low toxicity alpha emitters, or 0.04 Bq/cm^2 ($1 \times 10^{-6} \text{ } \mu\text{Ci/cm}^2$) for all other alpha emitters.

“Fixed contamination” means contamination that cannot be removed from a surface during normal conditions of transport.

“Non-fixed contamination” means contamination that can be removed from a surface during normal conditions of transport.

“Criticality Safety Index (CSI)” means the dimensionless number (rounded up to the next tenth) assigned to and placed on the label of a fissile material package, to designate the degree of control of accumulation of packages, overpacks or freight containers containing fissile material during transportation. Determination of the criticality safety index is described in 10 CFR 71.22, 10 CFR 71.23, and 10 CFR 71.59. The criticality safety index for an overpack, freight container, consignment or conveyance



containing fissile material packages is the arithmetic sum of the criticality safety indices of all the fissile material packages contained within the overpack, freight container, consignment or conveyance.

“Curie” means a unit of quantity of radioactivity. One curie (Ci) is that quantity of radioactive material which decays at the rate of $3.7E + 10^{10}$ transformations per second (tps).

“Current license or registration” means a license or registration issued by the Department and for which the licensee has paid the license or registration fee for the current year according to R9-7-1304.

“Deep-dose equivalent” (Hd), which applies to external whole body exposure, is the dose equivalent at a tissue depth of 1 centimeter (1000 mg/cm²).

“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.

“Discrete source” means a radionuclide that has been processed so that its concentration within a material has been purposely increased for use for commercial, medical, or research activities.

“Dose” is a generic term that means absorbed dose, dose equivalent, effective dose equivalent, committed dose equivalent, committed effective dose equivalent, total organ dose equivalent, or total effective dose equivalent. For purposes of these rules, “radiation dose” is an equivalent term.

“Dose equivalent” (HT) means the product of the absorbed dose in tissue, quality factor, and all other necessary modifying factors at the location of interest. The units of dose equivalent are the sievert (Sv) and rem.

“Dose limits” means the permissible upper bound of radiation doses established in accordance with these rules. For purposes of these rules, “limits” is an equivalent term.

“Dosimeter” (See “Individual monitoring device”)

“Effective dose equivalent” (HE) means the sum of the products of the dose equivalent to each organ or tissue (HT) and the weighting factor (wT) applicable to each of the body organs or tissues that are irradiated ($HE = \sum wTHT$).

“Effluent release” means any disposal or release of radioactive material into the ambient atmosphere, soil, or any surface or subsurface body of water.

“Embryo/fetus” means the developing human organism from conception until the time of birth.

“Enclosed beam x-ray system” means an analytical x-ray system constructed in such a way that access to the interior of the enclosure housing the x-ray source during operation is precluded except through bypassing of interlocks or other safety devices to perform maintenance or servicing.

“Enclosed radiography” means industrial radiography conducted by using cabinet radiography or shielded room radiography.

“Cabinet radiography” means industrial radiography conducted by using an x-ray machine in an enclosure not designed for human admittance and which is so shielded that every location on the exterior meets the conditions for an “unrestricted area.”

“Shielded room radiography” means industrial radiography conducted using an x-ray machine in an enclosure designed for human admittance and which is so shielded that every location of the exterior meets the conditions for an “unrestricted area.”

“Entrance or access point” means any opening through which an individual or extremity of an individual could gain access to radiation areas or to licensed radioactive materials. This includes entry or exit portals of sufficient size to permit human entry, irrespective of their intended use.

“Exhibit” for purposes of these rules, is equivalent in meaning to the word “Schedule” as found in previously issued rules, current license conditions, and regulation guide.

“Explosive material” means any chemical compound, mixture, or device which produces a substantial instantaneous release of gas and heat spontaneously or by contact with sparks or flame.

“Exposure” means:

Being subjected to ionizing radiation or radioactive materials.

The quotient of dQ by dm where “dQ” is the absolute value of the total charge of the ions of one sign produced in air when all the electrons (negatrons and positrons) liberated by photons in a volume element of air having mass “dm” are completely stopped in air. The special unit of exposure is the roentgen (R).

“Exposure rate” means the exposure per unit of time.

“External dose” means that portion of the dose equivalent received from any source of radiation outside the body.

“Extremity” means ~~the shoulder girdle to the phalanges and the lower two thirds of the femur to the phalanges~~ hand, elbow, arm below the elbow, foot, knee, and leg below the knee.

“Fail-safe characteristics” means a design feature which causes beam port shutters to close, or otherwise prevents emergence of the primary beam, upon the failure of a safety or warning device.

“FDA” means the United States Food and Drug Administration.

“Field radiography” means industrial radiography, utilizing a portable or mobile x-ray system, which is not conducted in a shielded enclosure.

“Field station” means a facility where radioactive sources may be stored or used and from which equipment is dispatched to temporary job sites.



“Former U.S. Atomic Energy Commission (AEC) or U.S. Nuclear Regulatory Commission (NRC) licensed facilities” means nuclear reactors, nuclear fuel reprocessing plants, uranium enrichment plants, or critical mass experimental facilities where AEC or NRC licenses have been terminated.

“Generally applicable environmental radiation standards” means standards issued by the U.S. Environmental Protection Agency (EPA), 40 CFR 190 and 191, revised July 1, 2013, incorporated by reference, and available under R9-7-101, under the authority of the Atomic Energy Act of 1954, as amended, that impose limits on radiation exposures or levels, or concentrations or quantities of radioactive material, in the general environment outside the boundaries of locations under the control of persons possessing or using radioactive material. This incorporated material contains no future editions or amendments.

“Gray” (Gy) means the International System (SI) unit of absorbed dose and is equal to 1 joule per kilogram. One gray equals 100 rad.

“Hazardous waste” means those wastes designated as hazardous in A.R.S. § 49-921(5).

“Healing arts” means the practice of medicine, dentistry, osteopathy, podiatry, chiropractic, and veterinary medicine.

“Health care institution” means every place, institution, or building which provides facilities for medical services or other health-related services, not including private clinics or offices which do not provide overnight patient care.

“High radiation area” means an area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving a dose equivalent in excess of 1 mSv (0.1 rem) in one hour at 30 centimeters from the radiation source or 30 centimeters from any surface that the radiation penetrates.

“Human use” means the internal or external administration of radiation or radioactive materials to human beings.

“Impound” means to abate a radiological hazard. Actions which may be taken by the Department in impounding a source of radiation include seizing the source of radiation, controlling access to an area, and preventing a radiation machine from being utilized.

“Indian ~~tribe~~ Tribe” means an Indian or Alaska native ~~tribe~~ Tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian ~~tribe~~ Tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994, 25 U.S.C. 479a.

“Individual” means any human being.

“Individual monitoring” means the assessment of:

Dose equivalent

By the use of individual monitoring devices, or

By the use of survey data, or

Committed effective dose equivalent

By bioassay; or

By determination of the time-weighted air concentrations to which an individual has been exposed, that is, DAC-hours. (See the definition of DAC-hours in Article 4).

“Individual monitoring device” means a device designed to be worn by a single individual for the assessment of dose equivalent. For purposes of this Chapter, “dosimeter” and “personnel dosimeter,” are equivalent terms. Examples of individual monitoring devices are film badges, thermoluminescence dosimeters (TLDs), pocket ionization chambers, optical stimulation devices, and personal (“lapel”) air sampling devices.

“Individual monitoring equipment” means one or more individual monitoring devices. For purposes of this Chapter, “personnel monitoring equipment” is an equivalent term.

“Industrial radiography” means the examination of the macroscopic structure of materials by non-destructive methods utilizing sources of ionizing radiation.

“Injection tool” means a device used for controlled subsurface injection of radioactive tracer material.

“Inspection” means an examination or observation by a representative of the Department, including but not limited to tests, surveys, and monitoring to determine compliance with rules, orders, requirements and conditions of the License or certificate of registration.

“Interlock” means a device arranged or connected such that the occurrence of an event or condition is required before a second event or condition can occur or continue to occur.

“Internal dose” means that portion of the dose equivalent received from radioactive material taken into the body.

“Irradiate” means to expose to radiation.

“Laser” (light amplification by the stimulated emission of radiation) means any device which can produce or amplify electromagnetic radiation with ~~wave-lengths~~ wavelengths in the range of 180 nanometers to 1 millimeter primarily by the process of controlled stimulated emission.

“Lens dose equivalent” (LDE) means the external exposure of the lens of the eye and is taken as the dose equivalent at a tissue depth of 0.3 centimeters (300 mg/cm²).

“License” means the grant of authority, issued pursuant to Articles 3 and 14 of this Chapter and A.R.S. §§ 30-671, 30-672, and 30-721 et seq., to acquire, possess, transfer, and use sources of radiation. The types of licenses issued by the Department are described in R9-7-1302.



“Licensed material” means radioactive material received, possessed, used, transferred, or disposed of under a general or specific license issued by the Department.

“Licensed practitioner” means a person licensed or otherwise authorized by law to practice medicine, dentistry, osteopathy, chiropractic, podiatry, or naturopathy in this state.

“Licensee” means any person who is licensed by the Department under this Chapter to acquire, possess, transfer, or use sources of radiation.

“Licensing State” means any state having regulations equivalent to this Chapter relating to, and an effective program for the regulation of, naturally occurring and accelerator-produced radioactive material (NARM).

“Limits” (See “Dose limits”)

“Local components” means those parts of an analytical x-ray system that are struck by x-rays, including radiation source housings, port and shutter assemblies, collimator, sample holders, cameras, goniometer, detectors and shielding but not including power supplies, transformers, amplifiers, readout devices, and control panels.

“Logging supervisor” means the individual who provides personal supervision of the utilization of sources of radiation at the well site.

“Logging tool” means a device used subsurface to perform well logging.

“Lost or missing licensed or registered source of radiation” means licensed or registered source of radiation the location of which is unknown. Included are licensed radioactive material or a registered radiation source that has been shipped but has not reached its planned destination and whose location cannot be readily traced or ascertained in the transportation system.

“Low-level waste” means waste material which contains radioactive nuclides in concentrations or quantities which exceed applicable standards for unrestricted release but does not include:

High-level waste, such as irradiated reactor fuel, liquid waste from reprocessing irradiated reactor fuel, or solids into which any such liquid waste has been converted;

Waste material containing transuranic elements with contamination levels greater than 10 nanocuries per gram (370 kilobecquerels per kilogram) of waste material;

The tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.

“Low Specific Activity (LSA) material” means radioactive material with limited specific activity which is nonfissile or is excepted under 10 CFR 71.15, and which satisfies the descriptions and limits set forth in the following section. Shielding materials surrounding the LSA material may not be considered in determining the estimated average specific activity of the package contents. The LSA material must be in one of three groups:

LSA—I.

Uranium and thorium ores, concentrates of uranium and thorium ores, and other ores containing naturally occurring radionuclides that are intended to be processed for the use of these radionuclides;

Natural uranium, depleted uranium, natural thorium or their compounds or mixtures, provided they are unirradiated and in solid or liquid form;

Radioactive material other than fissile material, for which the A2 value is unlimited; or

Other radioactive material in which the activity is distributed throughout and the estimated average specific activity does not exceed 30 times the value for exempt material activity concentration determined in accordance with appendix A.

LSA—II.

Water with tritium concentration up to 0.8 TBq/liter (20.0 Ci/liter); or

Other radioactive material in which the activity is distributed throughout and the estimated average specific activity does not exceed 10–4 A2/g for solids and gases, and 10–5 A2/g for liquids.

LSA—III. Solids (e.g., consolidated wastes, activated materials), excluding powders, that satisfy the requirements of 10 CFR 71.77, in which:

The radioactive material is distributed throughout a solid or a collection of solid objects, or is essentially uniformly distributed in a solid compact binding agent (such as concrete, bitumen, ceramic, etc.);

The radioactive material is relatively insoluble, or it is intrinsically contained in a relatively insoluble material, so that even under loss of packaging, the loss of radioactive material per package by leaching, when placed in water for 7 days will not exceed 0.1 A2; and

The estimated average specific activity of the solid, excluding any shielding material, does not exceed 2 x 10–3A2/g.

“Major processor” means a user processing, handling, or manufacturing radioactive material exceeding Type A quantities as unsealed sources or material or exceeding four times Type B quantities as sealed sources but does not include nuclear medicine programs, universities, industrial radiographers, or small industrial programs. Type A and B quantities are defined in 10 CFR 71.4, revised January 1, 2013, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.

“Medical dose” means a radiation dose intentionally delivered to an individual for medical examination, diagnosis, or treatment.

“Member of the public” means any individual except when that individual is receiving an occupational dose.

“MeV” means Mega Electron Volt which equals 1 million volts (106 eV).



“Mineral logging” means any well logging performed in a borehole drilled for the purpose of exploration for minerals other than oil or gas.

“Minor” means an individual less than 18 years of age.

“Monitoring” means the measurement of radiation, ~~radio active~~ radioactive material concentrations, surface area activities, or quantities of radioactive material, and the use of the results of these measurements to evaluate potential exposures and doses. For purposes of these rules, “radiation monitoring” and “radiation protection monitoring” are equivalent terms.

“Multiplier” means a letter representing a number. The use of a multiplier is based on the code given below:

Prefix	Multiplier Symbol	Value
eka	E	10 ¹⁸
peta	P	10 ¹⁵
tera	T	10 ¹²
giga	G	10 ⁹
mega	M	10 ⁶
kilo	k	10 ³
milli	m	10 ⁻³
micro	u	10 ⁻⁶
nano	n	10 ⁻⁹
pico	p	10 ⁻¹²
femto	f	10 ⁻¹⁵
atto	a	10 ⁻¹⁸

“NARM” means any naturally occurring or accelerator-produced radioactive material. It does not include byproduct, source, or special nuclear material. This term should not be confused with “NORM” which is defined as naturally occurring radioactive material.

“Normal operating procedures” means the entire set of instructions necessary to accomplish the intended use of the source of radiation. These procedures shall include, but are not limited to, sample insertion and manipulation, equipment alignment, routine maintenance by the licensee, and data recording procedures which are related to radiation safety.

“Natural radioactivity” means the radioactivity of naturally occurring radioactive substances.

“NRC” means Nuclear Regulatory Commission, the U.S. Nuclear Regulatory Commission, or its duly authorized representatives.

“NRC Document Control Desk” means the Nuclear Regulatory Document Control Desk. ATTN: Document Control Desk, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

“Nuclear waste” means any highway route controlled quantity (defined in 49 CFR 173.403, revised October 1, 2012, incorporated by reference, and available under R9-7-101; this incorporated material contains no future editions or amendments) of source, byproduct, or special nuclear material required to be in NRC-approved packaging while transported to, through, or across state boundaries to a disposal site, or to a collection point for transport to a disposal site. Additional requirements associated with transportation of radioactive material can be found in Article 15.

“Occupational dose” means the dose received by an individual in the course of employment in which the individual’s assigned duties involve exposure to sources of radiation, whether in the possession of a licensee, registrant, or other person. Occupational dose does not include a dose received from background radiation, medical administration of radiation to the individual, exposure to an individual who has been administered radioactive material and released in accordance with R9-7-717, voluntary participation in a medical research program, or as a member of the public.

“Open beam system” means an analytical x-ray system in which an individual could place some body part in the primary beam path during normal operation.

“Package” means the packaging together with its radioactive contents as presented for transport.

“Particle accelerator” (See “Accelerator”)

“Permanent radiographic installation” means a fixed, shielded installation or structure designed or intended for industrial radiography and in which industrial radiography is regularly performed.

“Personnel dosimeter” (See “Individual monitoring device”)

“Personnel monitoring equipment” (See “Individual monitoring device”)

“Personal supervision” means supervision in which the supervising individual is physically present at the site where sources of radiation and associated equipment are being used, watching the performance of the supervised individual and in such proximity that immediate assistance can be given if required.

“PET” (See Positron Emission Tomography (PET))

“Pharmacist” means an individual licensed by this state to compound and dispense drugs, prescriptions, and poisons.



“Physician” means an individual licensed pursuant to A.R.S. Title 32, Chapters 13 or 17.

“Positron Emission Tomography (PET)” means an imaging technique using radionuclides to produce high resolution images of the body’s biological functions.

“Positron Emission Tomography radionuclide production facility” means a facility operating a cyclotron or accelerator for the purpose of producing PET radionuclides.

“Preceptor” means an individual who provides, directs, or verifies training and experience required for an individual to become an authorized user, an authorized medical physicist, an authorized nuclear pharmacist, or a Radiation Safety Officer.

“Primary beam” means radiation which passes through an aperture of the source housing by a direct path from the x-ray tube or a radioactive source located in the radiation source housing.

“Public dose” means the dose received by a member of the public from radiation from radioactive material released by a licensee or registrant, or exposure to a source of radiation used in a licensed or registered operation. It does not include an occupational dose or a dose received from background radiation, medical administration of radiation to the individual, exposure to an individual who has been administered radioactive material and released in accordance with R9-7-717, or voluntary participation in a medical research program.

“Pyrophoric liquid” means any liquid that ignites spontaneously in dry or moist air at or below 130° F (54.4° C).

“Pyrophoric solid” means any solid material, other than one classed as an explosive, which under normal conditions is liable to cause fires through friction, retained heat from manufacturing or processing, or which can be ignited readily and, when ignited, burns so vigorously and persistently that it creates a serious transportation, handling, or disposal hazard. Included are spontaneously combustible and water-reactive materials.

“Qualified expert” means an individual certified in the appropriate field by the American Board of Radiology or the American Board of Health Physics, or having equivalent qualifications that provide the knowledge and training to measure ionizing radiation, to evaluate safety techniques, and to advise regarding radiation protection needs; or an individual certified in Therapeutic Radiological Physics or X-ray and Radium Physics by the American Board of Radiology, or having equivalent qualifications that provide training and experience in the clinical applications of radiation physics to radiation therapy, to calibrate radiation therapy equipment. The detailed requirements for a particular qualified expert may be provided in the respective Articles of this Chapter. For clarification purposes, a qualified expert is not always an authorized medical physicist; however, an authorized medical physicist is included within the definition of “qualified expert.”

“Quality Factor” (Q) means the modifying factor, listed in Tables I and II of this Article, that is used to derive dose equivalent from absorbed dose.

“Quarter” (See “Calendar quarter”)

“Rad” means the special unit of absorbed dose. One rad equals 100 ergs per gram, or 0.01 gray.

“Radiation” means alpha particles, beta particles, gamma rays, x-rays, neutrons, high-speed electrons, high-speed protons, and other particles capable of producing ions. For purposes of these rules, this term is synonymous with ionizing radiation. Equivalent terminology for non-ionizing radiation is defined in Article 14.

“Radiation area” means any area accessible to individuals, in which radiation levels could result in an individual receiving a dose equivalent in excess of 0.05 mSv (0.005 rem) in one hour at 30 centimeters from the source of radiation or from any surface that the radiation penetrates.

“Radiation dose” (See “Dose”)

“Radiation machine” means any device capable of producing radiation except those devices with radioactive material as the only source of radiation.

“Radiation Safety Officer” (RSO) means the individual and who for license conditions:

Meets the requirements in 10 CFR 35.50(a) or (c)(1) and 10 CFR 35.59, (revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.); or is identified as a Radiation Safety Officer on a specific medical use license issued by the NRC or an Agreement State; or a medical use permit issued by a NRC master material licensee;

Or, who, for registration conditions, is designated by the registrant as the individual who has the knowledge, authority, and responsibility to apply appropriate radiation protection principles to ensure radiation safety and compliance with the Act, this Chapter and any registration conditions.

“Radiation Safety Officer” (RSO) means the individual and who for license conditions:

Meets the requirements of R9-7-407, and for a medical license meets the training requirements of R9-7-710 or is identified as a Radiation Safety Officer on a specific medical use license issued by the Department, the NRC, or another Agreement State; or a medical use permit issued by a NRC master material licensee;

Or, who meets the requirements in R9-7-512 on a specific industrial license issued by the Department, the NRC, or another Agreement State; or an industrial use permit issued by a NRC master material licensee;

Or, who, for registration conditions, is designated by the registrant as the individual who has the knowledge, authority, and responsibility to apply appropriate radiation protection principles to ensure radiation safety and compliance with the Act, this Chapter and any registration conditions.

“Radioactive marker” means radioactive material placed subsurface or on a structure intended for subsurface use for the purpose of depth determination or direction orientation.



“Radioactive material” means any solid, liquid, or gas which emits radiation spontaneously.

“Radioactivity” means emission of electromagnetic energy or particles or both during the transformation of unstable atomic nuclei.

“Radiographer” means any individual who performs or personally supervises industrial radiographic operations and who is responsible to the licensee or registrant for assuring compliance with the requirements of this Chapter and all conditions of the license or certificate of registration.

“Radiographer’s assistant” means any individual who, under the personal supervision of a radiographer, uses sources of radiation, radiographic exposure devices, related handling tools, or survey instruments in industrial radiography.

“Registrant” means any person who is registered with the Department and is legally obligated to register with the Department pursuant to these rules and the Act.

“Registration” is the process by which a person becomes a registrant pursuant to Article 2 or 14 of this Chapter. With the exception of registration of persons who install or service radiation machines, the types of registrations issued by the Department are described in R9-7-1302.

“Regulations of the U.S. Department of Transportation” means the federal regulations in 49 CFR 107, 171 through 180, revised October 1, 2013, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.

“Rem” means the special unit of dose equivalent (see “Dose equivalent”). The dose equivalent in rem is equal to the absorbed dose in rad multiplied by the quality factor (1 rem = 0.01 sievert).

“Research and Development” means exploration, experimentation, or the extension of investigative findings and theories of a scientific or technical nature into practical application for experimental and demonstration purposes, including the experimental production and testing of models, devices, equipment, materials, and processes. Research and Development does not include the internal or external administration of radiation or radioactive material to human beings.

“Restricted area” means any area where the licensee or registrant controls access for purposes of protecting individuals from exposure to radiation and radioactive material. A restricted area does not include any areas used for residential quarters, although a room or separate rooms in a residential building may be set apart as a restricted area.

“Roentgen” (R) means the special unit of exposure and is equal to the quantity of x or gamma radiation which causes ionization in air equal to 258 microcoulomb per kilogram (see “Exposure”).

“Safety system” means any device, program, or administrative control designed to ensure radiation safety.

“Sealed source” means radioactive material that is permanently bonded or fixed in a capsule or matrix designed to prevent release and dispersal of the radioactive material under the most severe conditions which are likely to be encountered in normal use and handling.

“Sealed Source and Device Registry” means the national registry that contains all the registration certificates, generated by both the NRC and the Agreement States, that summarize the radiation safety information for the sealed sources and devices and describe the licensing and use conditions approved for each source or device.

“Shallow dose equivalent” (HS), which applies to the external exposure of the skin of the whole body or the skin of an extremity, is taken as the dose equivalent at a tissue depth of 0.007 centimeter (7 mg/cm²).

“Shielded position” means the location within a radiographic exposure device or storage container which, by manufacturer’s design, is the proper location for storage of the sealed source.

“Sievert” means the SI unit of dose equivalent (see “Dose equivalent”). The dose equivalent in sievert is equal to the absorbed dose in gray multiplied by the quality factor (1 Sv = 100 rem).

“Site boundary” means that line beyond which the land or property is not owned, leased, or otherwise controlled by the licensee or registrant.

“Source changer” means a device designed and used for replacement of sealed sources in radiographic exposure devices, including those also used for transporting and storage of sealed sources.

“Source holder” means a housing or assembly into which a radioactive source is placed for the purpose of facilitating the handling and use of the source in well-logging operations.

“Source material” means:

Uranium or thorium, or any combination of uranium or thorium, in any physical or chemical form; or

Ores that contain by weight 1/20 of 1 percent (0.05 percent) or more of uranium, thorium, or any combination of uranium and thorium.

Source material does not include special nuclear material.

“Source material milling” means any activity that results in the production of byproduct material as defined by the second subsection under the definition of “Byproduct material.”

“Source of radiation” or “source” means any radioactive material or any device or equipment emitting, or capable of producing, radiation.

“Special form radioactive material” means radioactive material that satisfies all of the following conditions:

It is either a single solid piece or is contained in a sealed capsule that can be opened only by destroying the capsule;

The piece or capsule has at least one dimension not less than 5 millimeters (0.2 inch); and



It satisfies the test requirements specified in 10 CFR 71.75, revised January 1, 2013, incorporated by reference, available under R9-7-101. This incorporated material contains no future editions or amendments. A special form encapsulation designed in accordance with the U.S. Nuclear Regulatory Commission requirements in effect on June 30, 1983, and constructed prior to July 1, 1985, may continue to be used. A special form encapsulation ~~constructed after June 30, 1985, shall meet requirements of this definition applicable at the time of its construction~~ designed in accordance with the requirements of 10 CFR 71.4 in effect on March 31, 1996 (see 10 CFR part 71, revised as of January 1, 1996), and constructed before April 1, 1998; and special form material that was successfully tested before September 10, 2015 in accordance with the requirements of 10 CFR 71.75(d) in effect before September 10, 2015 may continue to be used. Any other special form encapsulation must meet the specifications of this definition.

“Special nuclear material in quantities not sufficient to form a critical mass” means Uranium enriched in the isotope U-235 in quantities not exceeding 350 grams of contained U-235; Uranium-233 in quantities not exceeding 200 grams; Plutonium in quantities not exceeding 200 grams; or any combination of them in accordance with the following formula: for each kind of special nuclear material, determine the ratio between the quantity of that special nuclear material and the quantity specified above for the same kind of special nuclear material. The sum of such ratios for all of the kinds of special nuclear material in combination shall not exceed one. For example, the following quantities in combination would not exceed the limitation and are within the formula:

$$\frac{XgmsU235}{350} + \frac{YgmsU233}{200} + \frac{ZgmsPu}{200} \leq 1$$

“Storage area” means any location, facility, or vehicle which is used to store, transport, or secure a radiographic exposure device, storage container, sealed source, or other source of radiation when it is not in use.

“Storage container” means a device in which sealed sources are transported or stored.

“Subsurface tracer study” means the release of a substance tagged with radioactive material for the purpose of tracing the movement or position of the tagged substance in the well-bore or adjacent formation.

“Survey” means an evaluation of the production, use, release, disposal, or presence of sources of radiation or any combination thereof under a specific set of conditions to determine actual or potential radiation hazards. Such evaluations include, but are not limited to, tests, physical examination and measurements of levels of radiation or concentration of radioactive material present.

“TEDE” (See “Total Effective Dose Equivalent”)

“Teletherapy” means therapeutic irradiation in which the source of radiation is at a distance from the body.

“Temporary job site” means any location where sources of radiation are used other than the specified locations listed on a license document. Storage of sources of radiation at a temporary jobsite shall not exceed six months unless the Department has granted an amendment authorizing storage at that jobsite.

“Test” means the process of verifying compliance with an applicable rule, order, or license condition.

“These rules” means all Articles of 9 A.A.C. 7.

“Total Effective Dose Equivalent” (TEDE) means the sum of the effective dose equivalent (for external exposures) and the committed effective dose equivalent (for internal exposures).

“Total Organ Dose Equivalent” (TODE) means the sum of the deep-dose equivalent and the committed dose equivalent to the organ receiving the highest dose. Determination of TODE is described in R9-7-411.

“Tribal official” means the highest ranking individual that represents Tribal leadership, such as the Chief, President, or Tribal Council leadership.

“Unrefined and unprocessed ore” means ore in its natural form prior to 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.

“Unrestricted area” means any area access to which is not controlled by the licensee for purposes of protection of individuals from exposure to radiation and radioactive material. Any area used for residential quarters is an unrestricted area.

“Uranium - natural, depleted, enriched.”

Natural uranium means uranium (which may be chemically separated) with the naturally occurring distribution of uranium isotopes (approximately 0.711 weight percent uranium-235, and the remainder by weight essentially uranium-238).

Depleted uranium means uranium containing less uranium-235 than the naturally occurring distribution of uranium isotopes.

Enriched uranium means uranium containing more uranium-235 than the naturally occurring distribution of uranium isotopes.

“U.S. Department of Energy” means the Department of Energy established by P.L. 95-91, August 4, 1977, 91 Stat. 565, 42 U.S.C. 7101 et seq., to the extent that the Department of Energy exercises functions formerly vested in the U.S. Atomic Energy Commission, its Chairman, members, officers, and components; and transferred to the U.S. Energy Research and Development Administration and to the administrator of that agency under sections 104(b), (c), and (d) of the Energy Reorganization Act of 1974 (P.L. 93-438, October 11, 1974, 88 Stat. 1233 at 1237, 42 U.S.C. 5814, effective January 19, 1975) and retransferred to the Secretary of Energy under Section 301(a) of the Department of Energy Organization Act (P.L. 95-91, August 4, 1977, 91 Stat. 565 at 577-578, 42 U.S.C. 7151, effective October 1, 1977).



“Very high radiation area” means an area, accessible to individuals, in which radiation levels from radiation sources external to the body could result in an individual receiving an absorbed dose that exceeds 5 grays (500 rads) in one hour at one meter from a radiation source or one meter from any surface that the radiation penetrates.

“Waste” (See “Low-level waste”)

“Waste handling licensees” means persons licensed to receive and store radioactive wastes prior to disposal and persons licensed to dispose of radioactive waste.

“Week” means seven consecutive days starting on Sunday.

“Well-bore” means a drilled hole in which wireline service operations and subsurface tracer studies are performed.

“Well-logging” means the lowering and raising of measuring devices or tools which may contain sources of radiation into well-bores or cavities for the purpose of obtaining information about the well and adjacent formations.

“Whole body” means, for purposes of external exposure, head, trunk including male gonads, arms above the elbow, or legs above the knee.

“Wireline” means an armored cable containing one or more electrical conductors which is used to lower and raise logging tools in the well-bore.

“Wireline service operation” means any evaluation or mechanical service which is performed in the well-bore using devices on a wireline.

“Worker” means any individual engaged in work under a license or registration issued by the Department and controlled by employment or contract with a licensee or registrant.

“WL” means working level, any combination of short-lived radon daughters in 1 liter of air that will result in the ultimate emission of $1.3E + 5$ MeV of potential alpha particle energy. The short-lived radon daughters are – for radon-222: polonium-218, lead-214, bismuth-214, and polonium-214; and for radon-220: polonium-216, lead-212, bismuth-212, and polonium-212.

“WLM” means working level month, an exposure to one working level for 170 hours (2,000 working hours per year divided by 12 months per year is approximately equal to 170 hours per month).

“Workload” means the degree of use of an x-ray or gamma-ray source per unit time.

“Year” means the period of time beginning in January used to determine compliance with the provisions of these rules. The licensee or registrant may change the starting date of the year used to determine compliance by the licensee or registrant provided that the change is made at the beginning of the year and that no day is omitted or duplicated in consecutive years.

R9-7-103. Exemptions

- A. Common and contract carriers, freight forwarders, and warehousemen who are subject to 49 CFR 107.109, 107.111, 107.113, 171.2, 171.3, 172.200, 173.1, 173.3, 173.4, 173.401, 175.3, 175.10, 176.3, 176.5, 176.11, 176.24, 176.27, and 177.801, revised October 1, 2007, of the U.S. Department of Transportation, or 39 CFR 111.1 of the U.S. Postal Service, revised July 1, 2007, incorporated by reference, and available under R9-7-101, and who if need be, store radioactive material, for periods of less than 72 hours, in the regular course of their carriage for another, are exempt from this Chapter. The incorporated materials above contain no future editions or amendments.
- B. Any U.S. Department of Energy contractor or subcontractor and any U.S. Nuclear Regulatory Commission contractor or subcontractor of the following categories operating within this state are exempt from this Chapter to the extent that such contractor or subcontractor under the contract receives, possesses, uses, transfers, or acquires sources of radiation:
1. Prime contractors performing work for the Department of Energy at U.S. Government-owned or controlled sites, including the transportation of sources of radiation to or from such sites and the performance of contract services during temporary interruptions of such transportation;
 2. Prime contractors of the Department of Energy performing research or development, manufacture, storage, testing or transportation of nuclear weapons or components thereof;
 3. Prime contractors of the Department of Energy using or operating nuclear reactors or other nuclear devices in a United States Government-owned vehicle or vessel; and
 4. Any other prime contractor or subcontractor of the Department of Energy or of the Nuclear Regulatory Commission when the state and the Nuclear Regulatory Commission jointly determine:
 - a. That the exemption of the prime contractor or subcontractor is authorized by law; and
 - b. That under the terms of the contract or subcontract, there is adequate assurance that the work thereunder can be accomplished without undue risk to the public health and safety.
- C. Any licensee who delivers to a carrier for transport any package which contains radioactive material having a specific activity of 74 kBq/kg (2 nanocuries per gram) or less, is exempt from the provisions of this Chapter with respect to that package.
- D. Any physician licensed by a State to dispense drugs in the practice of medicine is exempt from 10 CFR 71.5 with respect to transport by the physician of licensed material for use in the practice of medicine. However, any physician operating under this exemption must be licensed under 10 CFR part 35 and/or R9-7-703.

ARTICLE 3. RADIOACTIVE MATERIAL LICENSING

R9-7-302. Source Material; Exemptions

- A. Any person is exempt from this Article to the extent the person receives, possesses, uses, delivers or transfers source material in any chemical mixture, compound, solution, or alloy in which the source material is by weight less than 1/20th of 1 percent (0.0005) of the mixture, compound, solution, or alloy.
- B. Any person is exempt from this Article to the extent the person receives, possesses, uses, or transfers unrefined and unprocessed ore containing source material, provided that, the person does not refine or process the ore except as authorized in a specific license.



- C. Any person is exempt from this Article if the person receives, possesses, uses, or transfers:
 - 1. Any quantities of thorium contained in:
 - a. Incandescent gas mantles;
 - b. Vacuum tubes;
 - c. Welding rods;
 - d. Electric lamps for illuminating purposes provided that each lamp does not contain more than 50 milligrams of thorium;
 - e. Germicidal lamps, sunlamps, and lamps for outdoor or industrial lighting, provided that each lamp does not contain more than 2 grams of thorium;
 - f. Rare earth metals, compounds, mixtures, or products containing not more than 0.25 percent by weight thorium, uranium, or any combination of thorium and uranium; or
 - g. Individual neutron dosimeters, provided that each dosimeter does not contain more than 50 milligrams of thorium;
 - 2. Source material contained in the following products:
 - a. Glazed ceramic tableware manufactured before August 27, 2013, provided that the glaze contains not more than 20 percent source material by weight;
 - b. Glassware containing not more than 2 percent by weight source material, glass enamel, and glass enamel frit containing not more than 10 percent source material by weight, but not including commercially manufactured glass brick, pane glass, ceramic tile or other glass, glass enamel or ceramic used in construction; or
 - c. Piezoelectric ceramic containing not more than 2 percent source material by weight;
 - 3. Photographic film, negatives, and prints containing uranium or thorium;
 - 4. Any finished product or part fabricated of, or containing, tungsten-thorium or magnesium-thorium alloys, provided that the thorium content of the alloy does not exceed 4 percent by weight and that the exemption contained in this subsection does not authorize the chemical, physical, or metallurgical treatment or processing of the finished product or part;
 - 5. Uranium contained in counterweights installed in aircraft, rockets, projectiles, and missiles, or stored or handled in connection with installation or removal of counterweights, provided that:
 - a. The counterweights are manufactured in accordance with a specific license issued by the U.S. Nuclear Regulatory Commission, authorizing distribution by the licensee according to 10 CFR 40;
 - b. Each counterweight has been impressed with the following legend clearly legible through any plating or other covering: "DEPLETED URANIUM";
 - c. Each counterweight is durably and legibly labeled or marked with the identification of the manufacturer and the statement: "UNAUTHORIZED ALTERATIONS PROHIBITED"; and
 - d. The exemption contained in this item does not authorize the chemical, physical, or metallurgical treatment or processing of any counterweight other than repair or restoration of any plating or other covering; and
 - e. The requirements specified in subsections (C)(5)(b) and (c) do not apply to counterweights manufactured prior to December 31, 1969; provided, that these counterweights are impressed with the legend, "CAUTION – RADIOACTIVE MATERIAL – URANIUM."
 - 6. Natural or depleted uranium metal used as shielding and constituting part of any shipping container; provided that:
 - a. The shipping container is conspicuously and legibly impressed with the legend "CAUTION – RADIOACTIVE SHIELDING – URANIUM," and
 - b. The uranium metal is encased in mild steel or equally fire resistant metal with minimum wall thickness of 1/8 inch (3.2 mm).
 - 7. Thorium contained in finished optical lenses, provided that each lens does not contain more than 30 percent of thorium by weight, and that the exemption contained in this item does not authorize either:
 - a. The shaping, grinding, or polishing of a thoriated lens or manufacturing processes other than the assembly of a thoriated lens into optical systems and devices without any alteration of the lens; or
 - b. The receipt, possession, use, or transfer of thorium contained in contact lenses, spectacles, or the eyepieces of binoculars or other optical instruments;
 - 8. Uranium contained in detector heads of fire detection units, provided that each detector head contains not more than 5 nanocuries (185 Bq) of uranium; or
 - 9. Thorium contained in any finished aircraft engine part containing nickel-thoria alloy, provided that:
 - a. The thorium is dispersed in the nickel-thoria alloy in the form of finely divided thoria (thorium dioxide), and
 - b. The thorium content in the nickel-thoria alloy does not exceed 4 percent by weight.
- D. The exemptions in subsection (C) do not authorize the manufacture of any of the products described.

R9-7-303. Radioactive Material Other Than Source Material; Exemptions

- A. Exempt concentrations
 - 1. Except as provided in subsection (A)(3) and (A)(4), any person is exempt from this Article if the person receives, possesses, uses, transfers, owns, or acquires products or materials containing radioactive material in concentrations not in excess of those listed in Exhibit A.
 - 2. This Section shall not be deemed to authorize the import of radioactive material or products containing radioactive material.
 - 3. A manufacturer, processor, or producer of a product or material is exempt from the requirements for a license issued under R9-7-311(A) or the requirements of this Article to the extent that this person transfers radioactive material contained in a product or material in concentrations not in excess of those specified in Exhibit A of this Article and introduced into the product or material by a licensee holding a specific license issued by the NRC expressly authorizing such introduction. This exemption does not apply to the transfer of radioactive material contained in any food, beverage, cosmetic, drug, or other commodity or product designed for ingestion or inhalation by, or application to, a human being.



4. A person shall not introduce radioactive material into a product or material knowing or having reason to believe that it will be transferred to persons exempt under subsection (A)(1) or equivalent Regulations of the U.S. Nuclear Regulatory Commission or any Agreement State or Licensing State, except in accordance with a license issued under 10 CFR 32.11.
- B. Exempt items**
1. Except for persons who apply radioactive material to, or persons who incorporate radioactive material into the following products, or persons who initially transfer for sale or distribution the following products, a person is exempt from this Chapter to the extent that the person receives, possesses, uses, transfers, owns, or acquires the following products:
 - a. Timepieces, hands, or dials containing not more than the following specified quantities of radioactive material and not exceeding the following specified levels of radiation:
 - i. 925 megabecquerels (25 millicuries) of tritium per timepiece;
 - ii. 185 megabecquerels (5 millicuries) of tritium per hand;
 - iii. 555 megabecquerels (15 millicuries) of tritium per dial (bezels when used shall be considered part of the dial);
 - iv. 3.7 megabecquerels (100 microcuries) of promethium-147 per watch or 7.4 megabecquerels (200 microcuries) of promethium-147 per any other timepiece;
 - v. 740 kBq (20 microcuries) of promethium-147 per watch hand or 1.48 megabecquerels (40 microcuries) of promethium-147 per other timepiece hand;
 - vi. 2.22 megabecquerels (60 microcuries) of promethium-147 per watch dial or 4.44 MBq (120 microcuries) of promethium-147 per other timepiece dial (bezels, when used, shall be considered part of the dial);
 - vii. The levels of radiation from hands and dials containing promethium-147 shall not exceed, when measured through 50 milligrams per square centimeter of absorber:
 - (1) For wrist watches, 1.0 μ Gy (0.1 millirad) per hour at 10 centimeters from any surface of the watch;
 - (2) For pocket watches, (0.1 millirad) per hour at 1 centimeter from any surface;
 - (3) For any other timepiece, 2.0 μ Gy (0.2 millirad) per hour at 10 centimeters from any surface;
 - viii. 37 kBq (1 microcurie) of radium-226 per timepiece in intact timepieces manufactured prior to November 30, 2007;
 - b. Static elimination devices which contain, as a sealed source or sources, radioactive material consisting of a total of not more than 18.5 MBq (500 μ Ci) of polonium-210 per device.
 - i. Ion generating tubes designed for ionization of air that contain, as a sealed source or sources, radioactive material consisting of a total of not more than 18.5 MBq (500 μ Ci) of polonium-210 per device or of a total of not more than 1.85 GBq (50 mCi) of hydrogen-3 (tritium) per device.
 - ii. Such devices authorized before October 23, 2012 for use under the general license then provided in R9-7-306 and equivalent regulations of the NRC or Agreement State and manufactured, tested, and labeled by the manufacturer in accordance with the specifications contained in a specific license issued by the NRC.
 - c. Balances of precision containing not more than 37 megabecquerels (1 millicurie) of tritium per balance or not more than 18.5 megabecquerels (0.5 millicurie) of tritium per balance part manufactured before December 17, 2007;
 - d. Marine compasses containing not more than 27.75 gigabecquerels (750 millicuries) of tritium gas and other marine navigational instruments containing not more than 9.25 gigabecquerels (250 millicuries) of tritium gas manufactured before December 17, 2007;
 - e. Ionization chamber smoke detectors containing not more than 37 kBq (1 microcurie) of americium-241 per detector in the form of a foil and designed to protect life and property from fires;
 - f. Electron tubes: Provided that each tube does not contain more than one of the following specified quantities of radioactive material:
 - i. 5.55 GBq (150 millicuries) of tritium per microwave receiver protector tube or 370 megabecquerels (10 millicuries) of tritium per any other electron tube;
 - ii. 37 kBq (1 microcurie) of cobalt 60;
 - iii. 185 kBq (5 microcuries) of nickel 63;
 - iv. 1.11 megabecquerels (30 microcuries) of krypton 85;
 - v. 185 kBq (5 microcuries) of cesium 137;
 - vi. 1.11 megabecquerels (30 microcuries) of promethium-147;
 - vii. And provided further, that the level of radiation due to radioactive material contained in each electron tube does not exceed 10 μ Gy (1 millirad) per hour at 1 centimeter from any surface when measured through 7 milligrams per square centimeter of absorber. The term "electron tubes" includes spark gap tubes, power tubes, gas tubes, including glow lamps, receiving tubes, microwave tubes, indicator tubes, pick-up tubes, radiation detection tubes, and any other completely sealed tube that is designed to conduct or control electrical current;
 - g. Ionizing radiation measuring instruments containing, for purposes of internal calibration or standardization, one or more sources of radioactive material provided that:
 - i. Each source contains no more than one exempt quantity set forth in Exhibit B of this Article; and
 - ii. Each instrument contains no more than 10 exempt quantities. For the purposes of this subsection, an instrument's source or sources may contain either one type or different types of radionuclide and an individual exempt quantity may be composed of fractional parts of one or more of the exempt quantities in Exhibit B of this Article, provided the sum of the fractions do not exceed unity;
 - iii. For the purposes of subsection (B)(1)(h) only, 185 kBq (50 nanocurie) of americium-241 is considered an exempt quantity under Exhibit B of this Article;
 - h. Any person who desires to apply radioactive material to, or to incorporate radioactive material into, the products exempted in subsection (B)(1)(a), or who desires to initially transfer for sale or distribution such products containing radioactive material, should apply for a specific license pursuant to R9-7-311 of this Article, which license states that the product may be distributed by the licensee to persons exempt from the rules pursuant ~~R9-7-303(A)(1)~~ to subsection (A)(1).



- 2. Self-luminous products containing tritium, krypton-85, or promethium-147:
 - a. Except for persons who manufacture, process, initially transfer for sale or distribution, or produce self-luminous products containing tritium, krypton-85, or promethium-147, and except as provided in ~~paragraph (e) of this subsection~~ (B)(2)(c), a person is exempt from this Chapter if the person receives, possesses, uses, owns, transfers or acquires tritium, krypton-85 or promethium-147 in self-luminous products manufactured, processed, produced, imported, initially transferred for sale or distribution, or transferred under a specific license issued by the U.S. Nuclear Regulatory Commission and described in 10 CFR 32.22, and the license authorizes the transfer of the products 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~~ krypton-85, or promethium-147 for use under ~~paragraph (a) of this subsection~~ subsection (B)(2)(a), should apply for a license:
 - i. Under 10 CFR 32 and for a certificate of registration in accordance with 10 CFR 32.210, and
 - ii. As described in R9-7-311.
 - e. ~~The exemption in paragraph (a) of this subsection does not apply to tritium, krypton-85, or promethium-147 used in products for primarily frivolous purposes or in toys or adornments.~~
 - ~~d.c.~~ A person is exempt from this Chapter if the person receives, possesses, uses, or transfers articles containing less than 3.7 kBq (100 nanocuries) of radium-226, manufactured prior to October 1, 1978.
- 3. Gas and aerosol detectors containing ~~radioactive byproduct~~ material
 - a. Except for persons who manufacture, process, initially transfer for sale or distribution, or produce gas and aerosol detectors containing radioactive material, a person is exempt from this Chapter if the person receives, possesses, uses, transfers, owns, or acquires radioactive material in gas and aerosol detectors designed to protect life or property from fires and airborne hazards, provided that detectors containing radioactive material shall be manufactured, imported, or transferred according to a specific license issued by the U.S. Nuclear Regulatory Commission and described in 10 CFR 32.26, or equivalent regulations of an Agreement or Licensing State, this exemption also covers gas and aerosol detectors manufactured or distributed before November 30, 2007 in accordance with a specific license issued by the U.S. Nuclear Regulatory Commission, or equivalent regulations of an Agreement or Licensing State and the license authorizes the transfer of the detectors to persons who are exempt from regulatory requirements.
 - 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 subsection, should apply for a license described in R9-7-344. Gas and aerosol detectors previously manufactured and distributed to general licensees in accordance with a specific license issued by an Agreement State are exempt under subsection (B)(3)(a), provided that the device is labeled in accordance with the specific license authorizing distribution of the general licensed device, and that the detectors meet the requirements of the regulations of the U.S. Nuclear Regulatory Commission.~~
 - c. ~~Gas and aerosol detectors previously manufactured and distributed to general licensees in accordance with a specific license issued by an Agreement State are exempt under subsection (B)(4)(a), provided that the device is labeled in accordance with the specific license authorizing distribution of the general licensed device, and that the detectors meet the requirements of the regulations of the U.S. Nuclear Regulatory Commission. 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 subsection (B)(3)(a), should apply for a license under 10 CFR 32.26 and for a certificate of registration in accordance with 10 CFR 32.210.~~
- 4. Certain industrial devices
 - 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 requirements for a license set forth in this Chapter 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 R9-7-311 of this Article, 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 (1) of this subsection~~ (B)(4)(a), shall apply for a license described in R9-7-311 and for a certificate of registration in accordance with 10 CFR 32.210.

C. Exempt quantities

- 1. Except as provided in subsections (C)(2), (3), and (7), a person is exempt from this Chapter if the person receives, possesses, uses, transfers, owns, or acquires radioactive material in individual quantities each of which does not exceed the applicable quantity set forth in Exhibit B of this Article.
- 2. This subsection does not authorize the production, packaging, or repackaging or transfer of radioactive material for purposes of commercial distribution, or the incorporation of radioactive material into products intended for commercial distribution.
- 3. Except as specified in this subsection, a person shall not, for purposes of commercial distribution, transfer radioactive material in the individual quantities set forth in Exhibit B of this Article, knowing or having reason to believe the described quantities of radioactive material will be transferred to persons exempt under subsection (C) or equivalent regulations of the U.S. Nuclear Regulatory Commission or any Agreement State or Licensing State. A person may transfer radioactive material for commercial distribution under a specific license issued by the U.S. Nuclear Regulatory Commission under 10 CFR 32.18 which license states that the radioactive material may be transferred by the licensee to persons exempt under this subsection or the equivalent regulations of the U.S. Nuclear Regulatory Commission or any Agreement State or Licensing State.



4. Sources containing exempt quantities of radioactive material shall not be bundled or placed in close proximity for the purpose of using the radiation from the combined sources in place of a single source, containing a licensable quantity of radioactive material.
5. Possession and use of bundled or combined sources containing exempt quantities of radioactive material in unregistered devices by persons exempt from licensing is prohibited.
6. Any person, who possesses radioactive material received or acquired before September 25, 1971, under the general license issued under R9-7-311(A) of this Article or similar general license of an Agreement State or the NRC, is exempt from the requirements for a license issued under R9-7-311(A) of this Article to the extent that this person possesses, uses, transfers, or owns radioactive material.
7. No person may, for purposes of producing an increased radiation level, combine quantities of radioactive material covered by the exemption described in subsection (C)(6) so that the aggregate quantity exceeds the limits set forth in Exhibit B, except for radioactive material combined within a device placed in use before May 3, 1999, or as otherwise permitted by the rules in this Section.

R9-7-304. License Types

- A. Activities requiring license. Except as provided in 10 CFR 30.3 (revised January 1, 2013, incorporated by reference, and available under R9-7-101; this incorporated material contains no future editions or amendments), ~~this Section in subsection (B)(1)~~, and for persons exempt as provided in R9-7-302 and R9-7-303 of this Article, no person shall manufacture, produce, transfer, receive, acquire, own, possess, or use byproduct material except as authorized in a specific or general license issued in accordance with the regulations in this chapter and in accordance with 10 CFR 30.3.
- B. Licenses for radioactive materials are of two types: general and specific.
 1. A general license is provided by rule, grants authority to a person for certain activities involving radioactive material, and is effective without the filing of an application with the Department or the issuance of a licensing document to a particular person. However, registration with the Department may be required by the particular general license.
 2. The Department issues a specific license to a named person who has filed an application for a license under the applicable provision of this Chapter. A specific licensee is subject to all of the applicable rules in this Chapter and any limitation contained in the license document.

R9-7-305. General Licenses – Source Material

- A. This subsection grants a general license that authorizes commercial and industrial firms; research, educational, and medical institutions; and state and local government agencies to use, and transfer not more than 6.8 kg (15 pounds) of source material at any one time for research, development, educational, commercial, or operational purposes. A person authorized under this subsection shall not receive more than 68.2 kg (150 pounds) of source material in one calendar year.
- B. A person who receives, possesses, uses, or transfers source material under a general license granted under subsection (A) is exempt from the provisions of 9 A.A.C. 7, Article 4 and Article 10, provided the receipt, possession, use, or transfer is within the terms of the general license. This exemption does not apply to any person who is also in possession of source material under a specific license issued under this Article.
- C. This subsection grants a general license that authorizes a person to receive acquire, possess, use, or transfer depleted uranium contained in industrial products and devices provided:
 1. The depleted uranium is contained in the industrial product or device for the purpose of providing a concentrated mass in a small volume of the product or device;
 2. The industrial products or devices have been manufactured or initially transferred in accordance with a specific license governed by ~~R9-7-311(M)~~ R9-7-311(J), or a specific license issued by the U.S. Nuclear Regulatory Commission or an Agreement State that authorizes manufacture of the products or devices for distribution to persons generally licensed by the U.S. Nuclear Regulatory Commission or an Agreement State;
 3. The person files an ARRA 23 “Registration Certificate -- Use of Depleted Uranium Under General License” with the Department. The person shall provide the information requested on the certificate and listed in Exhibit E. The person shall submit the information within 30 days after first receipt or acquisition of the depleted uranium, returning the completed registration certificate to the Department. The person shall report in writing to the Department any change in information originally submitted to the Department on ARRA 23. The person shall submit the change report within 30 days after the effective date of the described change.
- D. A person who receives, acquires, possesses, or uses depleted uranium according to the general license provided under subsection (C) shall:
 1. Not introduce depleted uranium, in any form, into a chemical, physical, or metallurgical treatment or process, except a treatment or process for repair or restoration of any plating or other covering of the depleted uranium;
 2. Not abandon the depleted uranium;
 3. Transfer the depleted uranium as prescribed in R9-7-318. If the transferee receives the depleted uranium under a general license established by subsection (C), the transferor shall furnish the transferee with a copy of this Section and a copy of the registration certificate. If the transferee receives the depleted uranium under a general license governed by a regulation of the U.S. Nuclear Regulatory Commission or an Agreement State that is equivalent to subsection (C), the transferor shall furnish the transferee a copy of the equivalent rule and a copy of the registration certificate, accompanied by a letter explaining that use of the product or device is regulated by the U.S. Nuclear Regulatory Commission or an Agreement State under requirements substantially similar to those in this Section;
 4. Within 30 days of any transfer, report in writing to the Department the name and address of the person receiving the depleted uranium; and
 5. Not export depleted uranium except under a license issued by the U.S. Nuclear Regulatory Commission in accordance with 10 CFR 110.



- E. A person who receives, acquires, possesses, uses, or transfers depleted uranium in accordance with a general license granted under subsection (C) is exempt from the requirements of 9 A.A.C. 7, Articles 4 and 10 with respect to the depleted uranium covered by that general license.

R9-7-306. General License - Radioactive Material Other Than Source Material

- A. Certain measuring, gauging or controlling devices and certain devices for producing light or an ionized atmosphere.
 - 1. This subsection grants a general license to a commercial or industrial firm; a research, educational or medical institution; an individual conducting business; or a state or local government agency to receive, acquire, possess, use, or transfer radioactive material contained in devices 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 light or an ionized atmosphere, according to the provisions of 10 CFR 31.5(b), (c), and (d), (Revised January 1, 2013, incorporated by reference, and available under R9-7-101. The incorporated material contains no future editions or amendments.
 - 2. A general licensee shall receive a device from one of the specific licensees described in this Section or through a transfer made under subsection (A)(4)(k).
 - 3. A general license in subsection (A)(1) applies only to radioactive material contained in devices that have been manufactured or initially transferred and labeled in accordance with the requirements contained in:
 - a. A specific license issued under R9-7-311(A), or
 - b. An equivalent specific license issued by the NRC or another Agreement State.
 - c. An equivalent specific license issued by a State with rules or regulations comparable to this Section.
 - 4. A person who acquires, receives, possesses, uses, or transfers radioactive material in a device licensed under subsection (A)(1) or through a transfer made under subsection (A)(4)(h), shall:
 - a. Ensure that all labels and safety statements affixed to a device at the time of receipt and bearing a statement that removal of the label is prohibited are maintained and not removed, and comply with all instructions and precautions on the labels.
 - b. Ensure that the device is tested for leakage of radioactive material and proper operation of the on-off mechanism and indicator, if any, at no longer than six-month intervals or at other intervals as specified on the label.
 - i. A general licensee need not test a device that contains only krypton for leakage of radioactive material; and
 - ii. A general licensee need not test a device for leakage of radioactive material if the device contains only tritium, not more than 3.7 megabecquerels (100 microcuries) of other beta and/or gamma emitting material, or 370 kilobecquerels (10 microcuries) of alpha emitting material, or the device is held in storage, in the original shipping container, before initial installation.
 - c. Ensure that the tests required by subsection (A)(4)(b) and other testing, installation, servicing, and removal from installation involving the radioactive material or its shielding or containment, are performed:
 - i. In accordance with the device label instructions, or
 - ii. By a person holding a specific license under R9-7-311(A) or in accordance with the provisions of a specific license issued by the NRC or an Agreement State which authorizes distribution of devices to persons generally licensed by the NRC or an Agreement State.
 - d. Maintain records of compliance with the requirements in subsections (A)(4)(b) and (c) that show the results of tests; the dates that required activities were performed, and the names of persons performing required activities involving radioactive material from the installation and its shielding or containment. The records shall be maintained for three years from the date of the recorded event or until transfer or disposal of the device.
 - e. Immediately suspend operation of a device if there is a failure of, or damage to, or any indication of a possible failure of or damage to, the shielding of the radioactive material or the on-off mechanism or indicator, or upon the detection of 185 becquerel (0.005 microcurie) or more of removable radioactive material.
 - i. A general licensee shall not operate the device until it has been repaired by the manufacturer or another person holding a specific license to repair this type of device that was issued by the Department under R9-7-311(A), the NRC, or an Agreement State which authorizes distribution of devices to persons generally licensed by the NRC or an Agreement State.
 - ii. If necessary the general licensee shall dispose of the device and any radioactive material from the device by transfer to a person authorized by a specific license to receive the radioactive material in the device or as otherwise approved by the Department.
 - iii. Within 30 days of an event governed by subsection (A)(4)(e) the general licensee shall furnish a report that contains a brief description of the event and the remedial action taken and, in the case of detection of 185 Becquerel (0.005 microcurie) or more of removable radioactive material or failure of or damage to a source likely to result in contamination of the general licensee's facility or the surrounding area, if applicable, a plan for ensuring that the general licensee's facility and surrounding area, if applicable, are acceptable for unrestricted use. The radiological criteria for unrestricted use in R9-7-452 may be used to prepare the plan, as determined by the Department, on a case-by-case basis.
 - f. Not abandon a device that contains radioactive material.
 - g. Not export a device that contains radioactive material except in accordance with 10 CFR 110, revised January 1, 2013, incorporated by reference, and available under R9-7-101. The incorporated material contains no future editions or amendments.
 - h. Transfer or dispose of a device that contains radioactive material only by export as authorized in subsection (A)(4)(g), transfer to another general licensee as authorized in subsection (A)(4)(k) or a person who is authorized to receive the device by a specific license issued by the Department, the NRC, or an Agreement State, or collection as waste if authorized by equivalent regulations of an Agreement State, or the NRC, or as otherwise approved under subsection (A)(4)(j).
 - i. Within 30 days after the transfer or export of a device to a specific licensee, furnish a report to the Department. The report shall:



- i. Identify the device by manufacturer's (or initial transferor's) name, model number, and serial number;
 - ii. Provide the name, address, and license number of the person receiving the device (license number not applicable if exported); and
 - iii. Provide the date of transfer or export.
 - j. Obtain written Department approval before transferring a device to any other specific licensee that is not authorized in accordance with subsection (A)(4)(h).
 - k. Transfer a device to another general licensee only:
 - i. If the device remains in use at a particular location. The transferor shall provide the transferee with a copy of this Section, a copy of R9-7-443, R9-7-445, and R9-7-448 and any safety documents identified on the device label. Within 30 days of the transfer, the transferor shall report to the Department the manufacturer's (or initial transferor's) name; the model number and the serial number of the device transferred; the transferee's name and mailing address for the location of use; and the name, title, and telephone number of the responsible individual appointed by the transferee in accordance with subsection (A)(4)(n); or
 - ii. If the device is held in storage in the original shipping container at its intended location of use before initial use by a general licensee, and by a person that is not a party to the transaction.
 - l. Comply with the provisions of R9-7-443, R9-7-444, R9-7-445, R9-7-447, and R9-7-448 for reporting and notification of radiation incidents, theft or loss of licensed material, and is exempt from the other requirements of 9 A.A.C 7, Articles 4 and 10.
 - m. Respond to written requests from the Department to provide information relating to the general license within 30 days from the date on the request, or a longer time period specified in the request. If the general licensee cannot provide the requested information within the specified time period, the general licensee shall request a longer period to supply the information before expiration of the time period, providing the Department with a written justification for the request.
 - n. Appoint an individual responsible for knowledge of applicable laws and possessing the authority to take actions required to comply with applicable radiation safety laws. The general licensee, through this individual, shall ensure the day-to-day compliance with applicable radiation safety laws. This provision does not relieve the general licensee of responsibility.
 - o. Register, in accordance with subsections (A)(4)(p) and (q), any device that contains at least 370 megabecquerels (10 millicuries) of cesium-137, 3.7 megabecquerels (0.1 millicuries) of strontium-90, 37 megabecquerels (1 millicurie) of cobalt-60, or 37 megabecquerels (1 millicurie) of americium-241 or any other transuranic (i.e., element with atomic number greater than uranium (92)), based on the activity indicated on the label. Each address for a location of use, as described under subsection (A)(4)(q)(iv), represents a separate general licensee and requires a separate registration and fee.
 - p. Register each device annually with the Department and pay the fee required by R9-7-1306, Category D4, if in possession of a device that meets the criteria in subsection (A)(4)(o). The general licensee shall register by verifying, correcting, and adding to the information provided in a request for registration received from the Department. The registration information shall be submitted to the Department within 30 days from the date on the request for registration. In addition, a general licensee holding devices meeting the criteria of subsection (A)(4)(o) is subject to the bankruptcy notification requirements in R9-7-313(D).
 - q. In registering a device, furnish the following information and any other registration information specifically requested by the Department:
 - i. Name and mailing address of the general licensee;
 - ii. Information about each device, including the manufacturer (or initial transferor), model number, serial number, radioisotope, and activity (as indicated on the label);
 - iii. Name, title, and telephone number of the responsible individual appointed by the general licensee under subsection (A)(4)(n);
 - iv. Address or location at which each device is used and stored. For a portable device, the address of the primary place of storage;
 - v. Certification by the responsible individual that the information concerning each device has been verified through a physical inventory and review of label information; and
 - vi. Certification by the responsible individual that the individual is aware of the requirements of the general license.
 - r. Report a change in mailing address for the location of use or a change in the name of the general licensee to the Department within 30 days of the effective date of the change. For a portable device, a report of address change is only required for a change in the device's primary place of storage.
 - s. Not use a device if the device has not been used for a period of two years. If a device with shutters is not being used, the general licensee shall ensure that the shutters are locked in the closed position. The testing required by subsection (A)(4)(b) need not be performed during a period of storage. However, if a device is put back into service or transferred to another person, and has not been tested during the required test interval, the general licensee shall ensure that the device is tested for leakage before use or transfer and that the shutter is tested before use. A device kept in standby for future use is excluded from the two-year time limit in this subsection if the general licensee performs a quarterly physical inventory regarding the standby devices.
 5. A person that is generally licensed by an Agreement State with respect to a device that meets the criteria in subsection (A)(4)(o) is exempt from registration requirements if the device is used in an area subject to Department jurisdiction for a period less than 180 days in any calendar year. The Department does not request registration information from a general licensee if the device is exempted from licensing requirements in subsection (A)(4)(o).
 6. The general license granted under subsection (A)(1) is subject to the provisions of 9 A.A.C. 7, Articles 1, 3, 12, and 15, and A.R.S. §§ 30-654(B)(13), 30-657(A) and (B), 30-681, and 30-685 through 30-689.
 7. The general license in subsection (A)(1) does not authorize the manufacture or import of devices containing byproduct material.
- B. Luminous safety devices for aircraft**



1. This subsection grants a general license that authorizes a person to own, receive, acquire, possess, and use tritium or promethium-147 contained in luminous safety devices for use in aircraft, provided that each device contains not more than 370 gigabecquerels (10 curies) of tritium or 11.1 gigabecquerels (300 millicuries) of promethium-147; and each device has been manufactured, assembled, initially transferred, or imported according to a specific license issued by the U.S. Nuclear Regulatory Commission, or each device has been manufactured or assembled according to the specifications contained in a specific license issued to the manufacturer or assembler of the device by the Department or any Agreement State or Licensing State in accordance with licensing requirements equivalent to those in 10 CFR 32.53.
 2. A person who owns, receives, acquires, possesses, or uses a luminous safety device according to the general license granted in subsection (B)(1) is:
 - a. Exempt from the requirements of 9 A.A.C. 7, Article 4 and Article 10 except that the person shall comply with the reporting and notification provisions of R9-7-443, R9-7-444, R9-7-445, R9-7-447, and R9-7-448;
 - b. Not authorized to manufacture, assemble, repair, or import a luminous safety device that contains tritium or promethium-147;
 - c. Not authorized to export luminous safety devices containing tritium or promethium-147;
 - d. Not authorized to own, receive, acquire, possess, or use radioactive material contained in instrument dials; and
 - e. Subject to the provisions of 9 A.A.C. 7, Articles 1, 3, 12, and 15 and A.R.S. §§ 30-654(B)(13), 30-657(A) and (B), 30-681, and 30-685 through 30-689.
- C. This subsection grants a general license that authorizes a person who holds a specific license to own, receive, possess, use, and transfer radioactive material if the Department issues the license; or special nuclear material if the NRC issues the license. For americium-241, radium-226, and plutonium contained in calibration or reference sources, this subsection grants a general license in accordance with the provisions of subsections (C)(1), (2), and (3). For plutonium, ownership is included in the licensed activities.
1. This subsection grants a general license for calibration or reference sources that have been manufactured according to the specifications contained in a specific license issued to the manufacturer or importer of the sources by the U.S. Nuclear Regulatory Commission under 10 CFR 32.57 or 10 CFR 70.39. This general license also governs calibration or reference sources that have been manufactured according to specifications contained in a specific license issued to the manufacturer by the Department, an Agreement State, or a Licensing State, according to licensing requirements equivalent to those contained in 10 CFR 32.57 or 10 CFR 70.39, revised January 1, 2013, incorporated by reference, and available under R9-7-101. The incorporated material contains no future editions or amendments.
 2. A general license granted under subsection (C) or (C)(1) is subject to the provisions of 9 A.A.C. 7, Articles 1, 3, 4, 10, 12, and 15 and A.R.S. §§ 30-654(B)(13), 30-657(A) and (B), 30-681, and 30-685 through 30-689. In addition, a person who owns, receives, acquires, possesses, uses, or transfers one or more calibration or reference sources under a general license granted under subsection (C) or (C)(1) shall:
 - a. Not possess at any one time, at any location of storage or use, more than 185 kBq (5 microcuries) of americium-241, plutonium, or radium-226 in calibration or reference sources;
 - b. Not receive, possess, use, or transfer a calibration or reference source unless the source, or the storage container, bears a label that includes one of the following statements, as applicable, or a substantially similar statement that contains the same information:
 - i. The receipt, possession, use and transfer of this source, Model _____, Serial No. _____, are subject to a general license and the regulations of the U.S. Nuclear Regulatory Commission or a state with which the Commission has entered into an agreement for the exercise of regulatory authority. Do not remove this label.
CAUTION – RADIOACTIVE MATERIAL – THIS SOURCE CONTAINS (name of the appropriate material) – DO NOT TOUCH RADIOACTIVE PORTION OF THIS SOURCE.

Name of manufacturer or importer
 - ii. The receipt, possession, use and transfer of this source, Model _____, Serial No. _____, are subject to a general license and the regulations of any Licensing State. Do not remove this label.
CAUTION – RADIOACTIVE MATERIAL – THIS SOURCE CONTAINS RADIUM-226. DO NOT TOUCH RADIOACTIVE PORTION OF THIS SOURCE.

Name of manufacturer or importer
 - c. Not transfer, abandon, or dispose of a calibration or reference source except by transfer to a person authorized to receive the source by a license from the Department, the U.S. Nuclear Regulatory Commission, an Agreement State, or a Licensing State;
 - d. Store a calibration or reference source, except when the source is being used, in a closed container designed, constructed, and approved for containment of americium-241, plutonium, or radium-226 which might otherwise escape during storage; and
 - e. Not use a calibration or reference source for any purpose other than the calibration of radiation detectors or the standardization of other sources.
 3. The general license granted under subsection (C) or (C)(1) does not authorize the manufacture or import of calibration or reference sources that contain americium-241, plutonium, or radium-226.
 4. The general license granted under subsections (C) or (C)(1) does not authorize the manufacture or export of calibration or reference sources that contain americium-241, plutonium, or radium-226.
- D. This subsection grants a general license that authorizes a person to receive, possess, use, transfer, own, or acquire carbon-14 urea capsules, which contain one microcurie of carbon-14 urea for “in vivo” human diagnostic use:
1. Except as provided in subsections (D)(2) and (3), a physician is exempt from the requirements for a specific license, provided that each carbon-14 urea capsule for “in vivo” diagnostic use contains no more than 1 microcurie.



2. A physician who desires to use the capsules for research involving human subjects shall obtain a specific license issued according to the specific licensing requirements in this Article.
 3. A physician who desires to manufacture, prepare, process, produce, package, repack, or transfer carbon-14 urea capsules for commercial distribution shall obtain a specific license from the Department, issued according to the requirements in 10 CFR 32.21, (Revised January 1, 2013, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.)
 4. Nothing in this subsection relieves physicians from complying with applicable FDA and other federal and state requirements governing receipt, administration, and use of drugs.
- E. This subsection grants a general license that authorizes any physician, clinical laboratory, or hospital to use radioactive material for certain “in vitro” clinical or laboratory testing.
1. The general licensee is authorized to receive, acquire, possess, transfer, or use, for any of the following stated tests, the following radioactive materials in prepackaged units:
 - a. Iodine-125, in units not exceeding 370 kilobecquerel (10 microcuries) each for use in “in vitro” clinical or laboratory tests not involving internal or external administration of radioactive material, or radiation from such material, to human beings or animals.
 - b. Iodine-131, in units not exceeding 370 kilobecquerel (10 microcuries) each for use in “in vitro” clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation from such material, to human beings or animals.
 - c. Carbon-14, in units not exceeding 370 kilobecquerel (10 microcuries) each for use in “in vitro” clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation from such material, to human beings or animals.
 - d. Hydrogen-3 (tritium), in units not exceeding 1.85 megabecquerel (50 microcuries) each for use in “in vitro” clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation from such material, to human beings or animals.
 - e. Iron-59, in units not exceeding 740 kilobecquerel (20 microcuries) each for use in “in vitro” clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation from such material, to human beings or animals.
 - f. Cobalt-57 or selenium-75, in units not exceeding 370 kilobecquerels (10 microcuries) each for use in “in vitro” clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation from such material, to human beings or animals.
 - g. Mock iodine-125 reference or calibration sources, in units not exceeding 1.85 kBq (50 nanocurie) of iodine-129 and 185 becquerel (5 nanocurie) of americium-241 each, for use in “in vitro” clinical or laboratory tests not involving internal or external administration of radioactive material, or the radiation from such material, to human beings or animals.
 2. A person shall not acquire, receive, possess, use, or transfer radioactive material according to the general license established by this subsection until the person has filed with the Department ARRA-9, “Certificate -- “In Vitro” Testing with Radioactive Material Under General License,” provided the information listed in Exhibit E, and received a validated copy of ARRA-9, which indicates the assigned certification number. The physician, clinical laboratory, or hospital shall furnish on ARRA-9 the following information:
 - a. Name, telephone number, and address of the physician, clinical laboratory, or hospital; and
 - b. A statement that the physician, clinical laboratory, or hospital has radiation measuring instruments to carry out “in vitro” clinical or laboratory tests with radioactive material and that tests will be performed only by personnel competent to use the instruments and handle the radioactive material.
 3. A person who receives, acquires, possesses, or uses radioactive material according to the general license granted under this subsection shall:
 - a. Not possess at any one time, in storage or use, a combined total of not more than 7.4 megabecquerels (200 microcuries) of iodine-125, iodine-131, iron-59, cobalt-57, or selenium-75 in excess of 7.4 megabecquerels (200 microcuries), or acquire or use in any one calendar month more than 18.5 megabecquerels (500 microcuries) of these radionuclides.
 - b. Store the radioactive material, until used, in the original shipping container or in a container that provides equivalent radiation protection.
 - c. Use the radioactive material only for the uses authorized by subsection (E).
 - d. Not transfer radioactive material to a person who is not authorized to receive it according to a license issued by the Department, the U.S. Nuclear Regulatory Commission, or any Agreement State or Licensing State, or in any manner other than in an unopened, labeled shipping container received from the supplier.
 - e. Not dispose of a mock iodine-125 reference or calibration source described subsection (E)(1) except as authorized by R9-7-434.
 - f. Package or prepackage a unit bearing a durable, clearly visible label: identifying the radioactive contents as to chemical form and radionuclide, and indicating that the amount of radioactivity does not exceed 0.37 megabecquerel (10 microcuries) of iodine-131, iodine-125, selenium-75, or carbon-14; 1.85 megabecquerels (50 microcuries) of hydrogen-3 (tritium); or 0.74 megabecquerel (20 microcuries) of iron-59; or Mock Iodine-125 in units not exceeding 1.85 kilobecquerels (0.05 microcurie) of iodine-129 and 0.185 kilobecquerel (0.005 microcurie) of americium-241 each; or cobalt-57 in units not exceeding 0.37 megabecquerel (10 microcuries).
 - g. Package to display the radiation caution symbol and the words, “Caution, Radioactive Material”, and “Not for Internal or External Use in Humans or Animals.”
 4. The general licensee shall not receive, acquire, possess, transfer, or use radioactive material according to subsection (E)(1):
 - a. Except as prepackaged units that are labeled according to the provisions of a specific license issued by the U.S. Nuclear Regulatory Commission, or any Agreement State that authorizes the manufacture and distribution of iodine-125, iodine-



131, carbon-14, hydrogen-3 (tritium), iron-59, cobalt-57, selenium-75, or mock iodine-125 for distribution to persons generally licensed under subsection (E) or its equivalent federal law; and

- b. Unless one of the following statements, or a substantially similar statement that contains the same information, appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure that accompanies the package:
 - i. This radioactive material may be acquired, received, possessed, and used only by physicians, clinical laboratories or hospitals and only for in vitro clinical or laboratory tests not involving internal or external administration of the material, or the radiation from such material, to human beings or animals. The acquisition, receipt, possession, use, and transfer are subject to the regulations and a general license of the U.S. Nuclear Regulatory Commission or of a state with which the Commission has entered into an agreement for the exercise of regulatory authority.

Name of manufacturer

- ii. This radioactive material shall be acquired, received, possessed, and used only by physicians, clinical laboratories or hospitals and only for in vitro clinical or laboratory tests not involving internal or external administration of the material, or the radiation from such material, to human beings or animals. The receipt, acquisition, possession, use, and transfer are subject to the regulations and a general license of a Licensing State.

Name of manufacturer

- 5. A physician, clinical laboratory or hospital that possesses or uses radioactive material under a general license granted by subsection (E):
 - a. Shall report to the Department in writing, any change in the information furnished on the ARRA-9. The report shall be furnished within 30 days after the effective date of the change; and
 - b. Is exempt from the requirements of 9 A.A.C. 7, Article 4 and Article 10 with respect to radioactive material covered by the general license, except that a person using mock iodine-125 sources, described in subsection (E)(1)(g), shall comply with the provisions of R9-7-434, R9-7-443, and R9-7-444 of this Chapter.
- 6. For the purposes of subsection (E), a licensed veterinary care facility is considered a “clinical laboratory.”

F. This subsection grants a general license that authorizes a person to own, receive, acquire, possess, use, and transfer strontium-90, contained in ice detection devices, provided each device contains not more than 1.85 megabecquerels (50 microcuries) of strontium-90 and each device has been manufactured or imported in accordance with a specific license issued by the U.S. Nuclear Regulatory Commission or each device has been manufactured according to the specifications contained in a specific license issued by the Department or any Agreement State to the manufacturer of the device under licensing requirements equivalent to those in 10 CFR 32.61. A person who receives, owns, acquires, possesses, uses, or transfers strontium-90 contained in ice detection devices under a general license in accordance with subsection (F):

- 1. Shall, upon occurrence of visually observable damage, such as a bend or crack or discoloration from overheating, discontinue use of the device until it has been inspected, tested for leakage, and repaired by a person who holds a specific license from the U.S. Nuclear Regulatory Commission or an Agreement State to manufacture or service ice detection devices; or dispose of the device according to the provisions of R9-7-434;
- 2. Shall assure that each label, affixed to the device at the time of receipt, which bears a statement that prohibits removal of the labels, maintained on the device; and
- 3. Is exempt from the requirements of 9 A.A.C. 7, Article 4 and Article 10, except that the user of an ice detection device shall comply with the provisions of R9-7-434, R9-7-443, and R9-7-444.
- 4. Shall not manufacture, assemble, disassemble, repair, or import an ice detection device that contains strontium-90.
- 5. Is subject to the provisions of 9 A.A.C. 7, Articles 1, 3, 12, and 15, and A.R.S. §§ 30-654(B), 30-657(A) and (B), 30-681, and 30-685 through 30-689.

G. This subsection grants a general license that authorizes a person to acquire, receive, possess, use, or transfer, in accordance with the provisions of subsections (H) and (I), radium-226 contained in the following products manufactured prior to November 30, 2007.

- 1. Antiquities originally intended for use by the general public. For the purposes of this ~~paragraph~~ subsection, antiquities mean products originally intended for use by the general public and distributed in the late 19th and early 20th centuries, such as radium emanator jars, revigators, radium water jars, radon generators, refrigerator cards, radium bath salts, and healing pads.
- 2. Intact timepieces containing greater than 0.037 megabecquerel (1 microcurie), nonintact timepieces, and timepiece hands and dials no longer installed in timepieces.
- 3. Luminous items installed in air, marine, or land vehicles.
- 4. All other luminous products, provided that no more than 100 items are used or stored at the same location at any one time.
- 5. Small radium sources containing no more than 0.037 megabecquerel (1 microcurie) of radium-226. For the purposes of this ~~paragraph~~ subsection, “small radium sources” means discrete survey instrument check sources, sources contained in radiation measuring instruments, sources used in educational demonstrations (such as cloud chambers and spintariscopes), electron tubes, lightning rods, ionization sources, static eliminators, or as designated by the NRC.

H. Persons who acquire, receive, possess, use, or transfer byproduct material under the general license issued in subsection (G) are exempt from the provisions 9 A.A.C. 7, Articles 1, 3, 4, 7, 10, 12, and 15 and A.R.S. §§ 30-654(B)(13), 30-657(A) and (B), 30-681, and 30-685 through 30-689, to the extent that the receipt, possession, use, or transfer of byproduct material is within the terms of the general license; provided, however, that this exemption shall not be deemed to apply to any such person specifically licensed under this chapter. Any person who acquires, receives, possesses, uses, or transfers byproduct material in accordance with the general license in subsection (G):

- 1. Shall notify the Department should there be any indication of possible damage to the product so that it appears it could result in a loss of the radioactive material. A report containing a brief description of the event, and the remedial action taken, must be furnished to the Department within 30 days.



2. Shall not abandon products containing radium-226. The product, and any radioactive material from the product, may only be disposed of according to Article 4 or by transfer to a person authorized by a specific license to receive the radium-226 in the product or as otherwise approved by the Department.
 3. Shall not export products containing radium-226 except in accordance with 10 CFR 110 revised January 1, 2013, incorporated by reference, and available under R9-7-101. The incorporated material contains no future editions or amendments.
 4. Shall dispose of products containing radium-226 at a disposal facility authorized to dispose of radioactive material in accordance with any federal or state solid or hazardous waste law, including the Solid Waste Disposal Act, as authorized under the Energy Policy Act of 2005, by transfer to a person authorized to receive radium-226 by a specific license issued under Article 3, equivalent regulations of an Agreement State, or the NRC.
 5. Shall respond to written requests from the Department 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 general licensee cannot provide the requested information within the allotted time, it shall, within that same time period, request a longer period to supply the information by providing the Department Director a written justification for the request.
- I. The general license in subsection (G) does not authorize the manufacture, assembly, disassembly, repair, or import of products containing radium-226, except that timepieces may be disassembled and repaired.

R9-7-311. Special Requirements for a Specific License to Manufacture, Assemble, Repair, or Distribute Commodities, Products, or Devices that Contain Radioactive Material

- A. Licensing the manufacture and distribution of devices to persons generally licensed under R9-7-306(A).
1. The Department shall grant a specific license to manufacture or distribute each device that contains radioactive material, excluding special nuclear material, to persons generally licensed under R9-7-306(A) or equivalent regulations of the U.S. NRC, an Agreement State, or the Licensing State if:
 - a. The applicant satisfies the requirements of R9-7-309;
 - b. The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control, labels, proposed uses, installation, servicing, leak testing, operating and safety instructions, and potential hazards of the device to provide reasonable assurance that:
 - i. The device can be safely operated by persons not having training in radiological protection;
 - ii. Under ordinary conditions of handling, storage, and use of the device, the radioactive material contained in the device will not be released or inadvertently removed from the device, and it is unlikely that any person will receive a dose in excess of 10 percent of the limits specified in R9-7-408; and
 - iii. Under accident conditions (such as fire and explosion) associated with handling, storage, and use of the device, it is unlikely that any person would receive an external radiation dose or dose commitment in excess of the following organ doses:
 - (1) Whole body; head and trunk; active blood-forming organs; gonads; or lens of eye: 150 mSv (15 rem)
 - (2) Hands and forearms; feet and ankles; localized areas of skin averaged over areas no larger than 1 square centimeter; 2 Sv (200 rem)
 - (3) Other organs: 500 mSv (50 rem)
 - c. Each device bears a durable, legible, clearly visible label or labels that contain in a clearly identified and separate statement:
 - i. Instructions and precautions necessary to assure safe installation, operating, and servicing of the device (documents such as operating and service manuals may be identified in the label and used to provide this information);
 - ii. The requirement, or lack of requirement, for leak testing, or for testing any on-off mechanism and indicator, including the maximum time interval for the testing, and the identification of radioactive material by isotope, quantity of radioactivity, and date of determination of the quantity; and
 - iii. The information called for in one of the following statements in the same or substantially similar form:

The receipt, possession, use, and transfer of this device, Model _____, Serial No. _____, are subject to a general license or the equivalent and the regulations of the U.S. Nuclear Regulatory Commission or a state with which the Nuclear Regulatory Commission has entered into an agreement for the exercise of regulatory authority. This label shall be maintained on the device in a legible condition. Removal of this label is prohibited.

CAUTION – RADIOACTIVE MATERIAL

(name of manufacturer or distributor)

The receipt, possession, use and transfer of this device, Model _____, Serial No. _____, are subject to a general license or the equivalent, and the regulations of a Licensing State. This label shall be maintained on the device in a legible condition. Removal of this label is prohibited.

CAUTION – RADIOACTIVE MATERIAL

(name of manufacturer or distributor)
 - d. The model, serial number, and name of manufacturer or distributor may be omitted from the label if the information location is specified in labeling affixed to the device;
 - e. Each device with a separable source housing that provides the primary shielding for the source also bears, on the source housing, a durable label that provides the device model number and serial number, the isotope and quantity, the words, "Caution-Radioactive Material," the radiation symbol described in R9-7-428, and the name of the manufacturer or initial distributor; and
 - f. Each device meets the criteria in 10 CFR 31.5(c)(13)(i) (revised January 1, 2013, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments) and bears a permanent (e.g., embossed, etched, stamped, or engraved) label affixed to the source housing, if separable, or the device if the source hous-



- ing is not separable, that includes the words, "Caution-Radioactive Material," and, if practicable, the radiation symbol described in R9-7-428.
- g. The device has been registered in the Sealed Source and Device Registry.
 2. In the event the applicant desires that the device undergo mandatory testing at intervals longer than six months, either for proper operation of the on-off mechanism and indicator, if any, or for leakage of radioactive material or for both, the application shall contain sufficient information to demonstrate that the longer interval is justified by performance characteristics of the device or similar devices and by design features which have a significant bearing on the probability or consequences of leakage of radioactive material from the device or failure of the on-off mechanism and indicator. In determining the acceptable interval for the test for leakage of radioactive material, the Department shall consider information which includes, but is not limited to:
 - a. Primary containment (source capsule),
 - b. Protection of primary containment,
 - c. Method of sealing containment,
 - d. Containment construction materials,
 - e. Form of contained radioactive material,
 - f. Maximum temperature withstood during prototype tests,
 - g. Maximum pressure withstood during prototype tests,
 - h. Maximum quantity of contained radioactive material,
 - i. Radiotoxicity of contained radioactive material, and
 - j. Operating experience with identical devices or similarly designed and constructed devices.
 3. In the event the applicant desires that the general licensee under R9-7-306(A), or under equivalent regulations of the NRC or an Agreement State or Licensing State, be authorized to install the device, collect the sample to be analyzed by a specific licensee for leakage of radioactive material, service the device, test the on-off mechanism and indicator, or remove the device from installation, the application shall include written instructions to be followed by the general licensee, estimated calendar quarter doses associated with the activity or activities, and bases for the estimates. The submitted information shall demonstrate that performance of the activity or activities by an individual untrained in radiological protection, in addition to other handling, storage, and use of devices under the general license, is unlikely to cause that individual to receive a dose in excess of 10 percent of the limits specified in R9-7-408.
 4. A licensee authorized under subsection (A) to distribute a device to a generally licensed person shall provide, if a device that contains radioactive material is to be transferred for use under the general license granted in R9-7-306(A), the name of each person that is licensed under R9-7-311(A) and the information specified in this subsection for each person to whom a device will be transferred. The licensee shall provide this information before the device may be transferred. In the case of transfer through another person, the licensee shall provide the listed information to the intended user before initial transfer to the other person.
 - a. The licensee shall provide:
 - i. A copy of the general license, issued under R9-7-306(A),
 - ii. A copy of R9-7-443 and R9-7-445,
 - iii. A list of the services that can only be performed by a specific licensee,
 - iv. Information on authorized disposal options, including estimated costs of disposal, and
 - v. A list of civil penalties for improper disposal.
 - b. The licensee shall:
 - i. Report on a quarterly basis to the responsible Agreement State or NRC all transfers of devices to persons for use under a general license in accordance with 10 CFR 32.52, revised January 1, 2013, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
 - ii. Maintain all information concerning transfers and receipts of devices that supports the reports required by subsection ~~(A)(4)(b)~~ (A)(4)(b)(i).
 - iii. Maintain records required by subsection ~~(A)(4)(b)~~ (A)(4)(b)(i) for a period of three years following the date of the recorded event.
 5. If radioactive material is to be transferred in a device for use under an equivalent general license of the NRC or another Agreement State, each person that is licensed under R9-7-304(B) shall provide the information specified in this subsection to each person to whom a device will be transferred. The licensee shall provide this information before the device is transferred. In the case of transfer through another person, the licensee shall provide the listed information to the intended user before initial transfer to the other person. The licensee shall provide:
 - a. A copy of the Agreement State's requirements that are equivalent to R9-7-306(A), ~~and A.R.S. §§ 30-657~~, R9-7-443, and R9-7-445, ~~and to A.R.S. § 30-657~~. If a copy of NRC regulations is provided to a prospective general licensee in lieu of the Agreement State's requirements, the licensee shall explain in writing that use of the device is regulated by the Agreement State. If certain requirements do not apply to a particular device, the licensee may omit the requirement from the material provided;
 - b. A list of the services that can only be performed by a specific licensee;
 - c. Information on authorized disposal options, including estimated costs of disposal; and
 - d. The name, title, address, and telephone number of the individual at the Agreement State regulatory agency who can provide additional information.
 6. A licensee may propose to the Department an alternate method of informing the customer.
 7. If a licensee has notified the Department of bankruptcy under R9-7-313(E) or is terminating under R9-7-319, the licensee shall provide, upon request, to the Department, the NRC, or another Agreement State, records of the disposition as required under A.R.S. § 30-657.
 8. A licensee authorized to transfer a device to a generally licensed person, shall comply with the following requirements:



- a. The person licensed under subsection (A) shall report all transfers of devices to persons for use under a general license obtained under R9-7-306(A), and all receipts of devices from persons licensed under R9-7-306(A) to the Department, the NRC, or other affected Agreement State. The report shall be submitted on a quarterly basis, in a clear and legible form, and contain the following information:
 - i. The identity of each general licensee by name and mailing address for the location of use. If there is no mailing address for the location of use, the person licensed under subsection (A) shall submit an alternate address for the general licensee, along with information on the actual location of use;
 - ii. The name, title, and telephone number of a person identified by the general licensee as having knowledge of and authority to take required actions to ensure compliance with the applicable laws;
 - iii. The date of transfer;
 - iv. The type, model number, and serial number of the device transferred; and
 - v. The quantity and type of radioactive material contained in the device.
 - b. If one or more intermediaries will temporarily possess the device at the intended place of use before its possession by the intended user, the report shall include the information required of the general licensee in subsection (A)(4) for both the intended user and each intermediary, clearly identifying the intended user and each intermediary.
 - c. For devices received from a general licensee, licensed under R9-7-306(A), the report shall include:
 - i. The identity of the general licensee by name and address;
 - ii. The type, model number, and serial number of the device received;
 - iii. The date of receipt; and
 - iv. In the case of a device not initially transferred by the reporting licensee, the name of the manufacturer or initial transferor.
 - d. If the person licensed under subsection (A) makes a change to a device possessed by a general licensee so that the label must be changed to update required information, the report shall identify the general licensee, the device, and the changes to information on the device label.
 - e. The report shall cover a calendar quarter, be filed within 30 days of the end of each calendar quarter, and clearly indicate the period covered by the report.
 - f. The report shall clearly identify the person licensed under subsection (A) submitting the report and include the license number of the license.
 - g. If no transfers are made to or from persons generally licensed under R9-7-306(A) during a reporting period, the person licensed under subsection (A) shall submit a report indicating the lack of activity.
9. The licensee shall maintain records of all transfers for Department inspection. Records shall be maintained for three years after termination of the license to manufacture the generally licensed devices regulated under R9-7-306(A).
- B.** The Department shall grant a specific license to manufacture, assemble, repair, or initially transfer luminous safety devices that contain tritium or promethium-147 for use in aircraft, for distribution to persons generally licensed under R9-7-306(B), if the applicant satisfies:
1. The general requirements specified in R9-7-309; and
 2. The requirements of 10 CFR 32.53 through 32.56 revised January 1, 2015, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
- C.** The Department shall grant a specific license to manufacture or initially transfer calibration or reference sources that contain americium-241, radium-226, or plutonium for distribution to persons generally licensed under R9-7-306(C) if the applicant satisfies:
1. The general requirements of R9-7-309; and
 2. The requirements of 10 CFR 32.57, 32.58, 32.59, and 70.39, revised January 1, 2015, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
- D.** The Department shall grant a specific license to distribute radioactive material for use by a physician under the general license in R9-7-306(D) if:
1. The general requirements of R9-7-309; and
 2. The requirements of 10 CFR 32.57, 32.58, 32.59, and 70.39, revised January 1, 2015, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
- E.** The Department shall grant for a specific license to manufacture or distribute radioactive material for use under the general license of R9-7-306(E) if:
1. The applicant satisfies the general requirements specified in R9-7-309.
 2. The radioactive material is to be prepared for distribution in prepackaged units of:
 - a. Iodine-125 in units not exceeding 370 kBq (10 microcuries) each;
 - b. Iodine-131 in units not exceeding 370 kBq (10 microcuries) each;
 - c. Carbon-14 in units not exceeding 370 kBq (10 microcuries) each;
 - d. Hydrogen-3 (tritium) in units not exceeding 1.85 MBq (50 microcuries) each;
 - e. Iron-59 in units not exceeding 740 kBq (20 microcuries) each;
 - f. Cobalt-57 or selenium-75 in units not exceeding 370 kilobecquerels (10 microcuries) each;
 - g. Mock iodine-125 in units not exceeding 1.85 kBq (50 nanocuries) of iodine-129 and 185 Bq (5 nanocuries) of americium-241 each.
 3. Each prepackaged unit bears a durable, clearly visible label:
 - a. Identifying the radioactive contents as to chemical form and radionuclide and indicating that the amount of radioactivity does not exceed 370 kilobecquerels (10 microcuries) of iodine-125, iodine-131, cobalt-57, selenium-75, or carbon-14; 1.85 megabecquerels (50 microcuries) of hydrogen-3 (tritium); 740 kilobecquerels (20 microcuries) of iron-59; or mock iodine-125 in units not exceeding 1.85 kilobecquerels (0.05 microcurie) of iodine-129 and 185 becquerels (0.005 microcurie) of americium-241 each; and



- b. Displaying the radiation caution symbol described in R9-7-428, the words, “CAUTION, RADIOACTIVE MATERIAL,” and the phrase “Not for Internal or External Use in Humans or Animals.”
- 4. One of the following statements, or a substantially similar statement that contains the information called for in the following statements appears on a label affixed to each prepackaged unit or appears in a leaflet or brochure that accompanies the package:
 - a. This radioactive material may be received, acquired, possessed, and used only by physicians, clinical laboratories or hospitals and only for in vitro clinical or laboratory tests not involving internal or external administration of the material, or the radiation from the radioactive material, to human beings or animals. Its receipt, acquisition, possession, use, and transfer are subject to the regulations and a general license of the U.S. Nuclear Regulatory Commission or of a state with which the Commission has entered into an agreement for the exercise of regulatory authority.

Name of Manufacturer

- b. This radioactive drug may be received, acquired, possessed, and used only by physicians, clinical laboratories or hospitals and only for in vitro clinical or laboratory tests not involving internal or external administration of the material, or the radiation from the radioactive material, to human beings or animals. Its receipt, acquisition, possession, use and transfer are subject to the regulations and a general license of a Licensing State.

Name of Manufacturer

- 5. The label affixed to the unit, or the leaflet or brochure that accompanies the package, contains adequate information about the precautions to be observed in handling and storing the specified radioactive material. In the case of the mock iodine-125 reference or calibration source, the information accompanying the source must also contain directions to the licensee regarding the waste disposal requirements set out in R9-7-434.
- F. The Department shall grant for a specific license to manufacture and distribute ice detection devices to persons generally licensed under R9-7-306(F) if the applicant satisfies:
 - 1. The general requirements of R9-7-309; and
 - 2. The criteria of 10 CFR 32.61 and 32.62, revised January 1, 2015, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
- G. The Department shall grant a specific license to manufacture, prepare, or transfer for commercial distribution radioactive drugs that contain radioactive material for use by a person authorized in accordance with Article 7 of this Chapter, if the applicant meets all of the requirements in 10 CFR 30.32(j) or 10 CFR 32.72, revised January 1, 2013, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
 - 1. Authorization under this Section to produce Positron Emission Tomography (PET) radioactive drugs for noncommercial transfer to medical use licensees in its consortium does not relieve the licensee from complying with applicable FDA, other federal, and state requirements governing radioactive drugs.
 - 2. Each licensee authorized under this Section to produce PET radioactive drugs for noncommercial transfer to medical use licensees in its consortium shall:
 - a. Satisfy the labeling requirements in R9-7-431 for each PET radioactive drug transport radiation shield and each syringe, vial, or other container used to hold a PET radioactive drug intended for noncommercial distribution to members of its consortium.
 - b. Possess and use instrumentation to measure the radioactivity of the PET radioactive drugs intended for noncommercial distribution to members of its consortium and meet the procedural, radioactivity measurement, instrument test, instrument check, and instrument adjustment requirements in R9-7-449.
 - 3. A licensee that is a pharmacy authorized under this Section to produce PET radioactive drugs for noncommercial transfer to medical use licensees in its consortium shall require that any individual who prepares PET radioactive drugs be an:
 - a. Authorized nuclear pharmacist that meets the requirements in R9-7-712, or
 - b. Individual under the supervision of an authorized nuclear pharmacist as specified in R9-7-706.
 - 4. A pharmacy, authorized under this Section to produce PET radioactive drugs for noncommercial transfer to medical use licensees in its consortium that allows an individual to work as an authorized nuclear pharmacist, shall meet the requirements of R9-7-712.
- H. The Department shall grant a specific license to manufacture and distribute generators or reagent kits that contain radioactive material for preparation of radiopharmaceuticals by persons licensed according to 9 A.A.C. 7, Article 7 if:
 - 1. The applicant satisfies the general requirements of R9-7-309;
 - 2. The applicant submits evidence that:
 - a. The generator or reagent kit is to be manufactured, labeled and packaged according to the Federal Food, Drug, and Cosmetic Act or the Public Health Service Act, a new drug application (NDA) approved by the Food and Drug Administration (FDA), a biologic product license issued by FDA, or a “Notice of Claimed Investigational Exemption for a New Drug” (IND) that has been accepted by the FDA; or
 - b. The manufacture and distribution of the generator or reagent kit are not subject to the Federal Food, Drug, and Cosmetic Act and the Public Health Service Act.
 - 3. The applicant submits information on the radionuclide; chemical and physical form, packaging including maximum activity per package, and shielding provided by the packaging of the radioactive material contained in the generator or reagent kit;
 - 4. The label affixed to the generator or reagent kit contains information on the radionuclide, including quantity, and date of assay; and
 - 5. The label affixed to the generator or reagent kit, or the leaflet or brochure that accompanies the generator or reagent kit, contains:
 - a. Adequate information, from a radiation safety ~~stand point~~ standpoint, on the procedures to be followed and the equipment and shielding to be used in eluting the generator or processing radioactive material with the reagent kit; and



- b. A statement that this generator or reagent kit (as appropriate) is approved for use by persons licensed by the Department under 9 A.A.C. 7, Article 7 or equivalent licenses of the U.S. Nuclear Regulatory Commission or an Agreement State or Licensing State. The labels, leaflets or brochures required by this subsection supplement the labeling required by FDA and they may be separate from or, with the approval of FDA, combined with the labeling required by FDA.
- I. The Department shall grant a specific license to manufacture and distribute sources and devices that contain radioactive material to a person licensed in accordance with Article 7 of this Chapter for use as a calibration, transmission, or reference source or for medical purposes, if the applicant meets all of the requirements in 10 CFR 32.74, revised January 1, 2015, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
- J. Requirements for license to manufacture and distribute industrial products containing depleted uranium for mass volume applications.
1. The Department shall grant a specific license to manufacture industrial products and devices that contain depleted uranium for use under R9-7-305(C) or equivalent regulations of the U.S. Nuclear Regulatory Commission or an Agreement State if:
 - a. The applicant satisfies the general requirements in R9-7-309;
 - b. The applicant submits sufficient information relating to the design, manufacture, prototype testing, quality control procedures, labeling or marking, proposed uses, and potential hazards of the industrial product or device to provide reasonable assurance that possession, use, or transfer of the depleted uranium in the product or device is not likely to cause any individual to receive a radiation dose in excess of 10 percent of the limits specified in R9-7-408.
 - c. The applicant submits sufficient information regarding the industrial product or device and the presence of depleted uranium for a mass volume application in the product or device to provide reasonable assurance that unique benefits will accrue to the public because of the usefulness of the product or device.
 2. In the case of an industrial product or device whose unique benefits are questionable, the Department shall approve an application for a specific license under this subsection only if the product or device is found to combine a high degree of utility and low probability of uncontrolled disposal and dispersal of significant quantities of depleted uranium into the environment.
 3. The Department may deny any application for a specific license under this subsection if the end use or uses of the industrial product or device cannot be reasonably foreseen.
 4. Each person licensed under subsection (J)(1) shall:
 - a. Maintain the level of quality control required by the license in the manufacture of the industrial product or device and the installation of the depleted uranium into the product or device;
 - b. Label or mark each unit to:
 - i. Identify the manufacturer of the product or device, the number of the license under which the product or device was manufactured or initially transferred, the fact that the product or device contains depleted uranium, and the quantity of depleted uranium in each product or device; and
 - ii. State that the receipt, possession, use, and transfer of the product or device are subject to a general license or the equivalent and the regulations of the U.S. Nuclear Regulatory Commission or an Agreement State;
 - c. Assure that the depleted uranium, before being installed in each product or device, has been impressed with the following legend, clearly legible through any plating or other covering: "Depleted Uranium";
 - d. Furnish a copy of the general license contained in R9-7-305(C) and a copy of ARRA-23 to each person to whom depleted uranium in a product or device is transferred for use under a general license contained in R9-7-305(C); or
 - e. Furnish a copy of the general license contained in the U.S. Nuclear Regulatory Commission's or Agreement State's regulation equivalent to R9-7-305(C) and a copy of the U.S. Nuclear Regulatory Commission's or Agreement State's certificate, or alternatively, furnish a copy of the general license contained in R9-7-305(C) and a copy of ARRA-23 to each person to whom depleted uranium in a product or device is transferred for use under a general license of the U.S. Nuclear Regulatory Commission or an Agreement State, with a document explaining that use of the product or device is regulated by the U.S. Nuclear Regulatory Commission or an Agreement State under requirements substantially the same as those in R9-7-305(C);
 - f. Report to the Department all transfers of industrial products or devices to persons for use under the general license in R9-7-305(C). The report shall identify each general licensee by name and address, an individual by name or position who serves as the point of contact person for the general licensee, the type and model number of device transferred, and the quantity of depleted uranium contained in the product or device. The report shall be submitted within 30 days after the end of each calendar quarter in which a product or device is transferred to the generally licensed person. If no transfers have been made to persons generally licensed under R9-7-305(C) during the reporting period, the report shall so indicate;
 - i. Report to the U.S. Nuclear Regulatory Commission all transfers of industrial products or devices to persons for use under the U.S. Nuclear Regulatory Commission general license in 10 CFR 40.25; or
 - ii. Report to the responsible state agency all transfers of devices manufactured and distributed under subsection (J)(4)(f) for use under a general license in that state's regulations equivalent to R9-7-305(C);
 - iii. The report required in subsection (J)(4)(f)(i) or (ii) shall identify each general licensee by name and address, an individual by name or position who serves as the contact person for the general licensee, the type and model number of the device transferred, and the quantity of depleted uranium contained in the product or device. The report shall be submitted within 30 days after the end of each calendar quarter in which a product or device is transferred to the generally licensed person;
 - iv. If no transfers have been made to U.S. Nuclear Regulatory Commission licensees during the reporting period, this information shall be reported to the U.S. Nuclear Regulatory Commission;
 - v. If no transfers have been made to general licensees within a particular Agreement State during the reporting period, this information shall be reported to the responsible Agreement state agency; and
 - vi. Keep records showing the name, address, and contact person for each general licensee to whom depleted uranium in industrial products or devices is transferred for use under a general license provided in R9-7-305(C) or equivalent reg-



ulations of the U.S. Nuclear Regulatory Commission or of an Agreement State. The records shall be maintained for a period of three years and show the date of each transfer, the quantity of depleted uranium in each product or device transferred, and compliance with the reporting requirements of this Section.

- K. A licensee who manufactures nationally tracked sources, as defined in Article 4, shall:
 1. Serialize the sources in accordance with 10 CFR 32.201, revised January 1, 2013, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments; and
 2. Report manufacturing activities in accordance with R9-7-454.

R9-7-313. Specific Terms and Conditions

- A. Each license issued under this Article is subject to all provisions of A.R.S. Title 30, Chapter 4 and to all rules, regulations, and orders of the Department.
- B. A licensee shall not transfer, assign, or in any manner dispose of a license issued or granted under this Article or a right to possess or utilize radioactive material granted by any license issued under this Article unless the Department finds that the transfer is consistent with the Department's statutes and rules, and gives its consent in writing. An application for transfer of license must include:
 1. The identity, technical and financial qualifications of the proposed transferee; and
 2. Financial assurance for decommissioning information required by R9-7-323.
- C. Each person licensed by the Department under this Article shall confine the use and possession of the material licensed to the locations and purposes authorized in the license.
- D. Each license issued pursuant to the rules in Articles 3, 5, 7, and 15 of this Chapter shall be deemed to contain the provisions set forth in the Act, whether or not these provisions are expressly set forth in the license.
- E. The Department may incorporate, in any license issued pursuant to the rules in this Chapter, at the time of issuance, or thereafter by appropriate rule, regulation or order, such additional requirements and conditions with respect to the licensee's receipt, possession, use and transfer of byproduct material as it deems appropriate or necessary in order to:
 1. Promote the common defense and security;
 2. Protect health or to minimize danger to life or property;
 3. Protect restricted data; or
 4. Require such reports and the keeping of such records, and to provide for such inspections of activities under the license as may be necessary or appropriate to effectuate the purposes of the Act and rules thereunder.
- F. Licensees required to submit emergency plans in accordance with R9-7-322 shall follow the emergency plan approved by the Department. The licensee may change the approved plan without Department approval only if the changes do not reduce the commitment of the plan. The licensee shall furnish the change to the Department and to affected offsite response organizations within six months after the change is made. Proposed changes that reduce, or potentially reduce, the commitment of the approved emergency plan may not be implemented without prior application to and prior approval by the Department.
- G. Each person licensed under this Section and each general licensee that is required to register under R9-7-306(A)(4)(o) shall notify the Department in writing if the licensee decides to permanently discontinue any or all activities involving materials authorized under the license. A specific licensee or general licensee shall notify the Department, in writing:
 1. Immediately following the filing of a petition for bankruptcy under any Chapter of Title 11 of the United States Code if the petition for bankruptcy is by or against:
 - a. The licensee;
 - b. An entity (as defined in the bankruptcy code) controlling the licensee or listing the license or licensee as property of the estate; or
 - c. An affiliate (as defined in the bankruptcy code) of the licensee.
 2. Providing the following information:
 - a. The bankruptcy court in which the petition for bankruptcy was filed, and
 - b. The bankruptcy case title and number, and
 - c. The date the petition was filed.
- H. Each licensee preparing technetium-99m radiopharmaceuticals from molybdenum-99/technetium-99m generators or rubidium-82 from strontium-82/rubidium-82 generators shall test the generator eluates for molybdenum-99 breakthrough or strontium-82 and strontium-85 contamination, respectively, in accordance with R9-7-720. The licensee shall record the results of each test and retain each record for three years after the record is made.

I. Inalienability of Licenses

1. No license issued or granted pursuant to the regulations in this part shall 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 Department, after securing full information, finds that the transfer is in accordance with the provisions of this act and gives its consent in writing.
2. An application for transfer of license must include:
 - a. The identity, technical and financial qualifications of the proposed transferee; and
 - b. Financial assurance for decommissioning information required by R9-7-323, 10 CFR 40.3 and 10 CFR 70.25.

R9-7-323. Financial Assurance and Recordkeeping for Decommissioning

- A. For purposes of terminating specific licensed activities:
 1. "Decommissioning" means to remove a radioactive material use facility safely from service and to reduce residual radioactivity to a level that permits release of the property for unrestricted use and termination of the radioactive material use license.
 2. "Byproduct material" as used in 10 CFR 30, means "radioactive material" which is defined in A.R.S. § 30-651.
 3. "Facility" means the entire site of radioactive material use, or any separate building or outdoor area where it is used.
 4. "Appendix B to Part 30" as used in 10 CFR 30, means Appendix E in 9 A.A.C. 7, Article 4.
 5. "Financial security" means having a net worth of not less than \$10,000.



- B. When applying, each non-government applicant for a specific license that authorizes the possession and use of radioactive material, and each non-government holder of a license to possess and use radioactive material issued before the effective date of this Section, shall submit to the Department a decommissioning funding plan or certification of financial security, as required in A.R.S. § 30-672(H). A licensee required to meet the requirements in subsection (C) is exempt from the requirements in this subsection.
- C. When applying, each applicant for a specific license that authorizes the possession and use of radioactive material, and each holder of a license to possess and use radioactive material issued before the effective date of this Section, shall submit to the Department a decommissioning funding plan or certification of financial assurance that meets the requirements in 10 CFR 30.35, 40.36, and 70.25, revised January 1, 2015, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments. Each decommissioning funding plan shall be submitted to the Department for review and approval and shall contain:
- ~~1.~~ ~~A~~ a detailed cost estimate for decommissioning, in an amount reflecting:
 - ~~a.1.~~ 1. The cost of an independent contractor to perform all decommissioning activities;
 - ~~b.2.~~ 2. The cost of meeting the R9-7-452(B) criteria for unrestricted use, provided that, if the applicant or licensee can demonstrate its ability to meet the provisions of ~~R9-7-453(C)~~ R9-7-452(C), the cost estimate may be based on meeting the ~~R9-7-453(C)~~ R9-7-452(C) criteria;
 - ~~e.3.~~ 3. The volume of onsite subsurface material containing residual radioactivity that will require remediation to meet the criteria for license termination; ~~and~~
 - ~~d.4.~~ 4. ~~An adequate contingency factor. The ability to meet the provisions of this Section, for which the cost estimate may be based on meeting the criteria specified in this Section; and~~
 - 5. An adequate contingency factor, including:
 - ~~2-a.~~ a. Identification of and justification for using the key assumptions contained in the DCE;
 - ~~3-b.~~ b. A description of the method of assuring funds for decommissioning including means for adjusting cost estimates and associated funding levels periodically over the life of the facility;
 - ~~4-c.~~ c. A certification by the licensee that financial assurance for decommissioning has been provided in the amount of the cost estimate for decommissioning; and
 - ~~5-d.~~ d. An original signed copy of the financial instrument obtained to satisfy the requirements of subsection (F) unless a previously submitted and accepted financial instrument continues to cover the cost estimate for decommissioning).
- D. Each licensee required to provide financial assurance for decommissioning a radioactive material facility under this Section shall maintain records of information important to the safe and effective decommissioning of the facility in an identified location until the license is terminated by the Department. The licensee shall maintain the following records during the decommissioning process:
1. Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, and site. These records may be limited to instances when contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete. The licensee shall keep records identifying the involved radionuclides and associated quantities, forms, and concentrations.
 2. As-built drawings showing modifications of structures and equipment in restricted areas where radioactive materials are used and stored, and locations of possible inaccessible contamination. If drawings are not available, the licensee shall provide appropriate records describing each location of possible contamination.
 3. Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds if either a funding plan or certification is used.
- E. Decommissioning procedures:
1. Upon expiration or termination of principal activities a licensee shall notify the Department in writing whether the licensee is discontinuing licensed activities. The licensee shall begin decommissioning its facility within 60 days after the Department receives notice of the decision to permanently terminate principal activities, or within 12 months after receipt of notice, submit to the Department a decommissioning plan, as prescribed in 10 CFR 30.36(g)(1), 40.42(g)(1), and 70.38(g)(1), revised January 1, 2015, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments. The licensee shall begin decommissioning upon approval of the plan if the license has expired or no licensed activities have been conducted at the licensee's facility for a period of 24 months.
 2. In addition to the notification requirements in subsection (E)(1), the licensee shall maintain in effect all decommissioning financial assurances required by this Section. The financial assurances shall be increased or may be decreased as appropriate to cover the cost estimate established for decommissioning in subsection (E)(1). The licensee may reduce the amount of the financial assurance following approval of the decommissioning plan, provided the radiological hazard is decreasing and the licensee has the approval of the Department.
 3. The Department shall extend the time periods established in subsection (E)(1) if a new time period is in the best interest of public health and safety.
 - a. The licensee shall submit a request for an extension no later than 30 days after the Department receives the notice required in subsection (E)(1).
 - b. If a licensee has requested an extension, the licensee is not required to commence decommissioning activities required in subsection (E)(1), until the Department has made a determination on the request submitted to the Department under subsection (E)(3)(a).
 4. Except as provided in subsection (E)(5), the licensee shall complete decommissioning of a facility as soon as practicable but no later than 24 months following the initiation of decommissioning; and except as provided in subsection (E)(5), when decommissioning involves the entire facility, the licensee shall request license termination as soon as practicable but no later than 24 months following initiation of decommissioning.
 5. The Department shall approve a request for an alternate schedule for completion of decommissioning and license termination if the Department determines that the alternative is warranted by consideration of the conditions specified in 10 CFR 30.36(i),



- 40.42(i), and 70.38(i), revised January 1, 2015, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
6. As a final step in decommissioning, the licensee shall meet the requirements specified in 10 CFR 30.36(j), 40.42(j), and 70.38(j), revised January 1, 2015, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
- F.** Each person licensed under this Article shall keep records of information important to the decommissioning of a facility in an identified location until the site is released for unrestricted use. Before licensed activities are transferred or assigned in accordance with R9-7-318, licensees shall transfer all records described in ~~this paragraph~~ **subsections (F)(1) through (F)(4)** to the new licensee. In this case, the new licensee will be responsible for maintaining these records until the license is terminated. If records important to the decommissioning of a facility are kept for other purposes, reference to these records and their locations may be used. Information the Department considers important to decommissioning consists of:
1. Records of spills or other unusual occurrences involving the spread of contamination in and around the facility, equipment, or site. These records may be limited to instances when contamination remains after any cleanup procedures or when there is reasonable likelihood that contaminants may have spread to inaccessible areas as in the case of possible seepage into porous materials such as concrete. These records must include any known information on identification of involved nuclides, quantities, forms, and concentrations.
 2. As-built drawings and modifications of structures and equipment in restricted areas where radioactive materials are used and/or stored, and of locations of possible inaccessible contamination such as buried pipes which may be subject to contamination. If required drawings are referenced, each relevant document need not be indexed individually. If drawings are not available, the licensee shall substitute appropriate records of available information concerning these areas and locations.
 3. Except for areas containing depleted uranium used only for shielding or as penetrators in unused munitions, a list contained in a single document and updated every 2 years, of the following:
 - a. All areas designated and formerly designated as restricted areas as defined under R9-7-102;
 - b. All areas outside of restricted areas that require documentation under ~~R9-7-323(F)(1)~~ **subsection (F)(1)**;
 - c. All areas outside of restricted areas where current and previous wastes have been buried as documented under R9-7-441; and
 - d. All areas outside of restricted areas that contain material such that, if the license expired, the licensee would be required to either decontaminate the area to meet the criteria for decommissioning in R9-7-451 or R9-7-452; or apply for approval for disposal under R9-7-435.
 4. Records of the cost estimate performed for the decommissioning funding plan or of the amount certified for decommissioning, and records of the funding method used for assuring funds if either a funding plan or certification is used.
- G.** In providing financial assurance under this section, each licensee shall use the financial assurance funds only for decommissioning activities and each licensee shall monitor the balance of funds held to account for market variations. The licensee shall replenish the funds, and report such actions to the Department, as follows:
1. If, at the end of a calendar quarter, the fund balance is below the amount necessary to cover the cost of decommissioning, but is not below 75 percent of the cost, the licensee shall increase the balance to cover the cost, and shall do so within 30 days after the end of the calendar quarter.
 2. If, at any time, the fund balance falls below 75 percent of the amount necessary to cover the cost of decommissioning, the licensee shall increase the balance to cover the cost, and shall do so within 30 days of the occurrence.
 3. Within 30 days of taking the actions required by subsection (G)(1) or (G)(2), the licensee shall provide a written report of such actions to the Director of the Department, and state the new balance of the fund.
- H.** The financial instrument must include the licensee's name, license number, and docket number, and the name, address, and other contact information of the issuer, and, if a trust is used, the trustee. When any of the foregoing information changes, the licensee must, within 30 days, submit financial instruments to the Department reflecting such changes. The financial instrument submitted must be a signed original or signed original duplicate, except where a copy of the signed original is specifically permitted. Financial assurance for decommissioning must be provided by one or more of the following methods:
1. Prepayment. Prepayment is the deposit before the start of operation into an account segregated from licensee assets and outside the licensee's administrative control of cash or liquid assets such that the amount of funds would be sufficient to pay decommissioning costs. Prepayment must be made into a trust account, and the trustee and the trust must be acceptable to the Department.
 2. A surety method, insurance, or other guarantee method. These methods guarantee that decommissioning costs will be paid. A surety method may be in the form of a surety bond, or letter of credit. A parent company guarantee of funds for decommissioning costs based on a financial test may be used if the guarantee and test are approved by the Department. For commercial corporations that issue bonds, a guarantee of funds by the applicant or licensee for decommissioning costs based on a financial test may be used if the guarantee and test are approved by the Department. For commercial companies that do not issue bonds, a guarantee of funds by the applicant or licensee for decommissioning costs may be used if the guarantee and test are approved by the Department. For nonprofit entities, such as colleges, universities, and nonprofit hospitals, a guarantee of funds by the applicant or licensee may be used if the guarantee and test are approved by the Department. Except for an external sinking fund, a parent company guarantee or a guarantee by the applicant or licensee may not be used in combination with any other financial methods used to satisfy the requirements of this section. A guarantee by the applicant or licensee may not be used in any situation where the applicant or licensee has a parent company holding majority control of the voting stock of the company. Any surety method or insurance used to provide financial assurance for decommissioning must contain the following conditions:
 - a. The surety method or insurance must be open-ended or, if written for a specified term, such as five years, must be renewed automatically unless 90 days or more prior to the renewal date, the issuer notifies the Department, the beneficiary, and the licensee of its intention not to renew. The surety method or insurance must also provide that the full face-value amount be paid to the beneficiary automatically prior to the expiration without proof of forfeiture if the licensee fails to provide a replacement acceptable to the Department within 30 days after receipt of notification of cancellation.



- b. The surety method or insurance must be payable to a trust established for decommissioning costs. The trustee and trust must be acceptable to the Department. An acceptable trustee includes an appropriate State or Federal government agency or an entity which has the authority to act as a trustee and whose trust operations are regulated and examined by a Federal or State agency.
- c. The surety method or insurance must remain in effect until the Department has terminated the license.
3. An external sinking fund in which deposits are made at least annually, coupled with a surety method, insurance, or other guarantee method, the value of which may reduce by the amount being accumulated in the sinking fund. An external sinking fund is a fund established and maintained by setting aside funds periodically in an account segregated from licensee assets and outside the licensee's administrative control in which the total amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected. An external sinking fund must be in the form of a trust. If the other guarantee method is used, no surety or insurance may be combined with the external sinking fund. The surety, insurance, or other guarantee provisions must be as stated in subsection (H)(2).
4. In the case of Federal, State, or local government licensees, a statement of intent containing a cost estimate for decommissioning, and indicating that funds for decommissioning will be obtained when necessary.
5. When a governmental entity is assuming custody and ownership of a site, an arrangement that is deemed acceptable by such governmental entity.

ARTICLE 4. STANDARDS FOR PROTECTION AGAINST IONIZING RADIATION

R9-7-408. Occupational Dose Limits for Adults

- A. Each licensee or registrant shall control the occupational dose to individual adults, except for planned special exposures required in R9-7-413, to the following dose limits:
 1. An annual limit, which is the more limiting of:
 - a. The total effective dose equivalent being equal to 0.05 Sv (5 rem); or
 - b. The sum of the deep-dose equivalent and the committed dose equivalent to any individual organ or tissue other than the lens of the eye being equal to 0.5 Sv (50 rem).
 2. The annual limits to the lens of the eye, to the skin, and to the extremities which are:
 - a. A lens dose equivalent of 0.15 Sv (15 rem), and
 - b. A shallow dose equivalent of 0.5 Sv (50 rem) to the skin of the whole body or to the skin of any extremity.
- B. Doses received in excess of the annual limits, including doses received during accidents, emergencies, and planned special exposures, shall be subtracted from the limits for planned special exposures that the individual may receive during the current year and during the individual's lifetime. See R9-7-413.
- C. The assigned deep-dose equivalent and shallow-dose equivalent are, for the portion of the body receiving the highest exposure, determined as follows:
 1. The deep-dose equivalent, lens dose equivalent, and shallow-dose equivalent may be assessed from surveys or other radiation measurements for the purpose of demonstrating compliance with the occupational dose limits, if the individual monitoring device was not in the region of highest potential exposure, or the results of individual monitoring are unavailable.
 2. If a protective apron is worn and monitoring is conducted as specified in R9-7-419(B), the effective dose equivalent for external radiation shall be determined as follows:
 - a. If only one individual monitoring device is used and it is located at the neck outside the protective apron, and the reported dose exceeds 25% of the limit specified in ~~R9-7-408(A)~~ subsection (A), the reported deep-dose equivalent value multiplied by 0.3 is the effective dose equivalent for external radiation; or
 - b. When individual monitoring devices are worn, both under the protective apron at the waist and outside the protective apron at the neck, the effective dose equivalent for external radiation is assigned the value of the sum of the deep-dose equivalent reported for the individual monitoring device located at the waist under the protective apron multiplied by 1.5 and the deep-dose equivalent reported for the individual monitoring device located at the neck outside the protective apron multiplied by 0.04.
 3. When the external exposure is determined by measurement with an external personal monitoring device, the deep-dose equivalent must be used in place of the effective dose equivalent, unless the effective dose equivalent is determined by a dosimetry method approved by the Department. The assigned deep-dose equivalent shall be determined for the part of the body that receives the highest exposure. The assigned shallow-dose equivalent is the dose averaged over the contiguous 10 square centimeters of skin that receives the highest exposure. The deep-dose equivalent, lens-dose equivalent, and shallow-dose equivalent may be assessed from surveys or other radiation measurements for the purpose of demonstrating compliance with the occupational dose limits, if the individual monitoring device was not in the region of highest potential exposure, or the results of individual monitoring are unavailable.
- D. Derived air concentration (DAC) and annual limit on intake (ALI) values are presented in Table I of Appendix B and may be used to determine the individual's dose and to demonstrate compliance with the occupational dose limits.
- E. Notwithstanding the annual dose limits, the licensee shall limit the soluble Uranium intake by an individual to 10 milligrams in a week in consideration of chemical toxicity. See footnote 3 of Appendix B.
- F. The licensee or registrant shall reduce the dose that an individual may receive in the current year by the amount of occupational dose received while employed occupationally as a radiation worker by all previous employers. See R9-7-412.

R9-7-415. Dose Equivalent to an Embryo or Fetus

- A. A licensee or registrant shall ensure that the dose equivalent to an embryo or fetus during the entire pregnancy, due to occupational exposure of a declared pregnant woman, does not exceed 5 mSv (0.5 rem). Records shall be maintained according to ~~R9-7-419(D)(4) and (5)~~ R9-7-419(E)(4) and (5).
- B. The licensee or registrant shall make efforts to avoid substantial variation above a uniform monthly exposure rate to a declared pregnant woman to satisfy the limit in subsection (A).



- C. For purposes of this Section, the dose equivalent to the embryo or fetus is the sum of:
 1. The deep-dose equivalent to the declared pregnant woman; and
 2. The dose equivalent to the embryo or fetus resulting from radionuclides in the embryo or fetus and radionuclides in the declared pregnant woman.
- D. If the dose equivalent to the embryo or fetus is found to have exceeded 5 mSv (0.5 rem) or is within 0.5 mSv (0.05 rem) of this dose by the time the woman declares the pregnancy to the licensee or registrant, the licensee or registrant shall be deemed to be in compliance with subsection (A) if the additional dose equivalent to the embryo or fetus does not exceed 0.5 mSv (0.05 rem) during the remainder of the pregnancy.

R9-7-417. Testing for Leakage or Contamination of Sealed Sources

- A. A licensee in possession of any sealed source shall ensure that:
 1. Each sealed source, except as specified in subsection (B), is tested for leakage or contamination and the test results are received before the sealed source is put into use unless the licensee has a certificate from the transferor indicating that the sealed source was tested within six months before transfer to the licensee or registrant.
 2. Each sealed source that is not designed to emit alpha particles is tested for leakage or contamination at intervals not to exceed six months or at alternative intervals approved by the Department, after evaluation of information specified by ~~R9-7-311(D)(2) and (D)(3)~~, R9-7-311(D)(2) or equivalent information specified by an Agreement State, a Licensing State, or the U.S. Nuclear Regulatory Commission.
 3. Each sealed source that is designed to emit alpha particles is tested for leakage or contamination at intervals not to exceed three months or at alternative intervals approved by the Department, after evaluation of information specified by ~~R9-7-311(D)(2) and (D)(3)~~, R9-7-311(D)(2) or equivalent information specified by an Agreement State, a Licensing State, or the Nuclear Regulatory Commission.
 4. Each sealed source suspected of damage or leakage is tested for leakage or contamination before further use.
 5. Tests for leakage for all sealed sources, except brachytherapy sources manufactured to contain radium, are capable of detecting the presence of 185 Bq (0.005 µCi) of radioactive material on a test sample. The person conducting the test shall take test samples from the sealed source or from the surfaces of the container in which the sealed source is stored or mounted on which contamination could accumulate. For a sealed source contained in a device, the person conducting the test shall obtain test samples when the source is in the “off” position.
 6. The test for leakage from brachytherapy sources containing radium is capable of detecting an absolute leakage rate of 37 Bq (0.001 µCi) of Radon-222 in a 24-hour period when the collection efficiency for Radon-222 and its daughters has been determined with respect to collection method, volume, and time.
 7. Tests for contamination from radium daughters are taken on the interior surface of brachytherapy source storage containers and are capable of detecting the presence of 185 Bq (0.005 µCi) of a radium daughter which has a half-life greater than four days.
- B. A licensee need not perform tests for leakage or contamination on the following sealed sources:
 1. Sealed sources containing only radioactive material with a half-life of less than 30 days;
 2. Sealed sources containing only radioactive material as a gas;
 3. Sealed sources containing 3.7 MBq (100 µCi) or less of beta or photon-emitting material or 370 kBq (10 µCi) or less of alpha-emitting material;
 4. Sealed sources containing only Hydrogen-3;
 5. Seeds of Iridium-192 encased in nylon ribbon; and
 6. Sealed sources, except teletherapy and ~~brachytherapy~~ brachytherapy sources, which are stored, not being used, and identified as in storage. The licensee shall test each sealed source for leakage or contamination and receive the test results before any use or transfer unless it has been tested for leakage or contamination within six months before the date of use or transfer.
- C. Persons specifically authorized by the Department, an Agreement State, a Licensing State, or the U.S. Nuclear Regulatory Commission shall perform tests for leakage or contamination from sealed sources.
- D. A licensee shall maintain for Department inspection test results in units of becquerel or microcurie.
- E. The following is considered evidence that a sealed source is leaking:
 1. The presence of 185 Bq (0.005 µCi) or more of removable contamination on any test sample.
 2. Leakage of 37 Bq (0.001 µCi) of Radon-222 per 24 hours for brachytherapy sources manufactured to contain radium.
 3. The presence of removable contamination resulting from the decay of 185 Bq (0.005 µCi) or more of radium.
- F. A licensee shall immediately withdraw a leaking sealed source from use and shall take action to prevent the spread of contamination. The leaking sealed source shall be repaired or disposed of in accordance with this Article.
- G. A licensee shall file a report with the Department within five days if the test for leakage or contamination indicates a sealed source is leaking or contaminated. The report shall include the equipment involved, the test results, and the corrective action taken.
- H. A licensee shall maintain records of the tests for leakage required in subsection (A) for three years after the records are made.

R9-7-418. Surveys and Monitoring

- A. Each licensee or registrant shall make, or cause to be made, surveys if surveys are:
 1. Necessary for the licensee or registrant to comply with Article 4, and
 2. Reasonable under the circumstances to evaluate:
 - a. The magnitude and extent of radiation levels, and
 - b. Concentrations or quantities of residual radioactivity, and
 - c. The potential radiological hazards of the radiation levels and residual radioactivity detected.
- B. All personnel dosimeters, except for direct and indirect reading pocket ionization chambers and those dosimeters used to measure the dose to any extremity, that require processing to determine the radiation dose and that are used by licensees and registrants to comply with R9-7-408, with other applicable provisions of these rules, or with conditions specified in a license or registration shall be processed and evaluated by a dosimetry processor:



1. Holding current personnel dosimetry accreditation from the National Voluntary Laboratory Accreditation Program (NVLAP) of the National Institute of Standards and Technology, according to NVLAP procedures published March 1994 as NIST Handbook 150, and NIST Handbook 150-4, published August 1994, which is incorporated by reference, published by the U.S. Government Printing Office, Washington D.C. 20402-9325, and on file with the Department. The material incorporated by reference contains no future editions or amendments; ~~and~~
 2. Approved in this accreditation process for the type of radiation or radiations included in the NVLAP program that most closely approximates the type of radiation or radiations for which the individual wearing the dosimeter is monitored; ~~and~~
 3. Film badges must be replaced at periods not to exceed one month; other personnel dosimeters processed and evaluated by an accredited NVLAP processor must be replaced at periods not to exceed three months.
- C. The licensee or registrant shall ensure that adequate precautions are taken to prevent a deceptive exposure of an individual monitoring device and that personnel monitoring devices are issued to, and used by only the individual to whom the monitoring device has been first issued during any reporting period.
- D. A licensee shall ensure that survey instruments and personnel dosimeters that are used to make quantitative measurements are calibrated in accordance with R9-7-449.
- E. Records.
1. Each licensee or registrant shall maintain records showing the results of surveys required by this Section and R9-7-433(B). The licensee or registrant shall retain these records for three years after the record is made.
 2. The licensee or registrant shall retain each of the following records for three years after the Department terminates the license or registration:
 - a. Records of the survey results used to determine the dose from external sources of radiation, in the absence of or in combination with individual monitoring data, and provide an assessment of individual dose equivalents;
 - b. Records of the results of measurements and calculations used to determine individual intakes of radioactive material and to assess an internal dose;
 - c. Records showing the results of air sampling, surveys, and bioassays required according to R9-7-425(A)(3)(a) and (b); ~~and~~
 - d. Records of the measurement and calculation results used to evaluate the release of radioactive effluents to the environment; ~~and~~
 - e. Notwithstanding subsection (A) of this part, records from surveys describing the location and amount of subsurface residual radioactivity identified at the site must be kept with records important for decommissioning, and such records must be retained in accordance with R9-7-323, as applicable.

R9-7-419. Conditions Requiring Individual Monitoring of External and Internal Occupational Dose

- A. Each licensee or registrant shall monitor exposures from sources of radiation at levels sufficient to demonstrate compliance with the occupational dose limits of this Article.
- B. At minimum each licensee or registrant shall supply and require the use of individual monitoring devices by the following personnel:
1. Adults likely to receive, in one year, an intake in excess of 10% of the applicable ALI in Table I, Columns 1 and 2, of Appendix B;
 2. Minors and declared pregnant women likely to receive, in one year, a committed effective dose equivalent in excess of 0.5 mSv (0.05 rem);
 3. Adults likely to receive, in one year from radiation sources external to the body, a dose in excess of 10 percent of the limits in R9-7-408(A);
 4. Minors likely to receive, in one year, from radiation sources external to the body, a deep dose equivalent in excess of 1 mSv (0.1 rem), a lens dose equivalent in excess of 1.5 mSv (0.15 rem), or a shallow dose equivalent to the skin or to the extremities in excess of 5 mSv (0.5 rem);
 5. Declared pregnant women likely to receive during the entire pregnancy, from radiation sources external to the body, a deep dose equivalent in excess of 1 mSv (0.1 rem) (Note: All of the occupational doses in R9-7-408 continue to be applicable to the declared pregnant worker as long as the embryo/fetus dose limit is not exceeded.); ~~and~~
 6. Individuals entering a high or very high radiation area;
 7. Individuals operating mobile x-ray equipment, ~~except dental intraoral systems~~, as described in R9-7-608;
 8. Individuals holding animals for diagnostic x-ray procedures, as described in R9-7-613;
 9. Individuals servicing enclosed beam x-ray systems with bypassed interlocks, as described in R9-7-803;
 10. Individuals operating open beam fluoroscopic systems and ancillary personnel working in the room when the fluoroscopic system is in use, except when relieved of this requirement by registration condition;
 11. Individuals performing well logging, as described in Article 17; ~~and~~
 12. Individuals, wearing a finger or wrist individual monitoring device, during the operation of an open-beam or hand held analytical x-ray system or equipment with no safety devices as described in R9-7-806(C) and (F); ~~and~~
 13. Individuals, wearing a finger or wrist individual monitoring device, performing repairs that require the presence of a primary beam of the analytical x-ray system or equipment, as described in R9-7-806(C) and (F).
- C. Each licensee shall monitor the occupational intake of radioactive material by and assess the committed effective dose equivalent to:
1. Adults likely to receive, in one year, an intake in excess of 10 percent of the applicable ALI in Table 1, Columns 1 and 2, of Appendix B;
 2. Minors likely to receive, in one year, a committed effective dose equivalent in excess of 1 mSv (0.1 rem); and
 3. Declared pregnant women likely to receive, during the entire pregnancy, a committed effective dose equivalent in excess of 1 mSv (0.1 rem).
- D. Each licensee or registrant shall require that all individual monitoring devices be located on individuals according to the following requirements:
1. An individual monitoring device, used to obtain the dose equivalent to an embryo or fetus of a declared pregnant woman according to R9-7-415, shall be located under the protective apron at the waist. A qualified expert shall be consulted to determine the



dose equivalent to the embryo or fetus if this individual monitoring device has a monthly reported dose equivalent value that exceeds 0.5 millisieverts (50 millirem). For purposes of this subsection, the value for determining the dose equivalent to an embryo or fetus under R9-7-415(C), for occupational exposure to radiation from medical fluoroscopic equipment, is the value reported by the individual monitoring device worn at the waist underneath the protective apron, which has been corrected for the particular individual and the work environment by a qualified expert.

- 2. An individual monitoring device used for lens dose equivalent shall be located at the neck or an unshielded location closer to the eye, outside the protective apron.
- 3. If only one individual monitoring device is used to determine the effective dose equivalent for external radiation, according to R9-7-408(C)(2)(a), the device shall be located at the neck outside the protective apron. If a second individual monitoring device is used for the same purpose, it shall be located under the protective apron at the waist. A second individual monitoring device is required for a declared pregnant woman.
- 4. An individual, wearing an extremity personnel monitoring device, during the operation of an open-beam or hand-held analytical x-ray system with no safety devices or an individual performing repairs in the presence of a primary beam of the analytical x-ray system or equipment, as described in R9-7-806(C) and (F), shall wear the device on the individual's finger or wrist.

E. Records.

- 1. Each licensee or registrant shall maintain records of doses received by all individuals for whom monitoring is required according to this Section, and records of doses received during planned special exposures, accidents, and emergency conditions. Assessments of dose equivalent and records made using units in effect before January 1, 1994, need not be changed. These records shall include, when applicable:
 - a. The deep-dose equivalent to the whole body, lens dose equivalent, shallow-dose equivalent to the skin, and shallow-dose equivalent to the extremities;
 - b. The estimated intake of radionuclides;
 - c. The committed effective dose equivalent assigned to the intake of radionuclides;
 - d. The specific information used to assess the committed effective dose equivalent according to R9-7-411(A) and (C), and when required R9-7-419;
 - e. The total effective dose equivalent when required by R9-7-409; and
 - f. The total of the deep-dose equivalent and the committed dose to the organ receiving the highest total dose;
- 2. The licensee or registrant shall make entries of the records specified in subsection (D)(1), at intervals not to exceed one year;
- 3. The licensee or registrant shall maintain at the inspection site the records specified in subsection (D)(1), ~~on Department Form Z (available from the Department), in accordance with the instructions for Department Form Z,~~ or in a clear and legible method ~~which that~~ contains all the information required by this subsection;
- 4. The licensee or registrant shall maintain the records of dose to an embryo or fetus with the records of dose to the declared pregnant woman. The declaration of pregnancy, including the estimated date of conception, shall also be kept on file but may be maintained separately from the dose records; and
- 5. The licensee or registrant shall retain each required form or record for three years after the Department terminates each pertinent license or registration requiring the record.

R9-7-448. Additional Reporting

- A. Each licensee shall notify the Department as soon as possible, but not later than four hours after the discovery of an event, and take immediate protective actions necessary to avoid exposures to radiation or radioactive materials that could exceed the limits specified in this Chapter or releases of licensed material that could exceed the limits specified in this Chapter. For purposes of this Section, event means a radiation accident involving a fire, explosion, gas release, or similar occurrence.
- B. Each licensee shall notify the Department within 24 hours after discovering any of the following events involving licensed material:
 - 1. A contamination event that:
 - a. Requires that anyone having access to the contaminated area be restricted for more than 24 hours by the imposition of additional radiological controls to prohibit entry into the area; and
 - b. Involves a quantity of radioactive material greater than five times the lowest annual limit on intake specified in Appendix B of this Article; and
 - c. Results in access to the contaminated area being restricted for a reason other than to allow radionuclides with a half-life of less than 24 hours to decay prior to decontamination.
 - 2. An event in which equipment is disabled or fails to function as designed when:
 - a. The equipment is part of a system designed to prevent releases exceeding the limits specified in this Chapter, to prevent exposures to radiation and radioactive materials exceeding limits specified in this Chapter, or to mitigate the consequences of an accident; and
 - b. The equipment performs a safety function; and
 - c. No redundant equipment is available and operable to perform the required safety function.
 - 3. An event that requires urgent medical treatment of an individual with radioactive contamination on the individual's clothing or body.
 - 4. A fire or explosion damaging any licensed material or any device, container, or equipment containing licensed material when:
 - a. The quantity of material involved is greater than five times the lowest annual limit on intake specified in Appendix B of this Article, and
 - b. The damage affects the integrity of the licensed material or its container.
- C. Each licensee shall make reports required by subsections (A) and (B) above by telephone to the Department. To the extent that the information is available at the time of notification, the information provided in these reports shall include:
 - 1. The callers's name, official title, and call back telephone number;
 - 2. A description of the event, including date and time;
 - 3. The exact location of the event;



4. The isotopes, quantities, and chemical and physical form of the licensed material involved; and
 5. Any personnel radiation exposure data available.
- D.** Each licensee who makes a report required by subsection (A) or (B) shall submit to the Department a written follow-up report within 30 days of the initial report. Written reports prepared as required by other rules may be submitted to fulfill this requirement if the reports contain all of the required information in this subsection. The report shall include the following:
1. A description of the event, including the probable cause and the manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;
 2. The exact location of the event;
 3. The isotopes, quantities, and chemical and physical form of the licensed material involved;
 4. Date and time of the event;
 5. Corrective actions taken or planned and the results of any evaluations or assessments; and
 6. The extent of personnel exposure to radiation or to radioactive materials without identification of each exposed individual by name.
- E.** Each licensee that makes a report required by subsection (A) or (B) shall submit a written follow-up report to the Department within 60 days after the initial report.

R9-7-451. Termination of a Radioactive Material License or a Licensed Activity

- A.** As the final step before terminating a radioactive material use program licensed under R9-7-312, the licensee shall:
1. Certify to the Department the disposition of all licensed material, including accumulated wastes, by submitting a complete description of a disposal plan with signed receipts from all licensed persons receiving the licensed material; and
 2. Conduct a radiation survey of the premises where the licensed activities were carried out to demonstrate that the premises are suitable for release in accordance with the criteria for decommissioning in R9-7-452 and submit to the Department a report of the results of this survey, unless the licensee demonstrates in some other manner acceptable to the Department that the premises are suitable for release in accordance with the criteria for decommissioning in R9-7-452.
- B.** Before terminating a licensed program, each licensee authorized to possess radioactive material with a half-life greater than 120 days, in any unsealed form, shall forward the following records to the Department:
1. Records of disposal of the licensed material required by R9-7-435, R9-7-436, R9-7-437, and R9-7-438; and
 2. Records required by ~~R9-7-418(D)(2)(d)~~ R9-7-418.
- C.** If a licensed activity is transferred or assigned in accordance with subsection (E), each licensee authorized to possess radioactive material with a half-life greater than 120 days, in any unsealed form, shall transfer the following records to the new licensee and the new licensee shall maintain these records until the license is terminated:
1. Records of disposal of licensed material required by R9-7-435, R9-7-436, R9-7-437, and R9-7-438; and
 2. Records required by ~~R9-7-418(D)(2)(d)~~ R9-7-418.
- D.** Before the Department terminates a license, each licensee shall forward the records required by subsection (E) to the Department.
- E.** A person licensed under R9-7-312 shall maintain required records regarding decommissioning of a facility in a location identified on the license until the Department releases the site for unrestricted use. Before transfer or assignment of licensed activities, a licensee shall transfer all records required by this Section to the transferee. If records relating to facility decommissioning are kept for other purposes, the transferee shall refer to these records and provide their location on the transferee's application for a license. The transferee shall maintain the records until the Department terminates the transferee's new license. The new licensee shall maintain the following decommissioning records for Department review:
1. Records of spills or other occurrences involving the spread of contamination in and around the facility, equipment, or site. The licensee shall maintain a record of any instance when contamination remains after cleanup procedures or there is a reasonable likelihood that a contaminant has spread to an inaccessible area, as in the case of possible seepage into porous material such as concrete. These records shall include any known information that identifies any radionuclide involved and its quantity, form, and concentration.
 2. As-built drawings showing modifications of structures and equipment in restricted areas where radioactive materials are used or stored, and locations of possible inaccessible contamination, such as buried pipes. If as-built drawings are referenced, the licensee need not index each relevant document individually. If drawings are not available, the licensee shall provide records with known information concerning these areas and locations, as prescribed in subsection (E)(1).
 3. Except for areas that contain depleted uranium used only for shielding or as penetrators in unused munitions, a list, contained in a single document and updated every two years, of the following:
 - a. Any area designated or formerly designated as a restricted area as defined under R9-7-102;
 - b. Any area outside of a restricted area for which documentation is required under subsection (B)(1);
 - c. Any area outside of a restricted area where wastes have been buried;
 - d. Any area outside of a restricted area that contains regulated radioactive material that will require the licensee to either decontaminate the area for decommissioning under R9-7-452 or obtain disposal approval under R9-7-435; and
 - e. Any restricted area where wastes have been buried.
 4. Records of the cost estimate performed for the decommissioning funding plan or the amount certified by the Department for decommissioning and the method for assuring funding, if either a funding plan or certification is used.



APPENDIX C. QUANTITIES¹ OF LICENSED OR REGISTERED MATERIAL REQUIRING LABELING

Radionuclide	Quantity (μCi)
Hydrogen-3	1,000
Beryllium-7	1,000
Beryllium-10	1
Carbon-11	1,000
Carbon-14	1,000
Fluorine-18	1,000
Sodium-22	10
Sodium-24	100
Magnesium-28	100
Aluminum-26	10
Silicon-31	1,000
Silicon-32	1
Phosphorus-32	10
Phosphorus-33	100
Sulfur-35	100
Chlorine-36	10
Chlorine-38	1,000
Chlorine-39	1,000
Argon-39	1,000
Argon-41	1,000
Potassium-40	100
Potassium-42	1,000
Potassium-43	1,000
Potassium-44	1,000
Potassium-45	1,000
Calcium-41	100
Calcium-45	100
Calcium-47	100
Scandium-43	1,000
Scandium-44m	100
Scandium-44	100
Scandium-46	10
Scandium-47	100
Scandium-48	100
Scandium-49	1,000
Titanium-44	1
Titanium-45	1,000
Vanadium-47	1,000
Vanadium-48	100
Vanadium-49	1,000
Chromium-48	1,000
Chromium-49	1,000
Chromium-51	1,000
Manganese-51	1,000
Manganese-52m	1,000
Manganese-52	100
Manganese-53	1,000
Manganese-54	100
Manganese-56	1,000
Iron-52	100
Iron-55	100
Iron-59	10



Iron-60	1
Cobalt-55	100
Cobalt-56	10
Cobalt-57	100
Cobalt-58m	1,000
Cobalt-58	100
Cobalt-60m	1,000
Cobalt-60	1
Cobalt-61	1,000
Cobalt-62m	1,000
Nickel-56	100
Nickel-57	100
Nickel-59	100
Nickel-63	100
Nickel-65	1,000
Nickel-66	10
Copper-60	1,000
Copper-61	1,000
Copper-64	1,000
Copper-67	1,000
Zinc-62	100
Zinc-63	1,000
Zinc-65	10
Zinc-69m	100
Zinc-69	1,000
Zinc-71m	1,000
Zinc-72	100
Gallium-65	1,000
Gallium-66	100
Gallium-67	1,000
Gallium-68	1,000
Gallium-70	1,000
Gallium-72	100
Gallium-73	1,000
Germanium-66	1,000
Germanium-67	1,000
Germanium-68	10
Germanium-69	1,000
Germanium-71	1,000
Germanium-75	1,000
Germanium-77	1,000
Germanium-78	1,000
Arsenic-69	1,000
Arsenic-70	1,000
Arsenic-71	100
Arsenic-72	100
Arsenic-73	100
Arsenic-74	100
Arsenic-76	100
Arsenic-77	100
Arsenic-78	1,000
Selenium-70	1,000
Selenium-73m	1,000
Selenium-73	100
Selenium-75	100



Selenium-79	100
Selenium-81m	1,000
Selenium-81	1,000
Selenium-83	1,000
Bromine-74m	1,000
Bromine-74	1,000
Bromine-75	1,000
Bromine-76	100
Bromine-77	1,000
Bromine-80m	1,000
Bromine-80	1,000
Bromine-82	100
Bromine-83	1,000
Bromine-84	1,000
Krypton-74	1,000
Krypton-76	1,000
Krypton-77	1,000
Krypton-79	1,000
Krypton-81	1,000
Krypton-83m	1,000
Krypton-85m	1,000
Krypton-85	1,000
Krypton-87	1,000
Krypton-88	1,000
Rubidium-79	1,000
Rubidium-81m	1,000
Rubidium-81	1,000
Rubidium-82m	1,000
Rubidium-83	100
Rubidium-84	100
Rubidium-86	100
Rubidium-87	100
Rubidium-88	1,000
Rubidium-89	1,000
Strontium-80	100
Strontium-81	1,000
Strontium-83	100
Strontium-85m	1,000
Strontium-85	100
Strontium-87m	1,000
Strontium-89	10
Strontium-90	0.1
Strontium-91	100
Strontium-92	100
Yttrium-86m	1,000
Yttrium-86	100
Yttrium-87	100
Yttrium-88	10
Yttrium-90m	1,000
Yttrium-90	10
Yttrium-91m	1,000
Yttrium-91	10
Yttrium-92	100
Yttrium-93	100
Yttrium-94	1,000



Yttrium-95	1,000
Zirconium-86	100
Zirconium-88	10
Zirconium-89	100
Zirconium-93	1
Zirconium-95	10
Zirconium-97	100
Niobium-88	1,000
Niobium-89m (66 min)	1,000
Niobium-89 (122 min)	1,000
Niobium-90	100
Niobium-93m	10
Niobium-94	1
Niobium-95m	100
Niobium-95	100
Niobium-96	100
Niobium-97	1,000
Niobium-98	1,000
Molybdenum-90	100
Molybdenum-93m	100
Molybdenum-93	10
Molybdenum-99	100
Molybdenum-101	1,000
Technetium-93m	1,000
Technetium-93	1,000
Technetium-94m	1,000
Technetium-94	1,000
Technetium-96m	1,000
Technetium-96	100
Technetium-97m	100
Technetium-97	1,000
Technetium-98	10
Technetium-99m	1,000
Technetium-99	100
Technetium-101	1,000
Technetium-104	1,000
Ruthenium-94	1,000
Ruthenium-97	1,000
Ruthenium-103	100
Ruthenium-105	1,000
Ruthenium-106	1
Rhodium-99m	1,000
Rhodium-99	100
Rhodium-100	100
Rhodium-101m	1,000
Rhodium-101	10
Rhodium-102m	10
Rhodium-102	10
Rhodium-103m	1,000
Rhodium-105	100
Rhodium-106m	1,000
Rhodium-107	1,000
Palladium-100	100



Palladium-101	1,000
Palladium-103	100
Palladium-107	10
Palladium-109	100
Silver-102	1,000
Silver-103	1,000
Silver-104m	1,000
Silver-104	1,000
Silver-105	100
Silver-106m	100
Silver-106	1,000
Silver-108m	1
Silver-110m	10
Silver-111	100
Silver-112	100
Silver-115	1,000
Cadmium-104	1,000
Cadmium-107	1,000
Cadmium-109	1
Cadmium-113m	0.1
Cadmium-113	100
Cadmium-115m	10
Cadmium-115	100
Cadmium-117m	1,000
Cadmium-117	1,000
Indium-109	1,000
Indium-110m (69.1m)	1,000
Indium-110 (4.9h)	1,000
Indium-111	100
Indium-112	1,000
Indium-113m	1,000
Indium-114m	10
Indium-115m	1,000
Indium-115	100
Indium-116m	1,000
Indium-117m	1,000
Indium-117	1,000
Indium-119m	1,000
Tin-110	100
Tin-111	1,000
Tin-113	100
Tin-117m	100
Tin-119m	100
Tin-121m	100
Tin-121	1,000
Tin-123m	1,000
Tin-123	10
Tin-125	10
Tin-126	10
Tin-127	1,000
Tin-128	1,000
Antimony-115	1,000
Antimony-116m	1,000



Antimony-116	1,000
Antimony-117	1,000
Antimony-118m	1,000
Antimony-119	1,000
Antimony-120	
(16m)	1,000
Antimony-120	
(5.76d)	100
Antimony-122	100
Antimony-124m	1,000
Antimony-124	10
Antimony-125	100
Antimony-126m	1,000
Antimony-126	100
Antimony-127	100
Antimony-128	
(10.4m)	1,000
Antimony-128	
(9.01h)	100
Antimony-129	100
Antimony-130	1,000
Antimony-131	1,000
Tellurium-116	1,000
Tellurium-121m	10
Tellurium-121	100
Tellurium-123m	10
Tellurium-123	100
Tellurium-125m	10
Tellurium-127m	10
Tellurium-127	1,000
Tellurium-129m	10
Tellurium-129	1,000
Tellurium-131m	10
Tellurium-131	100
Tellurium-132	10
Tellurium-133m	100
Tellurium-133	1,000
Tellurium-134	1,000
Iodine-120m	1,000
Iodine-120	100
Iodine-121	1,000
Iodine-123	100
Iodine-124	10
Iodine-125	1
Iodine-126	1
Iodine-128	1,000
Iodine-129	1
Iodine-130	10
Iodine-131	1
Iodine-132m	100
Iodine-132	100
Iodine-133	10
Iodine-134	1,000
Iodine-135	100
Xenon-120	1,000



Xenon-121	1,000
Xenon-122	1,000
Xenon-123	1,000
Xenon-125	1,000
Xenon-127	1,000
Xenon-129m	1,000
Xenon-131m	1,000
Xenon-133m	1,000
Xenon-133	1,000
Xenon-135m	1,000
Xenon-135	1,000
Xenon-138	1,000
Cesium-125	1,000
Cesium-127	1,000
Cesium-129	1,000
Cesium-130	1,000
Cesium-131	1,000
Cesium-132	100
Cesium-134m	1,000
Cesium-134	10
Cesium-135m	1,000
Cesium-135	100
Cesium-136	1
Cesium-137	10
Cesium-138	1,000
Barium-126	1,000
Barium-128	100
Barium-131m	1,000
Barium-131	100
Barium-133m	100
Barium-133	100
Barium-135m	100
Barium-139	1,000
Barium-140	100
Barium-141	1,000
Barium-142	1,000
Lanthanum-131	1,000
Lanthanum-132	100
Lanthanum-135	1,000
Lanthanum-137	10
Lanthanum-138	100
Lanthanum-140	100
Lanthanum-141	100
Lanthanum-142	1,000
Lanthanum-143	1,000
Cerium-134	100
Cerium-135	100
Cerium-137m	100
Cerium-137	1,000
Cerium-139	100
Cerium-141	100
Cerium-143	100
Cerium-144	1
Praseodymium-136	1,000
Praseodymium-137	1,000



Praseodymium-138m	1,000
Praseodymium-139	1,000
Praseodymium-142m	1,000
Praseodymium-142	100
Praseodymium-143	100
Praseodymium-144	1,000
Praseodymium-145	100
Praseodymium-147	1,000
Neodymium-136	1,000
Neodymium-138	100
Neodymium-139m	1,000
Neodymium-139	1,000
Neodymium-141	1,000
Neodymium-147	100
Neodymium-149	1,000
Neodymium-151	1,000
Promethium-141	1,000
Promethium-143	100
Promethium-144	10
Promethium-145	10
Promethium-146	1
Promethium-147	10
Promethium-148m	10
Promethium-148	10
Promethium-149	100
Promethium-150	1,000
Promethium-151	100
Samarium-141m	1,000
Samarium-141	1,000
Samarium-142	1,000
Samarium-145	100
Samarium-146	1
Samarium-147	100
Samarium-151	10
Samarium-153	100
Samarium-155	1,000
Samarium-156	1,000
Europium-145	100
Europium-146	100
Europium-147	100
Europium-148	10
Europium-149	100
Europium-150 (12.62h)	100
Europium-150 (34.2y)	1
Europium-152m	100
Europium-152	1
Europium-154	1
Europium-155	10
Europium-156	100
Europium-157	100
Europium-158	1,000
Gadolinium-145	1,000
Gadolinium-146	10



Gadolinium-147	100
Gadolinium-148	0.001
Gadolinium-149	100
Gadolinium-151	10
Gadolinium-152	100
Gadolinium-153	10
Gadolinium-159	100
Terbium-147	1,000
Terbium-149	100
Terbium-150	1,000
Terbium-151	100
Terbium-153	1,000
Terbium-154	100
Terbium-155	1,000
Terbium-156m (5.0h)	1,000
Terbium-156m (24.4h)	1,000
Terbium-156	100
Terbium-157	10
Terbium-158	1
Terbium-160	10
Terbium-161	100
Dysprosium-155	1,000
Dysprosium-157	1,000
Dysprosium-159	100
Dysprosium-165	1,000
Dysprosium-166	100
Holmium-155	1,000
Holmium-157	1,000
Holmium-159	1,000
Holmium-161	1,000
Holmium-162m	1,000
Holmium-162	1,000
Holmium-164m	1,000
Holmium-164	1,000
Holmium-166m	1
Holmium-166	100
Holmium-167	1,000
Erbium-161	1,000
Erbium-165	1,000
Erbium-169	100
Erbium-171	100
Erbium-172	100
Thulium-162	1,000
Thulium-166	100
Thulium-167	100
Thulium-170	10
Thulium-171	10
Thulium-172	100
Thulium-173	100
Thulium-175	1,000
Ytterbium-162	1,000
Ytterbium-166	100
Ytterbium-167	1,000



Ytterbium-169	100
Ytterbium-175	100
Ytterbium-177	1,000
Ytterbium-178	1,000
Lutetium-169	100
Lutetium-170	100
Lutetium-171	100
Lutetium-172	100
Lutetium-173	10
Lutetium-174m	10
Lutetium-174	10
Lutetium-176m	1,000
Lutetium-176	100
Lutetium-177m	10
Lutetium-177	100
Lutetium-178m	1,000
Lutetium-178	1,000
Lutetium-179	1,000
Hafnium-170	100
Hafnium-172	1
Hafnium-173	1,000
Hafnium-175	100
Hafnium-177m	1,000
Hafnium-178m	0.1
Hafnium-179m	10
Hafnium-180m	1,000
Hafnium-181	10
Hafnium-182m	1,000
Hafnium-182	0.1
Hafnium-183	1,000
Hafnium-184	100
Tantalum-172	1,000
Tantalum-173	1,000
Tantalum-174	1,000
Tantalum-175	1,000
Tantalum-176	100
Tantalum-177	1,000
Tantalum-178	1,000
Tantalum-179	100
Tantalum-180m	1,000
Tantalum-180	100
Tantalum-182m	1,000
Tantalum-182	10
Tantalum-183	100
Tantalum-184	100
Tantalum-185	1,000
Tantalum-186	1,000
Tungsten-176	1,000
Tungsten-177	1,000
Tungsten-178	1,000
Tungsten-179	1,000
Tungsten-181	1,000
Tungsten-185	100
Tungsten-187	100
Tungsten-188	10



Rhenium-177	1,000
Rhenium-178	1,000
Rhenium-181	1,000
Rhenium-182	
(12.7h)	1,000
Rhenium-182	
(64.0h)	100
Rhenium-184m	10
Rhenium-184	100
Rhenium-186m	10
Rhenium-186	100
Rhenium-187	1,000
Rhenium-188m	1,000
Rhenium-188	100
Rhenium-189	100
Osmium-180	1,000
Osmium-181	1,000
Osmium-182	100
Osmium-185	100
Osmium-189m	1,000
Osmium-191m	1,000
Osmium-191	100
Osmium-193	100
Osmium-194	1
Iridium-182	1,000
Iridium-184	1,000
Iridium-185	1,000
Iridium-186	100
Iridium-187	1,000
Iridium-188	100
Iridium-189	100
Iridium-190m	1,000
Iridium-190	100
Iridium-192m	
(1.4m)	10
Iridium-192	
(73.8d)	1
Iridium-194m	10
Iridium-194	100
Iridium-195m	1,000
Iridium-195	1,000
Platinum-186	1,000
Platinum-188	100
Platinum-189	1,000
Platinum-191	100
Platinum-193m	100
Platinum-193	1,000
Platinum-195m	100
Platinum-197m	1,000
Platinum-197	100
Platinum-199	1,000
Platinum-200	100
Gold-193	1,000
Gold-194	100
Gold-195	10



Gold-198m	100
Gold-198	100
Gold-199	100
Gold-200m	100
Gold-200	1,000
Gold-201	1,000
Mercury-193m	100
Mercury-193	1,000
Mercury-194	1
Mercury-195m	100
Mercury-195	1,000
Mercury-197m	100
Mercury-197	1,000
Mercury-199m	1,000
Mercury-203	100
Thallium-194m	1,000
Thallium-194	1,000
Thallium-195	1,000
Thallium-197	1,000
Thallium-198m	1,000
Thallium-198	1,000
Thallium-199	1,000
Thallium-201	1,000
Thallium-200	1,000
Thallium-202	100
Thallium-204	100
Lead-195m	1,000
Lead-198	1,000
Lead-199	1,000
Lead-200	100
Lead-201	1,000
Lead-202m	1,000
Lead-202	10
Lead-203	1,000
Lead-205	100
Lead-209	1,000
Lead-210	0.01
Lead-211	100
Lead-212	1
Lead-214	100
Bismuth-200	1,000
Bismuth-201	1,000
Bismuth-202	1,000
Bismuth-203	100
Bismuth-205	100
Bismuth-206	100
Bismuth-207	10
Bismuth-210m	0.1
Bismuth-210	1
Bismuth-212	10
Bismuth-213	10
Bismuth-214	100
Polonium-203	1,000
Polonium-205	1,000
Polonium-207	1,000



Polonium-210	0.1
Astatine-207	100
Astatine-211	10
Radon-220	1
Radon-222	1
Francium-222	100
Francium-223	100
Radium-223	0.1
Radium-224	0.1
Radium-225	0.1
Radium-226	0.1
Radium-227	1,000
Radium-228	0.1
Actinium-224	1
Actinium-225	0.01
Actinium-226	0.1
Actinium-227	0.001
Actinium-228	1
Thorium-226	10
Thorium-227	0.01
Thorium-228	0.001
Thorium-229	0.001
Thorium-230	0.001
Thorium-231	100
Thorium-232	100
Thorium-234	10
Thorium-natural	100
Protactinium-227	10
Protactinium-228	1
Protactinium-230	0.1
Protactinium-231	0.001
Protactinium-232	1
Protactinium-233	100
Protactinium-234	100
Uranium-230	0.01
Uranium-231	100
Uranium-232	0.001
Uranium-233	0.001
Uranium-234	0.001
Uranium-235	0.001
Uranium-236	0.001
Uranium-237	100
Uranium-238	100
Uranium-239	1,000
Uranium-240	100
Uranium-natural	100
Neptunium-232	100
Neptunium-233	1,000
Neptunium-234	100
Neptunium-235	100
Neptunium-236 (1.15E + 5)	0.001
Neptunium-236 (22.5h)	1
Neptunium-237	0.001



Neptunium-238	10
Neptunium-239	100
Neptunium-240	1,000
Plutonium-234	10
Plutonium-235	1,000
Plutonium-236	0.001
Plutonium-237	100
Plutonium-238	0.001
Plutonium-239	0.001
Plutonium-240	0.001
Plutonium-241	0.01
Plutonium-242	0.001
Plutonium-243	1,000
Plutonium-244	0.001
Plutonium-245	100
Americium-237	1,000
Americium-238	100
Americium-239	1,000
Americium-240	100
Americium-241	0.001
Americium-242m	0.001
Americium-242	10
Americium-243	0.001
Americium-244m	100
Americium-244	10
Americium-245	1,000
Americium-246m	1,000
Americium-246	1,000
Curium-238	100
Curium-240	0.1
Curium-241	1
Curium-242	0.01
Curium-243	0.001
Curium-244	0.001
Curium-245	0.001
Curium-246	0.001
Curium-247	0.001
Curium-248	0.001
Curium-249	1,000
Berkelium-245	100
Berkelium-246	100
Berkelium-247	0.001
Berkelium-249	0.1
Berkelium-250	10
Californium-244	100
Californium-246	1
Californium-248	0.01
Californium-249	0.001
Californium-250	0.001
Californium-251	0.001
Californium-252	0.001
Californium-253	0.1
Californium-254	0.001
Einsteinium-250	100
Einsteinium-251	100



Einsteinium-253	0.1
Einsteinium-254m	1
Einsteinium-254	0.01
Fermium-252	1
Fermium-253	1
Fermium-254	10
Fermium-255	1
Fermium-257	0.01
Mendelevium-257	10
Mendelevium-258	0.01
Any alpha-emitting radionuclide not listed above or mixtures of alpha emitters of unknown composition	0.001
Any radionuclide other than alpha-emitting radionuclides not listed above, or mixtures of beta emitters of unknown composition	0.01

* To convert µCi to kBq, multiply the µCi value by 37.

NOTE: For purposes of R9-7-428(E), R9-7-432(A), and R9-7-443(A) where Where there is involved a combination of radionuclides in known amounts, the limit for the combination shall be derived as follows: determine, for each radionuclide in the combination, the ratio between the quantity present in the combination and the limit otherwise established for the specific radionuclide when not in combination. The sum of such ratios for all radionuclides in the combination may not exceed "1" -- that is, unity.

¹ The quantities listed above were derived by taking 1/10 of the most restrictive ALI listed in Table I, Columns 1 and 2, of Appendix B to Article 4, rounding to the nearest factor of 10, and constraining the values listed between 37 Bq and 37 MBq (0.001 and 1,000 µCi). Values of 3.7 MBq (100 µCi) have been assigned for radionuclides having a radioactive half-life in excess of E+9 years, except rhenium, 37 MBq (1,000 µCi), to take into account their low specific activity.

ARTICLE 6. USE OF X-RAYS IN THE HEALING ARTS

R9-7-611.01. Electronic Brachytherapy to Deliver Interstitial and ~~Intra~~^{Intracavitary} Therapeutic Radiation Dosage

- A. Electronic brachytherapy devices used to deliver interstitial and ~~intra~~^{intracavitary} therapeutic radiation dosage shall be subject to the requirements of this Section, and unless otherwise specified in this Section shall be exempt from the requirements of R9-7-611.
 1. An electronic brachytherapy device that does not meet the requirements of this Section shall not be used for irradiation of patients; and
 2. An electronic brachytherapy device shall only be utilized for human use applications specifically approved by the U.S. Food and Drug Administration (FDA), unless participating in a research study approved by the registrant’s Institutional Review Board (IRB).
- B. Each facility location authorized to use an electronic brachytherapy device in accordance with this Section shall possess appropriately calibrated portable monitoring equipment. At a minimum, such equipment shall include a portable survey instrument capable of measuring dose rates over the range 10 µSv (1 mrem) per hour to 10 mSv (1000 mrem) per hour. The survey instrument shall be capable of measuring as low as 10 µSv (1 mrem) per hour in the energy range of the electronic brachytherapy unit for which the survey instrument is to be used. Published correction factors utilized in conjunction with the instrument’s readings may be used to achieve sensitivity. The survey instrument or instruments shall be operable and calibrated before first use, at intervals not to exceed 12 months, and after survey instrument repairs.
- C. Facility Design Requirements for Electronic Brachytherapy Devices. In addition to shielding adequate to meet requirements of R9-7-603(C), the treatment room shall meet the following design requirements:
 1. If applicable, provision shall be made to prevent simultaneous operation of more than one therapeutic radiation machine in a treatment room.
 2. Access to the treatment room shall be controlled by a door at each entrance.
 3. Each treatment room shall have provisions to permit continuous oral communication and visual observation of the patient from the treatment control panel during irradiation. The electronic brachytherapy device shall not be used for patient irradiation unless the patient can be observed.
 4. For electronic brachytherapy devices capable of operating below 150 kVp, radiation shielding for the staff in the treatment room may be available, either as a portable shield or as localized shielded material around the treatment site or both, in lieu of the requirements for room shielding. The shielding shall meet the requirements of R9-7-603(C).



5. For electronic brachytherapy devices capable of operating at or greater than 150 kVp, the facility must meet the requirements of R9-7-611(B)(4).
- D. Control Panel Functions.** The control panel, in addition to the displays required by other provisions in this Section, shall:
1. Provide an indication of whether electrical power is available at the control panel and if activation of the electronic brachytherapy source is possible;
 2. Provide an indication of whether x-rays are being produced;
 3. Provide a means for indicating electronic brachytherapy source potential and current;
 4. Provide the means for terminating an exposure at any time; and
 5. Include an access control (locking) device that will prevent unauthorized use of the electronic brachytherapy device.
- E. Timer.** A suitable irradiation control device (timer) shall be provided to terminate the irradiation after a pre-set time interval or integrated charge on a dosimeter-based monitor.
1. A timer shall be provided at the treatment control panel. The timer shall indicate the planned setting and the time elapsed or remaining;
 2. The timer shall not permit an exposure if set at zero;
 3. The timer shall be a cumulative device that activates with an indication of “BEAM-ON” that retains its reading after irradiation is interrupted or terminated. After irradiation is terminated and before irradiation can be reinitiated, it shall be necessary to reset the elapsed time indicator;
 4. The timer shall terminate irradiation when a pre-selected time has elapsed, if any dose monitoring system has not previously terminated irradiation.
 5. The timer shall permit setting of exposure times as short as 0.1 second; and
 6. The timer shall be accurate to within one percent of the selected value or 0.1 second, whichever is greater.
- F. Qualified Medical Physicist Support.**
1. The services of a Qualified Medical Physicist shall be required in facilities having electronic brachytherapy devices. The Qualified Medical Physicist shall be responsible for:
 - a. Evaluation of the output from the electronic brachytherapy source;
 - b. Generation of the necessary dosimetric information;
 - c. Supervision and review of treatment calculations prior to initial treatment of any treatment site;
 - d. Establishing the periodic and day-of-use quality assurance checks and reviewing the data from those checks as required in subsection (J);
 - e. Consultation with the authorized user in treatment planning, as needed; and
 - f. Performing calculations/assessments regarding patient treatments that may constitute a medical event.
 2. If the Qualified Medical Physicist is not a full-time employee of the registrant, then the operating procedures required by subsection (G) shall also specifically address how the Qualified Medical Physicist is to be contacted for problems or emergencies, as well as the specific actions, if any, to be taken until the Qualified Medical Physicist can be contacted.
- G. Operating Procedures.**
1. Only individuals approved by the authorized user, Radiation Safety Officer, or Qualified Medical Physicist shall be present in the treatment room during treatment;
 2. Electronic brachytherapy devices shall not be made available for medical use unless the requirements of subsections (A), (H), and (I) have been met;
 3. The electronic brachytherapy device shall be inoperable, either by hardware or password, when unattended by qualified staff or service personnel;
 4. During operation, the electronic brachytherapy device operator shall monitor the position of all persons in the treatment room, and all persons entering the treatment room, to prevent entering persons from unshielded exposure from the treatment beam;
 5. If a patient must be held in position during treatment, mechanical supporting or restraining devices shall be used;
 6. Written procedures shall be developed, implemented, and maintained for responding to an abnormal situation. These procedures shall include:
 - a. Instructions for responding to equipment failures and the names of the individuals responsible for implementing corrective actions; and
 - b. The names and telephone numbers of the authorized users, the Qualified Medical Physicist, and the Radiation Safety Officer to be contacted if the device or console operates abnormally.
 7. A copy of the current operating and emergency procedures shall be physically located at the electronic brachytherapy device control console;
 8. Instructions shall be maintained with the electronic brachytherapy device control console to inform the operator of the names and telephone numbers of the authorized users, the Qualified Medical Physicist, and the Radiation Safety Officer to be contacted if the device or console operates abnormally; and
 9. The Radiation Safety Officer, or the Radiation Safety Officer’s designee, and an authorized user shall be notified immediately if the patient has a medical emergency, suffers injury or dies. The Radiation Safety Officer or the Qualified Medical Physicist shall inform the manufacturer of the event.
- H. Safety Precautions for Electronic Brachytherapy Devices.**
1. Any person in the treatment room, other than the person being treated, shall wear personnel monitoring devices;
 2. An authorized user and a Qualified Medical Physicist shall be physically present during the initiation of all new patient treatments involving the electronic brachytherapy device;
 3. After the first treatment one of the following individuals shall be physically present during continuation of all patient treatments involving the electronic brachytherapy device:
 - a. A Qualified Medical Physicist, or
 - b. An authorized user, or



- c. A certified therapy technologist (CTT) certified by the Arizona Medical Radiologic Technology Board of Examiners, under the direct supervision of an authorized user, who has been trained in the operation and emergency response for the electronic brachytherapy device;
 4. When shielding is required by subsection (C)(4), surveys shall be conducted to ensure that the requirements of R9-7-408, R9-7-414, and R9-7-416 are met. Alternatively, a Qualified Medical Physicist shall designate shield locations sufficient to meet the requirements of R9-7-603(C) and R9-7-607(C) for any individual, other than the patient, in the treatment room; and
 5. All personnel in the treatment room are required to remain behind shielding during treatment. A Qualified Medical Physicist shall approve any deviation from this requirement and shall designate alternative radiation safety protocols, compatible with patient safety, to provide an equivalent degree of protection.
- I. Electronic Brachytherapy Source Calibration Measurements.**
1. Calibration of the electronic brachytherapy source output shall be performed by, or under the direct supervision of, a Qualified Medical Physicist. If the control console is integral to the electronic brachytherapy device, the required procedures shall be kept where the operator is located during electronic brachytherapy device operation;
 2. Calibration of the electronic brachytherapy source output shall be made for each electronic brachytherapy source, or after any repair affecting the x-ray beam generation, or when indicated by the electronic brachytherapy source quality assurance checks;
 3. Calibration of the electronic brachytherapy source output shall utilize a dosimetry system appropriate for the energy output of the unit and calibrated by the National Institute for Standards and Technology (NIST) or by an American Association of Physicists in Medicine (AAPM) Accredited Dosimetry Calibration Laboratory (ADCL). The calibration shall have been performed within the previous 24 months and after any servicing that may have affected system calibration;
 4. Calibration of the electronic brachytherapy source output shall include, as applicable, determination of:
 - a. The output within two percent of the expected value, if applicable, or determination of the output if there is no expected value;
 - b. Timer accuracy and linearity over the typical range of use;
 - c. Proper operation of back-up exposure control devices;
 - d. Evaluation that the relative dose distribution about the source is within five percent of that expected; and
 - e. Source positioning accuracy to within one millimeter within the applicator;
 5. Calibration of the x-ray source output required shall be in accordance with current published recommendations from a recognized national professional association with expertise in electronic brachytherapy (when available). In the absence of a calibration protocol published by a national professional association, the manufacturer's calibration protocol shall be followed.
 6. The registrant shall maintain a record of each calibration in an auditable form for the duration of the registration. The record shall include: the date of the calibration; the manufacturer's name, model number and serial number for the electronic brachytherapy device and a unique identifier for its electronic instrument or instruments brachytherapy source; the model numbers and serial numbers of the instrument or instruments used to calibrate the electronic brachytherapy device; and the name and signature of the Qualified Medical Physicist responsible for performing the calibration.
- J. Periodic and Day-of-Use Quality Assurance Checks for Electronic Brachytherapy Devices.**
1. Quality assurance checks shall be performed on each electronic brachytherapy device:
 - a. At the beginning of each day of use;
 - b. Each time the device is moved to a new room or site; and
 - c. After each x-ray tube installation.
 2. The registrant shall perform periodic quality assurance checks required in accordance with procedures established by the Qualified Medical Physicist;
 3. To satisfy the requirements of this subsection, radiation output quality assurance checks shall include at a minimum:
 - a. Verification that output of the electronic brachytherapy source falls within three percent of expected values, as appropriate for the device, as determined by:
 - i. Output as a function of time, or
 - ii. Output as a function of setting on a monitor chamber.
 - b. Verification of the consistency of the dose distribution to within three percent (or the manufacturer's or Qualified Medical Physicist's documented recommendation not to exceed five percent), observed at the source calibration required by subsection (I); and
 - c. Validation of the operation of positioning methods to ensure that the treatment dose exposes the intended location within one millimeter; and
 4. The registrant shall use a dosimetry system that has been intercompared within the previous 12 months with the dosimetry system described in this Section to make the quality assurance checks required in subsection (J)(3);
 5. The registrant shall review the results of each radiation output quality assurance check to ensure that:
 - a. An authorized user and Qualified Medical Physicist is immediately notified if any parameter is not within its acceptable tolerance, and the electronic brachytherapy device is not used until the Qualified Medical Physicist has determined that all parameters are within their acceptable tolerances;
 - b. If all radiation output quality assurance check parameters appear to be within their acceptable range, the acceptable quality assurance checklist shall be reviewed and signed by either the authorized user or Qualified Medical Physicist prior to the next patient use of the unit. In addition, the Qualified Medical Physicist shall review and sign the results of each radiation output quality assurance check at intervals not to exceed 30 days.
 6. To satisfy the requirements of subsection (J)(1), safety device quality assurance checks shall, at a minimum, assure:
 - a. Proper operation of radiation exposure indicator lights on the electronic brachytherapy device and on the control console;
 - b. Proper operation of viewing and intercom systems in each electronic brachytherapy facility, if applicable;
 - c. Proper operation of radiation monitors, if applicable;
 - d. The integrity of all cables, catheters or parts of the device that carry high voltages; and



- e. Connecting guide tubes, transfer tubes, transfer-tube-applicator interfaces, and treatment spacers are free from any defects that interfere with proper operation.
- 7. If the results of the safety device quality assurance checks required in subsection (J)(6) indicate the malfunction of any system, a registrant shall secure the control console in the OFF position and not use the electronic brachytherapy device except as may be necessary to repair, replace, or check the malfunctioning system.
- 8. The registrant shall maintain a record of each quality assurance check required by this Section in a legible form for three years.
 - a. The record shall include the date of the quality assurance check; the manufacturer's name, model number and serial number for the electronic brachytherapy device; the name and signature of the individual who performed the periodic quality assurance check and the name and signature of the Qualified Medical Physicist who reviewed the quality assurance check;
 - b. For radiation output quality assurance checks required by subsection (J)(3), the record shall also include the unique identifier for the electronic brachytherapy source and the manufacturer's name; model number and serial number for the instrument or instruments used to measure the radiation output of the electronic brachytherapy device.
- K. Therapy-related Computer Systems. The registrant shall perform acceptance testing on the treatment planning system of electronic brachytherapy-related computer systems in accordance with current published recommendations from a recognized national professional association with expertise in electronic brachytherapy (when available). In the absence of an acceptance testing protocol published by a national professional association, the manufacturer's acceptance testing protocol shall be followed.
 - 1. Acceptance testing shall be performed by, or under the direct supervision of a Qualified Medical Physicist. At a minimum, the acceptance testing shall include, as applicable, verification of:
 - a. The source-specific input parameters required by the dose calculation algorithm;
 - b. The accuracy of dose, dwell time, and treatment time calculations at representative points;
 - c. The accuracy of isodose plots and graphic displays;
 - d. The accuracy of the software used to determine radiation source positions from radiographic images; and
 - e. If the treatment planning system is different from the treatment delivery system, the accuracy of electronic transfer of the treatment delivery parameters to the treatment delivery unit from the treatment planning system.
 - 2. The position indicators in the applicator shall be compared to the actual position of the source or planned dwell positions, as appropriate, at the time of commissioning.
 - 3. Prior to each patient treatment regimen, the parameters for the treatment shall be evaluated for correctness and approved by the authorized user and the Qualified Medical Physicist through means independent of that used for the determination of the parameters.
- L. Training for e-brachytherapy Authorized Users.
 - 1. The registrant for any therapeutic radiation machine subject to this Section shall require the authorized user to be a physician who is:
 - a. ~~certified~~ Certified in:
 - ~~i.~~ Radiation oncology or therapeutic radiology by the American Board of Radiology or radiology (combined diagnostic and therapeutic radiology program) by the American Board of Radiology prior to 1976; or
 - ~~ii.~~ Radiation oncology by the American Osteopathic Board of Radiology; or
 - ~~iii.~~ Radiology, with specialization in radiotherapy, as a British "Fellow of the Faculty of Radiology" or "Fellow of the Royal College of Radiology"; or
 - ~~iv.~~ Therapeutic radiology by the Canadian Royal College of Physicians and Surgeons; or
 - ~~b.~~ In the active practice of therapeutic radiology, and has completed 200 hours of instruction in basic radiation techniques applicable to the use of an external beam radiation therapy unit, 500 hours of supervised work experience, and a minimum of three years of supervised clinical experience.
 - ~~2.~~ To satisfy the requirement in subsection (L)(1)(b) for:
 - a. ~~instruction~~ Instruction, the classroom and laboratory training shall include:
 - i. Radiation physics and instrumentation;
 - ii. Radiation protection;
 - iii. Mathematics pertaining to the use and measurement of ionization radiation; and
 - iv. Radiation biology;
 - b. ~~To satisfy the requirement for supervised~~ Supervised work experience, training shall be under the supervision of an authorized user and shall include:
 - i. Review of the full calibration measurements and periodic quality assurance checks;
 - ii. Evaluation of prepared treatment plans and calculation of treatment times or patient treatment settings or both;
 - iii. Using administrative controls to prevent medical events as described in R9-7-444;
 - iv. Implementing emergency procedures to be followed in the event of the abnormal operation of an external beam radiation therapy unit or console; and
 - v. Checking and using radiation survey meters; ~~and~~
 - c. ~~To satisfy the requirement for a~~ A period of supervised clinical experience, training shall include one year in a formal training program approved by the Residency Review Committee for Radiology of the Accreditation Council for Graduate Medical Education or the Committee on Postdoctoral Training of the American Osteopathic Association and an additional two years of clinical experience in therapeutic radiology under the supervision of an authorized user. The supervised clinical experience shall include:
 - i. Examining individuals and reviewing their case histories to determine their suitability for external beam radiation therapy treatment, and any limitations or contraindications or both;
 - ii. Selecting proper dose and how it is to be administered;



- iii. Calculating the therapeutic radiation machine doses and collaborating with the authorized user in the review of patients' progress and consideration of the need to modify originally prescribed doses or treatment plans as warranted by patients' reaction to radiation or both; and
 - iv. Post-administration follow-up and review of case histories.
- 3. A physician shall not act as an authorized user until such time as the physician's training has been reviewed and approved by the Department.
- ~~3.4.~~ Notwithstanding the requirements of ~~this subsection~~ subsections (L)(1) through (L)(3), the registrant for any therapeutic radiation machine subject to this Section may also submit the training of the prospective authorized user physician for Department review on a case-by-case basis if the training includes substantially equivalent training as that listed in ~~subsection (L)(2)~~ subsections (L)(1)(b) and (L)(2) and the training includes dosimetry calculation training and experience.
- 4. ~~A physician shall not act as an authorized user until such time as the physician's training has been reviewed and approved by the Department.~~
- M. Training for Qualified Medical Physicist. The registrant for any therapeutic radiation machine subject to this Section shall require the Qualified Medical Physicist to:
 - 1. Be certified with the Department, as a provider of radiation services in the area of calibration and compliance surveys of external beam radiation therapy units; and
 - 2. Be certified by the American Board of Radiology in:
 - a. Therapeutic radiological physics; or
 - b. Roentgen-ray and gamma-ray physics; or
 - c. X-ray and radium physics; or
 - d. Radiological physics; or
 - 3. Be certified by the American Board of Medical Physics in Radiation Oncology Physics; or
 - 4. Be certified by the Canadian College of Physicists in Medicine; or
 - 5. Hold a master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university, and have completed one year of full-time training in medical physics and an additional year of full-time work experience under the supervision of a Qualified Medical Physicist at a medical institution. This training and work experience shall be conducted in clinical radiation facilities that provide high-energy external beam radiation therapy (photons and electrons with energies greater than or equal to one MV/one MeV). To meet this requirement, the individual shall have performed the tasks listed in this subsection under the supervision of a Qualified Medical Physicist during the year of work experience.
- N. Qualifications of Operators. Individuals who will be operating a therapeutic radiation machine for medical use shall be certified by the Department as a CTT by the Arizona Medical Radiologic Technology Board of Examiners.
- O. Additional training requirements.
 - 1. A registrant shall provide instruction, initially and at least annually, to all individuals who operate the electronic brachytherapy device, as appropriate to the individual's assigned duties, in the operating procedures identified in subsection (G). If the interval between patients exceeds one year, retraining of the individuals shall be provided.
 - 2. In addition to the requirements of subsection (L) for therapeutic radiation machine authorized users and subsection (M) for Qualified Medical Physicists, these individuals shall also receive device-specific instruction initially from the manufacturer, and annually from either the manufacturer or other qualified trainer. The training shall be of a duration recommended by a recognized national professional association with expertise in electronic brachytherapy (when available). In the absence of any training protocol recommended by a national professional association, the manufacturer's training protocol shall be followed. The training shall include, but not be limited to:
 - a. Device-specific radiation safety requirements;
 - b. Device operation;
 - c. Clinical use for the types of use approved by the FDA;
 - d. Emergency procedures, including an emergency drill; and
 - e. The registrant's quality assurance program.
 - 3. A registrant shall retain a record of individuals receiving ~~manufacturers~~ manufacturer's instruction for three years. The record shall include a list of the topics covered, the date of the instruction, the name or names of the attendee or attendees, and the name or names of the individual or individuals who provided the instruction.
- P. Mobile Electronic Brachytherapy Service. A registrant providing mobile electronic brachytherapy service shall, at a minimum:
 - 1. Check all survey instruments before medical use at each address of use or on each day of use, whichever is more restrictive;
 - 2. Account for the electronic brachytherapy x-ray tube in the electronic brachytherapy device before departure from the client's address; and
 - 3. Perform, at each location on each day of use, all of the required quality assurance checks specified in this Section to assure proper operation of the device.
- Q. Medical events shall be reported to the Department. For purposes of this Section "medical event" means a therapeutic radiation dose from a machine:
 - 1. Delivered to the wrong patient;
 - 2. Delivered using the wrong mode of treatment;
 - 3. Delivered to the wrong treatment site; or
 - 4. Delivered in one week to the correct patient, using the correct mode, to the correct therapy site, but greater than 130 percent of the prescribed weekly dose; or
- R. A therapeutic radiation dose from a machine with errors in the calibration, time of exposure, or treatment geometry that result in a calculated total treatment dose differing from the final, prescribed total treatment dose by more than 20 percent, except for treatments given in 1 to 3 fractions, in which case a difference of more than 10 percent constitutes a medical event.



- S. Reports of therapy medical events:
1. Within 24 hours after discovery of a medical event, a registrant shall notify the Department by telephone by speaking to a Department staff member. The registrant shall also notify the referring physician of the affected patient and the patient or a responsible relative or guardian, unless the referring physician personally informs the registrant either that he or she will inform the patient, or that in his or her medical judgment, telling the patient or the patient's responsible relative or guardian would be harmful to one or the other, respectively. If the Department staff member, referring physician, or the patient's responsible relative or guardian cannot be reached within 24 hours, the registrant shall notify them as soon as practicable. The registrant shall not delay medical care for the patient because of notification problems.
 2. Within 15 days following the verbal notification to the Department, the registrant shall report, in writing, to the Department and individuals notified under subsection (S)(1). The written report shall include the registrant's name, the referring physician's name, a brief description of the event, the effect on the patient, the action taken to prevent recurrence, whether the registrant informed the patient or the patient's responsible relative or guardian, and if not, why not. The report shall not include the patient's name or other information that could lead to identification of the patient.
 3. Each registrant shall maintain records of all medical events for Department inspection. The records shall:
 - a. Contain the names of all individuals involved in the event, including:
 - i. The physician,
 - ii. The allied health personnel,
 - iii. The patient,
 - iv. The patient's referring physician,
 - v. The patient's identification number if one has been assigned,
 - vi. A brief description of the event,
 - vii. The effect on the patient, and
 - viii. The action taken to prevent recurrence.
 - b. Be maintained for three years beyond the termination date of the affected registration.

R9-7-613. Veterinary Medicine Radiographic Systems

- A. Equipment. A registrant shall ensure that:
1. ~~Before January 2, 1996, the~~ The total filtration permanently in the useful beam is not less than 1.5 millimeters aluminum-equivalent for equipment operating at up to 70 kVp and 2.0 millimeters aluminum-equivalent for equipment operating in excess of 70 kVp;
 2. A device is provided to terminate the exposure after a preset time or exposure;
 3. Each radiographic system has a "dead-man" exposure switch with an electrical cord of sufficient length to allow the operator to stand at least 1.82 meters (six feet) away from the useful beam during x-ray exposures.
- B. Procedures: A registrant shall ensure that:
1. Unless required to restrain an animal, the operator stands at least 1.82 meters (6 feet) away from the useful beam and the animal during a radiographic exposure;
 2. An individual other than the operator is not in the x-ray room or area while an exposure is being made, unless the individual's assistance is required;
 3. If possible, an animal is held in position during an x-ray exposure using mechanical supporting or restraining devices;
 4. An individual holding an animal during an x-ray exposure is:
 - a. Wearing protective gloves and an apron of not less than 0.5 millimeter lead equivalent or positioned behind a whole-body protective barrier;
 - b. Wearing required personnel monitoring devices; and
 - c. Positioned so that no part of the person's body, except hands and arms, will be struck by the useful beam;
 5. If an individual holds or supports an animal or a film during an x-ray exposure, the name of the individual is recorded in an x-ray log that contains the animal's name, the type of x-ray procedure, the number of exposures, and the date of the procedure; and
 6. As a condition of employment an individual is not required to routinely hold or support animals, or hold film during radiation exposures.

ARTICLE 7. MEDICAL USES OF RADIOACTIVE MATERIAL

R9-7-710. Radiation Safety Officer Training

- A. A licensee shall require an individual fulfilling the responsibilities of the radiation safety officer, described in R9-7-705, to be an individual who:
1. Is certified by a specialty board whose certification process includes all of the requirements in subsection (A)(2) and whose certification has been recognized by the Department, the NRC, or an Agreement State. To have its certification process recognized, a specialty board shall require all candidates for certification to:
 - a. Meet the following minimum requirements:
 - i. Hold a bachelor's or graduate degree from an accredited college or university in physical science or engineering or biological science with a minimum of 20 college credits in physical science;
 - ii. Have five or more years of professional experience in health physics (graduate training may be substituted for no more than two years of the required experience) including at least three years in applied health physics; and
 - iii. Pass an examination administered by diplomates of the specialty board, which evaluates knowledge and competence in radiation physics and instrumentation, radiation protection, mathematics pertaining to the use and measurement of radioactivity, radiation biology, and radiation dosimetry; or
 - b. Meet the following minimum requirements:
 - i. Hold a master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university;



- ii. Have two years of full-time practical training and/or supervised experience in medical physics;
 - (1) Under the supervision of a medical physicist who is certified in medical physics by a specialty board recognized by the Commission or an Agreement State; or
 - (2) In clinical nuclear medicine facilities providing diagnostic and/or therapeutic services under the direction of physicians who meet the requirements for authorized users qualified under section ~~R9-7-710(B)~~ subsection (B), R9-7-721, or R9-7-723;
 - iii. Pass an examination, administered by diplomates of the specialty board, that assesses knowledge and competence in clinical diagnostic radiological or nuclear medicine physics and in radiation safety; or
 - 2. Has completed a structured educational program consisting of both:
 - a. 200 hours of didactic and laboratory training in the following areas:
 - i. Radiation physics and instrumentation;
 - ii. Radiation protection;
 - iii. Mathematics pertaining to the use and measurement of radioactivity;
 - iv. Radiation biology; and
 - v. Radiation dosimetry; and
 - b. One year of full-time radiation safety experience under the supervision of the individual identified as the radiation safety officer on a Department, a NRC, or an Agreement State license or permit issued by a NRC master material licensee that authorizes similar type(s) of use(s) of radioactive material involving the following:
 - i. Shipping, receiving, and performing related radiation surveys;
 - ii. Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and instruments used to measure radionuclides;
 - iii. Securing and controlling radioactive material;
 - iv. Using administrative controls to avoid mistakes in the administration of radioactive material;
 - v. Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures;
 - vi. Using emergency procedures to control radioactive material; and
 - vii. Disposing of radioactive material; or
 - c. Has obtained written certification, signed by a preceptor radiation safety officer, that the individual has satisfactorily completed the requirements in subsection (A)(2)(a) and (A)(2)(b) and has achieved a level of radiation safety knowledge sufficient to function independently as a radiation safety officer for a medical use licensee; or
 - 3. Is an authorized user, authorized medical physicist, or authorized nuclear pharmacist identified on the licensee's license and has experience with the radiation safety aspects of similar types of use of radioactive material for which the individual has radiation safety officer responsibilities.
- B. Exceptions.**
 - 1. An individual identified as a radiation safety officer on a Department, a NRC, or an Agreement State license or a permit issued by the NRC or an Agreement State broad scope licensee or master material license permit or by a master material license permittee of broad scope before the effective date of these rules need not comply with the training requirements in subsections (A)(1) through (A)(3).
 - 2. A physician, dentist, or podiatrist identified as an authorized user for the medical use of radioactive material on a license issued by the Department, the NRC, or an Agreement State, a permit issued by a NRC master material licensee, a permit issued by the Department, the NRC, or an Agreement State broad scope licensee, or a permit issued by a NRC master material license broad scope permittee before the effective date of these rules need not comply with the training requirements in this Article.
- C.** The training and experience required in this Section shall be obtained within the seven years preceding the date of application or the individual shall have had related continuing education and experience since the required training and experience was completed.
- D.** Individuals who, under subsection (B), need not comply with training requirements described in this Section may serve as preceptors for, and supervisors of, applicants seeking authorization on Department licenses for the same uses for which these individuals are authorized.

R9-7-711. Authorized Medical Physicist Training

- A.** A licensee shall require an authorized medical physicist to be an individual who:
 - 1. Is certified by a specialty board whose certification process includes all of the training and experience requirements in subsection (A)(3)(b) and (A)(3)(c) and whose certification has been recognized by the Department, the NRC, or an Agreement State; or
 - 2. Training requirements.
 - a. Hold a master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university;
 - b. Have two years of full-time practical training and/or supervised experience in medical physics:
 - i. Under the supervision of a medical physicist who is certified in medical physics by a specialty board recognized by the NRC or an Agreement State; or
 - ii. In clinical radiation facilities providing high-energy, external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services under the direction of physicians who meet the requirements for authorized users in R9-7-710, R9-7-719, R9-7-721, R9-7-723, R9-7-727, R9-7-728, or R9-7-744; and
 - c. Pass an examination, administered by diplomates of the specialty board, that assesses knowledge and competence in clinical radiation therapy, radiation safety, calibration, quality assurance, and treatment planning for external beam therapy, brachytherapy, and stereotactic radiosurgery; or
 - 3. Training requirements alternative.
 - a. Holds a master's or doctor's degree in physics, medical physics, other physical science, engineering, or applied mathematics from an accredited college or university; and has completed one year of full-time training in medical physics and an



additional year of full-time work experience under the supervision of an individual who meets the requirements for an authorized medical physicist for the type(s) of use for which the individual is seeking authorization. This training and work experience must be conducted in clinical radiation facilities that provide high-energy, external beam therapy (photons and electrons with energies greater than or equal to 1 million electron volts) and brachytherapy services and must include:

- i. Performing sealed source leak tests and inventories;
 - ii. Performing decay corrections;
 - iii. Performing full calibration and periodic spot checks of external beam treatment units, stereotactic radiosurgery units, and remote afterloading units as applicable; and
 - iv. Conducting radiation surveys around external beam treatment units, stereotactic radiosurgery units, and remote afterloading units as applicable; and
- b. Has obtained written attestation that the individual has satisfactorily completed the requirements in ~~subsection (A)(3)(e) and (A)(2)(a) and (A)(2)(b) and (A)(3)(c)~~ both subsections (A)(2) and (A)(3)(c), or in both subsections (A)(3)(a) and (A)(3)(c); and has achieved a level of competency sufficient to function independently as an authorized medical physicist for each type of therapeutic medical unit for which the individual is requesting authorized medical physicist status. The written attestation must be signed by a preceptor authorized medical physicist who meets the requirements in section, or equivalent Agreement State requirements for an authorized medical physicist for each type of therapeutic medical unit for which the individual is requesting authorized medical physicist status; and
- c. Has training for the type(s) of use for which authorization is sought that includes hands-on device operation, safety procedures, clinical use, and the operation of a treatment planning system. This training requirement may be satisfied by satisfactorily completing either a training program provided by the vendor or by training supervised by an authorized medical physicist authorized for the type(s) of use for which the individual is seeking authorization.
- B.** Exceptions. An individual identified as a teletherapy or medical physicist on a Department, a NRC, or an Agreement State license or a permit issued by the NRC or an Agreement State broad scope licensee or master material license permit or by a master material license permittee of broad scope before the effective date of these rules need not comply with the training requirements in subsection (A).
- C.** The training and experience required in this Section shall be obtained within the seven years preceding the date of application or the individual shall have had related continuing education and experience since the required training and experience was completed.
- D.** Individuals who, under subsection (B), need not comply with training requirements described in this Section may serve as preceptors for, and supervisors of, applicants seeking authorization on Department licenses for the same uses for which these individuals are authorized.

R9-7-719. Training for Uptake, Dilution, and Excretion Studies

- A.** Except as provided in R9-7-710, the licensee shall require an authorized user of unsealed radioactive material for the uses authorized under Group 100 to be a physician who:
1. Is certified by a medical specialty board whose certification process has been recognized by the NRC or an Agreement State and who meets the requirements in subsection (A)(3). To have its certification process recognized, a specialty board shall require all candidates for certification to:
 - a. Complete 60 hours of training and experience in basic radionuclide handling techniques and radiation safety applicable to the medical use of unsealed radioactive material for uptake, dilution, and excretion studies as described in subsection (A)(3); and
 - b. Pass an examination, administered by diplomates of the specialty board, that assesses knowledge and competence in radiation safety, radionuclide handling, and quality control; or
 2. Is an authorized user under R9-7-721, R9-7-723, the NRC, or equivalent Agreement State requirements; or
 3. Has completed 60 hours of training and experience, including a minimum of eight hours of classroom and laboratory training, in basic radionuclide handling techniques applicable to the medical use of unsealed radioactive material for uptake, dilution, and excretion studies. The training and experience must include:
 - a. Classroom and laboratory training in the following areas:
 - i. Radiation physics and instrumentation;
 - ii. Radiation protection;
 - iii. Mathematics pertaining to the use and measurement of radioactivity;
 - iv. Chemistry of radioactive material for medical use; and
 - v. Radiation biology; and
 - b. Work experience, under the supervision of an authorized user who meets the requirements in this Article, NRC, or equivalent Agreement State requirements, involving:
 - i. Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;
 - ii. Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters;
 - iii. Calculating, measuring, and safely preparing patient or human research subject dosages;
 - iv. Using administrative controls to prevent a medical event involving the use of unsealed radioactive material;
 - v. Using procedures to contain spilled radioactive material safely and using proper decontamination procedures; and
 - vi. Administering dosages of radioactive drugs to patients or human research subjects; and
 - c. Has obtained written attestation, signed by a preceptor authorized user who meets the requirements of ~~R9-7-710~~, R9-7-719, R9-7-721, or R9-7-723, the NRC, or equivalent Agreement State requirements; that the individual has satisfactorily completed the requirements in subsection (A)(1) or (A)(3) and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized under Exhibit A of this Article.
- B.** The training and experience shall have been obtained within the seven years preceding the date of application or the individual shall have had related continuing education and experience since the required training and experience was completed.



- C. Individuals who, under R9-7-710(B), need not comply with training requirements described in this Section may serve as preceptors for, and supervisors of, applicants seeking authorization on Department licenses for the same uses for which these individuals are authorized.

R9-7-721. Training for Imaging and Localization Studies Not Requiring a Written Directive

~~A.~~ Except as provided in R9-7-710, the licensee shall require an authorized user of unsealed radioactive material for the uses authorized under Group 200 to be a physician who:

1. Is certified by a medical specialty board whose certification process has been recognized by the NRC or an Agreement State and who meets the requirements in subsection ~~(A)(3)~~ (3). To have its certification process recognized, a specialty board shall require all candidates for certification to:
 - a. Complete 700 hours of training and experience in basic radionuclide handling techniques and radiation safety applicable to the medical use of unsealed radioactive material for imaging and localization studies as described in subsection (3); and
 - b. Pass an examination, administered by diplomates of the specialty board, that assesses knowledge and competence in radiation safety, radionuclide handling, and quality control; or
2. Is an authorized user under ~~this Chapter and~~ R9-7-723, the NRC, or equivalent Agreement State requirements; or
3. Has completed 700 hours of training and experience, including a minimum of 80 hours of classroom and laboratory training, in basic radionuclide handling techniques applicable to the medical use of unsealed radioactive material for imaging and localization studies. The training and experience must include:
 - a. Classroom and laboratory training in the following areas:
 - i. Radiation physics and instrumentation;
 - ii. Radiation protection;
 - iii. Mathematics pertaining to the use and measurement of radioactivity;
 - iv. Chemistry of radioactive material for medical use; and
 - v. Radiation biology; and
 - b. Work experience, under the supervision of an authorized user who meets the requirements in R9-7-710, R9-7-721, or R9-7-723 and ~~R9-7-721(A)(3)(b)(vii); in subsection (3)(b)(vii); the requirements of the NRC;~~ or equivalent Agreement State requirements, involving:
 - i. Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;
 - ii. Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters;
 - iii. Calculating, measuring, and safely preparing patient or human research subject dosages;
 - iv. Using administrative controls to prevent a medical event involving the use of unsealed radioactive material;
 - v. Using procedures to contain spilled radioactive material safely and using proper decontamination procedures; and
 - vi. Administering dosages of radioactive drugs to patients or human research subjects; and
 - vii. Eluting generator systems appropriate for preparation of radioactive drugs for imaging and localization studies, measuring and testing the elate for radionuclide purity, and processing the elate with reagent kits to prepare labeled radioactive drugs; and;
 - c. Has obtained written attestation, signed by a preceptor authorized user who meets the requirements as an authorized user for Exhibit A group 200 nuclides, NRC, or equivalent Agreement State requirements, that the individual has satisfactorily completed the requirements in subsection ~~(A)(1) or (A)(3)~~ (1) or (3) and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized under Exhibit A of this Article.

~~B. The training and experience shall have been obtained within the seven years preceding the date of application or the individual shall have had related continuing education and experience since the required training and experience was completed.~~

Exhibit A. Medical Use Groups

Group 100

Included is the use of any unsealed radioactive material for use in uptake, dilution, or excretion studies and not requiring a written directive: The radioactive material in this group shall be:

1. Obtained from a manufacturer or preparer licensed under R9-7-703(C)(2)(a), or equivalent NRC or Agreement State requirements; or
2. Obtained from a PET radioactive drug producer licensed under R9-7-703 or equivalent NRC or an Agreement State license excluding production of PET radionuclides prepared by an authorized nuclear pharmacist who meets the requirements in R9-7-712, a physician who is an authorized user and who meets the requirements specified in R9-7-721, or R9-7-723 and ~~R9-7-721(A)(3)(b)(vii)~~ R9-7-721(3)(b)(vii), or an individual under the supervision of either as specified in R9-7-706; or
3. If a research protocol:
 - a. Obtained from and prepared by an Agreement State or NRC licensee for use in research in accordance with a Radioactive Drug Research Committee-approved protocol or an Investigational New Drug (IND) protocol accepted by FDA; or
 - b. Prepared by the licensee for use in research in accordance with a Radioactive Drug Research Committee-approved application or an Investigational New Drug (IND) protocol accepted by FDA.

Group 200

Included is the use of any unsealed radioactive material for use in imaging and localization not requiring a written directive. PET radiopharmaceuticals may be used if the licensee meets the requirements in R9-7-716. The radioactive material in this group shall be:

1. Obtained from a manufacturer or preparer licensed under R9-7-703(C)(2)(a), or equivalent NRC or Agreement State requirements; or
2. Obtained from a PET radioactive drug producer licensed under R9-7-703 or an equivalent NRC or ~~an~~ Agreement State license excluding production of PET radionuclides prepared by an authorized nuclear pharmacist who meets the requirements in R9-7-



712, a physician who is an authorized user and who meets the requirements specified in R9-7-721, or R9-7-723 and ~~R9-7-721(A)(3)(b)(vii)~~ R9-7-721(3)(b)(vii), or an individual under the supervision of either as specified in R9-7-706; or

3. If a research protocol:
 - a. Obtained from and prepared by an Agreement State or NRC licensee for use in research in accordance with a Radioactive Drug Research Committee- approved application or an Investigational New Drug (IND) protocol accepted by FDA; or
 - b. Prepared by the licensee for use in research in accordance with a Radioactive Drug Research Committee-approved application or an Investigational New Drug (IND) protocol accepted by FDA.

Group 300

Included is the use of any unsealed radioactive material for medical use (radiopharmaceutical) for which a written directive is required. The radioactive material in this group shall be:

1. Obtained from a manufacturer or preparer licensed under R9-7-703(C)(2)(a) or equivalent NRC or Agreement State requirements; or
2. Obtained from a PET radioactive drug producer licensed under R9-7-703 or equivalent NRC or an Agreement State license excluding production of PET radionuclides prepared by an authorized nuclear pharmacist who meets the requirements in R9-7-712, a physician who is an authorized user and who meets the requirements specified in R9-7-721 or R9-7-723, or an individual under the supervision of either as specified in R9-7-706; or
3. If a research protocol:
 - a. Obtained from and prepared by an Agreement State or NRC licensee for use in research in accordance with an Investigational New Drug (IND) protocol accepted by FDA; or
 - b. Prepared by the licensee for use in research in accordance with an Investigational New Drug (IND) protocol accepted by FDA.

Group 400

Included is the use of any brachytherapy source for therapeutic medical use that is manufactured in accordance with R9-7-703(C)(2)(b) and:

1. Approved for therapeutic use in the Sealed Source and Device Registry; or
2. Part of a research protocol that is approved for therapeutic use under an active Investigational Device Exemption (IDE) application accepted by the FDA, and meets the requirements of R9-7-709.

Group 500

Included is the use of any sealed source that is manufactured in accordance with R9-7-703(C)(2)(b), and is approved for diagnostic use in the Sealed Source and Device Registry.

Group 600

Included is the use of sealed sources in photon emitting remote afterloader units, teletherapy units, or gamma stereotactic radiosurgery units that are manufactured in accordance with R9-7-703(C)(2)(b) and:

1. Approved for therapeutic use in the Sealed Source and Device Registry; or
2. Part of a research protocol that is approved for therapeutic use under an active Investigational Device Exemption (IDE) application accepted by the FDA and meets the requirements of R9-7-709.

Group 1000

A licensee may use radioactive material or a radiation source approved for medical use which is not specifically addressed in ~~R9-7-309(A)(4)~~ R9-7-309(4) if:

1. The applicant or licensee has submitted the information required by this Article; and
2. The applicant or licensee has received written approval from the Department in a license or license amendment and uses the material in accordance with the rules and specific conditions the Department considers necessary for the medical use of the material.

ARTICLE 10. NOTICES, INSTRUCTIONS, AND REPORTS TO RADIATION WORKERS; INSPECTIONS

R9-7-1006. Consultation with Workers During Inspections

- A. A licensee or registrant shall afford Department inspectors talking to a licensee or registrant representative the opportunity to consult privately with workers concerning matters of occupational radiation protection and other matters related to applicable provisions of Department rules, licenses, and registrations to the extent the inspectors deem consultation necessary for conducting an effective and thorough inspection.
- B. During the course of an inspection, any worker may privately bring to the attention of the inspectors, either orally or in writing, any past or present condition which the worker has reason to believe may have contributed to or caused any violation of the Act, these rules, or a license or registration condition, or any unnecessary exposure of an individual to radiation from licensed radioactive material or a registered radiation machine under the licensee's or registrant's control. If this notification is in writing, the worker shall comply with the requirements of R9-7-1007(A).
- C. The provisions of ~~R9-7-1006(B)~~ subsection (B) shall not be interpreted as authorization to disregard instructions required by R9-7-1003.

ARTICLE 15. TRANSPORTATION

R9-7-1507. Packaging Quality Assurance

- A. A licensee that transports radioactive material in the course of business or delivers radioactive material to a carrier for transport in a package for which a license, certificate of compliance, applicant for a certificate of compliance, or other approval has been issued by the Nuclear Regulatory Commission, or meets the applicable criteria (10 CFR 71, Subpart H, revised January 1, 2008, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.), shall establish, maintain, and execute the quality assurance program specified in 10 CFR 71, Subpart H.



- B. In addition to the requirements in subsection (A) for a quality assurance program, a licensee shall verify by procedures such as checking or inspection, that deficiencies or defective material or equipment relative to the shipment of packages containing radioactive material are promptly identified and corrected.
- C. Before the first use of any Type B packaging, a licensee shall obtain approval of its quality assurance program by the Department.
- D. A licensee shall maintain sufficient written records to demonstrate compliance with the quality assurance program. Records of quality assurance pertaining to the use of a Type B package for shipment of radioactive material shall be maintained for three years after the package is used for a shipment.

R9-7-1508. Advance Notification of Nuclear Waste Transportation

- A. Prior to the transport of any nuclear waste, as defined in Article 1, outside of the confines of the licensee's facility or other place of use or storage, or prior to the delivery of any nuclear waste to a carrier for transport, each licensee shall provide advance notification of such transport to the Department.
- B. Each advance notification required in subsection (A) above shall contain the following information:
 - 1. The name, address, and telephone number of the shipper, carrier, and receiver of the shipment;
 - 2. A description of the nuclear waste contained in the shipment as required by 49 CFR 172.202 and 172.203(d) (Revised October 1, 2007, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.);
 - 3. The point of origin of the shipment and the seven-day period during which departure of the shipment will occur;
 - 4. The seven-day period during which arrival of the shipment at state boundaries will occur;
 - 5. The destination of the shipment, and the seven-day period during which arrival of the shipment will occur; and
 - 6. A point of contact with a telephone number for current shipment information.
- C. The licensee shall make the notification required by subsection (A) in writing to the Department. A notification delivered by mail must be postmarked at least seven days before the beginning of the seven-day period during which departure of the shipment is estimated to occur. The licensee shall maintain a copy of the notification for one year.
- D. The licensee shall notify the Department of any changes in shipment plans, including cancellations, rerouting, or rescheduling, provided pursuant to subsection (A). Such notification shall be by telephoning the Department. The licensee shall maintain for one year a record of the name of the individual contacted.
- E. After June 11, 2013, each licensee shall provide advance notification to the Tribal official of participating Tribes referenced in paragraph (c)(3)(iii) of 10 CFR 71.97, or the official's designee, of the shipment of licensed material, within or across the boundary of the Tribe's reservation, before the transport, or delivery to a carrier, for transport, of licensed material outside the confines of the licensee's plant or other place of use or storage.

R9-7-1510. Packaging

- A. A general license is issued to any licensee to transport, or to deliver to a carrier for transport, licensed material in a package for which a license, certificate of compliance, or other approval has been issued by the NRC.
 - 1. This general license applies only to a licensee that has a quality assurance program approved by the Department as satisfying R9-7-1507;
 - 2. This general license applies only to a licensee that:
 - a. Has a copy of the license, certificate of compliance, or other approval of the package, and has the drawings and other documents referenced in the approval relating to the use and maintenance of the packaging and to the actions to be taken before shipment;
 - b. Complies with the terms and conditions of the license, certificate, or other approval, as applicable, and the applicable requirements of this Article; ~~and~~
 - c. Before the licensee's first use of the package, submits in writing to the Department and to ATTN: Document Control Desk, Director, Division of Spent Fuel Storage and Transportation, Office of Nuclear Material Safety and Safeguards, using an appropriate method listed in 10 CFR 71.1(a), the licensee's name, license number, and the package identification number specified in the package approval;
 - d. Each certificate holder shall maintain, for a period of three years after the life of the packaging to which they apply. Records identifying the packaging by model number, serial number and date of manufacture;
 - e. The licensee, certificate holder, and an applicant for a CoC, shall make available to the Commission for inspection, upon reasonable notice, all records required by this part. Records are only valid if stamped, initialed, or signed and dated by authorized personnel, or otherwise authenticated; and
 - f. The licensee, certificate holder, and an applicant for a CoC shall maintain sufficient written records to furnish evidence of the quality of packaging. The records to be maintained include results of the determinations required by 10 CFR 71.85; design, fabrication, and assembly records; results of reviews, inspections, tests, and audits; results of monitoring work performance and materials analyses; and results of maintenance, modification, and repair activities. Inspection, test, and audit records must identify the inspector or data recorder, the type of observation, the results, the acceptability, and the action taken in connection with any deficiencies noted. These records must be retained for three years after the life of the packaging to which they apply.
 - 3. This general license applies only when the package approval authorizes use of the package under this general license.
 - 4. For a Type B or fissile material package, the design of which was approved by NRC before April 1, 1996, the general license is subject to the additional restrictions of subsection (B).
- B. Type B packages.
 - 1. ~~A Type B package previously approved by NRC but not designated as B(U) or B(M) in the identification number of the NRC Certificate of Compliance, may be used under the general license of subsection (A) with the following additional conditions:~~



- a. Fabrication of the packaging is satisfactorily completed by August 31, 1986, as demonstrated by application of its model number in accordance with 10 CFR 71.85(c) (Revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.);
 - b. A package that is used for a shipment to a location outside the United States is subject to multilateral approval, as defined in 49 CFR 173.403 (Revised October 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.); and
 - e. A serial number that uniquely identifies each package which conforms to the approved design and is assigned to, and legibly and durably marked on, the outside of each package.
 - d. The licensee shall ascertain that there are no cracks, pinholes, uncontrolled voids, or other defects that could significantly reduce the effectiveness of the packaging;
 - e. Where the maximum normal operating pressure will exceed 35 kPa (5 lbf/in²) gauge, the licensee shall test the containment system at an internal pressure at least 50 percent higher than the maximum normal operating pressure, to verify the capability of that system to maintain its structural integrity at that pressure; and
1. Before the first use of any packaging for the shipment of licensed material, refer to 10 CFR 71.85 (a), (b) and (c).
 2. A Type B(U) package, a Type B(M) package, a low specific activity (LSA) material package or a fissile material package, previously approved by the NRC but without the “-85” designation in the identification number of the NRC certificate of compliance, may be used under the general license of subsection (A) with the following additional conditions:
 - a. Fabrication of the packaging is satisfactorily completed by April 1, 1999 as demonstrated by application of its model number in accordance with 10 CFR 71.85(c) (Revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.);
 - b. A package that is used for a shipment to a location outside the United States is subject to multilateral approval as defined in 49 CFR 173.403 (Revised October 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.); and
 - c. A serial number which uniquely identifies each package which conforms to the approved design and is assigned to, and legibly and durably marked on, the outside of each package.
 3. A licensee may modify the design and authorized contents of a Type B package, or a fissile material package, previously approved by NRC, provided:
 - a. The modifications of a Type B package are not significant with respect to the design, operating characteristics, or safe performance of the containment system, when the package is subjected to the tests specified in 10 CFR 71.71 and 71.73 (Revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.);
 - b. The modifications of a fissile material package are not significant, with respect to the prevention of criticality, when the package is subjected to the tests specified in 10 CFR 71.71 and 71.73 (Revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.); and
 - c. The modifications to the package satisfy the requirements of this Section.
 4. The NRC will revise the package identification number to designate previously approved package designs as B(U), B(M), AF, BF, or A as applicable, and with the identification number suffix “-85” after receipt of an application demonstrating that the design meets the requirements of this Section.
 5. For purposes of this Section, package types are defined in 10 CFR 71.4, revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
- C. A general license is issued to any licensee of the Department to transport fissile material, or to deliver to a carrier for transport, licensed material in a specification container for fissile material or for a Type B quantity of radioactive material as specified in 49 CFR 173 and 178 (Revised October 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.), if the following requirements are met:
1. The licensee shall maintain a quality assurance program approved by the Department as satisfying R9-7-1507.
 2. The licensee shall:
 - a. Maintain a copy of the specification; and
 - b. Comply with the terms and conditions of the specification and the applicable requirements in 10 CFR 71, Subparts A, G, and H, revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
 3. The licensee may not use the specification container for a shipment to a location outside the United States, except by multilateral approval, as defined in 49 CFR 173.403, revised October 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
 4. The general license applies only when a package’s contents:
 - a. Contain no more than a Type A quantity of radioactive material; and
 - b. Contain less than 500 total grams of beryllium, graphite, or hydrogenous material enriched in deuterium.
 5. The general license applies only to packages containing fissile material that are labeled with a CSI which:
 - a. Has been determined in accordance with subsection (E);
 - b. Has a value less than or equal to 10; and
 - c. For a shipment of multiple packages containing fissile material, the sum of the CSIs must be less than or equal to 50 (for shipment on a nonexclusive use conveyance) and less than or equal to 100 (for shipment on an exclusive use conveyance).
 6. The CSI value must meet the following requirements:
 - a. The value for the CSI must be greater than or equal to the number calculated by the following equation: $CSI=10[(\text{grams of } ^{235}\text{U}/X) + (\text{grams of } ^{235}\text{U}/Y) + (\text{grams of } ^{235}\text{U}/Z)]$;
 - b. The calculated CSI must be rounded up to the first decimal place;



- c. The values of X, Y, and Z used in the CSI equation must be taken from Tables 71-1 or 71-2 as appropriate located in 10 CFR 71.22, (revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.);
- d. If Table 71-2 is used to obtain the value of X, then the values for the terms in the equation for uranium-233 and plutonium must be assumed to be zero; and
- e. Table 71-1 values for X, Y, and Z must be used to determine the CSI if:
 - i. Uranium-233 is present in the package;
 - ii. The mass of plutonium exceeds 1 percent of the mass of uranium-235;
 - iii. The uranium is of unknown uranium-235 enrichment or greater than 24 weight percent enrichment; or
 - iv. Substances having a moderating effectiveness (i.e., an average hydrogen density greater than H₂O) (e.g., certain hydrocarbon oils or plastics) are present in any form, except as polyethylene used for packing or wrapping.

D. Foreign packaging.

- 1. A general license is issued to any licensee of the Department to transport, or to deliver to a carrier for transport, licensed material in a package the design of which has been approved in a foreign national competent authority certificate that has been revalidated by the Federal Department of Transportation as meeting the applicable requirements of ~~49 CFR 171.12~~ 49 CFR 171.23, revised October 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
- 2. Except as otherwise provided in this Section, the general license applies only to a licensee who has a quality assurance program approved by the Department as satisfying the applicable provisions of R9-7-1507.
- 3. This general license applies only to:
 - a. Shipments made to or from locations outside the United States.
 - b. A licensee that:
 - i. Has a copy of the applicable certificate, the revalidation, and the drawings and other documents referenced in the certificate, relating to the use and maintenance of the packaging and to the actions to be taken before shipment; and
 - ii. Complies with the terms and conditions of the certificate and revalidation, and with the applicable requirements in 10 CFR 71, Subparts A, G, and H, revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments. ~~With respect to the quality assurance provisions of Subpart H of the regulations, the licensee is exempt from design, construction, and fabrication requirements.~~

~~E. Assumptions as to unknown properties. When the isotopic abundance, mass, concentration, degree of irradiation, degree of moderation, or other pertinent property of fissile material in any package is not known, the licensee shall package the fissile material as if the unknown properties have credible values that will cause the maximum neutron multiplication.~~

~~F.E.~~ Routine determination before each shipment of licensed material shall ensure that the package with its contents satisfies the applicable requirements of this Article and of the license. The licensee shall determine that:

- 1. The package is proper for the contents to be shipped;
- 2. The package is in unimpaired physical condition except for superficial defects such as marks or dents;
- 3. Each closure device of the packaging, including any required gasket, is properly installed and secured and free of defects;
- 4. Any system for containing liquid is adequately sealed and has adequate space or other specified provision for expansion of the liquid;
- 5. Any pressure relief device is operable and set in accordance with written procedures;
- 6. The package has been loaded and closed in accordance with written procedures;
- 7. For fissile material, any moderator or neutron absorber, if required, is present and in proper condition;
- 8. Any structural part of the package that could be used to lift or tie down the package during transport is rendered inoperable for that purpose, unless it satisfies the design requirements of 10 CFR 71.45 (revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.);
- 9. The level of non-fixed (removable) radioactive contamination on the external surfaces of each package offered for shipment is as low as reasonably achievable, and within the limits specified in DOT regulations in 49 CFR 173.443 (revised October 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.);
- 10. External radiation levels around the package and around the vehicle, if applicable, will not exceed the limits specified in 10 CFR 71.47 (revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.), at any time during transportation; and
- 11. Accessible package surface temperatures will not exceed the limits specified in 10 CFR 71.43(g) (revised January 1, 2010, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.), at any time during transportation.

F. Fissile material meeting the requirements of at least one of the conditions in subsections (F)(1) through (F)(6) are exempt from classification as fissile material and from the fissile material package standards of 10 CFR 71.55 and 71.59, but are subject to all other requirements of this part, except as noted.

- 1. Individual package containing 2 grams or less fissile material.
- 2. Individual or bulk packaging containing 15 grams or less of fissile material provided the package has at least 200 grams of solid nonfissile material for every gram of fissile material. Lead, beryllium, graphite, and hydrogenous material enriched in deuterium may be present in the package but must not be included in determining the required mass for solid nonfissile material.
- 3. Low concentrations of solid fissile material commingled with solid nonfissile material, provided that:
 - a. There is at least 2000 grams of solid nonfissile material for every gram of fissile material;
 - b. There is no more than 180 grams of fissile material distributed within 360 kg of contiguous nonfissile material; and
 - c. Lead, beryllium, graphite, and hydrogenous material enriched in deuterium may be present in the package but must not be included in determining the required mass of solid nonfissile material.



4. Uranium enriched in uranium-235 to a maximum of 1 percent by weight, and with total plutonium and uranium-233 content of up to 1 percent of the mass of uranium-235, provided that the mass of any beryllium, graphite, and hydrogenous material enriched in deuterium constitutes less than 5 percent of the uranium mass, and that the fissile material is distributed homogeneously and does not form a lattice arrangement within the package.
5. Liquid solutions of uranyl nitrate enriched in uranium-235 to a maximum of 2 percent by mass, with a total plutonium and uranium-233 content not exceeding 0.002 percent of the mass of uranium, and with a minimum nitrogen to uranium atomic ratio (N/U) of 2. The material must be contained in at least a DOT Type A package.
6. Packages containing, individually, a total plutonium mass of not more than 1000 grams, of which not more than 20 percent by mass may consist of plutonium-239, plutonium-241, or any combination of these radionuclides.

R9-7-1512. Advance Notification of Shipment of Irradiated Reactor Fuel and Nuclear Waste

- A.** A licensee shall provide advance notification to the Governor, or the Director of the Department, of the shipment of licensed material as specified in 10 CFR 71.97, revised January 1, 2015, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
- B.** After June 11, 2013, each licensee shall provide advance notification to the Tribal official of participating Tribes referenced in paragraph (c)(3)(iii) of 10 CFR 71.97, or the Tribal official's designee, of the shipment of licensed material, within or across the boundary of the Tribe's reservation, before the transport, or delivery to a carrier, for transport, of licensed material outside the confines of the licensee's plant or other place of use or storage.
- C.** Advance notification is also required under this section for the shipment of licensed material, other than irradiated fuel, meeting the following three conditions:
 1. The licensed material is required by this part to be in Type B packaging for transportation;
 2. The licensed material is being transported to or across a State boundary en route to a disposal facility or to a collection point for transport to a disposal facility; and
 3. The quantity of licensed material in a single package exceeds the least of the following:
 - a. 3000 times the A1 value of the radionuclides as specified in appendix A, Table A-1 for special form radioactive material;
 - b. 3000 times the A2 value of the radionuclides as specified in appendix A, Table A-1 for normal form radioactive material;
 - or
 - c. 1000 TBq (27,000 Ci).
- D.** Procedures for submitting advance notification. (1) The notification must be made in writing to:
 1. The office of each appropriate governor or governor's designee;
 2. The office of each appropriate Tribal official or Tribal official's designee; and
 3. The Director, Division of Security Policy, Office of Nuclear Security and Incident Response.

R9-7-1515. Exemption for Low-level Radioactive Materials

- A.** A licensee is exempt from all the requirements of 10 CFR 71 with respect to shipment or carriage of the low-level materials listed in 10 CFR 71.14(a), revised January 1, 2008, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments.
- B.** Natural material and ores containing naturally occurring radionuclides that are either in their natural state, or have only been processed for purposes other than for the extraction of the radionuclides, and which are not intended to be processed for the use of these radionuclides, provided the activity concentration of the material does not exceed 10 times the applicable radionuclide activity concentration values specified in appendix A, Table A-2, or Table A-3 of this part.
- C.** Materials for which the activity concentration is not greater than the activity concentration values specified in appendix A, Table A-2, or Table A-3 of this part, or for which the consignment activity is not greater than the limit for an exempt consignment found in appendix A, Table A-2, or Table A-3 of 10 CFR 71 Appendix A.
- D.** Non-radioactive solid objects with radioactive substances present on any surfaces in quantities not in excess of the levels cited in the definition of contamination in 10 CFR 71.4.

ARTICLE 19. PHYSICAL PROTECTION OF CATEGORY 1 AND CATEGORY 2 QUANTITIES OF RADIOACTIVE MATERIAL**R9-7-1927. Requirements for Criminal History Records Checks of Individuals Granted Unescorted Access to Category 1 or Category 2 Quantities of Radioactive Material**

- A.** General performance objective and requirements:
 1. Except for those individuals listed in R9-7-1929 and those individuals grandfathered under R9-7-1925(B), each licensee subject to the provisions of this Article shall fingerprint each individual who is to be permitted unescorted access to category 1 or category 2 quantities of radioactive material. Licensees shall transmit all collected fingerprints to the Department for transmission to the FBI. The licensee shall use the information received from the FBI as part of the required background investigation to determine whether to grant or deny further unescorted access to category 1 or category 2 quantities of radioactive materials for that individual.
 2. The licensee shall notify each affected individual that his or her fingerprints will be used to secure a review of his or her criminal history record, and shall inform him or her of the procedures for revising the record or adding explanations to the record.
 3. Fingerprinting is not required if a licensee is reinstating an individual's unescorted access authorization to category 1 or category 2 quantities of radioactive materials if:
 - a. The individual returns to the same facility that granted unescorted access authorization within 365 days of the termination of his or her unescorted access authorization; and
 - b. The previous access was terminated under favorable conditions.
 4. Fingerprints do not need to be taken if an individual who is an employee of a licensee, contractor, manufacturer, or supplier has been granted unescorted access to category 1 or category 2 quantities of radioactive material, access to safeguards information,



or safeguards information-modified handling by another licensee, based upon a background investigation conducted under this Article, the Fingerprint Orders, or 10 CFR part 73₂, revised January 1, 2015, incorporated by reference, and available under R9-7-101. This incorporated material contains no future editions or amendments. An existing criminal history records check file may be transferred to the licensee asked to grant unescorted access in accordance with the provisions of R9-7-1931(C).

5. Licensees shall use the information obtained as part of a criminal history records check solely for the purpose of determining an individual's suitability for unescorted access authorization to category 1 or category 2 quantities of radioactive materials, access to safeguards information, or safeguards information-modified handling.

B. Prohibitions:

1. Licensees may not base a final determination to deny an individual unescorted access authorization to category 1 or category 2 quantities of radioactive material solely on the basis of information received from the FBI involving:
 - a. An arrest more than 1 year old for which there is no information of the disposition of the case; or
 - b. An arrest that resulted in dismissal of the charge or an acquittal.
2. Licensees may not use information received from a criminal history records check obtained under this section in a manner that would infringe upon the rights of any individual under the First Amendment to the Constitution of the United States, nor shall licensees use the information in any way that would discriminate among individuals on the basis of race, religion, national origin, gender, or age.

C. Procedures for processing of fingerprint checks:

1. For the purpose of complying with this Article, licensees shall use an appropriate method listed in 10 CFR 37.7₂, revised January 1, 2015, incorporated by reference, available under R9-7-101, and containing no future editions or amendments; to submit to the U.S. Nuclear Regulatory Commission, Director, Division of Facilities and Security, 11545 Rockville Pike, ATTN: Criminal History Program/Mail Stop TWB-05 B32M, Rockville, Maryland 20852, one completed, legible standard fingerprint card (Form FD-258, ORIMDNRCOOOZ), electronic fingerprint scan or, where practicable, other fingerprint record for each individual requiring unescorted access to category 1 or category 2 quantities of radioactive material. Copies of these forms may be obtained by writing the ~~Office of Information Services~~ Office of the Chief Information Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, by calling 1-630-829-9565, or by email to FORMS.Resource@nrc.gov. Guidance on submitting electronic fingerprints can be found at <http://www.nrc.gov/site-help/e-submittals.html>.
2. Fees for the processing of fingerprint checks are due upon application. Licensees shall submit payment with the application for the processing of fingerprints through corporate check, certified check, cashier's check, money order, or electronic payment, made payable to "U.S. NRC." (For guidance on making electronic payments, contact the Security Branch, Division of Facilities and Security at 301-492-3531.) Combined payment for multiple applications is acceptable. The Commission publishes the amount of the fingerprint check application fee on the NRC's public website. (To find the current fee amount, go to the Electronic Submittals page at <http://www.nrc.gov/site-help/e-submittals.html> and see the link for the Criminal History Program under Electronic Submission Systems.)
3. The U.S. Nuclear Regulatory Commission will forward to the submitting licensee all data received from the FBI as a result of the licensee's application(s) for criminal history records checks.

R9-7-1943. General Security Program Requirements

A. Security plan:

1. Each licensee identified in R9-7-1941(A) shall develop a written security plan specific to its facilities and operations. The purpose of the security plan is to establish the licensee's overall security strategy to ensure the integrated and effective functioning of the security program required by this Article. The security plan shall, at a minimum:
 - a. Describe the measures and strategies used to implement the requirements of this Article; and
 - b. Identify the security resources, equipment, and technology used to satisfy the requirements of this Article.
2. The security plan shall be reviewed and approved by the individual with overall responsibility for the security program.
3. A licensee shall revise its security plan as necessary to ensure the effective implementation of Department requirements. The licensee shall ensure that:
 - a. The revision has been reviewed and approved by the individual with overall responsibility for the security program; and
 - b. The affected individuals are instructed on the revised plan before the changes are implemented.
4. The licensee shall retain a copy of the current security plan as a record for 3 years after the security plan is no longer required. If any portion of the plan is superseded, the licensee shall retain the superseded material for 3 years after the record is superseded.

B. Implementing procedures:

1. The licensee shall develop and maintain written procedures that document how the requirements of this Article and the security plan will be met.
2. The implementing procedures and revisions to these procedures shall be approved in writing by the individual with overall responsibility for the security program.
3. The licensee shall retain a copy of the current procedure as a record for 3 years after the procedure is no longer needed. Superseded portions of the procedure shall be retained for 3 years after the record is superseded.

C. Training:

1. Each licensee shall conduct training to ensure that those individuals implementing the security program possess and maintain the knowledge, skills, and abilities to carry out their assigned duties and responsibilities effectively. The training shall include instruction in:
 - a. The licensee's security program and procedures to secure category 1 or category 2 quantities of radioactive material, and in the purposes and functions of the security measures employed;
 - b. The responsibility to report promptly to the licensee any condition that causes or may cause a violation of Department requirements;
 - c. The responsibility of the licensee to report promptly to the local law enforcement agency and licensee any actual or attempted theft, sabotage, or diversion of category 1 or category 2 quantities of radioactive material; and



- d. The appropriate response to security alarms.
 2. In determining those individuals who shall be trained on the security program, the licensee shall consider each individual's assigned activities during authorized use and response to potential situations involving actual or attempted theft, diversion, or sabotage of category 1 or category 2 quantities of radioactive material. The extent of the training shall be commensurate with the individual's potential involvement in the security of category 1 or category 2 quantities of radioactive material.
 3. Refresher training shall be provided at a frequency not to exceed 12 months and when significant changes have been made to the security program. This training shall include:
 - a. Review of the training requirements of subsection (c) and any changes made to the security program since the last training;
 - b. Reports on any relevant security issues, problems, and lessons learned;
 - c. Relevant results of Department inspections; and
 - d. Relevant results of the licensee's program review and testing and maintenance.
 4. The licensee shall maintain records of the initial and refresher training for 3 years from the date of the training. The training records shall include dates of the training, topics covered, a list of licensee personnel in attendance, and related information.
- D. Protection of information:**
1. Licensees authorized to possess category 1 or category 2 quantities of radioactive material shall limit access to and unauthorized disclosure of their security plan, implementing procedures, and the list of individuals that have been approved for unescorted access.
 2. Efforts to limit access shall include the development, implementation, and maintenance of written policies and procedures for controlling access to, and for proper handling and protection against unauthorized disclosure of, the security plan and implementing procedures.
 3. Before granting an individual access to the security plan or implementing procedures, licensees shall:
 - a. Evaluate an individual's need to know the security plan or implementing procedures; and
 - b. If the individual has not been authorized for unescorted access to category 1 or category 2 quantities of radioactive material, safeguards information, or safeguards information-modified handling, the licensee shall complete a background investigation to determine the individual's trustworthiness and reliability. A trustworthiness and reliability determination shall be conducted by the reviewing official and shall include the background investigation elements contained in R9-7-1925(A)(2) through (A)(7).
 4. Licensees need not subject the following individuals to the background investigation elements for protection of information:
 - a. The categories of individuals listed in R9-7-1929(A); or
 - b. Security service provider employees, provided written verification that the employee has been determined to be trustworthy and reliable, by the required background investigation in R9-7-1925(A)(2) through (A)(7), has been provided by the security service provider.
 5. The licensee shall document the basis for concluding that an individual is trustworthy and reliable and should be granted access to the security plan or implementing procedures.
 6. Licensees shall maintain a list of persons currently approved for access to the security plan or implementing procedures. When a licensee determines that a person no longer needs access to the security plan or implementing procedures or no longer meets the access authorization requirements for access to the information, the licensee shall remove the person from the approved list as soon as possible, but no later than 7 working days, and take prompt measures to ensure that the individual is unable to obtain the security plan or implementing procedures.
 7. When not in use, the licensee shall store its security plan and implementing procedures in a manner to prevent unauthorized access. Information stored in non-removable electronic form shall be password protected.
 8. The licensee shall retain as a record for 3 years after the document is no longer needed:
 - a. A copy of the information protection procedures; and
 - b. The list of individuals approved for access to the security plan or implementing procedures.
 9. State officials, State employees, and other individuals, whether or not licensees of the Commission or an Agreement State, who receive schedule information of the kind specified in subsection (D)(1) shall protect that information against unauthorized disclosure as specified in subsection (D)(2).

R9-7-1975. Preplanning and Coordination of Shipment of Category 1 or Category 2 Quantities of Radioactive Material

- A. Each licensee that plans to transport, or deliver to a carrier for transport, licensed material that is a category 1 quantity of radioactive material outside the confines of the licensee's facility or other place of use or storage shall:
 1. Preplan and coordinate shipment arrival and departure times with the receiving licensee;
 2. Preplan and coordinate shipment information with the governor or the governor's designee of any State through which the shipment will pass to:
 - a. Discuss the State's intention to provide law enforcement escorts; and
 - b. Identify safe havens; and
 3. Document the preplanning and coordination activities.
- B. Each licensee that plans to transport, or deliver to a carrier for transport, licensed material that is a category 2 quantity of radioactive material outside the confines of the licensee's facility or other place of use or storage shall coordinate the shipment no-later-than arrival time and the expected shipment arrival with the receiving licensee. The licensee shall document the coordination activities.
- C. Each licensee who receives a shipment of a category 2 quantity of radioactive material shall confirm receipt of the shipment with the originator. If the shipment has not arrived by the no-later-than arrival time, the receiving licensee shall notify the originator.
- D. Each licensee, who transports or plans to transport a shipment of a category 2 quantity of radioactive material, and determines that the shipment will arrive after the no-later-than arrival time provided pursuant to ~~paragraph~~ subsection (B), shall promptly notify the receiving licensee of the new no-later-than arrival time.



E. The licensee shall retain a copy of the documentation for preplanning and coordination and any revision thereof, as a record for 3 years.

R9-7-1977. Advance Notification of Shipment of Category 1 Quantities of Radioactive Material

As specified in subsections (A) and (B), each Each licensee shall provide advance notification to the Department and the governor of a State, or the governor's designee, of the shipment of licensed material in a category 1 quantity, through or across the boundary of the State, before the transport, or delivery to a carrier for transport of the licensed material outside the confines of the licensee's facility or other place of use or storage.

1. Procedures for submitting advance notification:
 - a. The notification shall be made to the Department and to the office of each appropriate governor or governor's designee. The contact information, including telephone and mailing addresses, of governors and governors' designees, and participating Tribes is available on the NRC's website at <http://nrc-stp.ornl.gov/special/designee.pdf> <https://scp.nrc.gov/special/designee.pdf>. A list of the contact information is also available upon request from the Director, Division of Material Safety, State, Tribal, and Rulemaking Programs, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Notifications to the Department shall be to the Department Director or their designee. The notification to the Department may be made by email to ram@azdhs.gov or by fax to (602) 437-0705.
 - b. A notification delivered by mail shall be postmarked at least 7 days before transport of the shipment commences at the shipping facility.
 - c. A notification delivered by any means other than mail shall reach the Department at least 4 days before the transport of the shipment commences and shall reach the office of the governor or the governor's designee at least 4 days before transport of a shipment within or through the State.
2. Information to be furnished in advance notification of shipment: Each advance notification of shipment of category 1 quantities of radioactive material shall contain the following information, if available at the time of notification:
 - a. The name, address, and telephone number of the shipper, carrier, and receiver of the category 1 radioactive material;
 - b. The license numbers of the shipper and receiver;
 - c. A description of the radioactive material contained in the shipment, including the radionuclides and quantity;
 - d. The point of origin of the shipment and the estimated time and date that shipment will commence;
 - e. The estimated time and date that the shipment is expected to enter each State along the route;
 - f. The estimated time and date of arrival of the shipment at the destination; and
 - g. A point of contact, with a telephone number, for current shipment information.
3. Revision notice:
 - a. The licensee shall provide any information not previously available at the time of the initial notification, as soon as the information becomes available but not later than commencement of the shipment, to the governor of the State or the governor's designee and to the Department Director at the contact information available in R9-7-1907.
 - b. A licensee shall promptly notify the governor of the state or the governor's designee of any changes to the information provided in accordance with subsections (B) and (C)(1). The licensee shall also immediately notify the Department Director at the contact information available in R9-7-1907 of any such changes.
4. Cancellation notice: Each licensee who cancels a shipment for which advance notification has been sent shall send a cancellation notice to the governor of each State or to the governor's designee previously notified and to the Department Director at the contact information available in R9-7-1907. The licensee shall send the cancellation notice before the shipment would have commenced or as soon thereafter as possible. The licensee shall state in the notice that it is a cancellation and identify the advance notification that is being cancelled.
5. Records: The licensee shall retain a copy of the advance notification and any revision and cancellation notices as a record for 3 years.
6. Protection of information: State officials, State employees, and other individuals, whether or not licensees of the Department, the NRC, or an Agreement State, who receive schedule information of the kind specified R9-7-1977(B) in this Section shall protect that information against unauthorized disclosure as specified in R9-7-1943(D) of this Article.

R9-7-19101. Form of Records

A. Each record required by this Article shall be legible throughout the retention period specified by each Department rule. The record may be the original or a reproduced copy or a microform, provided that the copy or microform is authenticated by authorized personnel and that the microform is capable of producing a clear copy throughout the required retention period. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Records such as letters, drawings, and specifications, shall include all pertinent information such as stamps, initials, and signatures. The licensee shall maintain adequate safeguards against tampering with and loss of records.

B. The licensee who transferred the material shall retain each record of the transfer of source or byproduct material until the Department terminates each license that authorizes the activity that is subject to the recordkeeping requirement.



it determined to base fees on the number of pasteurizers. See A.R.S. §§ 3-607 & 3-619.

The fee for a license to engage in the manufacture of dairy trade products will continue to be \$100, the amount set out in A.R.S. § 3-665(B). This fee is included in the rule only for completeness.

7. **A reference to any study relevant to the rules that the agency reviewed and either relied on or did not rely on in its evaluation of or justification for the rules, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:**

None

8. **A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:**

Not applicable

9. **The summary of the economic, small business, and consumer impact, if applicable:**

Laws 2018, 2nd Reg. Sess., Ch. 283, § 10 authorizes an exemption from the rulemaking requirements of A.R.S. Title 41, Chapter 6 for the purpose of establishing fees pursuant to those sections until July 1, 2019. As a result, this rulemaking is exempt from the requirements of the Administrative Procedures Act and no economic, small business, and consumer impact statement is required.

10. **A description of any changes between the proposed rulemaking, including any supplemental proposed rulemaking, and the final rulemaking package (if applicable):**

Not applicable

11. **An agency's summary of the public or stakeholder comments made about the rulemaking and the agency response to the comments, if applicable:**

None received

12. **Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules. When applicable, matters shall include, but not be limited to:**

The Department of Agriculture Advisory Council voted on June 21, 2018 in favor of continuing the fees set out in this rulemaking through Fiscal Year 2019.

a. **Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:**

Rule 203 requires a license to conduct certain activities. Rule 701 does not require a permit, and rule 810 sets out fees for certain licenses but does not itself require or establish any permits or licenses. The Department does not use a general permit for rule 203 because that would increase the cost for licensees by requiring them to pay the licensing fee for activities that the licensees do not engage in. Additionally, any duplication of information provided by an applicant to obtain multiple licenses would be minimal.

b. **Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than the federal law and if so, citation to the statutory authority to exceed the requirements of federal law:**

Not applicable

c. **Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:**

No

13. **A list of any incorporated by reference material and its location in the rule:**

None

14. **Whether the rule was previously made, amended, repealed or renumbered as an emergency rule. If so, the agency shall state where the text changed between the emergency and the exempt rulemaking packages:**

No

15. **The full text of the rules follows:**

TITLE 3. AGRICULTURE
CHAPTER 2. DEPARTMENT OF AGRICULTURE
ANIMAL SERVICES DIVISION

ARTICLE 2. MEAT AND POULTRY INSPECTION

Section
R3-2-203. Licenses; Registration; Records

ARTICLE 7. LIVESTOCK INSPECTION

Section
R3-2-701. Department Livestock Inspection

ARTICLE 8. DAIRY AND DAIRY PRODUCTS CONTROL

Section
R3-2-810. License Fees

**ARTICLE 2. MEAT AND POULTRY INSPECTION****R3-2-203. Licenses; Registration; Records**

- A. No change
 - 1. No change
 - a. No change
 - b. No change
 - i. No change
 - ii. No change
 - 2. No change
 - a. No change
 - b. No change
 - c. No change
 - d. No change
 - e. No change
 - f. No change
 - g. No change
- B. No change
 - 1. No change
 - 2. No change
 - 3. No change
- C. No change
- D. During fiscal year ~~2018~~ 2019, the fee to obtain or renew a license to slaughter is:
 - 1. For not to exceed 45 head of cattle, and not to exceed 55 head of sheep, goats or swine in one calendar year: \$250.
 - 2. For more than 45 and not to exceed 150 head of cattle and more than 45 and not to exceed 160 head of sheep, goats or swine in one calendar year: \$300.
 - 3. For more than 150 head of cattle and more than 160 head of sheep, goats or swine in any one calendar year: \$450.
- E. During fiscal year ~~2018~~ 2019, the fee to obtain or renew a meat license is:
 - 1. For a broker, \$450.
 - 2. For exempt processing, \$300.
 - 3. For a distributor, \$500.
 - 4. For a jobber, \$450.
 - 5. For a pet food manufacturer, \$300.
 - 6. For a processor, \$300.
 - 7. For meat storage, \$450.
 - 8. For transportation, \$300.

ARTICLE 7. LIVESTOCK INSPECTION**R3-2-701. Department Livestock Inspection**

- A. No change
 - 1. No change
 - 2. No change
 - 3. No change
- B. No change
- C. No change
- D. During fiscal year ~~2018~~ 2019, livestock officers and inspectors shall collect from the person in charge of cattle, dairy cattle, or sheep inspected a service charge of \$10 plus the per head inspection fee set out in A.R.S. § 3-1337 for making inspections for the transfer of ownership, sale, slaughter or transportation of the animals.

ARTICLE 8. DAIRY AND DAIRY PRODUCTS CONTROL**R3-2-810. License Fees**

During fiscal year ~~2018~~ 2019, an applicant shall pay the following fee to obtain or renew a dairy license:

- 1. For a license to operate a milk distributing plant or business: \$300 plus \$2,500 per pasteurizer.
- 2. For a license to operate a manufacturing milk processing plant: \$100.
- 3. For a license to engage in the business of producer-distributor as an interstate milk shipper listed facility: \$150 plus \$2,500 per pasteurizer.
- 4. For a license to engage in the business of producer-distributor: \$150.
- 5. For a license to engage in the business of producer-manufacturer: \$25.
- 6. For a license to engage in the manufacture of trade products: \$100.
- 7. For a license to engage in the business of selling at wholesale milk or dairy products, or both: \$100.
- 8. For a license to sample milk or cream: an initial fee of \$50 and a renewal fee of \$30.



NOTICE OF FINAL EXEMPT RULEMAKING
TITLE 3. AGRICULTURE
CHAPTER 3. DEPARTMENT OF AGRICULTURE
ENVIRONMENTAL SERVICES DIVISION

[R18-141]

PREAMBLE

- 1. Article, Part, or Section Affected (as applicable) Rulemaking Action
2. Citations to the agency's statutory rulemaking authority to include the authorizing statute (general) and the implementing statute (specific), and the statute or session law authorizing the exemption:
3. The effective date of the rule and the agency's reason it selected the effective date:
4. A list of all notices published in the Register as specified in R1-1-409(A) that pertain to the record of the exempt rulemaking:
5. The agency's contact person who can answer questions about the rulemaking:
6. An agency's justification and reason why a rule should be made, amended, repealed, or renumbered to include an explanation about the rulemaking:
7. A reference to any study relevant to the rules that the agency reviewed and either relied on or did not rely on in its evaluation of or justification for the rules, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:
8. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:
9. The summary of the economic, small business, and consumer impact, if applicable:
10. A description of any changes between the proposed rulemaking, including any supplemental proposed rulemaking, and the final rulemaking package (if applicable):
11. An agency's summary of the public or stakeholder comments made about the rulemaking and the agency response to the comments, if applicable:
12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules. When applicable, matters shall include, but not be limited to:
a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:



3. The effective date of the rule and the agency's reason it selected the effective date:

August 3, 2018

The effective date of the rule is based on the effective date of the law authorizing the rulemaking.

4. A list of all notices published in the Register as specified in R1-1-409(A) that pertain to the record of the exempt rulemaking:

None

5. The agency's contact person who can answer questions about the rulemaking:

Name: G. John Caravetta, Associate Director
Address: Arizona Department of Agriculture
1688 W. Adams
Phoenix, AZ 85007
Telephone: (602) 542-0996
Fax: (602) 542-0922
E-mail: jcaravetta@azda.gov

6. An agency's justification and reason why a rule should be made, amended, repealed, or renumbered to include an explanation about the rulemaking:

This rulemaking continues nursery certification fees from fiscal years 2011 through 2017 in fiscal year 2018 for services provided in fiscal year 2018 in order to make up for decreases in general fund appropriations. See Notice of Exempt Rulemaking: 23 A.A.R. 1941, July 21, 2017; 21 A.A.R. 2410, Oct. 16, 2015; 20 A.A.R. 2449, Sept. 5, 2014; 19 A.A.R. 3143, Oct. 11, 2013; 18 A.A.R. 2063, Aug. 24, 2012; 17 A.A.R. 1761, Sept. 2, 2011; & 16 A.A.R. 1336, July 23, 2010. By continuing these fees and fees related to phytosanitary certification generally, the Department anticipates it will be able to continue these services pertaining to the plant services division for fiscal year 2019.

With this rulemaking, the Department will continue to charge \$250 for general nursery stock inspection certification, and the fee for single shipment nursery stock inspection certification (also known as state nursery stock phytosanitary certification) will continue to be \$50 plus \$10 per additional lot.

The applicant informs the Department how many lots the applicant has, and the Department issues a separate certificate for each lot. Some applicants elect to artificially divide their nursery stock shipment into several small lots because if the state of import rejects part of a lot, the entire lot is rejected. By designating multiple lots, the shipper can reduce the risk of having its entire shipment rejected. However, shippers' practice of designating multiple lots for a single shipment creates extra work for the Department in issuing multiple certificates, which is another reason for continuing this fee for another fiscal year.

7. A reference to any study relevant to the rules that the agency reviewed and either relied on or did not rely on in its evaluation of or justification for the rules, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

None

8. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. The summary of the economic, small business, and consumer impact, if applicable:

Laws 2018, 2nd Reg. Sess., Ch. 283, § 10 authorizes an exemption from the rulemaking requirements of A.R.S. Title 41, Chapter 6 for the purpose of establishing fees pursuant to those sections until July 1, 2019. As a result, this rulemaking is exempt from the requirements of the Administrative Procedures Act and no economic, small business, and consumer impact statement is required.

10. A description of any changes between the proposed rulemaking, including any supplemental proposed rulemaking, and the final rulemaking package (if applicable):

Not applicable

11. An agency's summary of the public or stakeholder comments made about the rulemaking and the agency response to the comments, if applicable:

None received

12. Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules. When applicable, matters shall include, but not be limited to:

The Department of Agriculture Advisory Council voted on June 21, 2018 in favor of continuing the fees set out in this rulemaking through FY2019.

a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:

The rule does not require a permit. The nursery certification program is voluntary.

b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than the federal law and if so, citation to the statutory authority to exceed the requirements of federal law:

Not applicable

c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:

No



13. A list of any incorporated by reference material and its location in the rule:

None

14. Whether the rule was previously made, amended, repealed or renumbered as an emergency rule. If so, the agency shall state where the text changed between the emergency and the exempt rulemaking packages:

No

15. The full text of the rules follows:

**TITLE 3. AGRICULTURE
CHAPTER 4. DEPARTMENT OF AGRICULTURE
PLANT SERVICES DIVISION**

ARTICLE 3. NURSERY CERTIFICATION PROGRAM

Section
R3-4-301. Nursery Certification

ARTICLE 3. NURSERY CERTIFICATION PROGRAM

R3-4-301. Nursery Certification

- A.** No change
 - “Associate Director” No change
 - “Certificate” No change
 - “Certificate Holder” No change
 - “Collected nursery stock” No change
 - “Commercially clean” No change
 - “Common pest” No change
 - “Director” No change
 - “General nursery stock inspection certification” No change
 - “Nursery location” No change
 - “Quarantine pest” No change
 - “Single shipment nursery stock inspection certification” No change
- B.** No change
 - 1. No change
 - a. No change
 - b. No change
 - 2. No change
 - 3. No change
 - 4. No change
 - 5. No change
 - 6. No change
 - 7. No change
 - 8. No change
 - 9. No change
- C.** No change
 - 1. No change
 - 2. No change
 - 3. No change
- D.** No change
 - 1. No change
 - 2. No change
 - 3. No change
 - 4. No change
- E.** No change
 - 1. No change
 - 2. No change
 - 3. No change
 - 4. No change
 - 5. No change
 - 6. No change
- F.** No change
 - 1. No change
 - 2. No change
 - 3. No change
 - 4. No change
- G.** Notwithstanding subsections (B)-(D), during fiscal year ~~2018~~ 2019, an applicant for nursery stock inspection certification shall pay the following fee:



- 10. **A description of any changes between the proposed rulemaking, including any supplemental proposed rulemaking, and the final rulemaking package (if applicable):**
Not applicable
- 11. **An agency's summary of the public or stakeholder comments made about the rulemaking and the agency response to the comments, if applicable:**
None received
- 12. **Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules. When applicable, matters shall include, but not be limited to:**
The Department of Agriculture Advisory Council voted on June 21, 2018 in favor of continuing the fees set out in this rulemaking through FY2019.
 - a. **Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:**
The rule does not require a permit.
 - b. **Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than the federal law and if so, citation to the statutory authority to exceed the requirements of federal law:**
The federal administrative user fee is set out in 7 CFR 354.3(g)(3)(i). This rule is not more stringent than federal law.
 - c. **Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:**
No
- 13. **A list of any incorporated by reference material and its location in the rule:**
7 CFR 354.3(g)(3)(i), revised January 1, 2015, is incorporated by reference in R3-6-102(A)(2).
- 14. **Whether the rule was previously made, amended, repealed or renumbered as an emergency rule. If so, the agency shall state where the text changed between the emergency and the exempt rulemaking packages:**
No
- 15. **The full text of the rules follows:**

**TITLE 3. AGRICULTURE
CHAPTER 6. DEPARTMENT OF AGRICULTURE
OFFICE OF COMMODITY DEVELOPMENT AND PROMOTION**

ARTICLE 1. MARKETING

Section
R3-6-102. Phytosanitary Certification

ARTICLE 1. MARKETING

R3-6-102. Phytosanitary Certification

- A. During fiscal year ~~2018~~ 2019, a person who applies to the Department for phytosanitary certification shall pay the following fee:
 - 1. For state certification, \$50 for the first lot plus \$10 for each additional lot per Department site trip.
 - 2. For federal certification, \$50 plus the federal administrative user fee set out in 7 CFR 354.3(g)(3)(i), revised January 1, 2016, which is incorporated by reference and does not include any later amendments or editions. A copy of the incorporated material is available for inspection at the Department, 1688 W. Adams St., Phoenix, Arizona 85007 or may also be viewed at <http://www.gpo.gov/fdsys/>.
- B. This Section does not apply to phytosanitary certification under A.A.C. R3-4-301.

**NOTICE OF FINAL EXEMPT RULEMAKING
TITLE 3. AGRICULTURE
CHAPTER 10. ~~RESERVED~~ DEPARTMENT OF AGRICULTURE
CITRUS FRUIT AND VEGETABLE DIVISION**

[R18-144]

PREAMBLE

- 1. **Article, Part, or Section Affected (as applicable)**

R3-10-101	<u>Rulemaking Action</u>
	New Section
R3-10-102	New Section
- 2. **Citations to the agency's statutory rulemaking authority to include the authorizing statute (general) and the implementing statute (specific), and the statute or session law authorizing the exemption:**
 Authorizing statute: A.R.S. § 3-107(A)(1); Laws 2018, 2nd Reg. Sess., Ch. 283, § 10
 Implementing statute: Laws 2018, 2nd Reg. Sess., Ch. 283, § 10; A.R.S. § 3-449; A.R.S. § 3-492; Statute or session law authorizing the exemption: Laws 2018, 2nd Reg. Sess., Ch. 283, § 10



- 3. **The effective date of the rule and the agency's reason it selected the effective date:**
 July 1, 2018
 The effective date is necessary to allow the reduced fees to be collected in FY2019.
- 4. **A list of all notices published in the Register as specified in R1-1-409(A) that pertain to the record of the exempt rulemaking:**
 None
- 5. **The agency's contact person who can answer questions about the rulemaking:**
 Name: Ed Foster, Assistant Director
 Address: Arizona Department of Agriculture
 1688 W. Adams
 Phoenix, AZ 85007
 Telephone: (602) 542-0947
 Fax: (602) 542-0898
 E-mail: efoster@azda.gov
- 6. **An agency's justification and reason why a rule should be made, amended, repealed, or renumbered to include an explanation about the rulemaking:**
 Laws 2018, 2nd Reg. Sess., Ch. 283, § 10 authorizes the Director, under the advisement of the Arizona Department of Agriculture Advisory Council to decrease fees in Fiscal Year 2019. The Citrus, Fruit and Vegetable Standardization Citrus Dealer license fee set out in A.R.S. § 3-449(A) renewal is due in July 2018 and the Citrus, Fruit and Vegetable Standardization Produce Dealer and Shipper license, set out in A.R.S. § 3-492(A) renewal is due in August 2018. The deadline for these renewals is fast approaching therefore there is an immediate need for exempt rulemaking in order to decrease these fees.
- 7. **A reference to any study relevant to the rules that the agency reviewed and either relied on or did not rely on in its evaluation of or justification for the rules, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:**
 None
- 8. **A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:**
 Not applicable
- 9. **The summary of the economic, small business, and consumer impact, if applicable:**
 Laws 2018, 2nd Reg. Sess., Ch. 283, § 10 authorizes an exemption from the rulemaking requirements of A.R.S. Title 41, Chapter 6 for the purpose of establishing fees pursuant to those sections until July 1, 2019. As a result, this rulemaking is exempt from the requirements of the Administrative Procedures Act and no economic, small business, and consumer impact statement is required.
- 10. **A description of any changes between the proposed rulemaking, including any supplemental proposed rulemaking, and the final rulemaking package (if applicable):**
 Not applicable
- 11. **An agency's summary of the public or stakeholder comments made about the rulemaking and the agency response to the comments, if applicable:**
 None received
- 12. **Any other matters prescribed by statute that are applicable to the specific agency or to any specific rule or class of rules. When applicable, matters shall include, but not be limited to:**
 The Citrus Fruit and Vegetable Advisory Committee voted on May 29, 2018 to reduce the fees as outlined in this rule. The Department of Agriculture Advisory Council voted on June 21, 2018 in favor of reducing the fees set out in this rulemaking through Fiscal Year 2019.
 - a. **Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:**
 Both rules require a license to conduct certain activities: however those licenses established by statute. This rule just reduces the fees associated with obtaining those licenses.
 - b. **Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than the federal law and if so, citation to the statutory authority to exceed the requirements of federal law:**
 Not applicable
 - c. **Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:**
 No
- 13. **A list of any incorporated by reference material and its location in the rule:**
 None
- 14. **Whether the rule was previously made, amended, repealed or renumbered as an emergency rule. If so, the agency shall state where the text changed between the emergency and the exempt rulemaking packages:**
 No
- 15. **The full text of the rules follows:**



TITLE 3. AGRICULTURE
CHAPTER 10. ~~RESERVED~~ DEPARTMENT OF AGRICULTURE
CITRUS FRUIT AND VEGETABLE DIVISION

ARTICLE 1. LICENSING FEES

Section

- R3-10-101. Citrus Fruit Dealer or Shipper Licensing Fee
- R3-10-102. Fruit and Vegetable Dealer or Shipper Licensing Fee

ARTICLE 1. LICENSING FEES

R3-10-101. Citrus Fruit Dealer or Shipper Licensing Fee

A person may not transact business as a citrus fruit dealer or shipper without first obtaining a license as provided in Arizona Revised Statutes, Title 3, Chapter 3, Article 2. For fiscal year 2019, license fee shall be determined according to the annual gross sales based on the dealer's or shipper's previous fiscal year as follows:

1. If the annual gross sales are \$500,000 or more, the annual fee is \$112.50.
2. If the annual gross sales are between \$200,000 and \$500,000, the annual fee is \$75.
3. If the annual gross sales are \$200,000 or less, the annual fee is \$37.50.
4. If the person was not in business the previous fiscal year, the annual fee is \$37.50.

R3-10-102. Fruit and Vegetable Dealer or Shipper Licensing Fee

A person shall not act as a fruit or vegetable dealer or shipper without first obtaining a license as provided in Arizona Revised Statutes, Title 3, Chapter 3, Article 4. For fiscal year 2019, application for the license shall be filed with the supervisor and accompanied by a license fee determined according to the annual gross sales based on the dealer's or shipper's previous fiscal year as follows:

1. If the annual gross sales are \$500,000 or more, the annual fee is \$125.
2. If the annual gross sales are between \$200,000 and \$500,000, the annual fee is \$87.50.
3. If the annual gross sales are \$200,000 or less, the annual fee is \$50.
4. If the person was not in business the previous fiscal year, the annual fee is \$50.

NOTICE OF FINAL EXEMPT RULEMAKING

TITLE 9. HEALTH SERVICES
CHAPTER 22. ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM (AHCCCS)
ADMINISTRATION

[R18-145]

PREAMBLE

1. **Article, Part, or Section Affected (as applicable)** **Rulemaking Action**
 R9-22-730 Amend
2. **Citations to the agency's statutory rulemaking authority to include both the authorizing statute (general) and the implementing statute (specific):**
 Authorizing statute: A.R.S. § 36-2901.08
 Implementing statute: A.R.S. § 36-2901.08
 Statute authorizing the exemption: A.R.S. § 41-1005(A)(31)
3. **The effective date of the rule:**
 July 10, 2018
 The Administration is proposing an effective date of July 10, 2018 so that the invoices for the new rates will be available on or before July 15, 2018 or upon approval by CMS, whichever is later.
4. **Citations to all related notices published in the Register as specified in R1-1-409(A) that pertain to the record of the final rulemaking package:**
 Not applicable
5. **The agency's contact person who can answer questions about the rulemaking:**
 Name: Nicole Fries
 Address: AHCCCS
 Office of Administrative Legal Services
 701 E. Jefferson, Mail Drop 6200
 Phoenix, AZ 85034
 Telephone: (602) 417-4232
 Fax: (602) 253-9115
 E-mail: AHCCCSRules@azahcccs.gov
 Web site: www.azahcccs.gov



6. An agency's justification and reason why a rule should be made, amended, repealed or renumbered, to include an explanation about the rulemaking:

A.R.S. § 36-2901.08 authorizes the Administration to establish, administer and collect an assessment on hospital revenues, discharges or bed days for funding a portion of the nonfederal share of the costs incurred beginning January 1, 2014, associated with eligible persons added to the program by A.R.S. §§ 36-2901.01 and 36-2901.07. It is the Agency's objective to assess only so much as is necessary to meet the estimated costs associated with the projected populations referenced in the statute. As such, it is necessary for the Administration to adjust the assessment from time to time as the Administration updates its estimate of the number of eligible persons and projected cost associated with coverage for those persons. The Administration is proposing a new rule to update the figures to be used as of July 1, 2018 for collecting the assessment from hospitals.

At the assessment rates in the current rule, the Administration estimates that it would collect \$290 million over the course of a state fiscal year. The amendments reflected in this proposed rule adjust the assessment rates such that the Administration anticipates the collection of \$287 million for the State Fiscal Year ending June 30, 2019. This amount corresponds to the amount of non-federal funds estimated to be necessary to cover the cost of providing care to the estimated 414,000 eligible individuals described in A.R.S. §36-2901.08(A) for State Fiscal year ending June 30, 2019.

Additionally, the Administration is proposing to update the current reference of data from the 2011 Medicare Cost Reports and 2012 Uniform Accounting Reports and replacing it with references to the 2016 Medicare Cost Reports and 2016 Uniform Accounting Reports to more accurately reflect current hospital discharges.

The Administration is also proposing to modify the language of the rule so that a hospital will only be assessed if it was open on March 1 preceding the July assessment start date and require new hospitals to submit data to AHCCCS by April 15 of each year. Currently, a hospital is assessed if it was open on April 1 preceding the July assessment start date and data for new hospitals is due to AHCCCS by May 15 of each year. This change will allow a more reasonable timeframe from when the assessment needs to be finalized each year. The rulemaking also clarifies the assessment calculation for new hospitals.

As required by A.R.S. § 36-2901.08(B), the assessment has been established in a manner consistent with federal regulations at 42 C.F.R. Part 433 Subpart B so that the assessment does not cause a reduction in federal financial participation.

7. A reference to any study relevant to the rule that the agency reviewed and either relied on or did not rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

No studies were conducted relevant to the rule.

8. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

9. A summary of the economic, small business, and consumer impact:

The Administration estimates that \$287 million will be necessary to be collected from Arizona hospitals to fund the cost required by statute for State Fiscal Year (SFY) 2019 ending June 30, 2019. The assessment amount currently in rule reflects the amount needed in SFY 2018 to cover the estimated cost of care, approximately \$290 million. The amendment adjusts the rates downward to reflect the estimated need of \$287 million for SFY 2019.

The AHCCCS program is jointly funded by the State and the federal government through the Medicaid program. Depending on the eligibility category of the individual, the federal government provides between two-thirds and 100% of the cost of care for persons described in A.R.S. § 36.2901.08(A). The Administration will use the amounts collected from the assessment combined with the federal financial participation to fund the cost of health care coverage for an estimated 414,000 persons described in A.R.S. § 36.2901.08(A) through direct payments to health care providers and capitation payments to managed care organizations that, in turn, make payments to health care providers that render care to AHCCCS members. Many of the providers of that medical care are considered small businesses located in Arizona.

A.R.S. § 36-2901.08 prohibits the assessed hospitals from passing the cost of the assessment on to patients or third parties who pay for care in the hospital. In the aggregate, the Administration expects to return millions more in SFY 2019 in incremental payments for hospital services than will be collected through the assessment. Along with a copy of this proposed exempt rule making, the Administration has posted to its website information regarding the fiscal impact of this amendment to hospitals:

<https://azahcccs.gov/PlansProviders/CurrentProviders/State/proposedrules.html>.

10. A description of any changes between the proposed rulemaking, to include supplemental notices, and the final rulemaking:

There were no changes between the proposed and final rulemaking.

11. An agency's summary of the public or stakeholder comments made about the rulemaking and the agency response to the comments:

No public comments were received.

12. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:

No other matters have been prescribed.

a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general permit is not used:

The rule does not require a permit.

b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:



The rulemaking must be established consistent with 42 CFR Part 433 Subpart B. The rule is not more stringent than federal law.

c. Whether a person submitted an analysis to the agency that compares the rule's impact on the competitive-ness of business in this state to the impact on business in other states:

No analysis was submitted.

13. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rule:

No material is incorporated by reference.

14. Whether the rule was previously made, amended, repealed or renumbered as an emergency rule. If so, the agency shall state where the text changed between the emergency and the exempt rulemaking packages:

The rule was not made, amended or repealed as an emergency rule.

15. The full text of the rules follows:

TITLE 9. HEALTH SERVICES

**CHAPTER 22. ARIZONA HEALTH CARE COST CONTAINMENT SYSTEM (AHCCCS)
ADMINISTRATION**

ARTICLE 7. STANDARDS FOR PAYMENTS

Section

R9-22-730. Hospital Assessment

ARTICLE 7. STANDARDS FOR PAYMENTS

R9-22-730. Hospital Assessment

- A. For purposes of this Section, the following terms are defined as provided below unless the context specifically requires another meaning:
1. "20112016 Medicare Cost Report" means:
 - a. The Medicare Cost Report for the hospital fiscal year ending in calendar year 20112016 as reported in the CMS Healthcare Provider Cost Reporting Information System (HCRIS) release dated ~~December 31, 2012~~, or July 21, 2017.
 - b. ~~For hospitals not included in that CMS HCRIS report, the "as filed" Medicare Cost Report for the hospital fiscal year ending in calendar year 2011 submitted by the hospital to the Administration.~~
 2. "20112016 Uniform Accounting Report" means the Uniform Accounting Report submitted to the Arizona Department of Health Services as of ~~December 19, 2012~~ August 16, 2017.
 3. "2012 Uniform Accounting Report" means the Uniform Accounting Report submitted to the Arizona Department of Health Services as of ~~August 2, 2013~~.
 4. "Quarter" means the three month period beginning January 1, April 1, July 1, and October 1 of each year.
 4. A "new hospital" means a licensed hospital that did not hold a license from the Arizona Department of Health Services prior to January 1, 2018.
- B. Beginning January 1, 2014, for each Arizona licensed hospital not excluded under subsection (I) shall be subject to an assessment payable on a quarterly basis. The assessment shall be levied against the legal owner of each hospital as of the first day of the quarter, and except as otherwise required by subsections (D), (E) and (F). For the period beginning ~~July 1, 2017~~ July 1, 2018, the assessment shall be calculated by multiplying the number of discharges reported on the hospital's 20112016 Medicare Cost Report, excluding discharges reported on the Medicare Cost Report as "Other Long Term Care Discharges" by the following rates based on the hospital's peer group:
1. ~~\$483.00~~ \$546.00 per discharge for hospitals located in a county with a population less than 500,000 that are designated as type: hospital, subtype: short-term.
 2. ~~\$483.00~~ \$546.00 per discharge for hospitals designated as type: hospital, subtype: critical access hospital.
 3. ~~\$120.75~~ \$136.50 per discharge for hospitals designated as type: hospital, subtype: long term.
 4. ~~\$120.75~~ \$136.50 per discharge for hospitals designated as type: hospital, subtype: psychiatric, that reported 2,500 or more discharges on the 20112016 Medicare Cost Report.
 5. ~~\$386.50~~ \$436.75 per discharge for hospitals designated as type: hospital, subtype: short-term with 20% of total licensed beds licensed as pediatric, pediatric intensive care and neonatal intensive care as reported in the hospital's 20112016 Uniform Accounting Report.
 6. ~~\$434.75~~ \$491.50 per discharge for hospitals designated as type: hospital, subtype: short-term with at least 10% but less than 20% of total licensed beds licensed as pediatric, pediatric intensive care and neonatal intensive care as reported in the hospital's 20122016 Uniform Accounting Report.
 7. ~~\$483.00~~ \$546.00 per discharge for hospitals designated as type: hospital, subtype: short-term not included in another peer group.
- C. Peer groups for the four quarters beginning July 1 of each year are established based on hospital license type and subtype designated in the Provider & Facility Database for Arizona Medical Facilities posted by the Arizona Department of Health Services Division of Licensing Services on its website ~~April 1, 2017~~ January 1, 2018.
- D. Notwithstanding subsection (B), psychiatric discharges from a hospital that reported having a psychiatric sub-provider in the hospital's 20112016 Medicare Cost Report, are assessed a rate of ~~\$120.75~~ \$136.50 for each discharge from the psychiatric sub-provider as reported in the 20112016 Medicare Cost Report. All discharges other than those reported as discharges from the psychiatric sub-provider are assessed at the rate required by subsection (B).



- E. Notwithstanding subsection (B), rehabilitative discharges from a hospital that reported having a rehabilitative sub-provider in the hospital's ~~2014~~2016 Medicare Cost Report, are assessed a rate of \$0 for each discharge from the rehabilitative sub-provider as reported in the ~~2014~~2016 Medicare Cost Report. All discharges other than those reported as discharges from the rehabilitative sub-provider are assessed at the rate required by subsection (B).
- F. Notwithstanding subsection (B), for any hospital that reported more than ~~28,200~~ 23,500 discharges on the hospital's ~~2014~~2016 Medicare Cost Report, discharges in excess of ~~28,200~~ 23,500 are assessed a rate of ~~\$48.25~~ \$54.50 for each discharge in excess of ~~28,200~~ 23,500. The initial ~~28,200~~ 23,500 discharges are assessed at the rate required by subsection (B).
- G. Assessment notice. On or before the 15th day of the first month of the quarter or upon CMS approval, whichever is later, the Administration shall send to each hospital a notification that the assessment invoice is available to be viewed on a secure website. The invoice shall include the hospital's peer group assignment and the assessment due for the quarter.
- H. Assessment due date. The assessment must be received by the Administration no later than:
 1. The 15th day of the second month of the quarter or
 2. In the event CMS approves the assessment after the 15th day of the first month of the quarter, 30 days after notification by the Administration that the assessment invoice is available.
- I. Excluded hospitals. The following hospitals are excluded from the assessment based on the hospital's ~~2014~~2016 Medicare Cost Report and Provider & Facility Database for Arizona Medical Facilities posted by the Arizona Department of Health Services Division of Licensing Services on its website for ~~April 1, 2017~~ January 1, 2018:
 1. Hospitals owned and operated by the state, the United States, or an Indian tribe.
 2. Hospitals designated as type: hospital, subtype: short-term that have a license number beginning "SH".
 3. Hospitals designated as type: hospital, subtype: psychiatric that reported fewer than 2,500 discharges on the ~~2014~~2016 Medicare Cost Report.
 4. Hospitals designated as type: hospital, subtype; rehabilitation.
 5. Hospitals designated as type: hospital, subtype: children's.
 6. Hospitals designated as type: med-hospital, subtype: special hospitals.
 7. Hospitals designated as type: hospital, subtype: short-term located in a city with a population greater than one million, which on average have at least 15 percent of inpatient days for patients who reside outside of Arizona, and at least 50 percent of discharges as reported on the ~~2014~~2016 Medicare Cost Report are reimbursed by Medicare.
 8. Hospitals designated as type: hospital, subtype: short-term that have at least 80 percent Medicare discharges, per the 2016 Medicare Cost Report.
- J. New hospitals. For hospitals that did not file a ~~2014~~2016 Medicare Cost Report because of the date the hospital began operations:
 1. If the hospital was open on the ~~April~~March 1 preceding the July assessment start date, the hospital assessment will begin on July 1 following the date the hospital began operating.
 2. If the hospital began operating between ~~April~~March 2 and June 30, the assessment will begin on July 1 of the following calendar year.
 3. A hospital is not considered a new hospital based on a change in ownership.
 4. ~~Until the first full year of data is available, the assessment will be based on the annualized number of discharges from the date hospital operations began through April 30 preceding the July assessment start date. The hospital shall submit the discharge data and all other data requested by the Administration necessary to determine the appropriate assessment to the Administration no later than May 15 preceding the assessment start date for the new hospitals. Thereafter, the assessment will be based on the discharges reported in the hospital's first Medicare Cost Report and Uniform Accounting Report which includes 12 months worth of data; however, when a new hospital shares a Medicare Identification Number with an existing hospital, the assessment amount will be based on self-reported data from the new hospital instead of the Medicare Cost Report. The data shall include the number of discharges and all other data requested by the Administration necessary to determine the appropriate assessment. No later than August 15, 2017, new hospitals shall also submit to the Administration discharge data and all other data requested by the Administration necessary to determine the appropriate assessment beginning July 1, 2018. The assessment will be based on the discharges reported in the hospital's first Medicare Cost Report and Uniform Accounting Report, which includes 12 months-worth of data, except when any of the following apply:~~
 - a. If there is not a complete 12 months-worth of data available, the assessment will be based on the annualized number of discharges from the date hospital operations began through March 31 preceding the July assessment start date. The hospital shall self-report the discharge data and all other data requested by the Administration necessary to determine the appropriate assessment to the Administration no later than April 15 preceding the assessment start date for the new hospitals. "Annualized" means divided by a ratio equal to the number of months of data divided by 12 months.
 - b. If more than 12 months of data is available, the assessment will be based on the most recent 12 months of self-reported data, as of March 31;
 5. For purposes of calculating subpart 4, if a new hospital shares a Medicare Identification Number with an existing hospital, the assessment amount will be based on self-reported data from the new hospital instead of the Medicare Cost Report. The data shall include the number of discharges and all other data requested by the Administration necessary to determine the appropriate assessment.
 56. For hospitals providing self-reported data, described in subpart 4 and 5:
 - a. Psychiatric discharges will be annualized to determine if subsections (B)(4) or (I)(3) apply to the assessment amount.
 - b. Discharges will be annualized to determine if subsection (F) applies to the assessment amount.
- K. Changes of ownership. The parties to a change of ownership shall promptly provide written notice to the Administration of a change of ownership and any agreement regarding the payment of the assessment. The assessed amount will continue at the same amount applied to the prior owner. Assessments are the responsibility of the owner of record as of the first day of the quarter; however, this rule is not intended to prohibit the parties to a change of ownership from entering into an agreement for a new owner to assume the assessment responsibility of the owner of record as of the first day of the prior quarter.



- L. Hospital closures. Hospitals that close shall pay a proportion of the quarterly assessment equal to that portion of the quarter during which the hospital operated.
- M. Required information. For any hospital that has not filed a ~~2014~~2016 Medicare Cost report, or if the ~~2014~~2016 Medicare Cost report does not include the reliable information sufficient for the Administration to calculate the assessment, the Administration shall use data reported on the ~~2014~~2016 Uniform Accounting Report filed by the hospital in place of the ~~2014~~2016 Medicare Cost report to calculate the assessment. If the ~~2014~~2016 Uniform Accounting Report filed by the hospital does not include reliable information sufficient for the Administration to calculate the assessment amounts, the hospital shall provide the Administration with data specified by the Administration necessary in place of the ~~2014~~2016 Medicare Cost report to calculate the assessment.
- N. The Administration will review and update as necessary rates and peer groups periodically to ensure the assessment is sufficient to fund the state match obligation to cover the cost of the populations as specified in A.R.S. § 36-2901.08.
- O. Enforcement. If a hospital does not comply with this section, the director may suspend or revoke the hospital's provider agreement. If the hospital does not comply within 180 days after the hospital's provider agreement is suspended or revoked, the director shall notify the director of the Department of Health Services who shall suspend or revoke the hospital's license.

NOTICES OF RULEMAKING DOCKET OPENING

This section of the *Arizona Administrative Register* contains Notices of Rulemaking Docket Opening.

A docket opening is the first part of the administrative rulemaking process. It is an "announcement" that the agency intends to work on its rules.

When an agency opens a rulemaking docket to consider rulemaking, the Administrative Procedure Act (APA) requires the publication of the Notice of Rulemaking Docket Opening.

Under the APA effective January 1, 1995, agencies must submit a Notice of Rulemaking Docket Opening before beginning the formal rulemaking process. Many times an agency may file the Notice of Rulemaking Docket Opening with the Notice of Proposed Rulemaking.

The Office of the Secretary of State is the filing office and publisher of these notices. Questions about the interpretation of this information should be directed to the agency contact person listed in item #4 of this notice.

NOTICE OF RULEMAKING DOCKET OPENING DEPARTMENT OF HEALTH SERVICES EMERGENCY MEDICAL SERVICES

[R18-148]

- 1. Title and its heading:** 9, Health Services
Chapter and its heading: 25, Department of Health Services - Emergency Medical Services
Articles and their headings: 2, Medical Direction; ALS Base Hospital Certification
Section numbers: R9-25-201, R9-25-202, R9-25-203, R9-25-204, R9-25-205, R9-25-206, R9-25-207

- 2. The subject matter of the proposed expedited rules:**
Arizona Revised Statutes (A.R.S.) §§ 36-2202(A)(3) and (4) and 36-2209(A)(2) require the Arizona Department of Health Services (Department) to adopt standards and criteria pertaining to the quality of emergency care, rules necessary for the operation of emergency medical services, and rules for carrying out the purposes of A.R.S. Title 36, Chapter 21.1. The Department has adopted rules to implement these statutes in 9 A.A.C. 25. The rules in 9 A.A.C. 25, Article 2, establish requirements for medical direction of emergency medical care technicians (EMCTs) and certification of advanced life support base hospitals. In the past five years, the Department has received written criticisms/comments about rules in 9 A.A.C. 25, Article 2, stating concern that the rules impose an undue burden on some regulated entities. For example, some otherwise qualified physicians who are licensed under A.R.S. Title 32, Chapter 17, may not qualify to be an administrative medical director or provide on-line medical direction to EMCTs under current rule requirements, which should be changed. In addition, the rules need to be improved and clarified to better address security of controlled substances, the information provided by an EMCT to hospital staff upon transfer of care, and other issues identified by stakeholders that may affect patient health or safety. After receiving an exception from the Governor's rulemaking moratorium established by Executive Order 2018-02, the Department plans to revise the rules in 9 A.A.C. 25, Article 2, to address these issues, including issues identified in a five-year review report approved by the Governor's Regulatory Review Council on July 6, 2017. The proposed amendments will conform to rulemaking format and style requirements of the Governor's Regulatory Review Council and the Office of the Secretary of State.

- 3. A citation to all published notices relating to the proceeding:**
None

- 4. The name and address of agency personnel with whom persons may communicate regarding the rules:**

Name: Terry Mullins, Bureau Chief
Address: Arizona Department of Health Services
Bureau of Emergency Medical Services and Trauma System
150 N. 18th Ave., Suite 540
Phoenix, AZ 85007-3248
Telephone: (602) 364-3150
Fax: (602) 364-3568
E-mail: Terry.Mullins@azdhs.gov
or
Name: Robert Lane, Chief
Address: Arizona Department of Health Services
Office of Administrative Counsel and Rules
150 N. 18th Ave., Suite 200
Phoenix, AZ 85007
Telephone: (602) 542-1020
Fax: (602) 364-1150
E-mail: Robert.Lane@azdhs.gov



5. The time during which the agency will accept written comments and the time and place where oral comments may be made:

To be announced in the Notice of Proposed Rulemaking

6. A timetable for agency decisions or other action on the proceeding, if known:

To be announced in the Notice of Proposed Rulemaking



GOVERNOR EXECUTIVE ORDER

Executive Order 2018-02 is being reproduced in each issue of the Administrative Register as a notice to the public regarding state agencies' rulemaking activities.

This order will appear in the Register until its expiration on December 31, 2018, and has been reproduced in its entirety as submitted.

EXECUTIVE ORDER 2018-02

Internal Review of Administrative Rules; Moratorium to Promote Job Creation and Customer-Service-Oriented Agencies

[M18-46]

WHEREAS, burdensome regulations inhibit job growth and economic development; and

WHEREAS, job creators and entrepreneurs are especially hurt by red tape and regulations; and

WHEREAS, in 2015 the State of Arizona implemented a moratorium on all new regulatory rulemaking by State agencies through executive order, and renewed the moratorium in 2016 and 2017; and

WHEREAS, in 2017 the State of Arizona eliminated or repealed 676 needless regulations; and

WHEREAS, estimates show these eliminations saved job creators more than \$48 million in operating costs; and

WHEREAS, 161,000 private sector jobs have been added to Arizona since January 2015; and

WHEREAS, all government agencies of the State of Arizona should continue to promote customer-service-oriented principles for the people that it serves; and

WHEREAS, each State agency shall continue a critical and comprehensive review of its administrative rules and take action to reduce the regulatory burden, administrative delay, and legal uncertainty associated with government regulation; and

WHEREAS, each State agency should evaluate its administrative rules using any available and reliable data and performance metrics; and

WHEREAS, overly burdensome, antiquated, contradictory, redundant, and nonessential regulations should be repealed; and

WHEREAS, Article 5, Section 4 of the Arizona Constitution and Title 41, Chapter 1, Article 1 of the Arizona Revised Statutes vests the executive power of the State of Arizona in the Governor;

NOW, THEREFORE, I, Douglas A. Ducey, by virtue of the authority vested in me by the Constitution and laws of the State of Arizona hereby declare the following:

- 2. A State agency subject to this Order, shall not conduct any rulemaking, whether informal or formal, without the prior written approval of the Office of the Governor. In seeking approval, a State agency shall address one or more of the following as justification for the rulemaking:
a. To fulfill an objective related to job creation, economic development, or economic expansion in this State.
b. To reduce or ameliorate a regulatory burden while achieving the same regulatory objective.
c. To prevent a significant threat to the public health, peace, or safety.
d. To avoid violating a court order or federal law that would result in sanctions by a federal court for failure to conduct the rulemaking action.
e. To comply with a federal statutory or regulatory requirement if such compliance is related to a condition for the receipt of federal funds or participation in any federal program.
f. To comply with a state statutory requirement.
g. To fulfill an obligation related to fees or any other action necessary to implement the State budget that is certified by the Governor's Office of Strategic Planning and Budgeting.
h. To promulgate a rule or other item that is exempt from Title 41, Chapter 6, Arizona Revised Statutes, pursuant to section 41-1005, Arizona Revised Statutes.
i. To address matters pertaining to the control, mitigation, or eradication of waste, fraud, or abuse within an agency or wasteful, fraudulent, or abusive activities perpetrated against an agency.
j. To eliminate rules that are antiquated, redundant or otherwise no longer necessary for the operation of state government.
3. A State agency subject to this Order, shall not publicize any directives, policy statements, documents or forms on its website unless such are explicitly authorized by Arizona Revised Statutes or Arizona Administrative Code.
4. A State agency subject to this Order, shall coordinate with the Office of Economic Opportunity to prepare a statement of estimated regulatory costs analyzing the economic impact of agency rules, including an analysis of the effort of such rules on the creation and retention of jobs within the State of Arizona.
5. A State agency subject to this Order, shall review the agency's rules related to license reciprocity and identify opportunities to decrease burdens for qualified professionals who relocate to Arizona, whether administrative or legislative, and report these opportunities to the office of the Governor no later than July 1, 2018.



6. A State agency subject to this Order, shall review the agency’s rules to identify opportunities for veterans by recognizing the skills, credentials, and training received during military service in place of some or all of the training requirements for a specific license, and include additional opportunities in the report to the office of the Governor no later than July 1, 2018.
7. For the purposes of this Order, the term “State agencies,” includes without limitation, all executive departments, agencies, offices, and all state boards and commissions, except for: (a) any State agency that is headed by a single elected State official, (b) the Corporation Commission and (c) any board or commission established by ballot measure during or after the November 1998 general election. Those State agencies, boards and commissions excluded from this Order are strongly encouraged to voluntarily comply with this Order in the context of their own rulemaking processes.
8. This Order does not confer any legal rights upon any persons and shall not be used as a basis for legal challenges to rules, approvals, permits, licenses or other actions or to any inaction of a State agency. For the purposes of this Order, “person,” “rule,” and “rulemaking” have the same meanings prescribed in Arizona Revised Statutes Section 41-1001.
9. This Executive Order expires on December 31, 2018.

IN WITNESS WHEREOF, I have hereunto set my hand and caused to be affixed the Great Seal of the State of Arizona.

Douglas A. Ducey
GOVERNOR

DONE at the Capitol in Phoenix on this Twelfth day of February in the Year Two Thousand and Eighteen and of the Independence of the United States of America the Two Hundred and Thirty-Sixth.

ATTEST:
Michele Reagan
SECRETARY OF STATE

REGISTER INDEXES

The *Register* is published by volume in a calendar year (See “General Information” in the front of each issue for more information).

Abbreviations for rulemaking activity in this Index include:

PROPOSED RULEMAKING

PN = Proposed new Section
PM = Proposed amended Section
PR = Proposed repealed Section
P# = Proposed renumbered Section

SUPPLEMENTAL PROPOSED RULEMAKING

SPN = Supplemental proposed new Section
SPM = Supplemental proposed amended Section
SPR = Supplemental proposed repealed Section
SP# = Supplemental proposed renumbered Section

FINAL RULEMAKING

FN = Final new Section
FM = Final amended Section
FR = Final repealed Section
F# = Final renumbered Section

SUMMARY RULEMAKING**PROPOSED SUMMARY**

PSMN = Proposed Summary new Section
PSMM = Proposed Summary amended Section
PSMR = Proposed Summary repealed Section
PSM# = Proposed Summary renumbered Section

FINAL SUMMARY

FSMN = Final Summary new Section
FSMM = Final Summary amended Section
FSMR = Final Summary repealed Section
FSM# = Final Summary renumbered Section

EXPEDITED RULEMAKING**PROPOSED EXPEDITED**

PEN = Proposed Expedited new Section
PEM = Proposed Expedited amended Section
PER = Proposed Expedited repealed Section
PE# = Proposed Expedited renumbered Section

SUPPLEMENTAL EXPEDITED

SPEN = Supplemental Proposed Expedited new Section
SPEM = Supplemental Proposed Expedited amended Section
SPER = Supplemental Proposed Expedited repealed Section
SPE# = Supplemental Proposed Expedited renumbered Section

FINAL EXPEDITED

FEN = Final Expedited new Section
FEM = Final Expedited amended Section
FER = Final Expedited repealed Section
FE# = Final Expedited renumbered Section

EXEMPT RULEMAKING**EXEMPT PROPOSED**

PXN = Proposed Exempt new Section
PXM = Proposed Exempt amended Section
PXR = Proposed Exempt repealed Section
PX# = Proposed Exempt renumbered Section

EXEMPT SUPPLEMENTAL PROPOSED

SPXN = Supplemental Proposed Exempt new Section
SPXR = Supplemental Proposed Exempt repealed Section
SPXM = Supplemental Proposed Exempt amended Section
SPX# = Supplemental Proposed Exempt renumbered Section

FINAL EXEMPT RULEMAKING

FXN = Final Exempt new Section
FXM = Final Exempt amended Section
FXR = Final Exempt repealed Section
FX# = Final Exempt renumbered Section

EMERGENCY RULEMAKING

EN = Emergency new Section
EM = Emergency amended Section
ER = Emergency repealed Section
E# = Emergency renumbered Section
EEXP = Emergency expired

RECODIFICATION OF RULES

RC = Recodified

REJECTION OF RULES

RJ = Rejected by the Attorney General

TERMINATION OF RULES

TN = Terminated proposed new Sections
TM = Terminated proposed amended Section
TR = Terminated proposed repealed Section
T# = Terminated proposed renumbered Section

RULE EXPIRATIONS

EXP = Rules have expired
See also “emergency expired” under emergency rulemaking

CORRECTIONS

C = Corrections to Published Rules

**2018 Arizona Administrative Register
Volume 24 Page Guide**

Issue 1, Jan. 5, 2018.....1-88	Issue 2, Jan. 12, 2018.....89-132	Issue 3, Jan. 19, 2018.....133-160
Issue 4, Jan. 26, 2018.....161-234	Issue 5, Feb. 2, 2018.....235-298	Issue 6, Feb. 9, 2018.....299-332
Issue 7, Feb. 16, 2018.....333-372	Issue 8, Feb. 23, 2018.....373-430	Issue 9, March 2, 2018.....431-490
Issue 10, March 9, 2018.....491-524	Issue 11, March 16, 2018.....525-590	Issue 12, March 23, 2018.....591-652
Issue 13, March 30, 2018.....653-717	Issue 14, April 6, 2018.....718-778	Issue 15, April 13, 2018.....779-808
Issue 16, April 20, 2018.....809-1120	Issue 17, April 27, 2018.....1121-1320	Issue 18, May 4, 2018.....1321-1410
Issue 19, May 11, 2018.....1411-1494	Issue 20, May 18, 2018.....1495-1538	Issue 21, May 25, 2018.....1539-1604
Issue 22, June 1, 2018.....1605-1638	Issue 23, June 8, 2018.....1639-1670	Issue 24, June 15, 2018.....1671-1702
Issue 25, June 22, 2018.....1703-1780	Issue 26, June 29, 2018.....1781-1846	Issue 27, July 6, 2018.....1847-1896
Issue 28, July 13, 2018.....1897-2002	Issue 29, July 20, 2018.....2003-2052	Issue 30, July 27, 2018.....2053-2146

RULEMAKING ACTIVITY INDEX

Rulemakings are listed in the Index by Chapter, Section number, rulemaking activity abbreviation and by volume page number. Use the page guide above to determine the *Register* issue number to review the rule. Headings for the Subchapters, Articles, Parts, and Sections are not indexed.

THIS INDEX INCLUDES RULEMAKING ACTIVITY THROUGH ISSUE 30 OF VOLUME 24.

Accountancy, Board of

R4-1-226.01.	PM-1707
R4-1-343.	PM-1707
R4-1-453.	PM-1707

Administration, Department of

R2-1-601.	FR-625
R2-1-602.	F#-625
R2-1-603.	FR-625
R2-1-801.	FM-625
R2-1-802.	FM-625
R2-1-803.	FM-625
R2-1-804.	FM-625
R2-1-805.	FR-625; F#-625; FM-625
R2-1-901.	FR-625
R2-1-902.	FR-625
R2-1-903.	FR-625
R2-1-904.	FR-625
R2-1-905.	FR-625

Agriculture, Department of - Weights and Measures Services Division

R3-7-101.	PM-595
R3-7-701.	PM-595
R3-7-702.	PM-595
R3-7-708.	PM-595
R3-7-749.	PM-595
R3-7-751.	PM-595
R3-7-752.	PM-595
R3-7-755.	PM-595
R3-7-757.	PM-595
R3-7-759.	PM-595
Table 1.	PM-595
Table 2.	PM-595

Arizona Health Care Cost Containment System - Administration

R9-22-202.	PM-337
R9-22-303.	PR-337
R9-22-703.	PM-337
R9-22-712.05.	FM-185; PM-2061
R9-22-712.35.	PM-1712
R9-22-712.61.	PM-1712
R9-22-712.71.	PM-1712
R9-22-718.	PM-345; FM-1515
R9-22-721.	PM-2066
R9-22-1202.	PM-337
R9-22-1302.	PM-1716
R9-22-1303.	PM-1716
R9-22-1305.	PM-1716
R9-22-1306.	PR-1716
R9-22-1501.	PM-337
R9-22-1910.	PR-337
R9-22-2101.	PM-1722

Arizona Health Care Cost Containment System - Arizona Long-term Care System

R9-28-401.01.	PM-348
R9-28-408.	FM-667
R9-28-703.	FM-191
R9-28-801.	FM-670
R9-28-801.01.	FR-670
R9-28-802.	FM-670
R9-28-803.	FM-670
R9-28-806.	FM-670
R9-28-807.	FM-670

Arizona Health Care Cost Containment System - Medicare Cost Sharing Program

R9-29-210.	PM-351
------------	--------

Behavioral Health Examiners, Board of

R4-6-101.	PM-1609
R4-6-211.	PM-1609
R4-6-212.	PM-1609
R4-6-212.01.	PM-1609
R4-6-215.	PM-1609
R4-6-301.	PM-1609
R4-6-304.	PM-1609
R4-6-306.	PM-1609
R4-6-402.	PM-1609
R4-6-502.	PM-1609
R4-6-602.	PM-1609
R4-6-704.	PM-1609
R4-6-1101.	PM-1609

Boxing and Mixed Martial Arts Commission, State

R4-3-101.	FR-435
R4-3-102.	FR-435
R4-3-103.	FR-435
R4-3-104.	FR-435
R4-3-105.	FR-435
R4-3-201.	FR-435
R4-3-202.	FR-435
R4-3-203.	FR-435
R4-3-301.	FR-435
R4-3-302.	FR-435
R4-3-303.	FR-435
R4-3-304.	FR-435
R4-3-305.	FR-435
R4-3-306.	FR-435
R4-3-307.	FR-435
R4-3-308.	FR-435
R4-3-309.	FR-435
R4-3-310.	FR-435
R4-3-401.	FR-435
R4-3-402.	FR-435
R4-3-403.	FR-435

R4-3-404.	FR-435	R6-1-201.	F#-1415;	R6-3-51140.	FM-1417
R4-3-405.	FR-435		FN-1415;	R6-3-5205.	FM-1417
R4-3-406.	FR-435		FM-1415	R6-3-5240.	FM-1417
R4-3-407.	FR-435	R6-1-202.	F#-1415;	R6-3-52235.	FM-1417
R4-3-408.	FR-435		FM-1415	R6-3-55460.	FM-1417
R4-3-409.	FR-435	R6-1-203.	F#-1415;		
R4-3-410.	FR-435		FN-1415;		
R4-3-411.	FR-435		FM-1415		
R4-3-412.	FR-435				
R4-3-412.01.	FR-435				
R4-3-413.	FR-435				
R4-3-414.	FR-435				
Table 1.	FR-435				
Child Safety, Department of - Adoption Agency Licensing					
R21-9-202.	PN-738				
R21-9-207.	PN-738				
Clean Elections Commission, Citizens					
R2-20-106.	FXM-107				
R2-20-109.	FXM-109				
R2-20-111.	FXM-111				
Constable Ethics, Standards and Training Board					
R13-14-101.	FN-1518				
R13-14-102.	FN-1518				
R13-14-103.	FN-1518				
R13-14-201.	FN-1518				
R13-14-202.	FN-1518				
R13-14-203.	FN-1518				
R13-14-204.	FN-1518				
R13-14-205.	FN-1518				
R13-14-301.	FN-1518				
R13-14-302.	FN-1518				
Corporation Commission, Arizona - Fixed Utilities					
R14-2-107.	PM-1643				
R14-2-108.	PN-1643				
R14-2-803.	PM-1617				
Criminal Justice Commission, Arizona					
R10-4-101.	FM-377				
R10-4-102.	FM-377				
R10-4-103.	FM-377				
R10-4-104.	FM-377				
R10-4-106.	FM-377				
R10-4-107.	FM-377				
R10-4-108.	FM-377				
R10-4-109.	FM-377				
R10-4-110.	FM-377				
R10-4-201.	FM-377				
R10-4-202.	FM-377				
R10-4-203.	FM-377				
R10-4-204.	FM-377				
Department Dissolved (previously Department of Weights and Measures)					
R20-2-205.	EXP-1125				
Economic Security, Department of - Developmental Disabilities					
		R6-6-301.	F#-2013;		
			FN-2013		
		R6-6-302.	F#-2013;		
			FM-2013		
		R6-6-303.	FR-2013;		
			F#-2013;		
			FM-2013		
		R6-6-304.	FN-2013		
		R6-6-305.	FN-2013		
		R6-6-306.	FN-2013		
		R6-6-307.	FN-2013		
		R6-6-308.	FN-2013		
		R6-6-309.	FN-2013		
		R6-6-501.	FR-2013		
		R6-6-502.	FR-2103		
		R6-6-503.	FR-2013		
		R6-6-504.	FR-2013		
		R6-6-505.	FR-2013		
Economic Security, Department of - Food Stamps Program					
		R6-14-301.	EN-2081		
		R6-14-302.	EN-2081		
		R6-14-303.	EN-2081		
		R6-14-304.	EN-2081		
		R6-14-305.	EN-2081		
		R6-14-306.	EN-2081		
		R6-14-307.	EN-2081		
		R6-14-308.	EN-2081		
		R6-14-401.	EN-2081		
		R6-14-402.	EN-2081		
		R6-14-403.	EN-2081		
		R6-14-404.	EN-2081		
		R6-14-405.	EN-2081		
		R6-14-406.	EN-2081		
		R6-14-407.	EN-2081		
		R6-14-408.	EN-2081		
		R6-14-409.	EN-2081		
		R6-14-410.	EN-2081		
		R6-14-411.	EN-2081		
		R6-14-412.	EN-2081		
		R6-14-413.	EN-2081		
		R6-14-414.	EN-2081		
		R6-14-415.	EN-2081		
		R6-14-416.	EN-2081		
		R6-14-417.	EN-2081		
		R6-14-501.	EN-2081		
		R6-14-502.	EN-2081		
		R6-14-503.	EN-2081		
		R6-14-504.	EN-2081		
		R6-14-505.	EN-2081		
		R6-14-506.	EN-2081		
		R6-14-507.	EN-2081		
Economic Security, Department of - Unemployment Insurance					
				R7-2-301.	FXM-691
				R7-2-302.	FXM-691
				R7-2-401.	FXM-140
				R7-2-604.03.	FXM-195
				R7-2-604.04.	FXM-195
				R7-2-604.05.	FXN-195
				R7-2-606.	FXM-1427
				R7-2-607.	FXM-195
				R7-2-608.	FXM-195
				R7-2-609.	FXM-195
				R7-2-609.01.	FXN-791
				R7-2-610.	FXM-195
				R7-2-610.01.	FXN-195
				R7-2-610.02.	FXN-195
				R7-2-611.	FXM-195;
					FXM-1427
				R7-2-612.	FXM-195;
					FXM-694
				R7-2-612.01.	FXM-694
				R7-2-613.	FXM-195
				R7-2-614.	FXM-195
				R7-2-616.	FXM-195
				R7-2-617.	FXM-195
				R7-2-619.	FXM-195
				R7-2-621.	FXM-195
				R7-2-810.	FXN-146
Environmental Quality, Department of - Air Pollution Control					
				R18-2-731.	PM-501;
					FM-1864
				R18-2-901.	PM-501;
					FEM-1564;
					FM-1864
				R18-2-1101.	FEM-1564
				Appendix 2.	FEM-1564
Equalization, State Board of					
				R16-4-101.	PN-619
				R16-4-102.	PN-619
				R16-4-103.	PN-619
				R16-4-104.	PN-619
				R16-4-105.	PN-619
				R16-4-106.	PN-619
				R16-4-107.	PN-619
				R16-4-108.	PN-619
				R16-4-109.	PN-619
				R16-4-110.	PN-619
				R16-4-111.	PN-619
				R16-4-112.	PN-619
				R16-4-113.	PN-619
				R16-4-114.	PN-619
				R16-4-115.	PN-619
				R16-4-116.	PN-619
				R16-4-117.	PN-619
Game and Fish Commission					
				R12-4-101.	PM-529;
					SPM-1936



R12-4-216.	PM-529; SPM-1936	R12-4-902.	FE#-407; FEM-407	R9-8-303.	FEN-389
R12-4-301.	PM-529; SPM-1936	R12-4-1101.	FE#-407	R9-8-304.	FEM-389
R12-4-302.	PM-529; SPM-1936	R12-4-1102..	FE#-407	R9-8-306.	FER-389
R12-4-303.	PM-529; SPM-1936	Governor's Regulatory Review Council		R9-8-307.	FER-389
R12-4-304.	PM-529; SPM-1936	R1-6-101.	PM-2007	R9-8-401.	FEM-266
R12-4-305.	PM-529; SPM-1936	R1-6-105.	PN-2007	R9-8-402.	FEM-266
R12-4-306.	PM-529; SPM-1936	R1-6-201.	PM-2007	Health Services, Department of - Health Care Institutions: Licensing	
R12-4-307.	PM-529; SPM-1936	R1-6-202.	PM-2007	R9-10-101.	PM-1901
R12-4-308.	PM-529; SPM-1936	R1-6-301.	PM-2007	R9-10-102.	PM-1901
R12-4-309.	PM-529; SPM-1936	R1-6-302.	PM-2007	R9-10-106.	PM-1901
R12-4-310.	PM-529; SPM-1936	R1-6-303.	PM-2007	R9-10-120.	EM-303; FN-657
R12-4-311.	PM-529; SPM-1936	R1-6-401.	PM-2007	R9-10-223.	PM-1922
R12-4-313.	PM-529; SPM-1936	Health Services, Department of - Communicable Diseases and Infections		R9-10-1021.	PM-1901
R12-4-314.	PN-529; SPM-1936	R9-6-601.	FEM-261	R9-10-1302.	PEM-1977
R12-4-315.	PR-529; SPM-1936	R9-6-701.	PEM-745	R9-10-1307.	PEM-1977
R12-4-316.	PR-529; SPM-1936	R9-6-702.	PEM-745	R9-10-1309.	PEM-1977
R12-4-317.	PR-529; SPM-1936	Table 7.1.	PEN-745	R9-10-1310.	PEM-1977
R12-4-318.	PM-529; SPM-1936	Table 7.2.	PEN-745	R9-10-1312.	PEM-1977
R12-4-319.	PM-529; SPM-1936	R9-6-703.	PEM-745	R9-10-1501.	PM-1922
R12-4-320.	PM-529; SPM-1936	R9-6-704.	PEM-745	R9-10-1502.	PM-1922
R12-4-321.	PM-529; SPM-1936	R9-6-705.	PEM-745	R9-10-1503.	PM-1922
R12-4-322.	PM-529; SPM-1936	R9-6-706.	PEM-745	R9-10-1504.	P#-1922; PN-1922
R12-4-401.	PM-529; SPM-1936	R9-6-707.	PEM-745	R9-10-1505.	P#-1922; PM-1922
R12-4-601.	FE#-393; FEN-393	Table 1.	PER-745	R9-10-1506.	P#-1922; PM-1922
R12-4-602.	FE#-393; FEM-393	Table 2.	PER-745	R9-10-1507.	P#-1922; PM-1922
R12-4-603.	FE#-393; FEM-393	R9-6-708.	PEM-745	R9-10-1508.	P#-1922; PM-1922
R12-4-604.	FE#-393; FEM-393	R9-6-801.	PEM-1650	R9-10-1509.	P#-1922; PM-1922
R12-4-605.	FE#-393; FEM-393	R9-6-802.	PEM-1650	R9-10-1510.	P#-1922; PM-1922
R12-4-606.	FE#-393; FEM-393	R9-6-1001.	PEM-1973	R9-10-1511.	P#-1922; PM-1922
R12-4-607.	FE#-393; FEM-393	R9-6-1002.	PEM-1973	R9-10-1512.	P#-1922; PM-1922
R12-4-608.	FEN-393	R9-6-1004.	PEM-1973	R9-10-1513.	P#-1922; PM-1922
R12-4-609.	FEM-393	R9-6-1005.	PEM-1973	R9-10-1514.	P#-1922; PM-1922
R12-4-610.	FEM-393	R9-6-1006.	PEM-1973	R9-10-1515.	PR-1922; P#-1922; PM-1922
R12-4-611.	FEM-393	Health Services, Department of - Emergency Medical Services		R9-10-2001.	PN-1901
R12-4-901.	FE#-407	R9-25-301.	FEM-268	R9-10-2002.	PN-1901
		R9-25-305.	FEM-268	R9-10-2003.	PN-1901
		R9-25-306.	FEM-268	R9-10-2004.	PN-1901
		R9-25-401.	FEM-268	R9-10-2005.	PN-1901
		R9-25-402.	FEM-268	R9-10-2006.	PN-1901
		R9-25-403.	FEM-268	R9-10-2007.	PN-1901
		R9-25-405.	FEM-268	R9-10-2008.	PN-1901
		R9-25-406.	FEM-268	R9-10-2009.	PN-1901
		R9-25-407.	FEM-268	R9-10-2010.	PN-1901
		R9-25-408.	FEM-268	Health Services, Department of - Noncommunicable Diseases	
		R9-25-409.	FEM-268	R9-4-601.	PN-93; EM-630; EN-783
		Table 12.1.	FEM-268		
		Health Services, Department of - Food, Recreational, and Institutional Sanitation			
		R9-8-102.	PM-99; FM-1817		
		R9-8-201.	FEM-263		
		R9-8-203.	FEM-263		
		R9-8-205.	FEM-263		
		R9-8-206.	FEM-263		
		R9-8-301.	FEM-389		
		R9-8-302.	FEM-389		

R9-7-719.	RC-813; PEM-1325	R9-7-1104.	RC-813	R9-7-1416.	RC-813
R9-7-720.	RC-813	R9-7-1106.	RC-813	R9-7-1418.	RC-813
R9-7-721.	RC-813; PEM-1325	R9-7-1108.	RC-813	R9-7-1421.	RC-813
Exhibit A.	PEM-1325	R9-7-1110.	RC-813	R9-7-1422.	RC-813
R9-7-722.	RC-813	R9-7-1112.	RC-813	R9-7-1423.	RC-813
R9-7-723.	RC-813	R9-7-1114.	RC-813	R9-7-1425.	RC-813
R9-7-724.	RC-813	R9-7-1116.	RC-813	R9-7-1426.	RC-813
R9-7-725.	RC-813	R9-7-1118.	RC-813	R9-7-1427.	RC-813
R9-7-726.	RC-813	R9-7-1120.	RC-813	R9-7-1429.	RC-813
R9-7-727.	RC-813	R9-7-1122.	RC-813	R9-7-1433.	RC-813
R9-7-728.	RC-813	R9-7-1126.	RC-813	R9-7-1434.	RC-813
R9-7-729.	RC-813	R9-7-1128.	RC-813	R9-7-1435.	RC-813
R9-7-730.	RC-813	R9-7-1130.	RC-813	R9-7-1436.	RC-813
R9-7-731.	RC-813	R9-7-1132.	RC-813	R9-7-1437.	RC-813
R9-7-732.	RC-813	R9-7-1134.	RC-813	R9-7-1438.	RC-813
R9-7-733.	RC-813	R9-7-1136.	RC-813	R9-7-1438.01.	RC-813
R9-7-734.	RC-813	R9-7-1138.	RC-813	R9-7-1439.	RC-813
R9-7-735.	RC-813	R9-7-1140.	RC-813	R9-7-1440.	RC-813
R9-7-736.	RC-813	R9-7-1142.	RC-813	R9-7-1441.	RC-813
R9-7-737.	RC-813	R9-7-1146.	RC-813	R9-7-1442.	RC-813
R9-7-738.	RC-813	Appendix A.	RC-813	R9-7-1443.	RC-813
R9-7-739.	RC-813	R9-7-1201.	RC-813	R9-7-1444.	RC-813
R9-7-740.	RC-813	R9-7-1202.	RC-813	Appendix A.	RC-813
R9-7-741.	RC-813	R9-7-1203.	RC-813	Appendix B.	RC-813
R9-7-742.	RC-813	R9-7-1204.	RC-813	Appendix C.	RC-813
R9-7-743.	RC-813	R9-7-1205.	RC-813	Appendix D.	RC-813
R9-7-744.	RC-813	R9-7-1207.	RC-813	R9-7-1501.	RC-813
R9-7-745.	RC-813	R9-7-1209.	RC-813	R9-7-1502.	RC-813
R9-7-746.	RC-813	R9-7-1210.	RC-813	R9-7-1503.	RC-813
Exhibit A.	RC-813	R9-7-1211.	RC-813	R9-7-1504.	RC-813
R9-7-801.	RC-813	R9-7-1212.	RC-813	R9-7-1505.	RC-813
R9-7-802.	RC-813	R9-7-1213.	RC-813	R9-7-1506.	RC-813
R9-7-803.	RC-813	R9-7-1214.	RC-813	R9-7-1507.	RC-813; PEM-1325
R9-7-804.	RC-813	R9-7-1215.	RC-813	R9-7-1508.	RC-813; PEM-1325
R9-7-805.	RC-813	R9-7-1216.	RC-813	R9-7-1509.	RC-813
R9-7-806.	RC-813	R9-7-1217.	RC-813	R9-7-1510.	RC-813; PEM-1325
R9-7-807.	RC-813	R9-7-1218.	RC-813	R9-7-1511.	RC-813
R9-7-808.	RC-813	R9-7-1219.	RC-813	R9-7-1512.	RC-813; PEM-1325
R9-7-809.	RC-813	R9-7-1220.	RC-813	R9-7-1513.	RC-813
R9-7-901.	RC-813	R9-7-1222.	RC-813	R9-7-1515.	RC-813; PEM-1325
R9-7-902.	RC-813	R9-7-1223.	RC-813	R9-7-1701.	RC-813
R9-7-903.	RC-813	Table A.	RC-813	R9-7-1702.	RC-813
R9-7-904.	RC-813	R9-7-1301.	RC-813	R9-7-1703.	RC-813
R9-7-905.	RC-813	R9-7-1302.	RC-813	R9-7-1712.	RC-813
R9-7-906.	RC-813	R9-7-1303.	RC-813	R9-7-1713.	RC-813
R9-7-907.	RC-813	R9-7-1304.	RC-813	R9-7-1714.	RC-813
R9-7-908.	RC-813	R9-7-1305.	RC-813	R9-7-1715.	RC-813
R9-7-909.	RC-813	R9-7-1306.	RC-813	R9-7-1716.	RC-813
R9-7-910.	RC-813	R9-7-1307.	RC-813	R9-7-1717.	RC-813
R9-7-911.	RC-813	R9-7-1308.	RC-813	R9-7-1718.	RC-813
R9-7-913.	RC-813	R9-7-1309.	RC-813	R9-7-1719.	RC-813
R9-7-914.	RC-813	Table 1.	RC-813	R9-7-1720.	RC-813
Appendix A.	RC-813	R9-7-1401.	RC-813	R9-7-1721.	RC-813
R9-7-1001.	RC-813	R9-7-1402.	RC-813	R9-7-1722.	RC-813
R9-7-1002.	RC-813	R9-7-1403.	RC-813	R9-7-1723.	RC-813
R9-7-1003.	RC-813	R9-7-1404.	RC-813	R9-7-1724.	RC-813
R9-7-1004.	RC-813	R9-7-1405.	RC-813	R9-7-1725.	RC-813
R9-7-1005.	RC-813	R9-7-1406.	RC-813	R9-7-1726.	RC-813
R9-7-1006.	RC-813; PEM-1325	R9-7-1407.	RC-813	R9-7-1727.	RC-813
R9-7-1007.	RC-813	R9-7-1408.	RC-813	R9-7-1728.	RC-813
R9-7-1008.	RC-813	R9-7-1409.	RC-813	R9-7-1731.	RC-813
Exhibit A.	RC-813	R9-7-1410.	RC-813		
R9-7-1102.	RC-813	R9-7-1412.	RC-813		
		R9-7-1413.	RC-813		
		R9-7-1414.	RC-813		
		R9-7-1415.	RC-813		

R9-7-1732.	RC-813	R12-5-921.	EXP-764	R4-34-707.	PN-165; FN-1499
R9-7-1733.	RC-813	Manufactured Housing, Board of		R4-34-801.	PM-165; FM-1499
R9-7-1734.	RC-813	R4-34-101.	PM-165; FM-1499	R4-34-802.	PM-165; FM-1499
R9-7-1741.	RC-813	R4-34-102.	PM-165; FM-1499	R4-34-803.	PR-165; FR-1499
R9-7-1742.	RC-813	R4-34-103.	PM-165; FM-1499	R4-34-804.	PR-165; FR-1499
R9-7-1743.	RC-813	R4-34-104.	PR-165; FR-1499	R4-34-805.	PM-165; FM-1499
R9-7-1751.	RC-813	R4-34-201.	PM-165; FM-1499	R4-34-1001.	PM-165; FM-1499
R9-7-1901.	RC-813	R4-34-202.	PM-165; FM-1499	Medical Board, Arizona	
R9-7-1903.	RC-813	R4-34-203.	PM-165; FM-1499	R4-16-101.	PM-1851
R9-7-1905.	RC-813	R4-34-204.	PM-165; FM-1499	R4-16-102.	FM-182; PM-1851
R9-7-1907.	RC-813	R4-34-301.	PM-165; FM-1499	R4-16-103.	PM-1851
R9-7-1909.	RC-813	R4-34-302.	PM-165; FM-1499	R4-16-201.1.	FM-182
R9-7-1911.	RC-813	R4-34-303.	PM-165; FM-1499	R4-16-205.	FM-182
R9-7-1921.	RC-813	R4-34-401.	PM-165; FM-1499	R4-16-401.	PM-1851
R9-7-1923.	RC-813	R4-34-402.	PM-165; FM-1499	R4-16-402.	PM-1851
R9-7-1925.	RC-813	R4-34-501.	PM-165; FM-1499	Nursing, Board of	
R9-7-1927.	RC-813; PEM-1325	R4-34-502.	PM-165; FM-1499	R4-19-511.	EM-1678
R9-7-1929.	RC-813	R4-34-503.	PM-165; FR-1499	Nursing Care Institution Adminis- trators and Assisted Living Facility Managers, Board of Examiners for	
R9-7-1931.	RC-813	R4-34-504.	PM-165; FM-1499	R4-33-101.	PM-721
R9-7-1933.	RC-813	R4-34-505.	PM-165; FM-1499	R4-33-103.	PM-721
R9-7-1941.	RC-813	R4-34-506.	PR-165; FR-1499	Table 1.	PM-721
R9-7-1943.	RC-813; PEM-1325	R4-34-601.	PR-165; FR-1499	R4-33-104.	PM-721
R9-7-1945.	RC-813	R4-34-603.	PM-165; FM-1499	R4-33-201.	PM-721
R9-7-1947.	RC-813	R4-34-604.	PR-165; FR-1499	R4-33-202.	PM-721
R9-7-1949.	RC-813	R4-34-605.	PM-165; FM-1499	R4-33-204.	PM-721
R9-7-1951.	RC-813	R4-34-606.	PM-165; FM-1499	R4-33-206.	PM-721
R9-7-1953.	RC-813	R4-34-701.	PM-165; FM-1499	R4-33-301.	PM-721
R9-7-1955.	RC-813	R4-34-702.	PM-165; FM-1499	R4-33-701.	PM-721
R9-7-1957.	RC-813	R4-34-703.	PM-165; FM-1499	R4-33-702.	PM-721
R9-7-1971.	RC-813	R4-34-704.	PM-165; FM-1499	R4-33-703.	PM-721
R9-7-1973.	RC-813	R4-34-705.	PM-165; FM-1499	R4-33-703.1.	PN-721
R9-7-1975.	RC-813; PEM-1325	R4-34-706.	PM-165; FM-1499	R4-33-704.	PM-721
R9-7-1977.	RC-813; PEM-1325	R4-34-707.	PM-165; FM-1499	R4-33-704.1.	PN-721
R9-7-1979.	RC-813	R4-34-708.	PM-165; FM-1499	R4-33-705.	PM-721
R9-7-1981.	RC-813	R4-34-709.	PM-165; FM-1499	R4-33-705.1.	PN-721
R9-7-19101.	RC-813; PEM-1325	R4-34-710.	PM-165; FM-1499	R4-33-706.	PM-721
R9-7-19103.	RC-813	Industrial Commission of Arizona		Optometry, Board of	
R9-7-19105.	RC-813	R20-5-106.	PM-565; FM-2069	R4-21-101.	PM-2057
R9-7-19107.	RC-813	R20-5-1301.	PM-565; FM-2069	R4-21-209.	PM-2057
R9-7-19109.	RC-813	R20-5-1302.	PM-565; FM-2069	R4-21-210.	PM-2057
Appendix A.	RC-813	R20-5-1303.	PM-565; FM-2069	R4-21-211.	PM-2057
		R20-5-1309.	PM-565; FM-2069	Public Safety, Department of - School Buses	
		R20-5-1310.	PM-565; FM-2069	R13-13-101.	PM-609
		R20-5-1311.	PM-565; FM-2069	R13-13-102.	PM-609
		Insurance, Department of		R13-13-106.	PEM-685
		R20-6-607.	FM-103	Psychologist Examiners, Board of	
		Land Department, State		R4-26-403.	PM-1855
				R4-26-404.2.	PN-1855
				R4-26-407.	PM-1855

R4-26-409.	PM-1855	R12-1-304.	RC-813	R12-1-441.	RC-813
Racing Commission, Arizona		R12-1-305.	RC-813	R12-1-442.	RC-813
R19-2-601.	F#-445; FM-445	R12-1-306.	RC-813	R12-1-443.	RC-813
R19-2-602.	F#-445; FM-445	R12-1-308.	RC-813	R12-1-444.	RC-813
R19-2-603.	F#-445; FM-445	R12-1-309.	RC-813	R12-1-445.	RC-813
R19-2-604.	F#-445; FM-445	R12-1-310.	RC-813	R12-1-446.	RC-813
R19-2-605.	F#-445; FM-445	R12-1-311.	RC-813	R12-1-447.	RC-813
R19-2-606.	F#-445; FM-445	R12-1-312.	RC-813	R12-1-448.	RC-813
R19-2-A601.	FN-445	R12-1-313.	RC-813	R12-1-449.	RC-813
R19-2-A602.	FN-445	R12-1-314.	RC-813	R12-1-450.	RC-813
R19-2-B601.	FN-445	R12-1-315.	RC-813	R12-1-451.	RC-813
R19-2-B602.	FN-445	R12-1-316.	RC-813	R12-1-452.	RC-813
R19-2-B603.	FN-445	R12-1-317.	RC-813	Table 1.	RC-813
R19-2-B604.	FN-445	R12-1-318.	RC-813	R12-1-453.	RC-813
R19-2-B605.	FN-445	R12-1-319.	RC-813	R12-1-454.	RC-813
R19-2-B606.	FN-445	R12-1-320.	RC-813	R12-1-455.	RC-813
R19-2-B607.	FN-445	R12-1-322.	RC-813	Appendix A.	RC-813
R19-2-B608.	FN-445	R12-1-323.	RC-813	Appendix B.	RC-813
R19-2-B609.	FN-445	R12-1-324.	RC-813	Appendix C.	RC-813
R19-2-B609.	FN-445	R12-1-325.	RC-813	Appendix D.	RC-813
R19-2-B609.	FN-445	Exhibit A.	RC-813	R12-1-501.	RC-813
R19-2-B609.	FN-445	Exhibit B.	RC-813	R12-1-502.	RC-813
R19-2-B609.	FN-445	Exhibit C.	RC-813	R12-1-503.	RC-813
R19-2-B609.	FN-445	Exhibit D.	RC-813	R12-1-504.	RC-813
R19-2-B609.	FN-445	Exhibit E.	RC-813	R12-1-505.	RC-813
R19-2-C601.	FN-445	R12-1-401.	RC-813	R12-1-506.	RC-813
R19-2-C602.	FN-445	R12-1-402.	RC-813	R12-1-507.	RC-813
R19-2-C603.	FN-445	R12-1-403.	RC-813	R12-1-508.	RC-813
R19-2-C604.	FN-445	R12-1-404.	RC-813	R12-1-509.	RC-813
R19-2-C605.	FN-445	R12-1-405.	RC-813	R12-1-510.	RC-813
R19-2-C606.	FN-445	R12-1-406.	RC-813	R12-1-512.	RC-813
R19-2-C607.	FN-445	R12-1-407.	RC-813	R12-1-513.	RC-813
R19-2-C608.	FN-445	R12-1-408.	RC-813	R12-1-514.	RC-813
R19-2-C609.	FN-445	R12-1-409.	RC-813	R12-1-515.	RC-813
R19-2-D601.	FN-445	R12-1-410.	RC-813	R12-1-516.	RC-813
R19-2-D602.	FN-445	R12-1-411.	RC-813	R12-1-517.	RC-813
R19-2-D603.	FN-445	R12-1-412.	RC-813	R12-1-518.	RC-813
R19-2-D604.	FN-445	R12-1-413.	RC-813	R12-1-522.	RC-813
R19-2-D605.	FN-445	R12-1-414.	RC-813	R12-1-523.	RC-813
R19-2-D606.	FN-445	R12-1-415.	RC-813	R12-1-524.	RC-813
R19-2-D607.	FN-445	R12-1-416.	RC-813	R12-1-525.	RC-813
Table 1.	FN-445	R12-1-417.	RC-813	R12-1-531.	RC-813
Table 2.	FN-445	R12-1-418.	RC-813	R12-1-532.	RC-813
Radiation Regulatory Agency		R12-1-419.	RC-813	R12-1-533.	RC-813
R12-1-101.	RC-813	R12-1-420.	RC-813	R12-1-535.	RC-813
R12-1-102.	RC-813	R12-1-421.	RC-813	R12-1-539.	RC-813
R12-1-103.	RC-813	R12-1-422.	RC-813	R12-1-540.	RC-813
R12-1-104.	RC-813	R12-1-423.	RC-813	R12-1-543.	RC-813
R12-1-105.	RC-813	R12-1-424.	RC-813	Appendix A.	RC-813
R12-1-106.	RC-813	R12-1-425.	RC-813	R12-1-602.	RC-813
R12-1-107.	RC-813	R12-1-426.	RC-813	R12-1-603.	RC-813
R12-1-201.	RC-813	R12-1-427.	RC-813	R12-1-604.	RC-813
R12-1-202.	RC-813	R12-1-428.	RC-813	R12-1-605.	RC-813
R12-1-203.	RC-813	R12-1-429.	RC-813	R12-1-606.	RC-813
R12-1-204.	RC-813	R12-1-430.	RC-813	R12-1-607.	RC-813
R12-1-205.	RC-813	R12-1-431.	RC-813	R12-1-608.	RC-813
R12-1-206.	RC-813	R12-1-432.	RC-813	R12-1-609.	RC-813
R12-1-207.	RC-813	R12-1-433.	RC-813	R12-1-610.	RC-813
R12-1-208.	RC-813	R12-1-434.	RC-813	R12-1-610.01.	RC-813
R12-1-209.	RC-813	R12-1-435.	RC-813	R12-1-611.	RC-813
Appendix A.	RC-813	R12-1-436.	RC-813	R12-1-611.01.	RC-813
R12-1-301.	RC-813	R12-1-437.	RC-813	R12-1-611.02.	RC-813
R12-1-302.	RC-813	R12-1-438.	RC-813	R12-1-612.	RC-813
R12-1-303.	RC-813	R12-1-438.01.	RC-813	R12-1-613.	RC-813
		R12-1-439.	RC-813	R12-1-614.	RC-813
		R12-1-440.	RC-813	R12-1-615.	RC-813

Appendix A.	RC-813	R12-1-910.	RC-813	Table 1.	RC-813
R12-1-701.	RC-813	R12-1-911.	RC-813	R12-1-1401.	RC-813
R12-1-702.	RC-813	R12-1-913.	RC-813	R12-1-1402.	RC-813
R12-1-703.	RC-813	R12-1-914.	RC-813	R12-1-1403.	RC-813
R12-1-704.	RC-813	Appendix A.	RC-813	R12-1-1404.	RC-813
R12-1-705.	RC-813	R12-1-1001.	RC-813	R12-1-1405.	RC-813
R12-1-706.	RC-813	R12-1-1002.	RC-813	R12-1-1406.	RC-813
R12-1-707.	RC-813	R12-1-1003.	RC-813	R12-1-1407.	RC-813
R12-1-708.	RC-813	R12-1-1004.	RC-813	R12-1-1408.	RC-813
R12-1-709.	RC-813	R12-1-1005.	RC-813	R12-1-1409.	RC-813
R12-1-710.	RC-813	R12-1-1006.	RC-813	R12-1-1410.	RC-813
R12-1-711.	RC-813	R12-1-1007.	RC-813	R12-1-1412.	RC-813
R12-1-712.	RC-813	R12-1-1008.	RC-813	R12-1-1413.	RC-813
R12-1-713.	RC-813	Exhibit A.	RC-813	R12-1-1414.	RC-813
R12-1-714.	RC-813	R12-1-1102.	RC-813	R12-1-1415.	RC-813
R12-1-715.	RC-813	R12-1-1104.	RC-813	R12-1-1416.	RC-813
R12-1-716.	RC-813	R12-1-1106.	RC-813	R12-1-1418.	RC-813
R12-1-717.	RC-813	R12-1-1108.	RC-813	R12-1-1421.	RC-813
R12-1-718.	RC-813	R12-1-1110.	RC-813	R12-1-1422.	RC-813
R12-1-719.	RC-813	R12-1-1112.	RC-813	R12-1-1423.	RC-813
R12-1-720.	RC-813	R12-1-1114.	RC-813	R12-1-1425.	RC-813
R12-1-721.	RC-813	R12-1-1116.	RC-813	R12-1-1426.	RC-813
R12-1-722.	RC-813	R12-1-1118.	RC-813	R12-1-1427.	RC-813
R12-1-723.	RC-813	R12-1-1120.	RC-813	R12-1-1429.	RC-813
R12-1-724.	RC-813	R12-1-1122.	RC-813	R12-1-1433.	RC-813
R12-1-725.	RC-813	R12-1-1126.	RC-813	R12-1-1434.	RC-813
R12-1-726.	RC-813	R12-1-1128.	RC-813	R12-1-1435.	RC-813
R12-1-727.	RC-813	R12-1-1130.	RC-813	R12-1-1436.	RC-813
R12-1-728.	RC-813	R12-1-1132.	RC-813	R12-1-1437.	RC-813
R12-1-729.	RC-813	R12-1-1134.	RC-813	R12-1-1438.	RC-813
R12-1-730.	RC-813	R12-1-1136.	RC-813	R12-1-1438.01.	RC-813
R12-1-731.	RC-813	R12-1-1138.	RC-813	R12-1-1439.	RC-813
R12-1-732.	RC-813	R12-1-1140.	RC-813	R12-1-1440.	RC-813
R12-1-733.	RC-813	R12-1-1142.	RC-813	R12-1-1441.	RC-813
R12-1-734.	RC-813	R12-1-1146.	RC-813	R12-1-1442.	RC-813
R12-1-735.	RC-813	Appendix A.	RC-813	R12-1-1443.	RC-813
R12-1-736.	RC-813	R12-1-1201.	RC-813	R12-1-1444.	RC-813
R12-1-737.	RC-813	R12-1-1202.	RC-813	Appendix A.	RC-813
R12-1-738.	RC-813	R12-1-1203.	RC-813	Appendix B.	RC-813
R12-1-739.	RC-813	R12-1-1204.	RC-813	Appendix C.	RC-813
R12-1-740.	RC-813	R12-1-1205.	RC-813	Appendix D.	RC-813
R12-1-741.	RC-813	R12-1-1207.	RC-813	R12-1-1501.	RC-813
R12-1-742.	RC-813	R12-1-1209.	RC-813	R12-1-1502.	RC-813
R12-1-743.	RC-813	R12-1-1210.	RC-813	R12-1-1503.	RC-813
R12-1-744.	RC-813	R12-1-1211.	RC-813	R12-1-1504.	RC-813
R12-1-745.	RC-813	R12-1-1212.	RC-813	R12-1-1505.	RC-813
R12-1-746.	RC-813	R12-1-1213.	RC-813	R12-1-1506.	RC-813
Exhibit A.	RC-813	R12-1-1214.	RC-813	R12-1-1507.	RC-813
R12-1-801.	RC-813	R12-1-1215.	RC-813	R12-1-1508.	RC-813
R12-1-802.	RC-813	R12-1-1216.	RC-813	R12-1-1509.	RC-813
R12-1-803.	RC-813	R12-1-1217.	RC-813	R12-1-1510.	RC-813
R12-1-804.	RC-813	R12-1-1218.	RC-813	R12-1-1511.	RC-813
R12-1-806.	RC-813	R12-1-1219.	RC-813	R12-1-1512.	RC-813
R12-1-807.	RC-813	R12-1-1220.	RC-813	R12-1-1513.	RC-813
R12-1-808.	RC-813	R12-1-1222.	RC-813	R12-1-1515.	RC-813
R12-1-809.	RC-813	R12-1-1223.	RC-813	R12-1-1701.	RC-813
R12-1-805.	RC-813	Table A.	RC-813	R12-1-1702.	RC-813
R12-1-901.	RC-813	R12-1-1301.	RC-813	R12-1-1703.	RC-813
R12-1-902.	RC-813	R12-1-1302.	RC-813	R12-1-1712.	RC-813
R12-1-903.	RC-813	R12-1-1303.	RC-813	R12-1-1713.	RC-813
R12-1-904.	RC-813	R12-1-1304.	RC-813	R12-1-1714.	RC-813
R12-1-905.	RC-813	R12-1-1305.	RC-813	R12-1-1715.	RC-813
R12-1-906.	RC-813	R12-1-1306.	RC-813	R12-1-1716.	RC-813
R12-1-907.	RC-813	R12-1-1307.	RC-813	R12-1-1717.	RC-813
R12-1-908.	RC-813	R12-1-1308.	RC-813	R12-1-1718.	RC-813
R12-1-909.	RC-813	R12-1-1309.	RC-813	R12-1-1719.	RC-813

R12-1-1720.	RC-813	R2-8-122.	PM-495;	R17-1-703.	FN-673
R12-1-1721.	RC-813		FM-1861	R17-1-704.	FN-673
R12-1-1722.	RC-813	R2-8-124.	PM-495;	R17-1-705.	FN-673
R12-1-1723.	RC-813		FM-1861	R17-1-706.	FN-673
R12-1-1724.	RC-813	R2-8-125.	PM-495;	R17-1-707.	FN-673
R12-1-1725.	RC-813		FM-1861	R17-1-708.	FN-673
R12-1-1726.	RC-813	R2-8-901.	EXP-1872	R17-1-709.	FN-673
R12-1-1727.	RC-813	R2-8-902.	EXP-1872	R17-1-710.	FN-673
R12-1-1728.	RC-813	R2-8-903.	EXP-1872	R17-1-711.	FN-673
R12-1-1731.	RC-813	R2-8-904.	EXP-1872	R17-1-712.	FN-673
R12-1-1732.	RC-813	R2-8-905.	EXP-1872	R17-1-713.	FN-673
R12-1-1733.	RC-813			R17-1-714.	FN-673
R12-1-1734.	RC-813				
R12-1-1741.	RC-813				
R12-1-1742.	RC-813				
R12-1-1743.	RC-813				
R12-1-1751.	RC-813				
R12-1-1901.	RC-813				
R12-1-1903.	RC-813				
R12-1-1905.	RC-813				
R12-1-1907.	RC-813				
R12-1-1909.	RC-813				
R12-1-1911.	RC-813				
R12-1-1921.	RC-813				
R12-1-1923.	RC-813				
R12-1-1925.	RC-813				
R12-1-1927.	RC-813				
R12-1-1929.	RC-813				
R12-1-1931.	RC-813				
R12-1-1933.	RC-813				
R12-1-1941.	RC-813				
R12-1-1943.	RC-813				
R12-1-1945.	RC-813				
R12-1-1947.	RC-813				
R12-1-1949.	RC-813				
R12-1-1951.	RC-813				
R12-1-1953.	RC-813				
R12-1-1955.	RC-813				
R12-1-1957.	RC-813				
R12-1-1971.	RC-813				
R12-1-1973.	RC-813				
R12-1-1975.	RC-813				
R12-1-1977.	RC-813				
R12-1-1979.	RC-813				
R12-1-1981.	RC-813				
R12-1-19101.	RC-813				
R12-1-19103.	RC-813				
R12-1-19105.	RC-813				
R12-1-19107.	RC-813				
R12-1-19109.	RC-813				
Appendix A.	RC-813				
Registrar of Contractors					
R4-9-106.	PM-498				
R4-9-110.	PM-1675				
R4-9-119.	PM-498				
R4-9-130.	PM-1675				
Retirement System Board, State					
R2-8-104.	PM-495;				
	FM-1861				
R2-8-116.	PM-495;				
	FM-1861				
R2-8-118.	PM-495;				
	FM-1861				
		Revenue, Department of - Transac- tion Privilege and Use Tax Section			
		R15-5-601.	FM-742		
		Secretary of State, Office of the			
		R2-12-1102.	FM-137		
		Exhibit 1.	FN-137		
		State Parks Board, Arizona			
		Exhibit A.	FXM-699		
		Technical Registration, Board of			
		R4-30-101.	FM-1785		
		R4-30-102.	FM-1785		
		R4-30-103.	FR-1785		
		R4-30-106.	FM-1785		
		R4-30-107.	FM-1785		
		R4-30-120.	FM-1785		
		R4-30-121.	FM-1785		
		R4-30-123.	FM-1785		
		R4-30-126.	FM-1785		
		R4-30-201.	FM-1785		
		R4-30-202.	FM-1785		
		R4-30-202.01.	FR-1785		
		R4-30-203.	FM-1785		
		R4-30-204.	FM-1785		
		R4-30-208.	FM-1785		
		R4-30-209.	FM-1785		
		R4-30-210.	FM-1785		
		R4-30-214.	FM-1785		
		R4-30-222.	FM-1785		
		R4-30-242.	FM-1785		
		R4-30-247.	FM-1785		
		R4-30-252.	FR-1785		
		R4-30-254.	FM-1785		
		R4-30-262.	FR-1785		
		R4-30-264.	FR-1785		
		R4-30-270.	FR-1785		
		R4-30-271.	FR-1785		
		R4-30-272.	FR-1785		
		R4-30-282.	FM-1785		
		R4-30-284.	FM-1785		
		R4-30-301.	FM-1785		
		R4-30-301.01.	FM-1785		
		R4-30-303.	FM-1785		
		R4-30-304.	FM-1785		
		R4-30-305.	FR-1785		
		Appendix A.	FM-1785		
		Appendix B.	FR-1785		
		Transportation, Department of - Administration			
		R17-1-701.	FN-673		
		R17-1-702.	FN-673		
				Transportation, Department of - Commercial Programs	
				R17-5-202.	FM-1549
				R17-5-203.	FM-1549
				R17-5-205.	FM-1549
				R17-5-206.	FM-1549
				R17-5-208.	FM-1549
				R17-5-209.	FM-1549
				R17-5-212.	FM-1549
				R17-5-601.	FXM-1725
				R17-5-602.	FXM-1725
				R17-5-603.	FXM-1725
				R17-5-604.	FXM-1725
				R17-5-605.	FXM-1725
				R17-5-606.	FXM-1725
				R17-5-607.	FXM-1725
				R17-5-608.	FXM-1725
				R17-5-609.	FXR-1725; FXN-1725
				R17-5-610.	FXM-1725
				R17-5-611.	FXM-1725
				R17-5-612.	FXM-1725
				R17-5-613.	FXM-1725
				R17-5-614.	FXN-1725
				R17-5-615.	FXN-1725
				R17-5-616.	FXN-1725
				R17-5-617.	FXN-1725
				R17-5-618.	FXN-1725
				R17-5-619.	FXN-1725
				R17-5-620.	FXN-1725
				R17-5-621.	FXN-1725
				R17-5-622.	FXN-1725
				R17-5-623.	FXN-1725
				R17-5-701.	FXM-1725
				R17-5-702.	FXR-1725; FXN-1725
				R17-5-703.	FXR-1725
				R17-5-704.	FXR-1725
				R17-5-705.	FXR-1725
				R17-5-706.	FXM-1725
				R17-5-707.	FXR-1725
				R17-5-708.	FXR-1725
				R17-5-801.	FEM-279
				R17-5-802.	FEM-279
				R17-5-803.	FEM-279
				R17-5-804.	FEM-279
				R17-5-805.	FEM-279
				R17-5-806.	FEM-279
				R17-5-807.	FEM-279
				R17-5-808.	FEM-279
				R17-5-809.	FEM-279
				R17-5-810.	FEM-279

Title, Registration, and Driver Licenses

R17-4-501.	FM-1543
R17-4-507.	FR-1543
R17-4-508.	FM-1543
R17-4-701.	FM-1543
R17-4-702.	FM-1543
R17-4-705.	FM-1543
R17-4-706.	FM-1543
R17-4-707.	FM-1543
R17-4-709.	FM-1543
R17-4-710.	FM-1543
R17-4-712.	FM-1543

Water Infrastructure Finance Authority of Arizona

R18-15-101.	FM-239
R18-15-102.	FM-239
R18-15-103.	FM-239

R18-15-104.	FM-239	R18-15-403.	F#-239;
R18-15-105.	FM-239		FM-239
R18-15-106.	FM-239	R18-15-404.	F#-239;
R18-15-107.	FM-239		FM-239
R18-15-201.	FM-239	R18-15-405.	FR-239;
R18-15-203.	FM-239		F#-239;
R18-15-204.	FM-239		FM-239
R18-15-205.	FM-239	R18-15-406.	F#-239;
R18-15-206.	FM-239		FM-239
R18-15-207.	FM-239	R18-15-407.	F#-239
R18-15-303.	FM-239	R18-15-408.	F#-239
R18-15-304.	FM-239	R18-15-501.	FM-239
R18-15-305.	FM-239	R18-15-502.	FM-239
R18-15-306.	FM-239	R18-15-503.	FM-239
R18-15-307.	FM-239	R18-15-504.	FM-239
R18-15-401.	FM-239	R18-15-505.	FM-239
R18-15-402.	FR-239;	R18-15-602.	FM-239
	F#-239;	R18-15-701.	FM-239
	FM-239		

OTHER NOTICES AND PUBLIC RECORDS INDEX

Other notices related to rulemakings are listed in the Index by notice type, agency/county and by volume page number. Agency policy statements and proposed delegation agreements are included in this section of the Index by volume page number. Public records, such as Governor Office executive orders, proclamations, declarations and terminations of emergencies, summaries of Attorney General Opinions, and county notices are also listed in this section of the Index and published by volume page number.

THIS INDEX INCLUDES OTHER NOTICE ACTIVITY THROUGH ISSUE 30 OF VOLUME 24.

Agency Ombudsman, Notices of

Osteopathic Examiners in Medicine and Surgery, Board of; p. 285
 Early Childhood Development and Health Board/First Things First; p. 322
 Water Resources, Arizona Department of; p. 1877

County Notices Pursuant to A.R.S. § 49-112

Maricopa County; pp. 5-63, 413-421, 1439-1477, 1655, 1685-1686, 1828, 1880, 2098-2127
 Pima County; pp. 1128-1309

Governor's Office

Executive Order 2018-02: pp. 1683-1684
Governor's Regulatory Review Council

Notices of Action Taken at Monthly Meetings: pp. 293-295, 487-488, 713-714, 1407-1408, 1491-1492, 1843-1844, 2143-2144

Docket Opening, Notices of

Accountancy, Board of; 4 A.A.C. 1; pp. 1752-1753
 Agriculture, Department of - Weights and Measures Services Division; 3 A.A.C. 7; p. 637
 Arizona Health Care Cost Containment System - Administration; 9

A.A.C. 22; pp. 353-354, 1754-1755; 2094-2095
 Arizona Health Care Cost Containment System - Arizona Long-term Care System; 9 A.A.C. 28; p. 354
 Arizona Health Care Cost Containment System - Medicare Cost Sharing Program; 9 A.A.C. 29; p. 355
 Behavioral Health Examiners, Board of; 4 A.A.C. 6; p. 1620
 Child Safety, Department of - Adoption Agency Licensing; 21 A.A.C. 9; p. 765
 Child Safety, Department of - Child Welfare Agency Licensing; 21 A.A.C. 7; p. 1587-1588
 Corporation Commission, Arizona - Fixed Utilities; 14 A.A.C. 2; pp. 1620-1621, 1653
 Dispensing Opticians, Board of; 4 A.A.C. 20; p. 2093
 Environmental Quality, Department of - Air Pollution Control; 18 A.A.C. 2; p. 514
 Environmental Quality, Department of - Hazardous Waste Management; 18 A.A.C. 8; p. 1587
 Game and Fish Commission; 12 A.A.C. 4; p. 577
 Governor's Regulatory Review Council; 1 A.A.C. 6; p. 2031
 Health Services, Department of - Communicable Diseases and

Infestations; 9 A.A.C. 6; pp. 638-639, 1437-1438, 1681
 Health Services, Department of - Food, Recreational, and Institutional Sanitation; 9 A.A.C. 8; pp. 510-512
 Health Services, Department of - Health Care Institutions: Licensing; 9 A.A.C. 10; pp. 310-311, 513, 1821-1822
 Health Services, Department of - Radiation Control; 9 A.A.C. 7; pp. 793-794
 Industrial Commission of Arizona; 20 A.A.C. 5; pp. 578-579
 Medical Board, Arizona; 4 A.A.C. 16; p. 638
 Optometry, Board of; 4 A.A.C. 21; pp. 1753-1754
 Pharmacy, Board of; 4 A.A.C. 23; pp. 2031-2032
 Psychologist Examiners, Board of; 4 A.A.C. 26; p. 1873
 Registrar of Contractors; 4 A.A.C. 9; pp. 509, 1681
 Retirement System Board, State; 2 A.A.C. 8; p. 509
 Secretary of State, Office of; 2 A.A.C. 12; p. 793

Proposed Delegation Agreement, Notices of

Environmental Quality, Department of; pp. 356-357
 Health Services, Department of; pp. 411, 766

**Public Information, Notices of**

Environmental Quality, Department of; pp. 114-122, 1756-1763
Environmental Quality, Department of - Pesticides and Water Pollution Control; pp. 1874-1876
Environmental Quality, Department of Safe Drinking Water; pp. 1126-1127
Game and Fish Commission; pp. 358-359
Health Services, Department of; pp. 150-151, 795
Pima County; p. 1393
State Retirement System, Arizona; p. 1823
Technical Registration, Arizona Board of; p. 640

Substantive Policy Statement, Notices of

Financial Institutions, Department of; p. 412
Game and Fish Commission; p. 360
Industrial Commission of Arizona; p. 1654
Insurance, Department of; p. 123
Land Department, State; pp. 361-362
Lottery Commission, State; p. 2033
Nursing, Board of; pp. 1824-1825
Psychologist Examiners, Board of; p. 767
State Retirement System, Arizona; p. 641
Water Infrastructure Finance Authority; pp. 312-321
Water Resources, Department of; p. 360, 796



RULES EFFECTIVE DATES CALENDAR

A.R.S. § 41-1032(A), as amended by Laws 2002, Ch. 334, § 8 (effective August 22, 2002), states that a rule generally becomes effective 60 days after the day it is filed with the Secretary of State's Office. The following table lists filing dates and effective dates for rules that follow this provision. Please also check the rulemaking Preamble for effective dates.

January		February		March		April		May		June	
Date Filed	Effective Date										
1/1	3/2	2/1	4/2	3/1	4/30	4/1	5/31	5/1	6/30	6/1	7/31
1/2	3/3	2/2	4/3	3/2	5/1	4/2	6/1	5/2	7/1	6/2	8/1
1/3	3/4	2/3	4/4	3/3	5/2	4/3	6/2	5/3	7/2	6/3	8/2
1/4	3/5	2/4	4/5	3/4	5/3	4/4	6/3	5/4	7/3	6/4	8/3
1/5	3/6	2/5	4/6	3/5	5/4	4/5	6/4	5/5	7/4	6/5	8/4
1/6	3/7	2/6	4/7	3/6	5/5	4/6	6/5	5/6	7/5	6/6	8/5
1/7	3/8	2/7	4/8	3/7	5/6	4/7	6/6	5/7	7/6	6/7	8/6
1/8	3/9	2/8	4/9	3/8	5/7	4/8	6/7	5/8	7/7	6/8	8/7
1/9	3/10	2/9	4/10	3/9	5/8	4/9	6/8	5/9	7/8	6/9	8/8
1/10	3/11	2/10	4/11	3/10	5/9	4/10	6/9	5/10	7/9	6/10	8/9
1/11	3/12	2/11	4/12	3/11	5/10	4/11	6/10	5/11	7/10	6/11	8/10
1/12	3/13	2/12	4/13	3/12	5/11	4/12	6/11	5/12	7/11	6/12	8/11
1/13	3/14	2/13	4/14	3/13	5/12	4/13	6/12	5/13	7/12	6/13	8/12
1/14	3/15	2/14	4/15	3/14	5/13	4/14	6/13	5/14	7/13	6/14	8/13
1/15	3/16	2/15	4/16	3/15	5/14	4/15	6/14	5/15	7/14	6/15	8/14
1/16	3/17	2/16	4/17	3/16	5/15	4/16	6/15	5/16	7/15	6/16	8/15
1/17	3/18	2/17	4/18	3/17	5/16	4/17	6/16	5/17	7/16	6/17	8/16
1/18	3/19	2/18	4/19	3/18	5/17	4/18	6/17	5/18	7/17	6/18	8/17
1/19	3/20	2/19	4/20	3/19	5/18	4/19	6/18	5/19	7/18	6/19	8/18
1/20	3/21	2/20	4/21	3/20	5/19	4/20	6/19	5/20	7/19	6/20	8/19
1/21	3/22	2/21	4/22	3/21	5/20	4/21	6/20	5/21	7/20	6/21	8/20
1/22	3/23	2/22	4/23	3/22	5/21	4/22	6/21	5/22	7/21	6/22	8/21
1/23	3/24	2/23	4/24	3/23	5/22	4/23	6/22	5/23	7/22	6/23	8/22
1/24	3/25	2/24	4/25	3/24	5/23	4/24	6/23	5/24	7/23	6/24	8/23
1/25	3/26	2/25	4/26	3/25	5/24	4/25	6/24	5/25	7/24	6/25	8/24
1/26	3/27	2/26	4/27	3/26	5/25	4/26	6/25	5/26	7/25	6/26	8/25
1/27	3/28	2/27	4/28	3/27	5/26	4/27	6/26	5/27	7/26	6/27	8/26
1/28	3/29	2/28	4/29	3/28	5/27	4/28	6/27	5/28	7/27	6/28	8/27
1/29	3/30			3/29	5/28	4/29	6/28	5/29	7/28	6/29	8/28
1/30	3/31			3/30	5/29	4/30	6/29	5/30	7/29	6/30	8/29
1/31	4/1			3/31	5/30			5/31	7/30		



July		August		September		October		November		December	
Date Filed	Effective Date										
7/1	8/30	8/1	9/30	9/1	10/31	10/1	11/30	11/1	12/31	12/1	1/30
7/2	8/31	8/2	10/1	9/2	11/1	10/2	12/1	11/2	1/1	12/2	1/31
7/3	9/1	8/3	10/2	9/3	11/2	10/3	12/2	11/3	1/2	12/3	2/1
7/4	9/2	8/4	10/3	9/4	11/3	10/4	12/3	11/4	1/3	12/4	2/2
7/5	9/3	8/5	10/4	9/5	11/4	10/5	12/4	11/5	1/4	12/5	2/3
7/6	9/4	8/6	10/5	9/6	11/5	10/6	12/5	11/6	1/5	12/6	2/4
7/7	9/5	8/7	10/6	9/7	11/6	10/7	12/6	11/7	1/6	12/7	2/5
7/8	9/6	8/8	10/7	9/8	11/7	10/8	12/7	11/8	1/7	12/8	2/6
7/9	9/7	8/9	10/8	9/9	11/8	10/9	12/8	11/9	1/8	12/9	2/7
7/10	9/8	8/10	10/9	9/10	11/9	10/10	12/9	11/10	1/9	12/10	2/8
7/11	9/9	8/11	10/10	9/11	11/10	10/11	12/10	11/11	1/10	12/11	2/9
7/12	9/10	8/12	10/11	9/12	11/11	10/12	12/11	11/12	1/11	12/12	2/10
7/13	9/11	8/13	10/12	9/13	11/12	10/13	12/12	11/13	1/12	12/13	2/11
7/14	9/12	8/14	10/13	9/14	11/13	10/14	12/13	11/14	1/13	12/14	2/12
7/15	9/13	8/15	10/14	9/15	11/14	10/15	12/14	11/15	1/14	12/15	2/13
7/16	9/14	8/16	10/15	9/16	11/15	10/16	12/15	11/16	1/15	12/16	2/14
7/17	9/15	8/17	10/16	9/17	11/16	10/17	12/16	11/17	1/16	12/17	2/15
7/18	9/16	8/18	10/17	9/18	11/17	10/18	12/17	11/18	1/17	12/18	2/16
7/19	9/17	8/19	10/18	9/19	11/18	10/19	12/18	11/19	1/18	12/19	2/17
7/20	9/18	8/20	10/19	9/20	11/19	10/20	12/19	11/20	1/19	12/20	2/18
7/21	9/19	8/21	10/20	9/21	11/20	10/21	12/20	11/21	1/20	12/21	2/19
7/22	9/20	8/22	10/21	9/22	11/21	10/22	12/21	11/22	1/21	12/22	2/20
7/23	9/21	8/23	10/22	9/23	11/22	10/23	12/22	11/23	1/22	12/23	2/21
7/24	9/22	8/24	10/23	9/24	11/23	10/24	12/23	11/24	1/23	12/24	2/22
7/25	9/23	8/25	10/24	9/25	11/24	10/25	12/24	11/25	1/24	12/25	2/23
7/26	9/24	8/26	10/25	9/26	11/25	10/26	12/25	11/26	1/25	12/26	2/24
7/27	9/25	8/27	10/26	9/27	11/26	10/27	12/26	11/27	1/26	12/27	2/25
7/28	9/26	8/28	10/27	9/28	11/27	10/28	12/27	11/28	1/27	12/28	2/26
7/29	9/27	8/29	10/28	9/29	11/28	10/29	12/28	11/29	1/28	12/29	2/27
7/30	9/28	8/30	10/29	9/30	11/29	10/30	12/29	11/30	1/29	12/30	2/28
7/31	9/29	8/31	10/30			10/31	12/30			12/31	3/1



REGISTER PUBLISHING DEADLINES

The Secretary of State's Office publishes the Register weekly. There is a three-week turnaround period between a deadline date and the publication date of the Register. The weekly deadline dates and issue dates are shown below. Council meetings and Register deadlines do not correlate. Also listed are the earliest dates on which an oral proceeding can be held on proposed rulemakings or proposed delegation agreements following publication of the notice in the Register.

Table with 3 columns: Deadline Date (paper only) Friday, 5:00 p.m., Register Publication Date, and Oral Proceeding may be scheduled on or after. Rows list dates from March 23, 2018 to October 12, 2018.



GOVERNOR’S REGULATORY REVIEW COUNCIL DEADLINES

The following deadlines apply to all Five-Year-Review Reports and any adopted rule submitted to the Governor’s Regulatory Review Council. Council meetings and *Register* deadlines do not correlate. We publish these deadlines as a courtesy.

All rules and Five-Year Review Reports are due in the Council office by 5 p.m. of the deadline date. The Council’s office is located at 100 N. 15th Ave., Suite 402, Phoenix, AZ 85007. For more information, call (602) 542-2058 or visit <http://grrc.az.gov>.

GOVERNOR’S REGULATORY REVIEW COUNCIL DEADLINES FOR 2018

[M18-01]

DEADLINE FOR PLACEMENT ON AGENDA*	FINAL MATERIALS SUBMITTED TO COUNCIL	DATE OF COUNCIL STUDY SESSION	DATE OF COUNCIL MEETING
<i>Tuesday</i> November 21, 2017	<i>Tuesday</i> December 19, 2017	<i>Wednesday</i> January 3, 2018	<i>Tuesday</i> January 9, 2018
<i>Tuesday</i> December 19, 2017	<i>Tuesday</i> January 23, 2018	<i>Tuesday</i> January 30, 2018	<i>Tuesday</i> February 6, 2018
<i>Tuesday</i> January 23, 2018	<i>Tuesday</i> February 20, 2018	<i>Tuesday</i> February 27, 2018	<i>Tuesday</i> March 6, 2018
<i>Tuesday</i> February 20, 2018	<i>Tuesday</i> March 20, 2018	<i>Tuesday</i> March 27, 2018	<i>Tuesday</i> April 3, 2018
<i>Tuesday</i> March 20, 2018	<i>Tuesday</i> April 17, 2018	<i>Tuesday</i> April 24, 2018	<i>Tuesday</i> May 1, 2018
<i>Tuesday</i> April 17, 2018	<i>Tuesday</i> May 22, 2018	<i>Wednesday</i> May 30, 2018	<i>Tuesday</i> June 5, 2018
<i>Tuesday</i> May 22, 2018	<i>Tuesday</i> June 19, 2018	<i>Tuesday</i> June 26, 2018	<i>Tuesday</i> July 10, 2018
<i>Tuesday</i> June 19, 2018	<i>Tuesday</i> July 24, 2018	<i>Tuesday</i> July 31, 2018	<i>Tuesday</i> August 7, 2018
<i>Tuesday</i> July 24, 2018	<i>Tuesday</i> August 21, 2018	<i>Tuesday</i> August 28, 2018	<i>Wednesday</i> September 5, 2018
<i>Tuesday</i> August 21, 2018	<i>Tuesday</i> September 18, 2018	<i>Tuesday</i> September 25, 2018	<i>Tuesday</i> October 2, 2018
<i>Tuesday</i> September 18, 2018	<i>Tuesday</i> October 23, 2018	<i>Tuesday</i> October 30, 2018	<i>Tuesday</i> November 6, 2018
<i>Tuesday</i> October 23, 2018	<i>Tuesday</i> November 20, 2018	<i>Tuesday</i> November 27, 2018	<i>Tuesday</i> December 4, 2018
<i>Tuesday</i> November 20, 2018	<i>Tuesday</i> December 18, 2018	<i>Thursday</i> January 3, 2019	<i>Tuesday</i> January 8, 2019
<i>Tuesday</i> December 18, 2018	<i>Tuesday</i> January 22, 2019	<i>Tuesday</i> January 29, 2019	<i>Tuesday</i> February 5, 2019

* Materials must be submitted by **5 PM** on dates listed as a deadline for placement on a particular agenda. Placement on a particular agenda is not guaranteed.