



To: Members of the State Board of Health

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Through: Jennifer T. Opila, Division Director *JTO*

Date: August 19, 2020

Subject: Rulemaking Hearing concerning 6 CCR 1007-1 Part 22, Physical protection of category 1 and category 2 quantities of radioactive material, and 6 CCR 1007-1 Part 17, Transportation of radioactive materials

The radiation program is proposing minor technical and editorial changes to Part 22 and Part 17 of the radiation regulations primarily for conformance to final regulations of the U.S. Nuclear Regulatory Commission (NRC) in 10 CFR Part 37, and Part 71. Changes to these federal rules were published in 2018 and 2019. Consistent with its agreement with the NRC, Colorado must maintain its radiation regulations compatible with those of NRC and therefore is proposing changes to Colorado rules.

Part 22 provides specific physical security requirements for certain licensees who possess and use higher quantities and of radioactive materials and devices deemed to be risk significant per federal regulation. Part 17 as used in conjunction with 10 CFR Part 71 and 49 CFR, provides requirements for transportation and shipping of radioactive materials.

The changes to the proposed rules are primarily non-substantive technical corrections and edits with minimal impacts on licensees. The proposed changes include clarification that the oath and affirmation documents required under Part 22 are to be submitted to the Department, consistent with current licensing practices; changes in NRC division names and contact information due to NRC organizational changes; correction of the website and contact information for submission of fingerprints under Part 22; clarification that the list of individuals with unescorted access required by Part 22 must be protected in a manner similar to other security related documents; clarification in Part 17 that the quality assurance program information for certain packages be sent to the Department for review (rather than NRC); and typographical error and formatting additions and corrections throughout both rules. Amendment of these regulations will help ensure consistency with the national framework for regulation of radioactive materials.

Throughout the rule, new text appears as red bold text while deleted current text of this regulation is shown in strikethrough. **Changes made since the request for rulemaking are highlighted in yellow.**

At the August 19, 2020 rulemaking hearing, the Radiation Program requests that the Board of Health adopt the rules as proposed.

STATEMENT OF BASIS AND PURPOSE
AND SPECIFIC STATUTORY AUTHORITY

for Amendments to
6 CCR 1007-1, Part 22, Physical protection of category 1 and category 2 quantities of
radioactive material
6 CCR 1007-1, Part 17, Transportation of radioactive material

Basis and Purpose.

The proposed amendments make minor technical and formatting changes to select provisions in the Part 22 and Part 17 rules based on 2018 and 2019 changes in parallel federal regulation and to address past comments of NRC from a prior rulemaking. The proposed changes are outlined below for each section by rule.

Changes throughout Part 22

- Updates and modifications to the standard language pertaining to documents incorporated by reference, consistent with the intent and requirements of the Colorado Administrative Procedure Act.
- Correction of typographical and formatting for alignment of rule text.
- The addition of section headers to Part 22 for consistency with the format of federal rule.

Changes to provision 22.2 of Part 22

- Updates to the incorporation by reference language for consistency with the APA and other regulations.

Changes to provision 22.4 of Part 22

- The addition of email contact information where information may be sent to the Department.

Changes to provision 22.9 of Part 22

- Adding clarification that the oath and affirmation information for reviewing officials should be sent to the Department within 30 days of changes or additions of individuals, or when such designation is revoked.

Changes to provision 22.11 of Part 22

- Updating the contact information where licensees must submit fingerprint information to the U.S. Nuclear Regulatory Commission (NRC). Information was updated as a result of NRC organizational and contact information.

Changes to provision 22.16 of Part 22

- Language is added to clarify that the list of individuals that have been approved for unescorted access must be protected in a manner similar to other security related documents.

Changes to provision 22.27 of Part 22

- Clarifying language is added to specify that advance notification of shipments of category 1 quantities of radioactive material must also be made to the Department, along with the governor of each state through which the material is being shipped.

The amended language also includes the NRC information where contact information can be found.

Changes throughout Part 17

- Updates to the standard language pertaining to documents incorporated by reference, consistent with the Colorado Administrative Procedure Act and other regulatory parts.
- Correction of typographical, formatting and numbering errors.
- Removal of specific dates referencing federal regulations in rule body.
- The addition of the word "Part" in references to federal regulation.
- Removal of header and footer information in preparation for final publication.

Changes to provision 17.3 of Part 17

- Deletion of term "licensing state" due to no longer being used in the national regulatory scheme.

Changes to provision 17.7 of Part 17

- Clarification that only NRC can provide an alternate approval for a package and only NRC issues the certificates of compliance.

Changes to provision 17.10 of Part 17

- When a package falls within the requirements of Subpart H of 10 CFR Part 71, a licensee using such package must submit their applicable quality assurance program requirements to the Department for review.

Changes to provision 17.11 of Part 17

- Incorporation of and updates to NRC Division names due to reorganization changes at NRC;
- An additional notification reference to NRC is added, consistent with other changes to this section.

Specific Statutory Authority.

Statutes that require or authorize rulemaking:

25-1.5-101(1)(k), 25-1.5-101(1)(l), 25-11-103, 25-11-104, and 25-1-108, C.R.S.

Is this rulemaking due to a change in state statute?

Yes, the bill number is _____. Rules are ___ authorized ___ required.
 No

Does this rulemaking include proposed rule language that incorporate materials by reference?

Yes URL
 No

Does this rulemaking include proposed rule language to create or modify fines or fees?

Yes
 No

Does the proposed rule language create (or increase) a state mandate on local government?

No.

- The proposed rule does not require a local government to perform or increase a specific activity for which the local government will not be reimbursed;
- The proposed rule requires a local government to perform or increase a specific activity because the local government has opted to perform an activity, or;
- The proposed rule reduces or eliminates a state mandate on local government.

Has an elected official or other representatives of local governments disagreed with this categorization of the mandate? ___Yes _X_No. If "yes," please explain why there is disagreement in the categorization.

Please elaborate as to why a rule that contains a state mandate on local government is necessary.

While most radioactive materials licensee facilities in Colorado are privately owned, some facilities may be wholly or partially owned or operated by a local government, town, county or special district. However, for consistency with the national framework for regulation of radioactive materials and consistent with Colorado's agreement with the U.S. Nuclear Regulatory Commission, all facilities regardless of ownership, must adhere to the same public health and safety requirements and regulations for use of radioactive materials within the state. The proposed rule changes are mostly non-substantial, technical and editorial changes that will not significantly impact the level of service or mandate and will therefore similarly impact all types of facilities using radioactive materials whether privately or governmentally owned or operated. The Department does not collect or maintain data regarding the governmental or private ownership status of licensed facilities.

REGULATORY ANALYSIS

6 CCR 1007-1, Part 22, Physical protection of category 1 and category 2 quantities of radioactive material

6 CCR 1007-1, Part 17, Transportation of radioactive material

1. A description of the classes of persons affected by the proposed rule, including the classes that will bear the costs and the classes that will benefit from the proposed rule.

Group of persons/entities Affected by the Proposed Rule	Size of the Group	Relationship to the Proposed Rule Select category: C/CLG/S/B
All active specific radioactive materials licensees. This includes the subset of licensees that are required to implement the enhanced security requirements of Part 22 and licensees that transport or ship radioactive materials under the requirements of Part 17. Note: The proposed changes to Part 17 are unlikely to impact any Colorado licensees as the primary changes relate to transport of nuclear (reactor) waste and no Colorado licensees are typically involved in shipment of nuclear waste.	306	C / CLG
Stakeholders and other entities who collectively represent radioactive materials licensees or are otherwise interested in their activities. This includes associations, professional organizations, advocacy organizations, and members of the public who have expressed interest in receiving notification of proposed radiation regulation changes.	378	S
Members of the public who may be impacted if a licensee fails to follow the regulatory requirements.	Not easily quantifiable	B

While all are stakeholders, groups of persons/entities connect to the rule and the problem being solved by the rule in different ways. To better understand those different relationships, the following relationship categorization key is used:

- C = individuals/entities that implement or apply the rule.
- CLG = local governments that must implement the rule in order to remain in compliance with the law.
- S = individuals/entities that do not implement or apply the rule but are interested in others applying the rule.
- B = the individuals that are ultimately served, including the customers of our customers. These individuals may benefit, be harmed by or be at-risk because of the standard communicated in the rule or the manner in which the rule is implemented.

More than one category may be appropriate for some stakeholders.

2. To the extent practicable, a description of the probable quantitative and qualitative impact of the proposed rule, economic or otherwise, upon affected classes of persons.

Economic outcomes

Summarize the financial costs and benefits, include a description of costs that must be incurred, costs that may be incurred, any Department measures taken to reduce or eliminate these costs, and any financial benefits.

All stakeholders - C, CLG, S, B: The proposed rule changes consist of technical, non-substantial changes. There are expected to be no economic impacts or financial costs or benefits when implemented by licensees.

Non-economic outcomes

Summarize the anticipated favorable and non-favorable non-economic outcomes (short-term and long-term), and, if known, the likelihood of the outcomes for each affected class of persons by the relationship category.

Adding clarity to the rule language and addressing minor errors is expected to make it easier for impacted licensees in Category C / CLG to follow, as the rules will be made more consistent with the regulations of NRC and those in other states who have adopted the federal rule changes. Those licensees required by the rules to submit information to the NRC or the Department will have the correct mailing and contact information, thereby saving time.

3. The probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues.
- A. Anticipated CDPHE personal services, operating costs or other expenditures: None. The proposed changes are expected to be neutral for the Department.
- Anticipated CDPHE Revenues: N/A
- B. Anticipated personal services, operating costs or other expenditures by another state agency: N/A
4. A comparison of the probable costs and benefits of the proposed rule to the probable costs and benefits of inaction.

Along with the costs and benefits discussed above, the proposed revisions:

- Comply with a statutory mandate to promulgate rules.
- Comply with federal or state statutory mandates, federal or state regulations, and department funding obligations.
- Maintain alignment with other states or national standards.
- Implement a Regulatory Efficiency Review (rule review) result
- Improve public and environmental health practice.
- Implement stakeholder feedback.

Advance the following CDPHE Strategic Plan priorities (select all that apply):

<p>1. Reduce Greenhouse Gas (GHG) emissions economy-wide from 125.716 million metric tons of CO₂e (carbon dioxide equivalent) per year to 119.430 million metric tons of CO₂e per year by June 30, 2020 and to 113.144 million metric tons of CO₂e by June 30, 2023.</p> <p><input type="checkbox"/> Contributes to the blueprint for pollution reduction</p> <p><input type="checkbox"/> Reduces carbon dioxide from transportation</p> <p><input type="checkbox"/> Reduces methane emissions from oil and gas industry</p> <p><input type="checkbox"/> Reduces carbon dioxide emissions from electricity sector</p>
<p>2. Reduce ozone from 83 parts per billion (ppb) to 80 ppb by June 30, 2020 and 75 ppb by June 30, 2023.</p> <p><input type="checkbox"/> Reduces volatile organic compounds (VOC) and oxides of nitrogen (NO_x) from the oil and gas industry.</p> <p><input type="checkbox"/> Supports local agencies and COGCC in oil and gas regulations.</p> <p><input type="checkbox"/> Reduces VOC and NO_x emissions from non-oil and gas contributors</p>
<p>3. Decrease the number of Colorado adults who have obesity by 2,838 by June 30, 2020 and by 12,207 by June 30, 2023.</p> <p><input type="checkbox"/> Increases the consumption of healthy food and beverages through education, policy, practice and environmental changes.</p> <p><input type="checkbox"/> Increases physical activity by promoting local and state policies to improve active transportation and access to recreation.</p> <p><input type="checkbox"/> Increases the reach of the National Diabetes Prevention Program and Diabetes Self-Management Education and Support by collaborating with the Department of Health Care Policy and Financing.</p>
<p>4. Decrease the number of Colorado children (age 2-4 years) who participate in the WIC Program and have obesity from 2120 to 2115 by June 30, 2020 and to 2100 by June 30, 2023.</p> <p><input type="checkbox"/> Ensures access to breastfeeding-friendly environments.</p>
<p>5. Reverse the downward trend and increase the percent of kindergartners protected against measles, mumps and rubella (MMR) from 87.4% to 90% (1,669 more kids) by June 30, 2020 and increase to 95% by June 30, 2023.</p> <p><input type="checkbox"/> Reverses the downward trend and increase the percent of kindergartners protected against measles, mumps and rubella (MMR) from 87.4% to 90% (1,669 more kids) by June 30, 2020 and increase to 95% by June 30, 2023.</p> <p><input type="checkbox"/> Performs targeted programming to increase immunization rates.</p> <p><input type="checkbox"/> Supports legislation and policies that promote complete immunization and exemption data in the Colorado Immunization Information System (CIIS).</p>
<p>6. Colorado will reduce the suicide death rate by 5% by June 30, 2020 and 15% by June 30, 2023.</p>

<ul style="list-style-type: none"> ___ Creates a roadmap to address suicide in Colorado. ___ Improves youth connections to school, positive peers and caring adults, and promotes healthy behaviors and positive school climate. ___ Decreases stigma associated with mental health and suicide, and increases help-seeking behaviors among working-age males, particularly within high-risk industries. ___ Saves health care costs by reducing reliance on emergency departments and connects to responsive community-based resources.
<p>7. The Office of Emergency Preparedness and Response (OEP) will identify 100% of jurisdictional gaps to inform the required work of the Operational Readiness Review by June 30, 2020.</p> <ul style="list-style-type: none"> ___ Conducts a gap assessment. ___ Updates existing plans to address identified gaps. ___ Develops and conducts various exercises to close gaps.
<p>8. For each identified threat, increase the competency rating from 0% to 54% for outbreak/incident investigation steps by June 30, 2020 and increase to 92% competency rating by June 30, 2023.</p> <ul style="list-style-type: none"> ___ Uses an assessment tool to measure competency for CDPHE's response to an outbreak or environmental incident. ___ Works cross-departmentally to update and draft plans to address identified gaps noted in the assessment. ___ Conducts exercises to measure and increase performance related to identified gaps in the outbreak or incident response plan.
<p>9. 100% of new technology applications will be virtually available to customers, anytime and anywhere, by June 20, 2020 and 90 of the existing applications by June 30, 2023.</p> <ul style="list-style-type: none"> ___ Implements the CDPHE Digital Transformation Plan. ___ Optimizes processes prior to digitizing them. ___ Improves data dissemination and interoperability methods and timeliness.
<p>10. Reduce CDPHE's Scope 1 & 2 Greenhouse Gas emissions (GHG) from 6,561 metric tons (in FY2015) to 5,249 metric tons (20% reduction) by June 30, 2020 and 4,593 tons (30% reduction) by June 30, 2023.</p> <ul style="list-style-type: none"> ___ Reduces emissions from employee commuting ___ Reduces emissions from CDPHE operations
<p>11. Fully implement the roadmap to create and pilot using a budget equity assessment by June 30, 2020 and increase the percent of selected budgets using the equity assessment from 0% to 50% by June 30, 2023.</p> <ul style="list-style-type: none"> ___ Used a budget equity assessment

- ___ Advance CDPHE Division-level strategic priorities.
 - Identify division strategic plan item or strategic priority

The costs and benefits of the proposed rule will not be incurred if inaction was chosen. Costs and benefits of inaction not previously discussed include:

The cost of inaction will result in Colorado regulations being inconsistent with the national framework and federal regulations pertaining to use, security and transportation of select radioactive materials at facilities. Failing to have final regulations that are compatible with those of the NRC could result in enhanced regulatory oversight of the radiation program and potential revocation of authorization as an agreement state.

5. A determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule.

Rulemaking is proposed when it is the least costly method or the only statutorily allowable method for achieving the purpose of the statute or state agreement. The specific revisions proposed in this rulemaking make no substantive changes and impose no new requirements. Local stakeholders were given the opportunity to provide feedback regarding these proposed changes, but no comments were received. The benefits, risks and costs of these proposed revisions were compared to the costs and benefits of other options. The proposed revisions provide the most benefit for the least amount of cost, are the minimum necessary or are the most feasible manner to achieve compliance with statute and federal regulations.

6. Alternative Rules or Alternatives to Rulemaking Considered and Why Rejected.

No alternative rules or alternative rulemaking was considered as the proposed changes are primarily informational in nature and do not substantially modify existing regulations. No stakeholders provided comments or feedback pertaining to either rule. To varying degrees, Colorado's rules pertaining to radiation control must be maintained consistent with the regulations of the U.S. NRC in order to maintain its status as an Agreement State.

7. To the extent practicable, a quantification of the data used in the analysis; the analysis must take into account both short-term and long-term consequences.

With a few exceptions, the proposed changes to the requirements in Part 22 and Part 17 are primarily based upon changes to the overarching federal regulations which establish a national and consistent framework for regulation and transport of certain radioactive materials. The discussion, considerations, and evaluation that resulted in the final federal rule changes may be found through the following documents:

[NRC RATS \(Regulatory Action Tracking System\) 2018-2](#)
[NRC RATS 2018-3](#)
[NRC RATS 2019-1](#)
[NRC RATS 2019-2](#)

Links and information for the associated federal register entry are contained within the above NRC regulatory tracking system documents.

STAKEHOLDER ENGAGEMENT

for Amendments to

6 CCR 1007-1, Part 22, Physical protection of category 1 and category 2 quantities of radioactive material

6 CCR 1007-1, Part 17, Transportation of radioactive material

State law requires agencies to establish a representative group of participants when considering to adopt or modify new and existing rules. This is commonly referred to as a stakeholder group.

Early Stakeholder Engagement:

The following individuals and/or entities were invited to provide input and included in the development of these proposed rules:

Organization	Representative Name and Title (if known)
All specific radioactive materials licensees in Colorado (-306+).	Radiation Safety Officer(s)
Professional associations, societies and organizations.	NA
Other stakeholders with interest in changes to rules and regulations pertaining to radiation control.	NA

Stakeholders were notified of the opportunity to comment on the proposed draft rules, which were posted on the Department website. Due to the limited scope and anticipated impact of the proposed rule changes, no stakeholder meetings were held. No comments were received during the comment period which was held April 6 through May 7, 2020.

Stakeholder Group Notification

The stakeholder group was provided notice of the rulemaking hearing and provided a copy of the proposed rules or the internet location where the rules may be viewed. Notice was provided prior to the date the notice of rulemaking was published in the Colorado Register (typically, the 10th of the month following the Request for Rulemaking).

- Not applicable. This is a Request for Rulemaking Packet. Notification will occur if the Board of Health sets this matter for rulemaking. This is selected for the request for rulemaking.
- Yes. This is selected for the rulemaking to document that timely division notification occurred.

Summarize Major Factual and Policy Issues Encountered and the Stakeholder Feedback Received. If there is a lack of consensus regarding the proposed rule, please also identify the Department's efforts to address stakeholder feedback or why the Department was unable to accommodate the request.

The Department received no stakeholder feedback or comments regarding the proposed rules.

No major factual or policy issues were encountered during the rulemaking process.

Please identify the determinants of health or other health equity and environmental justice considerations, values or outcomes related to this rulemaking.

Overall, after considering the benefits, risks and costs, the proposed rule:

Select all that apply.

	Improves behavioral health and mental health; or, reduces substance abuse or suicide risk.		Reduces or eliminates health care costs, improves access to health care or the system of care; stabilizes individual participation; or, improves the quality of care for unserved or underserved populations.
	Improves housing, land use, neighborhoods, local infrastructure, community services, built environment, safe physical spaces or transportation.		Reduces occupational hazards; improves an individual's ability to secure or maintain employment; or, increases stability in an employer's workforce.
	Improves access to food and healthy food options.	X	Reduces exposure to toxins, pollutants, contaminants or hazardous substances; or ensures the safe application of radioactive material or chemicals.
X	Improves access to public and environmental health information; improves the readability of the rule; or, increases the shared understanding of roles and responsibilities, or what occurs under a rule.		Supports community partnerships; community planning efforts; community needs for data to inform decisions; community needs to evaluate the effectiveness of its efforts and outcomes.
	Increases a child's ability to participate in early education and educational opportunities through prevention efforts that increase protective factors and decrease risk factors, or stabilizes individual participation in the opportunity.		Considers the value of different lived experiences and the increased opportunity to be effective when services are culturally responsive.
X	Monitors, diagnoses and investigates health problems, and health or environmental hazards in the community.		Ensures a competent public and environmental health workforce or health care workforce.
	Other: _____ _____		Other: _____ _____

1 **DRAFT 2 07/31/2020**

2 **DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT**

3 **Hazardous Materials and Waste Management Division**

4 **RADIATION CONTROL - TRANSPORTATION OF RADIOACTIVE MATERIALS**

5 **6 CCR 1007-1 Part 17**

6 *[Editor's Notes follow the text of the rules at the end of this CCR Document.]*

7
8 **Adopted by the Board of Health September 20, 2017August 19, 2020, effective date November 14,**
9 **2017October 15, 2020.**

10 **PART 17: TRANSPORTATION OF RADIOACTIVE MATERIALS**

11 **GENERAL PROVISIONS**

12 [* * * INDICATES NO CHANGES TO THIS PORTION OF THE RULE]

13 * * *

14 17.1.4 Applicability.

15 17.1.4.1 This part applies to any person who transports radioactive material or delivers
16 radioactive material to a carrier for transport.

17 (1) This part applies in particular to any licensee authorized by specific or general
18 license to receive, possess, use, or transfer licensed material, if the licensee
19 delivers that material to a carrier for transport, transports the material outside the
20 site of usage as specified in the license, or transports that material on a public
21 highway.

22 (2) The transport of licensed material or delivery of licensed material to a carrier for
23 transport is subject to the:

24 (a) General provisions of 17.1 through 17.5, including referenced DOT
25 regulations;

26 (b) Quality assurance requirements of 10 CFR Part 71; and

27 (c) Operating controls and procedures requirements of 17.11 through 17.17.

28 * * *

29 **17.1.5 Published Material Incorporated by Reference.**

30 ~~In accordance with Section 24-4-103(12.5)(c), CRS, <https://www.colorado.gov/cdphe/radregs>~~
31 ~~identifies where incorporated material is available to the public on the internet at no cost. If the~~
32 ~~incorporated material is not available on the internet at no cost to the public, copies of the~~
33 ~~incorporated material has been provided to the State Publications Depository and Distribution~~
34 ~~Center, also known as the State Publications Library. The State Librarian at the State Publication~~
35 ~~Library retains a copy of the material and will make the copy available to the public.~~

36 **17.1.5.1 Throughout this Part 17, federal regulations, state regulations, and**
37 **standards or guidelines of outside organizations have been adopted and**

Commented [JSJ1]:
Editorial note 1: All comments (such as this one) shown in the right side margin of this draft document are for information only to assist the reader in understanding the proposed rule change during the review and comment process.

These side margin notes are **not** part of the rule and all comments will be deleted prior to publication of the final rule.

Editorial note 2: Alignment and formatting corrections and minor typographical adjustments may be made in the rule and may not be specifically identified with a side margin comment.

Editorial note 3: The acronym "RATS-20##-#" refers to the U.S. Nuclear Regulatory Commission (NRC) regulatory action tracking system. This system is used to identify and summarize changes to federal regulations that may be required for adoption by an NRC agreement state. To maintain agreement state status, Colorado's radiation regulations must be compatible with federal regulations of the NRC.
NRC RATS items may be found online at https://scp.nrc.gov/rss_regamendents.html.

Colorado statute also prescribes that the radiation control regulations must be consistent with the model regulations of the Conference of Radiation Control Program Directors, Inc. (CRCPD). To date, the CRCPD model regulation equivalent to part 17 has not been updated for consistency with the 2018 federal rule changes.

Commented [JSJ2]: These dates reflect anticipated adoption and effective dates based on the current rulemaking schedule. Dates are subject to change pending additional review, approvals, and department rulemaking and Board of Health schedule.

Commented [JSJ3]: Provisions are added and revised for this section for consistency with the Colorado Administrative Procedure Act (24-4-103(12.5)(a)(2), CRS).

38 incorporated by reference. Unless a prior version of the incorporated
39 material is otherwise specifically indicated, the materials incorporated by
40 reference cited herein include only those versions that were in effect as of
41 the most recent effective date of this Part 17 (October 2020), and not later
42 amendments or editions of the incorporated material.

43 **17.1.5.2** Materials incorporated by reference are available for public inspection, and
44 copies (including certified copies) can be obtained at reasonable cost,
45 during normal business hours from the Colorado Department of Public
46 Health and Environment, Hazardous Materials and Waste Management
47 Division, 4300 Cherry Creek Drive South, Denver, Colorado 80246.
48 Additionally, <https://www.colorado.gov/cdphe/radregs> identifies where the
49 incorporated material is available to the public on the internet at no cost.
50 Due to copyright restrictions, certain materials incorporated in this Part are
51 available for public inspection at the state publications depository and
52 distribution center.

53 **17.1.5.3** Availability from Source Agencies or Organizations.

54 (1) All federal agency regulations incorporated by reference herein are
55 available at no cost in the online edition of the Code of Federal
56 Regulations (CFR) hosted by the U.S. Government Printing Office,
57 online at www.govinfo.gov.

58 (2) All state regulations incorporated by reference herein are available
59 at no cost in the online edition of the Code of Colorado Regulations
60 (CCR) hosted by the Colorado Secretary of State's Office, online at
61 <https://www.sos.state.co.us/CCR/RegisterHome.do>.

62 **17.2** Definitions.

63 17.2.1 Definitions of general applicability to these regulations are in Part 1, Section 1.2.2.

64 17.2.2 Terms used in Part 17 have the definitions set forth as follows.

65 "Certificate holder" means a person who has been issued a Certificate of Compliance or other
66 package approval by the NRC.

67 "Certificate of Compliance" (COC) means the certificate issued by the NRC under subpart D of 10
68 CFR **Part** 71 which approves the design of a package for the transportation of radioactive
69 material.

70 * * *

71 Criticality Safety Index (CSI)" means the dimensionless number (rounded up to the next tenth)
72 assigned to and placed on the label of a fissile material package, to designate the degree of
73 control of accumulation of packages, overpacks, or freight containers containing fissile material
74 during transportation. Determination of the criticality safety index is described in 10 CFR **Part**
75 71.22, 71.23, and 71.59. The criticality safety index for an overpack, freight container,
76 consignment or conveyance containing fissile material packages is the arithmetic sum of the
77 criticality safety indices of all the fissile material packages contained within the overpack, freight
78 container, consignment or conveyance.

79 * * *

80 "Low specific activity material" (LSA material) means radioactive material with limited specific
81 activity which is nonfissile or is excepted under Part 17 and which satisfies the descriptions and

82 limits set forth in the following section. Shielding materials surrounding the LSA material may not
 83 be considered in determining the estimated average specific activity of the package contents. The
 84 LSA material must be in one of three groups:

85 * * *

86 (3) LSA-III. Solids (e.g., consolidated wastes, activated materials), excluding
 87 powders, that satisfy the requirements of 10 CFR **Part** 71.77, in which:

88 * * *

89 "Packaging" means the assembly of components necessary to ensure compliance with the
 90 packaging requirements of 10 CFR **Part** 71. It may consist of one or more receptacles, absorbent
 91 materials, spacing structures, thermal insulation, radiation shielding, and devices for cooling or
 92 absorbing mechanical shocks. The vehicle, tie-down system, and auxiliary equipment may be
 93 designated as part of the packaging.

94 * * *

95 "Regulations of the DOT" means the regulations in 49 CFR Parts 100-189 and Parts 390-397
 96 (~~October 1, 2016~~).

97 "Regulations of the NRC" means the regulations in 10 CFR **Part** 71 (~~January 1, 2016~~) for
 98 purposes of Part 17.

99 * * *

100 LICENSE-RELATED REGULATORY REQUIREMENTS

101 **17.3 Requirement for License.**

102 No person shall transport radioactive material or deliver radioactive material to a carrier for
 103 transport except as authorized in a general or specific license issued by the Department, an
 104 Agreement State, ~~a Licensing State~~, or NRC, or as exempted in 17.4

105 **17.4 Exemptions.**

106 17.4.1 Common and contract carriers, freight forwarders, and warehouse workers which are subject to
 107 the requirements of the DOT in 49 CFR **Part** 170 through 189, or the U.S. Postal Service in the
 108 Postal Service Manual (Domestic Mail Manual), are exempt from the requirements of Part 17 to
 109 the extent that they transport or store radioactive material in the regular course of their carriage
 110 for others or storage incident thereto. Common and contract carriers who are not subject to the
 111 requirements of the DOT or U.S. Postal Service are subject to 17.3 and other applicable
 112 requirements of these regulations.

113 * * *

114 17.4.3 Fissile materials meeting the requirements of one of the paragraphs (a) through (f) in 10 CFR
 115 **Part** 71.15 are exempt from classification as fissile material, and from the fissile material package
 116 standards of 10 CFR **Part** 71.55 and 10 CFR **Part** 71.59, but are subject to all other requirements
 117 of 10 CFR **Part** 71, except as noted in paragraphs (a) through (f) in 10 CFR **Part** 71.15.

118 * * *

119 **17.7 General License: NRC-Approved Packages.**

Commented [JSJ4]:
 This change removes a term no longer used in the current
 state or national regulatory scheme.

120 **17.7.1** A general license is hereby issued to any licensee of the Department to transport, or to deliver to
 121 a carrier for transport, licensed material in a package for which a license, ~~NRC-issued~~ Certificate
 122 of Compliance, or other approval has been issued by the ~~NRC~~ Department.

123 **17.7.2** This general license applies only to a licensee who has a quality assurance program approved by
 124 the Department as satisfying the provisions of Subpart H (excluding 71.101(c)(2), (d), and (e) and
 125 71.107 through 71.125) of 10 CFR **Part** 71.

126 17.7.3 Each licensee issued a general license under Section 17.7.1 shall:

127 17.7.3.1 Maintain a copy of the ~~NRC-issued~~ Certificate of Compliance, or other approval
 128 of the package, and the drawings and other documents referenced in the
 129 approval relating to the use and maintenance of the packaging and to the actions
 130 to be taken before shipment;

131 17.7.3.2 Comply with the terms and conditions of the license, ~~NRC-issued~~ Certificate of
 132 Compliance, or other approval **issued** by the ~~Department~~ NRC, as applicable,
 133 and the applicable requirements of Subparts A (excluding 71.11), G (excluding
 134 71.85(a)-(c), and 71.91(b)), and H (excluding 71.101(c)(2), (d), and (e) and
 135 71.107 through 71.125) of 10 CFR **Part** 71; **and**

136 **17.7.3.3** ~~Prior to the licensee's first use of the package, submit to the Department in~~
 137 ~~writing: Submit in writing before the first use of the package to: ATTN:~~
 138 ~~Document Control Desk, Director, Division of Fuel Management, Office of~~
 139 ~~Nuclear Material Safety and Safeguards, using an appropriate method~~
 140 ~~listed in 10 CFR Part 71.1(a), the licensee's name and license number and~~
 141 ~~the package identification number specified in the package approval.~~

142 ~~(1) The licensee's name and license number; and~~

143 ~~(2) The package identification number specified in the package approval.~~

144 17.7.4 The general license in 17.7.1 applies only when the package approval authorizes use of the
 145 package under this general license.

146 17.7.5 For a Type B or fissile material package, the design of which was approved by NRC before April
 147 1, 1996, the general license in 17.7.1 is subject to additional restrictions of 10 CFR **Part** 71.19.

148 17.8 General Licenses: Use of Foreign-Approved and Other Approved Packages

149 17.8.1 A general license is issued to any licensee of the Department to transport, or to deliver to a
 150 carrier for transport, licensed material in a package, the design of which has been approved in a
 151 foreign national competent authority certificate, that has been revalidated by the DOT as meeting
 152 the applicable requirements of 49 CFR **Part** 171.23.

153 **17.8.2** Except as otherwise provided in this section, the general license applies only to a licensee who
 154 has a quality assurance program approved by the Department as satisfying the applicable
 155 provisions of 10 CFR **Part** 71.101 through 71.137, excluding 71.101(c)(2), (d), and (e) and 71.107
 156 through 71.125.

157 17.8.3 This general license applies only to shipments made to or from locations outside the United
 158 States.

159 17.8.4 Each licensee issued a general license under Section 17.8.1 shall:

160 (1) Maintain a copy of the applicable certificate, the revalidation, and the drawings
 161 and other documents referenced in the certificate, relating to the use and

Commented [JSJ5]: Language is updated in 17.7 based on a prior NRC comment in correspondence dated March 8, 2018 associated with [RATS 2015-3](#), for consistency with the current [10 CFR Part 71.17](#).

The proposed language clarifies that only NRC issues the Certificate of Compliance document and grants the general license for transportation.

Provision 17.7 is also formatted for alignment.

NRC Compatibility B.

Commented [JSJ6]: Based on NRC comments in correspondence dated [April 24, 2020](#) received during the 2020 comment period, the current rule language is retained to continue to require that the Department reviews the (package) quality assurance program for a Colorado licensee.

NRC Compatibility B.

Commented [JSJ7]: For consistency with 10 CFR 71.17(c)(3), NRC comments dated [March 8, 2018](#) rescind a prior (2017) comment indicating the licensee should submit documentation to the Department before the first use of an NRC approved package. As indicated in the proposed draft language, this documentation should instead be submitted to appropriate NRC Division for review.

NRC [RATS 2019-2](#)
NRC Compatibility B.

Commented [JSJ8]: The text of provisions (1) and (2) are incorporated into 17.7.3.3 above, following the format and flow of the federal rule.

Commented [JSJ9]: Based on NRC comments in correspondence dated [April 24, 2020](#) received during the 2020 comment period, the current rule language is retained to continue to require that the Department reviews the (package) quality assurance program for a Colorado licensee.

NRC Compatibility B.

162 maintenance of the packaging and to the actions to be taken before shipment;
 163 and

164 (2) Comply with the terms and conditions of the certificate and revalidation, and with
 165 the applicable requirements of Part 17, sections 17.1 through 17.5, 17.10 through
 166 17.17, and Subparts A (excluding 71.11), G (excluding 71.85(a)-(c), and
 167 71.91(b)), and H (excluding 71.101(c)(2), (d), and (e) and 71.107 through 71.125)
 168 of 10 CFR **Part 71**.

169 17.9 General Licenses: Fissile Material Transport

170 17.9.1 A general license is hereby issued to any licensee to transport fissile material, or to deliver fissile
 171 material to a carrier for transport, if the licensee meets the requirements of 10 CFR **Part 71.22**
 172 and the material is shipped in accordance with 10 CFR **Part 71.22** and each applicable
 173 requirement of Part 17.

174 17.9.2 A general license is hereby issued to any licensee to transport fissile material in the form of
 175 plutonium-beryllium (Pu-Be) special form sealed sources, or to deliver fissile material in the form
 176 of plutonium-beryllium (Pu-Be) special form sealed sources to a carrier for transport, if the
 177 licensee meets the requirements of 10 CFR **Part 71.23** and the material is shipped in accordance
 178 with 10 CFR **Part 71.23** and each applicable requirement of Part 17.

179 QUALITY ASSURANCE

180 17.10 Quality Assurance Requirements.

181 **17.10.1** Subpart H of 10 CFR **Part 71** describes quality assurance requirements applying to design,
 182 purchase, fabrication, handling, shipping, storing, cleaning, assembly, inspection, testing,
 183 operation, maintenance, repair, and modification of components of packaging that are important
 184 to safety. As used in Subpart H of 10 CFR **Part 71**, "quality assurance" comprises all those
 185 planned and systematic actions necessary to provide adequate confidence that a system or
 186 component will perform satisfactorily in service. Quality assurance includes quality control, which
 187 comprises those quality assurance actions related to control of the physical characteristics and
 188 quality of the material or component to predetermined requirements.

Commented [JSJ10]: Language is updated in 17.10.1 to address editorial comments in NRC correspondence dated [March 8, 2018](#).

189 **17.10.2** Each licensee is responsible for satisfying the **applicable** quality assurance requirements that
 190 apply to its use of a packaging for the shipment of licensed material subject to the applicable
 191 requirements **of set forth in** Subpart H of 10 CFR **Part 71** (excluding **10 CFR 71.101(c)(2), (d),**
 192 and (e) and **10 CFR 71.107** through 71.125).

Commented [JSJ11]: Provision is numbered and language is updated in 17.10.2 to address editorial comments in NRC correspondence dated [March 8, 2018](#).

193 **17.10.3** **Before the use of any package for the shipment of licensed material subject to Subpart H**
 194 **of 10 CFR Part 71, each licensee shall obtain Department approval of its quality assurance**
 195 **program. Each licensee shall file with the Department, a description of its quality**
 196 **assurance program, including a discussion of which requirements of Subpart H of 10 CFR**
 197 **Part 71 are applicable and how they will be satisfied.**

Commented [JSJ12]: Provision added for consistency with 10 CFR Part 71.101(c)(1).

As annotated by NRC in [RATS 2019-2](#), the proposed language clarifies that for Agreement State (Colorado) licensees, the Department rather than NRC is to approve the quality assurance program before the use of a package for shipment of licensed material that is subject to the requirements of Subpart H of 10 CFR Part 71.

NRC Compatibility C.

198 17.10.24 Radiography containers.

199 A program for transport container inspection and maintenance limited to radiographic exposure
 200 devices, source changers, or packages transporting these devices and meeting the requirements
 201 of Part 5, sections 5.12(4).4 through 5.12(6).6 or equivalent Agreement State or NRC
 202 requirement, is deemed to satisfy the requirements of 17.7.2 and 10 CFR **Part 71.101(b)**.

203 **17.11 Advance Notification of Shipment of Nuclear Waste.**

Commented [JSJ13]: Section 17.11 formatted for alignment.

204 17.11.1 As specified in 17.11.3, 17.11.4, and 17.11.5, each licensee shall provide advance notification to
 205 the governor of a state, or the governor's designee, of the shipment of licensed material (nuclear

- 206 waste), within or across the boundary of the state, before the transport, or delivery to a carrier, for
 207 transport, of licensed material outside the confines of the licensee's plant or other place of use or
 208 storage.
- 209 17.11.2 As specified in 17.11.3, 17.11.4, and 17.11.5 of this section, after June 11, 2013, each licensee
 210 shall provide advance notification to the Tribal official of participating Tribes referenced in
 211 17.11.4.3(3), or the official's designee, of the shipment of licensed material, within or across the
 212 boundary of the Tribe's reservation, before the transport, or delivery to a carrier, for transport, of
 213 licensed material outside the confines of the licensee's plant or other place of use or storage.
- 214 17.11.3 Advance notification is also required under this section for the shipment of licensed material,
 215 other than irradiated fuel, meeting the following three conditions:
- 216 17.11.3.1 The licensed material is required by this part to be in Type B packaging for
 217 transportation;
- 218 17.11.3.2 The licensed material is being transported to or across a state boundary en route
 219 to a disposal facility or to a collection point for transport to a disposal facility; and
- 220 17.11.3.3 The quantity of licensed material in a single package exceeds the least of the
 221 following:
- 222 (1) 3000 times the A_1 value of the radionuclides as specified in Appendix 17A, Table
 223 A1 for special form radioactive material; or
- 224 (2) 3000 times the A_2 value of the radionuclides as specified in Appendix 17A, Table
 225 A1 for normal form radioactive material; or
- 226 (3) 1000 TBq (27,000 Ci).
- 227 17.11.4 Procedures for submitting advance notification
- 228 17.11.4.1 The notification must be made in writing to:
- 229 (1) The office of each appropriate governor or governor's designee;
- 230 (2) The office of each appropriate Tribal official or Tribal official's designee;
- 231 (3) The Department; **and**
- 232 **(4) The NRC's Director, Office of Nuclear Security and Incident Response.**
- 233 17.11.4.2 A notification delivered by mail must be postmarked at least 7 days before the
 234 beginning of the 7 day period during which departure of the shipment is
 235 estimated to occur.
- 236 17.11.4.3 A notification delivered by any other means than mail must reach the office of the
 237 governor or of the governor's designee or the Tribal official, or Tribal official's
 238 designee at least 4 days before the beginning of the 7-day period during which
 239 departure of the shipment is estimated to occur.
- 240 (1) A list of the names and mailing addresses of the governors' designees receiving
 241 advance notification of transportation of nuclear waste was published in the
 242 Federal Register on June 30, 1995 (60 FR 34306)
- 243 (2) Contact information for each State, including telephone and mailing addresses of
 244 governors and governors' designees, and participating Tribes, including

Commented [JSJ14]:

Based on NRC comments dated [April 24, 2020](#), language is modified and added to ensure the appropriate NRC office is notified of these shipments, and for consistency with 10 CFR Part 71.97.

NRC Compatibility B.
 NRC RATS 2018-2.

245 telephone and mailing addresses of Tribal officials and Tribal official's designees,
246 is available on the NRC Web site at: <https://scp.nrc.gov/special/designee.pdf>.

247 (3) A list of the names and mailing addresses of the governor's designees and Tribal
248 official's designees of participating Tribes is available on request from the
249 Director, Division of ~~Material Safety, State, Tribal, and Rulemaking~~ **Materials**
250 **Safety, Security, State, and Tribal** Programs, Office of Nuclear Material Safety
251 and Safeguards, U.S. Nuclear Regulatory Commission, Washington, DC 20555-
252 0001.

Commented [JSJ15]: Due to an NRC organizational change, the Division title is updated, consistent with the 2018 changes to [10 CFR 71.97\(c\)\(3\)\(iii\)](#).

NRC Compatibility B
NRC [RATS 2018-3](#)

253 17.11.4.4 The licensee shall retain a copy of the notification as a record for 3 years.

254 17.11.5 Information to be furnished in advance notification of shipment.

255 17.11.5.1 Each advance notification of nuclear waste shall contain the following
256 information:

257 (1) The name, address, and telephone number of the shipper, carrier, and receiver
258 of the nuclear waste shipment;

259 (2) A description of the nuclear waste contained in the shipment, as required by 49
260 CFR **Part** 172.202 and 172.203(d);

261 (3) The point of origin of the shipment and the 7-day period during which departure
262 of the shipment is estimated to occur;

263 (4) The 7-day period during which arrival of the shipment at state boundaries or
264 Tribal reservation boundaries is estimated to occur;

265 (5) The destination of the shipment, and the 7-day period during which arrival of the
266 shipment is estimated to occur; and

267 (6) A point of contact with a telephone number for current shipment information.

268 17.11.6 Revision notice

269 17.11.6.1 A licensee who finds that schedule information previously furnished to a governor
270 or governor's designee or a Tribal official or Tribal official's designee, in
271 accordance with this section, will not be met, shall:

272 (1) Telephone a responsible individual in the office of the governor of the state or of
273 the governor's designee or the Tribal official or Tribal official's designee an inform
274 that individual of the extent of the delay beyond the schedule originally reported;
275 and

276 (2) Maintain a record of the name of the individual contacted for 3 years.

277 17.11.7 Cancellation notice

278 17.11.7.1 Each licensee who cancels a nuclear waste shipment, for which advance
279 notification has been sent, shall:

280 (1) Send a cancellation notice to the governor of each state, or governor's designee
281 previously notified, each Tribal official or Tribal official's designee previously
282 notified, **the NRC's Director, Office of Nuclear Security and Incident**
283 **Response**, and to the Department;

Commented [JSJ16]: Following additional clarification from NRC this language is updated, consistent with a similar change made to 17.11.4.1(4).

284 (2) State in the notice that it is a cancellation and identify the advance notification
285 that is being cancelled; and

286 (3) Retain a copy of the notice for 3 years.
287 * * *

288 17.14 Preliminary Determinations.

289 Before the first use of any packaging for the shipment of radioactive material the licensee shall ascertain
290 that the determinations in paragraphs (a) through (c) of 10 CFR Part 71.85 have been made by the
291 certificate holder.

292 17.15 Routine Determinations.

293 * * *

294 17.15.7 Any structural part of the package which could be used to lift or tie down the package during
295 transport is rendered inoperable for the purpose unless it satisfies design requirements specified
296 in 10 CFR Part 71.45;

297 17.15.8 The level of non-fixed (removable) radioactive contamination on the external surfaces of each
298 package offered for shipment is as low as reasonably achievable and within the limits specified in
299 49 CFR Part 173.443.

300 17.15.8.1 Determination of the level of non-fixed (removable) contamination shall be based
301 upon wiping an area of 300 square centimeters of the surface concerned with an
302 absorbent material, using moderate pressure, and measuring the activity on the wiping
303 material.

304 (1) The number and location of measurements shall be sufficient to yield a
305 representative assessment of the removable contamination levels.

306 (2) Other methods of assessment of equal or greater detection efficiency may be
307 used.

308 17.15.8.2 In the case of packages transported as exclusive use shipments by rail or
309 highway only, the non-fixed (removable) radioactive contamination:

310 (1) At the beginning of transport shall not exceed the levels specified in 49 CFR Part
311 173.443; and

312 (2) At any time during transport shall not exceed 10 times the levels specified in 49
313 CFR Part 173.443.

314 17.15.9 External radiation levels around the package and around the vehicle, if applicable, shall not
315 exceed:

316 17.15.9.1 2 mSv/h (200 millirem per hour) at any point on the external surface of the
317 package at any time during transportation;

318 17.15.9.2 A transport index of 10.0.

319 17.15.10 For a package transported in exclusive use by rail, highway or water, radiation levels
320 external to the package may exceed the limits specified in 17.15.9 but shall not exceed
321 any of the following:

Commented [JSJ17]:
Sections 17.15.9 through 7.15.15 are formatted for alignment
of text.

- 322 17.15.10.1 2 mSv/h (200 millirem per hour) on the accessible external surface of the
323 package unless the following conditions are met, in which case the limit is 10
324 mSv/h (1000 millirem per hour);
- 325 (1) The shipment is made in a closed transport vehicle,
- 326 (2) Provisions are made to secure the package so that its position within the vehicle
327 remains fixed during transportation, and
- 328 (3) No loading or unloading operation occurs between the beginning and end of the
329 transportation.
- 330 17.15.10.2 2 mSv/h (200 millirem per hour) at any point on the outer surface of the vehicle,
331 including the upper and lower surfaces, or, in the case of a flat-bed style vehicle,
332 with a personnel barrier, at any point on the vertical planes projected from the
333 outer edges of the vehicle, on the upper surface of the load (or enclosure, if
334 used), and on the lower external surface of the vehicle;
- 335 (1) A flat bed style vehicle with a personnel barrier shall have radiation levels
336 determined at vertical planes.
- 337 (2) If no personnel barrier is in place, the package cannot exceed 2 mSv/h (200
338 millirem per hour) at any accessible surface.
- 339 17.15.10.3 0.1 mSv/h (10 millirem per hour) at any point 2 meters from the vertical planes
340 represented by the outer lateral surfaces of the vehicle, or, in the case of a flat-
341 bed style vehicle, at any point 2 meters from the vertical planes projected from
342 the outer edges of the vehicle; and
- 343 17.15.10.4 0.02 mSv/h (2 millirem per hour) in any normally occupied positions of the
344 vehicle, except that this provision does not apply to private motor carriers when
345 persons occupying these positions are provided with special health supervision,
346 personnel radiation exposure monitoring devices, and training in accordance with
347 10.3; and
- 348 17.15.11 For shipments made under the provisions of Section 17.15.10, the shipper shall provide
349 specific written instructions to the carrier for maintenance of the exclusive use shipment
350 controls. The instructions must be included with the shipping paper information.
- 351 17.15.12 The written instructions required for exclusive use shipments must be sufficient so that,
352 when followed, they will cause the carrier to avoid actions that will:
- 353 17.15.12.1 Unnecessarily delay delivery; or
- 354 17.15.12.2 Unnecessarily result in increased radiation levels or radiation exposures to
355 transport workers or members of the general public.
- 356 17.15.13 A package must be prepared for transport so that in still air at 100 degrees Fahrenheit
357 (38 degrees Celsius) and in the shade, no accessible surface of a package would have a
358 temperature exceeding 50 degrees Celsius (122 degrees Fahrenheit) in a nonexclusive
359 use shipment or 82 degrees Celsius (185 degrees Fahrenheit) in an exclusive use
360 shipment. Accessible package surface temperatures shall not exceed these limits at any
361 time during transportation.
- 362 17.15.14 A package may not incorporate a feature intended to allow continuous venting during
363 transport.

364 17.15.15 Before delivery of a package to a carrier for transport, the licensee shall ensure that any
 365 special instructions needed to safely open the package have been sent to the consignee,
 366 or otherwise made available to the consignee, for the consignee's use in accordance with
 367 4.32.5.2.

368 * * *

369 17.17.1.4 Type and quantity of licensed material in each package, and the total quantity of
 370 each shipment;

Commented [JSJ18]: Formatted for alignment of text.

371 * * *

372 17.17.1.10 Results of the determinations required by 17.15 and by the conditions of the
 373 package approval.

Commented [JSJ19]: Formatted for alignment of text.

374 * * *

375 **Appendix 17A - Determination of A1 and A2**

Commented [JSJ20]: Prior to final publication, ensure that Appendix 7A begins on a new page.

376 17A1 Values of A_1 and A_2 for individual radionuclides, which are the bases for many activity limits
 377 elsewhere in these regulations are given in Table 17A1. The curie (Ci) values specified are
 378 obtained by converting from the Terabecquerel (TBq) value. The Terabecquerel values are the
 379 regulatory standard. The curie values are for information only and are not intended to be the
 380 regulatory standard. Where values of A_1 or A_2 are unlimited, it is for radiation control purposes
 381 only. For nuclear criticality safety, some materials are subject to controls placed on fissile
 382 material.

383 17A2 For individual radionuclides whose identities are known, but which are:

384 17A2.1 Not listed in Table 17A1:

- 385 (1) The A_1 and A_2 values Table 17A3 may be used.
- 386 (2) Otherwise, the licensee shall obtain prior NRC approval of the A_1 and A_2 values
 387 for radionuclides not listed in Table 17A1, before shipping the material. The
 388 licensee shall submit such request for prior approval to NRC in accordance with
 389 10 CFR Part 71.1.

390 * * *

391 [NO CHANGES TO REMAINDER OF RULE OR SUBSEQUENT TABLES]
 392
 393

1 **DRAFT 2 07/30/2020**

2 **DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT**

3 **Hazardous Materials and Waste Management Division**

4 **RADIATION CONTROL – PHYSICAL PROTECTION OF CATEGORY 1 AND CATEGORY 2**
5 **QUANTITIES OF RADIOACTIVE MATERIAL**

6 **6 CCR 1007-1 Part 22**

7 *[Editor's Notes follow the text of the rules at the end of this CCR Document.]*

8 _____
9 **Adopted by the Board of Health on May 17, 2017 August 19, 2020; effective June 30, 2017 October**
10 **15, 2020.**

11 **Affected licensees shall be compliant with this Part on or before March 19, 2016**

12 **PHYSICAL PROTECTION OF CATEGORY 1 AND CATEGORY 2 QUANTITIES OF RADIOACTIVE**
13 **MATERIAL**

14 **22.1 Authority.**

15 22.1.1 Rules and regulations set forth herein are adopted pursuant to the provisions of section 25-1-108,
16 25-1.5-101(1)(k) and (1)(l), and 25-11-104, CRS.

17 **Section A – General provisions**

18 **22.2 Scope, Purpose and Applicability.**

19 [* * * INDICATES NO CHANGES TO THIS PORTION OF THE RULE]

20 * * *

21 22.2.2 Applicability.

22 22.2.2.1 ~~This Part applies~~ **Sections B and C of this part apply** to any person who, under
23 ~~these~~ regulations of ~~22.8 through 22.23~~, possesses or uses at any site, an
24 aggregated category 1 or category 2 quantity of radioactive material.

25 22.2.2.2 ~~This Part~~ **Section D of this part** applies to any person who, under ~~these~~
26 ~~regulations of 22.24 through 22.29:~~

27 (1) Transports or delivers to a carrier for transport in a single shipment, a category 1
28 or category 2 quantity of radioactive material; or

29 (2) Imports or exports a category 1 or category 2 quantity of radioactive material; the
30 provisions only apply to the domestic portion of the transport.

31 ~~22.2.2.3~~ ~~In accordance with Section 24-4-103(12.5)(c), CRS,~~
32 ~~https://www.colorado.gov/cdphe/radregs identifies where incorporated material is~~
33 ~~available to the public on the internet at no cost. If the incorporated material is not~~
34 ~~available on the internet at no cost to the public, copies of the incorporated material has~~
35 ~~been provided to the State Publications Depository and Distribution Center, also known~~
36 ~~as the State Publications Library. The State Librarian at the State Publication Library~~
37 ~~retains a copy of the material and will make the copy available to the public.~~

Commented [JSJ21]:
Editorial note 1: All comments (such as this one) shown in the right side margin of this draft document are for information purposes only to assist the reader in understanding the proposed rule change during the review and comment process. These side margin notes are **not** part of the rule and all comments will be deleted prior to publication of the final rule.

Editorial note 2: Alignment and formatting corrections and minor typographical adjustments may be made in the rule and may not be specifically identified with a side margin comment.

Editorial note 3: The acronym "RATS-20##-#" refers to the U.S. Nuclear Regulatory Commission (NRC) regulatory action tracking system. This system is used to identify and summarize changes to federal regulations that may be required for adoption by an NRC agreement state. To maintain agreement state status, Colorado's radiation regulations must be compatible with federal regulations of the NRC. NRC RATS items may be found online at https://scp.nrc.gov/rss_regamendents.html.

Colorado statute also prescribes that the radiation control regulations must be consistent with the model regulations of the Conference of Radiation Control Program Directors, Inc. (CRCPD). To date, the CRCPD model regulation equivalent to part 22 has not been updated for consistency with the 2018 or later federal rule changes.

Commented [JSJ22]: These dates reflect anticipated adoption and effective dates based on the current rulemaking schedule. Dates are subject to change pending additional review, approvals, and department rulemaking and Board of Health schedules.

Commented [JSJ23]: Here and throughout the rule, section designations (section A, section B, etc.) are added to parallel the subpart structure found in 10 CFR Part 37. These section headers are then referenced in the rule body/text, consistent with the equivalent provisions referenced in 10 CFR Part 37.

Commented [JSJ24]: Section 22.2 is formatted for alignment.

Commented [JSJ25]: This provision is replaced by the new/revised provisions in 22.2.3.

38 **22.2.3** Published material incorporated by reference.

39 **22.2.3.1** Throughout this Part 22, federal regulations, state regulations, and
40 standards or guidelines of outside organizations have been adopted and
41 incorporated by reference. Unless a prior version of the incorporated
42 material is otherwise specifically indicated, the materials incorporated by
43 reference cited herein include only those versions that were in effect as of
44 the most recent effective date of this Part 22 (October 15, 2020), and not
45 later amendments or editions of the incorporated material.

46 **22.2.3.2** Materials incorporated by reference are available for public inspection, and
47 copies (including certified copies) can be obtained at reasonable cost,
48 during normal business hours from the Colorado Department of Public
49 Health and Environment, Hazardous Materials and Waste Management
50 Division, 4300 Cherry Creek Drive South, Denver, Colorado 80246.
51 Additionally, <https://www.colorado.gov/cdphe/radregs> identifies where the
52 incorporated federal and state regulations are available to the public on the
53 internet at no cost. A copy of the materials incorporated in this Part is
54 available for public inspection at the state publications depository and
55 distribution center.

56 **22.2.3.3** Availability from Source Agencies or Organizations.

57 (1) All federal agency regulations incorporated by reference herein are
58 available at no cost in the online edition of the Code of Federal
59 Regulations (CFR) hosted by the U.S. Government Printing Office,
60 online at www.govinfo.gov.

61 (2) All state regulations incorporated by reference herein are available
62 at no cost in the online edition of the Code of Colorado Regulations
63 (CCR) hosted by the Colorado Secretary of State's Office, online at
64 <https://www.sos.state.co.us/CCR/RegisterHome.do>.

65 **22.3** Definitions.

66 * * *

67 "Approved individual" means an individual whom the licensee has determined to be trustworthy and
68 reliable for unescorted access in accordance with ~~22.8 through 22.14~~ **section B of this part** and who has
69 completed the training required by 22.16.3.

70 * * *

71 **22.4** Communications.

72 Except where otherwise specified, all communications, reports, and notifications concerning or required
73 by the regulations in this Part shall be sent **via email to CDPHE_hmrdat@state.co.us**. **Hardcopy**
74 **documents should be mailed** to Radiation Program - HMWMD, Colorado Department of Public Health
75 and Environment, 4300 Cherry Creek Drive South, Denver, CO 80246-1530.

76 **22.5** Reserved.

77 **22.6** Specific Exemptions.

78 **22.6.1** The Department may, upon application of any interested person or upon its own initiative, grant
79 such exemptions from the requirements of the regulations in this Part as it determines are

Commented [JSJ26]:
Provisions in section 22.2.3, are revised and amended for consistency with the Colorado Administrative Procedure Act (24-4-103(12.5)(a)(2), CRS) regarding documents incorporated by reference.

Commented [JSJ27]:
As the department is continuing to move towards less paper documents, this provision updated to include an email address where documents may be sent.

Commented [JSJ28]: Language revised as Colorado may not have the authority specified in the original language.

80 authorized by law and will not endanger life or property or the ~~common defense and~~
81 ~~security~~**physical protection of material**, and are otherwise in the public interest.

82 22.6.2 A licensee that possesses radioactive waste that contains category 1 or category 2 quantities of
83 radioactive material is exempt from the requirements of ~~22.8 through 22.29~~**sections B, C and D**
84 **of this part**. Except that any radioactive waste that contains discrete sources, ion-exchange
85 resins, or activated material that weighs less than 2,000 kg (4,409 lbs) is not exempt from the
86 requirements of this Part. The licensee shall implement the following requirements to secure the
87 radioactive waste:

- 88 A. Use continuous physical barriers that allow access to the radioactive waste only through
89 established access control points;
- 90 B. Use a locked door or gate with monitored alarm at the access control point;
- 91 C. Assess and respond to each actual or attempted unauthorized access to determine
92 whether an actual or attempted theft, sabotage, or diversion occurred; and
- 93 D. Immediately notify the LLEA and request an armed response from the LLEA upon
94 determination that there was an actual or attempted theft, sabotage, or diversion of the
95 radioactive waste that contains category 1 or category 2 quantities of radioactive
96 material.

97 **22.7 Reserved**

98 ~~Background Investigations and Access Authorization Program~~**Section B – Background investigations**
99 ~~and access authorization program~~

100 **22.8 Personnel Access Authorization Requirements for Category 1 or Category 2 Quantities of** 101 **Radioactive Material.**

102 22.8.1 General.

- 103 A. Each licensee that possesses an aggregated quantity of radioactive material at or above
104 the category 2 threshold shall establish, implement, and maintain its access authorization
105 program in accordance with the requirements of **section B** of this Part.
- 106 B. An applicant for a new license and each licensee that would become newly subject to the
107 requirements of this ~~Part~~**section B** upon application for modification of its license shall
108 implement the requirements of this ~~section B~~**Part**, as appropriate, before taking
109 possession of an aggregated category 1 or category 2 quantity of radioactive material.
- 110 C. Any licensee that has not previously implemented the NRC Security Orders or been
111 subject to the provisions of ~~22.8 through 22.14~~**this section B** shall implement the
112 provisions of ~~22.8 through 22.14~~**this section B** before aggregating radioactive material to
113 a quantity that equals or exceeds the category 2 threshold.

114 * * *

- 115 D. Licensees may include individuals needing access to safeguards information-modified
116 handling under 10 CFR Part 73 in the access authorization program under **section B** of
117 ~~this Part~~**22.8 through 22.14**.

118 **22.9 Access Authorization Program Requirements.**

119 22.9.1 Granting unescorted access authorization.

- 120 A. Licensees shall implement the requirements of **section B** of this Part for granting initial
121 or reinstated unescorted access authorization.
- 122 B. Individuals who have been determined to be trustworthy and reliable shall also complete
123 the security training required by 22.16.3 before being allowed unescorted access to
124 category 1 or category 2 quantities of radioactive material.
- 125 22.9.2 Reviewing officials.
- 126 A. Reviewing officials are the only individuals who may make trustworthiness and reliability
127 determinations that allow individuals to have unescorted access to category 1 or category
128 2 quantities of radioactive materials possessed by the licensee.
- 129 **B.** Each licensee shall name one or more individuals to be reviewing officials. After
130 completing the background investigation on the reviewing official, the licensee shall
131 provide under oath or affirmation, a certification that the reviewing official is deemed
132 trustworthy and reliable by the licensee. **Provide oath or affirmation certifications to**
133 **the Department.** The fingerprints of the named reviewing official must be taken by a law
134 enforcement agency, Federal or State agencies that provide fingerprinting services to the
135 public, or commercial fingerprinting services authorized by a State to take fingerprints.
136 The licensee shall re-certify that the reviewing official is deemed trustworthy and reliable
137 every 10 years in accordance with 22.10.3.
- 138 **1. The oath or affirmation certifications required by 22.9.2.B shall be provided**
139 **to the Department within 30 days of naming a new or additional individual**
140 **as a reviewing official.**
- 141 **2. The licensee shall notify the Department in writing within 30 days of**
142 **revoking a reviewing official certification.**
- 143 C. Reviewing officials must be permitted to have unescorted access to category 1 or
144 category 2 quantities of radioactive materials or access to safeguards information or
145 safeguards information-modified handling, if the licensee possesses safeguards
146 information or safeguards information modified handling.
- 147 D. Reviewing officials cannot approve other individuals to act as reviewing officials.
- 148 E. A reviewing official does not need to undergo a new background investigation before
149 being named by the licensee as the reviewing official if:
- 150 1. The individual has undergone a background investigation that included
151 fingerprinting and an FBI criminal history records check and has been
152 determined to be trustworthy and reliable by the licensee; or
- 153 2. The individual is subject to a category listed in 22.12.1.
- 154 22.9.3 Informed consent.
- 155 A. Licensees may not initiate a background investigation without the informed and signed
156 consent of the subject individual. This consent must include authorization to share
157 personal information with other individuals or organizations as necessary to complete the
158 background investigation. Before a final adverse determination, the licensee shall provide
159 the individual with an opportunity to correct any inaccurate or incomplete information that
160 is developed during the background investigation. Licensees do not need to obtain
161 signed consent from those individuals that meet the requirements of 22.10.2. A signed
162 consent must be obtained prior to any reinvestigation.

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This provision is updated to add clarifying language regarding submission of documentation, consistent with the intent of the 2018 amendments to [10 CFR Part 37.23\(b\)\(2\)](#).

Although the proposed language is new to Part 22, the requirement for submission of the reviewing official documentation and notification to the department has been in effect for a number of years through existing licensing activities.

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- 163 B. The subject individual may withdraw his or her consent at any time. Licensees shall
164 inform the individual that:
- 165 1. If an individual withdraws his or her consent, the licensee may not initiate any
166 elements of the background investigation that were not in progress at the time
167 the individual withdrew his or her consent; and
- 168 2. The withdrawal of consent for the background investigation is sufficient cause for
169 denial or termination of unescorted access authorization.
- 170 22.9.4 Personal history disclosure.
- 171 A. Any individual who is applying for unescorted access authorization shall disclose the
172 personal history information that is required by the licensee's access authorization
173 program for the reviewing official to make a determination of the individual's
174 trustworthiness and reliability. Refusal to provide, or the falsification of, any personal
175 history information required by **section B of this Part** is sufficient cause for denial or
176 termination of unescorted access.
- 177 22.9.5 Determination basis.
- 178 A. The reviewing official shall determine whether to permit, deny, unfavorably terminate,
179 maintain, or administratively withdraw an individual's unescorted access authorization
180 based on an evaluation of all of the information collected to meet the requirements of
181 **section B of this Part**.
- 182 B. The reviewing official may not permit any individual to have unescorted access until the
183 reviewing official has evaluated all of the information collected to meet the requirements
184 of **section B of this Part** and determined that the individual is trustworthy and reliable.
185 The reviewing official may deny unescorted access to any individual based on
186 information obtained at any time during the background investigation.
- 187 * * *
- 188 22.9.6 Procedures.
- 189 A. Licensees shall develop, implement, and maintain written procedures for implementing
190 the access authorization program. The procedures must include provisions for the
191 notification of individuals who are denied unescorted access. The procedures must
192 include provisions for the review, at the request of the affected individual, of a denial or
193 termination of unescorted access authorization. The procedures must contain a provision
194 to ensure that the individual is informed of the grounds for the denial or termination of
195 unescorted access authorization and allow the individual an opportunity to provide
196 additional relevant information.
- 197 22.9.7 Right to correct and complete information.
- 198 A. Prior to any final adverse determination, licensees shall provide each individual subject to
199 **section B of this Part**~~22.9 through 22.14~~ with the right to complete, correct, and explain
200 information obtained as a result of the licensee's background investigation. Confirmation
201 of receipt by the individual of this notification must be maintained by the licensee for a
202 period of 1 year from the date of the notification.
- 203 B. If, after reviewing his or her criminal history record, an individual believes that it is
204 incorrect or incomplete in any respect and wishes to change, correct, update, or explain
205 anything in the record, the individual may initiate challenge procedures. These
206 procedures include direct application by the individual challenging the record to the law

207 enforcement agency that contributed the questioned information or a direct challenge as
 208 to the accuracy or completeness of any entry on the criminal history record to the Federal
 209 Bureau of Investigation, Criminal Justice Information Services (CJIS) Division, ATTN:
 210 SCU, Mod. D-2, 1000 Custer Hollow Road, Clarksburg, WV 26306 as set forth in 28 CFR
 211 **Part** 16.30 through 16.34. In the latter case, the Federal Bureau of Investigation (FBI) will
 212 forward the challenge to the agency that submitted the data, and will request that the
 213 agency verify or correct the challenged entry. Upon receipt of an official communication
 214 directly from the agency that contributed the original information, the FBI Identification
 215 Division makes any changes necessary in accordance with the information supplied by
 216 that agency. Licensees must provide at least 10 days for an individual to initiate action to
 217 challenge the results of an FBI criminal history records check after the record being made
 218 available for his or her review. The licensee may make a final adverse determination
 219 based upon the criminal history records only after receipt of the FBI's confirmation or
 220 correction of the record.

221 * * *

222 22.10 Background Investigations.

223 22.10.1 Initial investigation.

- 224 A. Before allowing an individual unescorted access to category 1 or category 2 quantities of
 225 radioactive material or to the devices that contain the material, licensees shall complete a
 226 background investigation of the individual seeking unescorted access authorization. The
 227 scope of the investigation must encompass at least the 7 years preceding the date of the
 228 background investigation or since the individual's eighteenth birthday, whichever is
 229 shorter. The background investigation must include at a minimum:
- 230 1. Fingerprinting and an FBI identification and criminal history records check in
 231 accordance with 22.11;
 - 232 2. Verification of true identity. Licensees shall verify the true identity of the individual
 233 who is applying for unescorted access authorization to ensure that the applicant
 234 is who he or she claims to be. A licensee shall review official identification
 235 documents (e.g., driver's license; passport; government identification; certificate
 236 of birth issued by the state, province, or country of birth) and compare the
 237 documents to personal information data provided by the individual to identify any
 238 discrepancy in the information. Licensees shall document the type, expiration,
 239 and identification number of the identification document, or maintain a photocopy
 240 of identifying documents on file in accordance with 22.13. Licensees shall certify
 241 in writing that the identification was properly reviewed, and shall maintain the
 242 certification and all related documents for review upon inspection;
 - 243 3. Employment history verification. Licensees shall complete an employment history
 244 verification, including military history. Licensees shall verify the individual's
 245 employment with each previous employer for the most recent 7 years before the
 246 date of application;
 - 247 4. Verification of education. Licensees shall verify that the individual participated in
 248 the education process during the claimed period;
 - 249 5. Character and reputation determination. Licensees shall complete reference
 250 checks to determine the character and reputation of the individual who has
 251 applied for unescorted access authorization. Unless other references are not
 252 available, reference checks may not be conducted with any person who is known
 253 to be a close member of the individual's family, including but not limited to the
 254 individual's spouse, parents, siblings, or children, or any individual who resides in
 255 the individual's permanent household. Reference checks under **section B** of this

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 Section 22.10.1 is modified for formatting to remove unneeded spaces.

Note that these changes are not shown by strikeout or other indicators.

- 256 Part must be limited to whether the individual has been and continues to be
257 trustworthy and reliable;
- 258 6. The licensee shall also, to the extent possible, obtain independent information to
259 corroborate that provided by the individual (e.g., seek references not supplied by
260 the individual); and
- 261 7. If a previous employer, educational institution, or any other entity with which the
262 individual claims to have been engaged fails to provide information or indicates
263 an inability or unwillingness to provide information within a time frame deemed
264 appropriate by the licensee but at least after 10 business days of the request or if
265 the licensee is unable to reach the entity, the licensee shall document the refusal,
266 unwillingness, or inability in the record of investigation; and attempt to obtain the
267 information from an alternate source.

268 22.10.2 Grandfathering.

- 269 A. Individuals who have been determined to be trustworthy and reliable for unescorted
270 access to category 1 or category 2 quantities of radioactive material under the fingerprint
271 Orders or equivalent Agreement State requirements may continue to have unescorted
272 access to category 1 and category 2 quantities of radioactive material without further
273 investigation. These individuals shall be subject to the reinvestigation requirement.
- 274 B. Individuals who have been determined to be trustworthy and reliable under the provisions
275 of 10 CFR Part 73 or the security orders for access to safeguards information,
276 safeguards information-modified handling, or risk-significant material may have
277 unescorted access to category 1 and category 2 quantities of radioactive material without
278 further investigation. The licensee shall document that the individual was determined to
279 be trustworthy and reliable under the provisions of 10 CFR Part 73 or a security order.
280 Security order, in this context, refers to any order that was issued by the NRC that
281 required fingerprints and an FBI criminal history records check for access to safeguards
282 information, safeguards information-modified handling, or risk significant material such as
283 special nuclear material or large quantities of uranium hexafluoride. These individuals
284 shall be subject to the reinvestigation requirement.

285 22.10.3 Reinvestigations.

- 286 A. Licensees shall conduct a reinvestigation every 10 years for any individual with
287 unescorted access to category 1 or category 2 quantities of radioactive material. The
288 reinvestigation shall consist of fingerprinting and an FBI identification and criminal history
289 records check in accordance with 22.11. The reinvestigations must be completed within
290 10 years of the date on which these elements were last completed.

291 **22.11 Requirements for Criminal History Records Checks of Individuals Granted Unescorted**
292 **Access to Category 1 or Category 2 Quantities of Radioactive Material.**

293 22.11.1 General performance objective and requirements.

- 294 A. Except for those individuals listed in 22.12 and those individuals grandfathered under
295 22.10.2., each licensee subject to the provisions of **section B** of this Part shall fingerprint
296 each individual who is to be permitted unescorted access to category 1 or category 2
297 quantities of radioactive material. Licensees shall transmit all collected fingerprints to the
298 U.S. Nuclear Regulatory Commission for transmission to the FBI. The licensee shall use
299 the information received from the FBI as part of the required background investigation to
300 determine whether to grant or deny further unescorted access to category 1 or category 2
301 quantities of radioactive materials for that individual.

302

* * *

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This section (22.10.2) modified for formatting to remove
unneded spaces.

303 D. Fingerprints do not need to be taken if an individual who is an employee of a licensee,
 304 contractor, manufacturer, or supplier has been granted unescorted access to category 1
 305 or category 2 quantities of radioactive material, access to safeguards information, or
 306 safeguards information-modified handling by another licensee, based upon a background
 307 investigation conducted under **section B** of this Part, the Fingerprint Orders, or 10 CFR
 308 Part 73. An existing criminal history records check file may be transferred to the licensee
 309 asked to grant unescorted access in accordance with the provisions of 22.13.3.

310 * * *

311 22.11.2 Prohibitions.

312 * * *

313 B. Licensees may not use information received from a criminal history records check
 314 obtained under **section B** of this Part in a manner that would infringe upon the rights of
 315 any individual under the First Amendment to the Constitution of the United States, nor
 316 shall licensees use the information in any way that would discriminate among individuals
 317 on the basis of race, religion, national origin, gender, or age.

318 22.11.3 Procedures for processing of fingerprint checks.

319 ~~A. For the purpose of complying with this Part, licensees shall submit to the U.S. Nuclear
 320 Regulatory Commission, Director, Division of Facilities and Security, 11545 Rockville
 321 Pike, Rockville, MD 20852-2738, ATTN: Criminal History Program, Mail Stop TWB-05
 322 B32M, one completed, legible standard fingerprint card (Form FD-258,
 323 ORIMDNRCOOOZ), electronic fingerprint scan or, where practicable, other fingerprint
 324 record for each individual requiring unescorted access to category 1 or category 2
 325 quantities of radioactive material. Copies of these forms may be obtained by writing the
 326 Office of the Chief Information Officer, U.S. Nuclear Regulatory Commission,
 327 Washington, DC 20555-0001, by calling 1-630-829-9565, or by email to
 328 FORMS.Resource@nrc.gov. Guidance on submitting electronic fingerprints can be found
 329 at <http://www.nrc.gov/site-help/e-submittals.html>. For the purposes of complying with
 330 this section B, licensees shall use an appropriate method listed in 10 CFR Part 37.7
 331 to submit to the U.S. Nuclear Regulatory Commission, Director, Division of
 332 Physical and Cyber Security Policy, 11545 Rockville Pike, ATTN: Criminal History
 333 Program/Mail Stop T-8B20, Rockville, MD 20852, one completed, legible standard
 334 fingerprint card (Form FD-258, ORIMDNRCOOOZ), electronic fingerprint scan or,
 335 where practicable, other fingerprint record for each individual requiring unescorted
 336 access to category 1 or category 2 quantities of radioactive material. Copies of
 337 these forms may be obtained by emailing MAILSVS.Resource@nrc.gov. Guidance
 338 on submitting fingerprints can be found at <https://www.nrc.gov/security/chp.html>.~~

339 ~~B. Fees for the processing of fingerprint checks are due upon application. Licensees shall
 340 submit payment with the application for the processing of fingerprints through corporate
 341 check, certified check, cashier's check, money order, or electronic payment, made
 342 payable to "U.S. NRC." (For guidance on making electronic payments, contact the
 343 Security Branch, Division of Facilities and Security at 304-492-3531.) (For guidance on
 344 making electronic payments, contact the Division of Physical and Cyber Security
 345 Policy by e-mailing Crimhist.Resource@nrc.gov.) Combined payment for multiple
 346 applications is acceptable. The U.S. Nuclear Regulatory Commission publishes the
 347 amount of the fingerprint check application fee on the NRC's public Web site. (To find the
 348 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
 349 Submission Systems.) (To find the current fee amount, go to the Licensee Criminal
 350 History Records Checks & Firearms Background Check information page at
 351 <https://www.nrc.gov/security/chp.html> and see the link for How do I determine how
 352 much to pay for the request?).~~

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This provision is amended for consistency with the November 18, 2019 technical corrections to [10 CFR Part 37.27\(c\)\(1\)](#), due to changes in NRC organizational structure and contact information.

Licensees will use this updated information in order to submit fingerprinting information to NRC.

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This provision is amended for consistency with the November 18, 2019 technical corrections to 10 CFR Part 37.27(c)(2), due to changes in NRC organizational structure and contact information.

Licensees will require this updated information in order to submit payment for fingerprinting processing.

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354 C. The U.S. Nuclear Regulatory Commission will forward to the submitting licensee all data
 355 received from the FBI as a result of the licensee's application(s) for criminal history
 356 records checks.

357 **22.12 Relief from Fingerprinting, Identification, and Criminal History Records Checks and Other**
 358 **Elements of Background Investigations for Designated Categories of Individuals Permitted**
 359 **Unescorted Access to Certain Radioactive Materials.**

360 22.12.1 Fingerprinting, and the identification and criminal history records checks required by
 361 section 149 of the Atomic Energy Act of 1954, as amended, and other elements of the
 362 background investigation are not required for the following individuals prior to granting
 363 unescorted access to category 1 or category 2 quantities of radioactive materials:

364 A. An employee of the Commission or of the Executive Branch of the U.S. Government who
 365 has undergone fingerprinting for a prior U.S. Government criminal history records check;

366 B. A Member of Congress;

367 C. An employee of a member of Congress or Congressional committee who has undergone
 368 fingerprinting for a prior U.S. Government criminal history records check;

369 D. The Governor of a State or his or her designated State employee representative;

370 E. Federal, State, or local law enforcement personnel;

371 F. State Radiation Control Program Directors and State Homeland Security Advisors or their
 372 designated State employee representatives;

373 G. Agreement State employees conducting security inspections on behalf of the NRC under
 374 an agreement executed under section 274.i. of the Atomic Energy Act;

375 H. Representatives of the International Atomic Energy Agency (IAEA) engaged in activities
 376 associated with the U.S./IAEA Safeguards Agreement who have been certified by the
 377 NRC;

378 I. Emergency response personnel who are responding to an emergency;

379 J. Commercial vehicle drivers for road shipments of category 1 and category 2 quantities of
 380 radioactive material;

381 K. Package handlers at transportation facilities such as freight terminals and railroad yards;

382 L. Any individual who has an active Federal security clearance, provided that he or she
 383 makes available the appropriate documentation. Written confirmation from the
 384 agency/employer that granted the Federal security clearance or reviewed the criminal
 385 history records check must be provided to the licensee. The licensee shall retain this
 386 documentation for a period of 3 years from the date the individual no longer requires
 387 unescorted access to category 1 or category 2 quantities of radioactive material; and

388 M. Any individual employed by a service provider licensee for which the service provider
 389 licensee has conducted the background investigation for the individual and approved the
 390 individual for unescorted access to category 1 or category 2 quantities of radioactive
 391 material. Written verification from the service provider must be provided to the licensee.
 392 The licensee shall retain the documentation for a period of 3 years from the date the
 393 individual no longer requires unescorted access to category 1 or category 2 quantities of
 394 radioactive material.

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The following sections are formatted for alignment of text and
 to remove unneeded spaces:

22.12.1
 22.12.2

- 395 22.12.2 Fingerprinting, and the identification and criminal history records checks required by
 396 section 149 of the Atomic Energy Act of 1954, as amended, are not required for an
 397 individual who has had a favorably adjudicated U.S. Government criminal history records
 398 check within the last 5 years, under a comparable U.S. Government program involving
 399 fingerprinting and an FBI identification and criminal history records check provided that
 400 he or she makes available the appropriate documentation. Written confirmation from the
 401 agency/employer that reviewed the criminal history records check must be provided to
 402 the licensee. The licensee shall retain this documentation for a period of 3 years from the
 403 date the individual no longer requires unescorted access to category 1 or category 2
 404 quantities of radioactive material. These programs include, but are not limited to:
- 405 A. National Agency Check;
- 406 B. Transportation Worker Identification Credentials (TWIC) under 49 CFR ~~part~~**Part** 1572;
- 407 C. Bureau of Alcohol, Tobacco, Firearms, and Explosives background check and clearances
 408 under 27 CFR ~~part~~**Part** 555;
- 409 D. Health and Human Services security risk assessments for possession and use of select
 410 agents and toxins under 42 CFR ~~part~~**Part** 73;
- 411 E. Hazardous Material security threat assessment for hazardous material endorsement to
 412 commercial driver's license under 49 CFR ~~part~~**Part** 1572; and
- 413 F. Customs and Border Protection's Free and Secure Trade (FAST) Program.
- 414 **22.13 Protection of Information.**
- 415 22.13.1 Each licensee who obtains background information on an individual under **section B of**
 416 this Part shall establish and maintain a system of files and written procedures for
 417 protection of the record and the personal information from unauthorized disclosure.
- 418 22.13.2 The licensee may not disclose the record or personal information collected and
 419 maintained to persons other than the subject individual, his or her representative, or to
 420 those who have a need to have access to the information in performing assigned duties
 421 in the process of granting or denying unescorted access to category 1 or category 2
 422 quantities of radioactive material, safeguards information, or safeguards information-
 423 modified handling. No individual authorized to have access to the information may
 424 disseminate the information to any other individual who does not have a need to know.
- 425 22.13.3 The personal information obtained on an individual from a background investigation may
 426 be provided to another licensee:
- 427 A. Upon the individual's written request to the licensee holding the data to disseminate the
 428 information contained in his or her file; and
- 429 B. The recipient licensee verifies information such as name, date of birth, social security
 430 number, gender, and other applicable physical characteristics.
- 431 22.13.4 The licensee shall make background investigation records obtained under **section B of**
 432 this Part available for examination by an authorized representative of the Department to
 433 determine compliance with the regulations and laws.
- 434 22.13.5 The licensee shall retain all fingerprint and criminal history records (including data
 435 indicating no record) received from the FBI, or a copy of these records if the individual's
 436 file has been transferred, on an individual for 3 years from the date the individual no

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The following sections are formatted for alignment of text and to remove unneeded spaces:

22.13.1
 22.13.2
 22.13.3
 22.13.4
 22.13.5

437 longer requires unescorted access to category 1 or category 2 quantities of radioactive
438 material.

439 **22.14 Access Authorization Program Review.**

440 22.14.1 Each licensee shall be responsible for the continuing effectiveness of the access
441 authorization program. Each licensee shall ensure that access authorization programs
442 are reviewed to confirm compliance with the requirements of **section B of this Part** and
443 that comprehensive actions are taken to correct any noncompliance that is identified. The
444 review program shall evaluate all program performance objectives and requirements.
445 Each licensee shall periodically (at least annually) review the access program content
446 and implementation.

447 22.14.2 The results of the reviews, along with any recommendations, must be documented. Each
448 review report must identify conditions that are adverse to the proper performance of the
449 access authorization program, the cause of the condition(s), and, when appropriate,
450 recommend corrective actions, and corrective actions taken. The licensee shall review
451 the findings and take any additional corrective actions necessary to preclude repetition of
452 the condition, including reassessment of the deficient areas where indicated.

453 22.14.3 Review records must be maintained for 3 years.

454 ~~Physical Protection Requirements During Use~~ **Section C – Physical protection requirements during**
455 **use**

456 **22.15 Security Program.**

457 22.15.1 Applicability.

- 458 A. Each licensee that possesses an aggregated category 1 or category 2 quantity of
459 radioactive material shall establish, implement, and maintain a security program in
460 accordance with the requirements of **section C of this Part**.
- 461 B. An applicant for a new license and each licensee that would become newly subject to the
462 requirements of **section C of this Part** upon application for modification of its license
463 shall implement the requirements of **section C of this Part**, as appropriate, before taking
464 possession of an aggregated category 1 or category 2 quantity of radioactive material.
- 465 C. Any licensee that has not previously implemented the Security Orders or **been subject**
466 **to** equivalent Agreement State requirements or been subject to **section C of this**
467 **Part 22.15 through 22.23** shall provide written notification to the Department to the
468 address specified in 22.4 at least 90 days before aggregating radioactive material to a
469 quantity that equals or exceeds the category 2 threshold.

470 * * *

471 **22.16 General Security Program Requirements.**

472 22.16.1 Security plan.

473 A. Each licensee identified in 22.15.1. shall develop a written security plan specific to its
474 facilities and operations. The purpose of the security plan is to establish the licensee's
475 overall security strategy to ensure the integrated and effective functioning of the security
476 program required by **section C of this Part**. The security plan must, at a minimum:

- 477 1. Describe the measures and strategies used to implement the requirements of
478 **section C of this Part**; and

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The following sections are formatted for alignment of text and
to remove unneeded spaces:

22.14.1
22.14.2

- 479 2. Identify the security resources, equipment, and technology used to satisfy the
480 requirements of **section C** of this Part.
- 481 B. The security plan must be reviewed and approved by the individual with overall
482 responsibility for the security program.
- 483 C. A licensee shall revise its security plan as necessary to ensure the effective
484 implementation of Department requirements. The licensee shall ensure that:
- 485 1. The revision has been reviewed and approved by the individual with overall
486 responsibility for the security program; and
- 487 2. The affected individuals are instructed on the revised plan before the changes
488 are implemented.
- 489 D. The licensee shall retain a copy of the current security plan as a record for 3 years after
490 the security plan is no longer required. If any portion of the plan is superseded, the
491 licensee shall retain the superseded material for 3 years after the record is superseded.
- 492 22.16.2 Implementing procedures.
- 493 A. The licensee shall develop and maintain written procedures that document how the
494 requirements of **section C** of this Part and the security plan will be met.
495
- 496 * * *
- 497 **22.16.4** Protection of information.
- 498 A. Licensees authorized to possess category 1 or category 2 quantities of radioactive
499 material shall limit access to and unauthorized disclosure of their security plan,
500 implementing procedures, and the list of individuals that have been approved for
501 unescorted access.
- 502 B. Efforts to limit access shall include the development, implementation, and maintenance of
503 written policies and procedures for controlling access to, and for proper handling and
504 protection against unauthorized disclosure of, the security plan ~~and~~ implementing
505 procedures, **and the list of individuals that have been approved for unescorted**
506 **access.**
- 507 C. Before granting an individual access to the security plan, ~~or~~ implementing procedures, **or**
508 **the list of individuals that have been approved for unescorted access**, licensees
509 shall:
- 510 1. Evaluate an individual's need to know the security plan, ~~or~~ implementing
511 procedures, **or the list of individuals that have been approved for**
512 **unescorted access**; and
- 513 2. If the individual has not been authorized for unescorted access to category 1 or
514 category 2 quantities of radioactive material, safeguards information, or
515 safeguards information-modified handling, the licensee must complete a
516 background investigation to determine the individual's trustworthiness and
517 reliability. A trustworthiness and reliability determination shall be conducted by
518 the reviewing official and shall include the background investigation elements
519 contained in 22.10.1.A.2. through 22.10.1.A.7.

Commented [JSJ37]:

New (repeated) language is added to several provisions in 22.16.4 for consistency with the 2018 amendments to [10 CFR Part 37.43](#).

The amended language provides clarification that the list of approved individuals must be maintained in a secure manner similar to other security related documents and information.

Licensees will be required to make minor changes to their security plan and/or procedures as a result of this change.

NRC Compatibility C
NRC [RATS 2018-3](#)

- 520 D. Licensees need not subject the following individuals to the background investigation
- 521 elements for protection of information:
- 522 1. The categories of individuals listed in 22.12.1.A. through 22.12.1.M; or
- 523 2. Security service provider employees, provided written verification that the
- 524 employee has been determined to be trustworthy and reliable, by the required
- 525 background investigation in 22.10.1.A.2 through 22.10.1.A.7, has been provided
- 526 by the security service provider.

527 **E.** The licensee shall document the basis for concluding that an individual is trustworthy and

528 reliable and should be granted access to the security plan, ~~or~~ implementing procedures,

529 **or the list of individuals that have been approved for unescorted access.**

Commented [JSJ38]:
New language added for consistency with the 2018 amendments to [10 CFR Part 37.43\(d\)\(5\)](#).

NRC Compatibility C
NRC [RATS 2018-3](#)

530 F. Licensees shall maintain a list of persons currently approved for access to the security

531 plan ~~or~~ implementing procedures, **or the list of individuals that have been approved**

532 **for unescorted access.** When a licensee determines that a person no longer needs

533 access to the security plan, ~~or~~ implementing procedures, **or the list of individuals that**

534 **have been approved for unescorted access,** or no longer meets the access

535 authorization requirements for access to the information, the licensee shall remove the

536 person from the approved list as soon as possible, but no later than 7 working days, and

537 take prompt measures to ensure that the individual is unable to obtain the security plan,

538 ~~or~~ implementing procedures, **or the list of individuals that have been approved for**

539 **unescorted access.**

540 G. When not in use, the licensee shall store its security plan, ~~and~~ implementing procedures,

541 **and the list of individuals that have been approved for unescorted access** in a

542 manner to prevent unauthorized access. Information stored in nonremovable electronic

543 form must be password protected.

544 H. The licensee shall retain as a record for 3 years after the document is no longer needed:

- 545 1. A copy of the information protection procedures; and
- 546 2. The list of individuals approved for access to the security plan, ~~or~~ implementing
- 547 procedures, **or the list of individuals that have been approved for**
- 548 **unescorted access.**

549 **22.17 LLEA Coordination.**

Commented [JSJ39]:
This section is formatted for alignment of text and elimination of blank lines/space.

550 **22.17.1** A licensee subject to **section C of** this Part shall coordinate, to the extent practicable,

551 with an LLEA for responding to threats to the licensee's facility, including any necessary

552 armed response. The information provided to the LLEA must include:

Commented [JSJ40]:
Clarifying language added to parallel the subpart reference found in [10 CFR Part 37.45](#).

553 A. A description of the facilities and the category 1 and category 2 quantities of radioactive

554 materials along with a description of the licensee's security measures that have been

555 implemented to comply with **section C of** this Part; and

556 B. A notification that the licensee will request a timely armed response by the LLEA to any

557 actual or attempted theft, sabotage, or diversion of category 1 or category 2 quantities of

558 material.

559 * * *

560 **22.19 Monitoring, Detection, and Assessment.**

561 22.19.1 Monitoring and detection.

562

* * *

563 C. A licensee subject to **section C of** this Part shall also have a means to detect
564 unauthorized removal of the radioactive material from the security zone. This detection
565 capability must provide:

566

* * *

567 **22.20 Maintenance and Testing.**

568 22.20.1 Each licensee subject to **section C of** this Part shall implement a maintenance and
569 testing program to ensure that intrusion alarms, associated communication systems, and other
570 physical components of the systems used to secure or detect unauthorized access to radioactive
571 material are maintained in operable condition and are capable of performing their intended
572 function when needed. The equipment relied on to meet the security requirements of this Part
573 must be inspected and tested for operability and performance at the manufacturer's suggested
574 frequency. If there is no suggested manufacturer's suggested frequency, the testing must be
575 performed at least annually, not to exceed 12 months.

576 22.20.2 The licensee shall maintain records on the maintenance and testing activities for 3 years.

577

* * *

578 **22.22 Security Program Review.**

579 22.22.1 Each licensee shall be responsible for the continuing effectiveness of the security
580 program. Each licensee shall ensure that the security program is reviewed to confirm compliance
581 with the requirements of **section C of** this Part and that comprehensive actions are taken to
582 correct any noncompliance that is identified. The review must include the radioactive material
583 security program content and implementation. Each licensee shall periodically (at least annually)
584 review the security program content and implementation.

585

* * *

586 ~~Physical Protection in Transit~~ **Section D – Physical protection in transit**

587 **22.24 Additional Requirements for Transfer of Category 1 and Category 2 Quantities of** 588 **Radioactive Material.**

589

* * *

590 **22.25 Applicability of Physical Protection of Category 1 and Category 2 Quantities of Radioactive** 591 **Material During Transit.**

592 22.25.1 For shipments of category 1 quantities of radioactive material, each shipping licensee
593 shall comply with the requirements for physical protection contained in 22.26.1. and 22.26.5.;
594 22.27; 22.28.1.A., 22.28.2.A. and 22.28.3.; and 22.29.1., 22.29.3., 22.29.5., 22.29.7., and
595 22.29.8.

596 22.25.2 For shipments of category 2 quantities of radioactive material, each shipping licensee
597 shall comply with the requirements for physical protection contained in 22.26.2. through 22.26.5.;
598 22.28.1.B., 22.28.1.C., 22.28.2.B., and 22.28.3.; and 22.29.2., 22.29.4., 22.29.6., 22.29.7., and
599 22.29.8. For those shipments of category 2 quantities of radioactive material that meet the criteria
600 of Part 17, Section 17.11, the shipping licensee shall also comply with the advance notification
601 provisions of Part 17, Section 17.11.

602 22.25.3 The shipping licensee shall be responsible for meeting the requirements of **section D of**
 603 **this part 22.24 through 22.29** unless the receiving licensee has agreed in writing to arrange for
 604 the in-transit physical protection required under **section D of this part 22.24 through 22.29**.

605

* * *

606 **22.27 Advance Notification of Shipment of Category 1 Quantities of Radioactive Material.**

607 22.27.1 As specified in 22.27.1.A. and 22.27.1.B., each licensee shall provide advance
 608 notification to the Department and the governor of a State, or the governor's designee, of
 609 the shipment of licensed material in a category 1 quantity, through or across the
 610 boundary of the State, before the transport, or delivery to a carrier for transport of the
 611 licensed material outside the confines of the licensee's facility or other place of use or
 612 storage.

613 A. Procedures for submitting advance notification.

614 1. The notification **must be made to the Department and** to the office of each
 615 appropriate governor or governor's designee. **The contact information,**
 616 **including telephone and mailing addresses, of governors and governors'**
 617 **designees,** is available on the NRC's Web site at
 618 *https://scp.nrc.gov/special/designee.pdf*. A list of the contact information is also
 619 available upon request from the Director, Division of **Material Safety, State,**
 620 **Tribal, and Rulemaking Materials Safety, Security, State, and Tribal** Programs,
 621 Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory
 622 Commission, Washington, DC 20555-0001. The notification to the Department
 623 must be made **by email** to the address specified in 22.4.

624 2. A notification delivered by mail must be postmarked at least 7 days before
 625 transport of the shipment commences at the shipping facility.

626 3. A notification delivered by any means other than mail must reach **the** Department
 627 at least 4 days before the transport of the shipment commences and must reach
 628 the office of the governor or the governor's designee at least 4 days before
 629 transport of a shipment within or through the State.

630 B. Information to be furnished in advance notification of shipment. Each advance notification
 631 of shipment of category 1 quantities of radioactive material must contain the following
 632 information, if available at the time of notification:

633 1. The name, address, and telephone number of the shipper, carrier, and receiver
 634 of the category 1 radioactive material;

635 2. The license numbers of the shipper and receiver;

636 3. A description of the radioactive material contained in the shipment, including the
 637 radionuclides and quantity;

638 4. The point of origin of the shipment and the estimated time and date that shipment
 639 will commence;

640 5. The estimated time and date that the shipment is expected to enter each State
 641 along the route;

642 6. The estimated time and date of arrival of the shipment at the destination; and

643 7. A point of contact, with a telephone number, for current shipment information.

Commented [JSJ41]:
 Consistent with the Agreement State note regarding NRC
[RATS 2018-3](#), licensees must provide the notification to the
 Department and not NRC.

The updated RATS 2018-3 note negates direction in NRC
 correspondence to CO dated [March 8, 2018](#) regarding NRC
[RATS 2015-5](#).

The amended language also incorporates clarifying
 information for electronic and paper submissions to the
 department.

NRC Compatibility B.

- 644 C. Revision notice.
- 645 1. The licensee shall provide any information not previously available at the time of
- 646 the initial notification, as soon as the information becomes available but not later
- 647 than commencement of the shipment, to the governor of the State or the
- 648 governor's designee, and to the Department.
- 649 2. A licensee shall promptly notify the governor of the State or the governor's
- 650 designee of any changes to the information provided in accordance with
- 651 22.27.1.B and 22.27.1.C.1 of this section. The licensee shall also immediately
- 652 notify the Department of any such changes.
- 653 D. Cancellation notice. Each licensee who cancels a shipment for which advance notification
- 654 has been sent shall send a cancellation notice to the governor of each State or to the
- 655 governor's designee previously notified and to the Department. The licensee shall send
- 656 the cancellation notice before the shipment would have commenced or as soon thereafter
- 657 as possible. The licensee shall state in the notice that it is a cancellation and identify the
- 658 advance notification that is being cancelled.
- 659 E. Records. The licensee shall retain a copy of the advance notification and any revision
- 660 and cancellation notices as a record for 3 years.
- 661 F. Protection of information. State officials, State employees, and other individuals, whether
- 662 or not licensees of NRC or an Agreement State, who receive schedule information of the
- 663 kind specified in 22.27.1.B shall protect that information against unauthorized disclosure
- 664 as specified in 22.16.4.

665 * * *

666 ~~Records~~Section E - Records

667 **22.30 Form of Records.**

668 22.30.1 Each record required by this Part must be legible throughout the retention period

669 specified by each Department regulation. The record may be the original or a reproduced copy or

670 a microform, provided that the copy or microform is authenticated by authorized personnel and

671 that the microform is capable of producing a clear copy throughout the required retention period.

672 The record may also be stored in electronic media with the capability for producing legible,

673 accurate, and complete records during the required retention period. Records such as letters,

674 drawings, and specifications, must include all pertinent information such as stamps, initials, and

675 signatures. The licensee shall maintain adequate safeguards against tampering with and loss of

676 records.

677 **22.31 Record Retention.**

678 22.31.1 Licensees shall maintain the records that are required by the regulations in this Part for

679 the period specified by the appropriate regulation. If a retention period is not otherwise specified,

680 these records must be retained until the Department terminates the facility's license. All records

681 related to this Part may be destroyed upon Department termination of the facility license.

682 ~~Enforcement~~Section F - Enforcement

683 **22.32 Inspections.**

684 * * *

685 [NO FURTHER CHANGES TO RULE AFTER THIS POINT]