

Protecting, maintaining and improving the health of all Minnesotans

December 23, 2014

Legislative Reference Library 645 State Office Building 100 Constitution Avenue St. Paul, Minnesota 55155

Dear Librarian:

Subject:

In The Matter of the Proposed Rules of the Department of Health Governing

Radioactive Materials; Revisor's ID Number RD4233

The Minnesota Department of Health intends to adopt rules governing radioactive materials. We plan to publish a Notice of Intent to Adopt Rules without a Public Hearing in the December 29, 2014 State Register.

The Department has prepared a Statement of Need and Reasonableness. As required by Minnesota Statutes, sections 14.131 and 14.23, the Department is sending the Library an electronic copy of the Statement of Need and Reasonableness at the same time we are mailing our Notice of Intent to Adopt Rules.

If you have questions, please contact me at 651-201-4526.

Sincerely,

Brandon Juran, Radiation Protection Specialist

Radioactive Materials Unit

PO Box 64975

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Enclosure: Statement of Need and Reasonableness

Minnesota Department of Health Environmental Health Division Indoor Environments and Radiation Section

STATEMENT OF NEED AND REASONABLENESS

Proposed Amendment to Rules Governing Radioactive Materials, *Minnesota Rules*, Chapter 4731

The Minnesota Department of Health (MDH or Department) proposes to amend Chapter 4731 to reflect the U.S. Nuclear Regulatory Commission's (NRC's) recent regulation changes. The proposed changes are necessary to conform to US Nuclear Regulatory Commission regulations.

The proposed rule changes also include Minnesota Department of Health-initiated changes to clarify existing requirements, and to correct editorial issues.

INTRODUCTION

By an agreement with the NRC, the State of Minnesota regulates byproduct, source, and special nuclear material. Essentially, this means that Minnesota now regulates radioactive material within the state. As a result, the licensees, which include hospitals and clinics, manufacturing facilities, engineering companies, and universities and colleges in Minnesota, benefit from reduced fees. The agreement does not cover nuclear-power-plant regulation, radioactive material used at facilities under exclusive federal jurisdiction, exempt-quantities distribution, or sealed-sources or devices evaluation. The NRC still performs these functions exclusively.

Minnesota and other states that have entered into this type of agreement are known as "Agreement States." The Agreement requires Minnesota to have rules that are compatible with NRC regulations. When the NRC makes regulation changes, the Agreement States have a set period of time to bring their rules likewise up to date. The NRC categorizes their regulations by level of compatibility required. Some categories require strict adherence while others allow states flexibility in their rules.

The following summarizes the NRC's eight federal regulation changes that MDH proposes to incorporate in this rule revision and includes the *Federal Register* citation.

1. Decommissioning Planning, 76 FR 35512. The purpose is to improve decommissioning planning to reduce the likelihood that a current operating facility will become a legacy site. A legacy site is a facility that is in decommissioning status with complex issues and an owner who cannot complete the decommissioning work for technical or financial reasons. The new provision requires licensees to minimize the introduction of residual radioactivity into the site, including subsurface soils and groundwater. They may be required to perform surveys to determine if radioactivity is present in subsurface areas. The rule changes also require licensees to report additional details in their decommissioning cost estimate (DCE). Also, financial assurance instrument requirements are being updated.

- 2. Licenses, Certifications, and Approvals for Materials Licenses, 76 FR 56951. This clarifies the definitions of "construction" and "commencement of construction" to improve the effectiveness and efficiency of the licensing and approval process and eliminate inconsistencies in those definitions.
- 3. Change of Compatibility of 10 CFR 31.5 and 31.6 in the Withdrawal of Proposed Rule and Closure of Petition for Rulemaking: Organization of Agreement States and Florida Department of Health, Bureau of Radiation Control, 77 FR 3640. This changes the compatibility category for 10 CFR 31.5 and 31.6 from Category B to Category C. No changes to the regulations were made.
- 4. Advance Notification to Native American Tribes of Transportation of Certain Types of Nuclear Waste, 77 FR 34194. This requires licensees to provide advance notice to Tribal governments regarding shipments of certain nuclear wastes for shipments passing within or across their reservations.
- 5. Technical Corrections Parts 30, 34, 40, and 71, 77 FR 39899. This corrects some typographical errors.
- 6. Requirements for Distribution of Byproduct Material, Parts 30, 31, 32, 40, and 70, 77 FR 43666. This redefines categories of devices people may use under exemptions, adds flexibility for licensing users of sealed sources and devices, and removes prescriptive requirements for distributers of generally licensed devices.
- 7. Physical Protection of Byproduct Material, 10 CFR Parts 20, 30, 32, 33, 34, 35, 36, 37, 39, 51, 71, and 73, 78 FR 16922. This establishes security requirements for certain risk significant quantities of radioactive material (category 1 and category 2).
- 8. Distribution of Source Material to Exempt Persons and to General Licensees and Revision of General License and Exemptions 10 CFR Parts 30, 40, 70, 170, and 171, 78 FR 32310. This adds a requirement that distributors have a specific license to initially distribute source material to general licensees with new reporting requirements, modifies existing possession and use requirements of the general license for small quantities of source material, and clarifies or deletes certain source material exemptions from licensing to make the exemption more risk-informed.

A detailed summary and discussion of the NRC changes can be found in the *Federal Register* pages listed above, which can be accessed online from the Government Printing Office, *Federal Register* website at http://www.gpo.gov/fdsys/search/submitcitation.action?publication=FR. [From the main page select the desired volume (number preceding FR), and enter the page number (number following FR)].

In addition to the above, the Department proposes changes that clarify existing requirements, and correct editorial issues. Those proposed changes are listed below in the Rule-by-Rule Analysis section.

ALTERNATIVE FORMAT

Upon request, this Statement of Need and Reasonableness can be made available in an alternative format, such as large print, Braille, or cassette tape. To make such a request, please contact:

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Phone: (651) 201-4522 FAX: (651) 201-3999

STATUTORY AUTHORITY

Minnesota Statutes, sections 144.1201 through 144.1205 authorize the Department to enter into an agreement with the NRC to assume regulatory authority over certain nuclear materials. These sections also authorize rulemaking to allow Minnesota to assume regulatory authority under the agreement with the NRC. This rulemaking amends rules adopted since 1995. Previous rulemaking satisfied the requirements of *Minnesota Statutes*, section 14.125, so the Department retains its rulemaking authority for making these amendments.

REGULATORY ANALYSIS

The Department is amending its rules to correct errors; address inconsistencies; remove redundant language; and reflect recent NRC regulation changes. These changes maintain standards necessary to promote and protect the radiological health and safety of the public, employees' health and safety, and the safety of the environment. The proposed rule changes establish requirements that are an integral element in the Agreement State process.

Minnesota Statutes, section 14.131, sets out eight factors for a regulatory analysis that must be included in the SONAR. Paragraphs (1) through (8) below quote these factors and then provide the agency's response.

"(1) a description of the classes of persons who probably will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule."

The rules in general affect MDH radioactive material licensees. The extent to which the proposed changes will affect a licensee will depend on the type of license the licensee has and the material it possesses.

Ultimately, the largest group affected by these rules is the Minnesota general public since the purpose of the rules is to protect both licensees and the general public from unwanted or unsafe exposures to radioactive materials.

"(2) 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."

The increased cost of enforcement is negligible. The cost of enforcement of the rules is already funded through annual statutory fees. The Department will require no additional revenues to enforce these rules.

"(3) a determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule."

The NRC requires that MDH adopt the proposed rules compatible NRC's regulations. MDH has little discretion in considering methods that would be less restrictive to the regulated parties. The majority of the other changes are intended to make the requirements more understandable, thereby improving compliance.

"(4) a description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule."

Rather than amending the rules to maintain compatibility with the NRC and other Agreement States, the Department could terminate its agreement with the NRC, which would allow NRC to reclaim its regulatory role. If that action were taken, however, Minnesota would lose the control it holds at present and the state's licensees would pay higher fees.

"(5) the probable costs of complying with the proposed rule."

Most of the proposed changes are minor in nature and will have a nominal cost for licensees. The most significant change is the NRC's new Part 37, which requires additional security measures for higher activity material. Licensees that will be required to meet these additional security measures already meet most of the requirements in complying with the increased control orders.

"(6) the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals."

If the State does not adopt the rule changes required for compatibility, our rules would not meet the NRC's compatibility requirements, which the State agreed to when it became an Agreement Radioactive Materials SONAR

State. The NRC could ultimately end the agreement and reclaim regulatory control, costing the State the annual fees that licensees would then pay to the federal government, which are typically higher than the Minnesota fees.

"(7) an assessment of any differences between the proposed rule and existing federal regulations and a specific analysis of the need for and reasonableness of each difference."

The majority of the differences between the proposed rule changes and the federal regulations are those necessary to conform to Minnesota rulemaking format.

"(8) an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule. . . . 'Cumulative effect' means the impact that results from incremental impact of the proposed rule in addition to other rules, regardless of what state or federal agency has adopted the other rules. Cumulative effects can result from individually minor but collectively significant rules adopted over a period of time."

The Department is not aware of any other regulations related to the specific purpose of the rule.

The proposed rules need to be compatible with the NRC's regulation in the Code of Federal Regulations Chapter 10 (10 CFR). Though the proposed regulations are similar to corresponding regulations in 10 CFR, the effect is not cumulative. The material that falls under the agreement between the NRC and Minnesota is covered by Minnesota rules and not the NRC regulations, so licensees in the state follow Minnesota Rules Chapter 4731, not the corresponding parts of 10 CFR. For material not covered by the agreement (e.g. distribution of exempt material and the nuclear power plants) the opposite is true, they follow 10 CFR, not Chapter 4731.

PERFORMANCE-BASED RULES

As stated above, the proposed rules are based on federal regulations that the Department is contractually required to adopt. The Department thus has little flexibility in designing these rules.

ADDITIONAL NOTICE

The Department will provide all notices required by statute. The proposed rules and Notice of Intent to Adopt will be sent to everyone who has registered to be on the Department's rulemaking mailing list under Minnesota Statutes, section 14.14, subdivision 1a. We will also give notice to the Legislature per Minnesota Statutes, section 14.116.

Also, when the Department publishes the Notice of Intent to Adopt in the State Register, the Department will provide a copy of the Notice to the 164 facilities that have an MDH-specific radioactive materials license, and the 53 that have a general license that requires registration. It will also send the Notice to the NRC and other agreement state licensees that have filed for Radioactive Materials SONAR

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reciprocity within Minnesota. The notice will also be posted on the Radioactive Materials page of the MDH website. The facilities that will receive a mailed notice include medical facilities, colleges and universities, research facilities, and industrial users.

CONSULTATION WITH MMB ON LOCAL GOVERNMENT IMPACT

As required by Minnesota Statutes, section 14.131, the Department will consult with Minnesota Management and Budget (MMB). We will do this by sending MMB copies of the documents that we send to the Governor's Office for review and approval on the same day we send them to the Governor's office. We will do this before the Department's publishing the Notice of Intent to Adopt. The documents will include: the Governor's Office Proposed Rule and SONAR Form; the proposed rules; and the SONAR. The Department will submit a copy of the cover correspondence and any response received from Minnesota Management and Budget to OAH with the documents it submits for ALJ review.

DETERMINATION ABOUT RULES REQUIRING LOCAL IMPLEMENTATION

As required by Minnesota Statutes, section 14.128, subdivision 1, the agency has considered whether these proposed rules will require a local government to adopt or amend any ordinance or other regulation in order to comply with these rules. The agency has determined that they do not because these rules amend a regulatory framework for the Department's oversight of radioactive materials under its agreement with the NRC. All regulatory functions are performed within the Department of Health and do not require local government enforcement.

Furthermore, the affected licensees are parties such as hospitals and clinics, manufacturing facilities, engineering companies, and universities and colleges in Minnesota. These parties are almost exclusively privately owned entities or individuals. While there are publicly owned entities, any action required by these parties' governing boards would be ministerial in nature and not require a local government to adopt or amend an ordinance or other regulation. During the rulemaking process, the Department received no comments that suggested that the rule would be affected in such a way that would require local governments to adopt or amend any ordinance or other regulation.

COST OF COMPLYING FOR SMALL BUSINESS OR CITY

As required by Minnesota Statues, section 14.127, MDH has considered whether the cost of complying with the proposed rules in the first year after the rules take effect will exceed \$25,000 for any small business or small city. MDH has determined that it will not. This determination mirrors the probable costs of complying with the proposed rule, as described in the Regulatory Analysis section of this SONAR on page 4.

LIST OF WITNESSES

MDH does not plan to call non-agency witnesses to testify if these rules were to go to a public hearing. In that event, Sherrie Flaherty, Supervisor of the Radioactive Materials Unit, Minnesota Department of Health would testify briefly about the rule amendments' development and content.

RULE-BY-RULE ANALYSIS

As previously indicated, most of the proposed rule changes are required to meet the compatibility requirements with the NRC regulations. The NRC categorizes rules that are adopted by states as A, B, C, D, or Health and Safety (H&S) compatibility. The following describes the NRC's various categories:

- A = Basic radiation protection standard or related definitions, signs, labels, or terms necessary for the common understanding of radiation protection principles. The state program element should be essentially identical to that of the NRC.
- B = Program element with significant direct trans-boundary implications. The state program element should be essentially identical to that of NRC.
- C = Program element, the essential objectives of which should be adopted by the state to avoid conflicts, duplications, or gaps. The manner in which the essential objectives are addressed need not be the same as NRC, provided the essential objectives are met.
- D = Not required for compatibility purposes.
- H&S = Program element with a particular health and safety significance. The state should adopt the essential objectives of such program elements in order to maintain an adequate program.

A table correlating the NRC rules to the proposed rule changes and indicating the compatibility level of each rule is included as Exhibit 1 of this SONAR.

The following changes are MDH-initiated rather than being NRC-driven.

4731.0355 Reciprocity.

The Department revised this section to make the requirements clearer and to change the reciprocity period from "in a one-year period" to "in a calendar year". MDH reordered the requirements to distinguish between the initial application for reciprocity and the notification of work locations once reciprocity is approved. Also, MDH removed the general license for persons installing or servicing generally licensed devices from this part. Since these persons are allowed by 4731.3220 to do this work without applying for reciprocity, repeating these requirements in this part caused confusion because it raised the question of whether reciprocity is required, when it is not.

Changing the reciprocity period from "in a one-year period" to "in a calendar year" is necessary to be consistent with the language in statute (144.1205 Subd. 8). It will also allow for easier tracking of reciprocity expirations and to sync the NRC reciprocity inspection performance standards, which are tracked on a calendar year, with the reciprocity period.

4731.1010 Posting Worker Notices.

This part requires posting certain documents, including enforcement documents, issued by MDH to the licensee. This revision conforms the part to language MDH uses in its enforcement program: "correction order" instead of "notice of violation" and "administrative penalty order" instead of "civil penalty."

4731.2620 Reports; Radiation Exposures, Levels, and Concentrations Exceeding Constraints or Limits.

This part currently requires licensees to report to MDH the name, *social security number*, and date of birth of any occupationally overexposed individual. [emphasis supplied] MDH does not need to require these individuals' social security number and is removing that requirement.

4731.2650 Reports; Individual Monitoring.

This part requires certain licensees to report individual monitoring results to MDH on an annual basis. MDH does not use this information and has no reason to receive it, so MDH is repealing this part. MDH looks at individual monitoring results during routine inspections of licensees. Also, licensees are required to report if any individual exceeds the annual dose limits.

4731.3065 Specific License Application.

The MDH-initiated change is in Subpart 1, which requires licensees to file applications for a radioactive materials license in duplicate. MDH does not need a second copy of the application, so "in duplicate" is being removed.

4731.3145 Exempt Quantities.

MDH plans to remove Carbon-11, Nitrogen-13, Oxygen-15, and Radium-226 from the exempt quantity list to be compatible with the NRC's regulations. With the Energy Policy Act of 2005, these radionuclides fall under the agreement between Minnesota and the NRC. Since the NRC has not established exempt limits for these radionuclides, MDH must remove these from our exempt quantity list to be consistent.

4731.3215 General License; Detecting, Measuring, Gauging, Controlling, and Other Devices.

These changes correct incorrect references.

4731.3250 General License; Certain Items and Self-Luminous Products Containing Radium-226.

This part was changed to fix an incorrect reference.

4731.3520 Specific License of Broad Scope; Application.

This part requires licensees to file applications for a radioactive materials license of broad scope in duplicate. MDH does not need a second copy of the application, so "in duplicate" is being removed.

4731.4010 Specific License; Application.

As in changes included above, this part requires licensee file applications for a radioactive materials license for industrial radiography in duplicate. MDH does not need a second copy of the application, so MDH is removing "in duplicate."

4731.4421 Calibration of Survey Requirements.

This amendment clarifies the requirement for survey meter calibrations by changing the intervals to be "not to exceed 12 months" instead of "annually." Calibrating survey instruments at intervals not to exceed 12 months is the industry standard.

4731.4612 Training for Individuals Functioning as a Nuclear Medicine Technologist Before January 1, 2011, Who Are Not Accredited.

This part allows non-accredited nuclear medicine technologists to continue working without accreditation. These individuals are required to obtain continuing education equivalent to those who are accredited. When this rule part was originally written, the requirement for continuing education included the phrase "on nuclear medicine." The accrediting organizations allow some continuing education related to the job that is not necessarily directly on nuclear medicine (for example patient care). MDH is removing the phrase "on nuclear medicine" to make it clear that the non-accredited technologists can count these continuing education credits, just as the accredited individuals can.

LIST OF EXHIBITS

1. Correlation of Department Rules to NRC Regulations and Compatibility Classification

CONCLUSION

Based on the foregoing, the proposed rule changes are both needed and reasonable.

Date

Ed Ehlinger Commissioner

12/14/14

Exhibit 1

Correlation of Department Rules to NRC Regulations and Compatibility Classification

MN Rule Part	Title	10 CFR	Compatibility
4731.0100	Definitions		
Subp. 4b	Access Control	37.5	С
Subp. 9a	Aggregated	37.5	С
Subp. 16a	Approved individual	37.5	В
Subp. 24a	Background investigation	37.5	С
Subp. 33a	Category 1 quantity of radioactive material	37.5	В
Subp. 33b	Category 2 quantity of radioactive material	37.5	В
Subp. 33c	Certificate holder	71.4	В
Subp. 33d	Certificate of compliance	71.4	В
Subp. 40	Commencement of construction	30.4, 36.2	D
Subp. 44a	Construction	30.4, 36.2	D
Subp. 44b	Containment system	71.4	D
Subp. 63a	Diversion	37.5	С
Subp. 75a	Escorted access	37.5	В
Subp. 83a	Fingerprint orders	37.5	С
Subp. 100a	Indian tribe	71.4	В
Subp. 118a	License issuing authority	37.5	D
Subp. 121b	Local law enforcement agency or LLEA	37.5	С
Subp. 144a	Mobile device	37.5	В
Subp. 146a	Movement control center	37.5	В
Subp. 152a	No-later-than arrival time	37.5	В
Subp. 205a	Reviewing official	37.5	С
Subp. 207a	Sabotage	37.5	С
Subp. 207b	Safe haven	37.5	В
Subp. 210a	Security zone	37.5	С
Subp. 237a	Telemetric position monitoring system	37.5	В
Subp. 247a	Tribal official	71.4	В
Subp. 248a	Trustworthiness and reliability	37.5	В
Subp. 253a	Unescorted access	37.5	В
Subp. 253b	Unirradiated uranium	71.4	В
Subp. 255	Unrefined and unprocessed ore	40.4	В
4731.0355	Reciprocity	150.20	C
Subp. 1	Application; recognition		
Subp. 2	Review and inspection		

Subp. 3	Notification		
4731.0419	Advance Notification of Shipment of Irradiated Reactor Fuel and Nuclear Waste	71.97	В
Subp. 1	Notice required		
Subp. 2	Shipments requiring notice		
Subp. 3	Procedures for submitting notification		
Subp. 4	Information to be furnished in advance notification of shipment		
Subp. 5	Revision notice		
Subp. 6	Cancellation notice		
4731.0422	A1 and A2 Values for Radionuclides	Part 71 Appendix A	В
Subp. 1a	A1 and A2 values		
Subp. 2	Specific activity		
4731.0580	Application; Financial Assurance and Record Keeping for Decommissioning	70.25	D
Subp. 4	Funding plan requirements		
Subp. 4a	Resubmittal of decommissioning funding plan		
4731.0597	Inalienability of Licenses	70.36	C
4731.0725	Exemption; Unimportant Quantities of Source Material	40.13	В
Subp. 3	Certain items and materials		
4731.0745	General License; Small Quantities of Source Material	40.22	B (except as noted)
Subp. 1	General license issued		
Subp. 2	Other law		D (Item D only)
Subp. 2a	Contamination		C
Subp. 3	Exemption		
Subp. 4	Transfer authorization required		
4731.0780	Financial Assurance and Record Keeping for Decommissioning	40.36	H&S
Subp. 4	Funding plan requirements		
4731.0810	Inalienability of Licenses	40.46	C
4731.0816	License to transfer source material	40.54	В
4731.0817	Requirements for labeling source material; instructions	40.55	B (except as noted)
Subp. 1	Label required		
Subp. 2	Transfer records		
Subp. 3	Transfer information		

Subp. 4	Transfer report		
Subp. 5	Records retention		С
4731.1010	Posting worker notices	19.11	C
Subp. 1	Required postings		
Subp. 4	Correction order and APO		
4731.2100	Radiological Criteria for License Termination		
Subp. 3	Criteria for termination under restricted conditions	20.1403	С
Subp. 4	Alternative criteria for license termination	20.1404	С
4731.2150	Minimization of Contamination	20.1406	C
4731.2200	Surveys and Monitoring	20.1501	H&S
Subp. 1	Required surveys		
4731.2620	Reports; Radiation Exposures, Levels, and Concentrations Exceeding Constraints or Limits	20.2203	С
Subp. 3	Individual information		
4731.3020	Exemption; Carriers	30.13	В
4731.3030	Exemption; Certain Items Containing Radioactive Material	30.15	В
Subp. 1	Exempt products		
4731.3045	Exemption; self-luminous products Containing Tritium, Krypton-85, or Promethium-147	30.19	В
Subp. 2	Specific license required		
4731.3050	Exemption; Gas and Aerosol Detectors Containing Radioactive Material	30.20	В
Subp. 1	specific ficense exemption		
Subp. 2	Specific license required		
4731.3056	Exemption ; Certain Industrial Devices	30.22	В
Subp. 1	Specific license exemption		
Subp. 2	Specific license required		
4731.3065	Specific License; Application	30.32	D (except as noted)
Subp. 1	General requirements		
Subp. 2	Sealed source requirements		С
Subp. 3	Decommissioning requirements		
4731.3070	Specific License; Approval	30.33	D (except as noted)
Subp. 1	Application		C (Items B and C only)
Subp. 2	License		

4731.3075	Terms and Conditions of License	30.34	C (except as noted)
Subp. 2	Transfer prohibited		
Subp. 4	Bankruptcy		H&S
4731.3080	Financial Assurance and Record Keeping for Decommissioning	30.35	H&S
Subp. 5	Funding plan requirements		
4731.3145	Exempt Quantities	30.71	В
4731.3215	General License; Detecting, Measuring, Gauging, Controlling, and Other Devices	31.5	C
Subp. 3	Requirements		
Subp. 3a	Registration of generally licensed devices		
4731.3240	General License; Strontium-90 Ice Detection Devices	31.10	В
Subp. 2	Requirements		
4731.3250	General License; Certain Items and Self- Luminous Products Containing Radium-226	31.12	C
Subp. 2	Exempt provisions		
4731.3300	Specific Domestic Licenses to Manufacture or Transfer Certain Items Containing Radioactive Material	32.1	D
Subp. 1	Scope		
Subp. 2	Applicability		
4731.3330	Specific License; Certain Devices Containing Radioactive Materials; Manufacture or Initial Transfer	32.51	В
Subp. 1	Approval criteria		
4731.3345	Specific License; Luminous Safety Devices; Manufacture, Assemble, Repair, or Initial Transfer		
Subp. 1	Approval criteria	32.53	В
Subp. 4	Quality assurance; transfer prohibition	32.55	В
Subp. 5	Transfer reports	32.56	В
4731.3365	Specific License; Calibration or Reference Sources; Manufacture or Initial Transfer		
Subp. 1	Approval criteria	32.57	В
Subp. 3	Leak testing	32.59	В
4731.3380	Specific License; Ice Detection Devices; Manufacture or Initial Transfer		
Subp. 1	Approval criteria	32.61	В
Subp. 2	Quality assurance; transfer prohibition	32.62	В
4731.3400	Specific License; Sources or Devices for	32.74	В

	Medical Use; Manufacture and Distribution		
Subp. 1	Approval criteria		
4731.3520	Specific License of Broad Scope; Application	33.12	D
4731.4010	Specific License; Application	34.11	D
4731.4421	Calibration of Survey Instruments	35.61	H&S
4731.4612	Training for Individuals Functioning as a Nuclear Medicine Technologist Before January 1, 2011, Who Are Not Accredited	N/A	MDH Only
Subp. 4	Continuing education		
4731.6020	Specific License; Approval	36.13	H&S
4731.7020	Specific License; Well Logging	39.13	H&S
4731.8000	Applicability; Category 1 or Category 2 Quantities of Radioactive Material	37.3	D
4731.8005	Exemption for Waste	37.11	В
4731.8010	Personnel Access Authorization Requirements for Category 1 or Category 2 Quantities of Radioactive Material	37.21	B (except as noted)
Subp. 1	General		С
Subp. 2	General performance objective		
Subp. 3	Applicability		
4731.8015	Access Authorization Program Requirements	37.23	B (except as noted)
Subp. 1	Granting unescorted access authorization		
Subp. 2	Reviewing officials		C (Item C only)
Subp. 3	Informed consent		
Subp. 4	Personal history disclosure		
Subp. 5	Determination basis		
Subp. 6	Procedures		С
Subp. 7	Right to correct and complete information		
Subp. 8	Records		C .
4731.8020	Background Investigations	37.25	B (except as noted)
Subp. 1	Initial investigation		
Subp. 2	Grandfathering		С
Subp. 3	Reinvestigations		
4731.8025	Requirements for Criminal History Records Checks of Individuals Granted Unescorted Access to Category 1 or Category 2 Quantities of Radioactive Material	37.27	В
Subp. 1	General performance objective and		

	requirements		
Subp. 2	Prohibitions		
Subp. 3	Procedures for processing of fingerprint checks		
4731.8030	Relief From Fingerprinting, Identification, and Criminal History Records Checks and Other Elements of Background Investigations for Designated Categories of Individuals Permitted Unescorted Access to Certain Radioactive Materials	37.29	В
Subp. 1	Exemption to certain security checks		
Subp. 2	Additional exemption		
4731.8035	Protection of Information	37.31	B (except C for Item E)
4731.8040	Access Authorization Program Review	37.33	C
4731.8050	Security Program	37.41	B (except as noted)
Subp. 1	Applicability		
Subp. 2	General performance objective		
Subp. 3	Program features		С
4731.8055	General Security Program Requirements	37.43	B (except as noted)
Subp. 1	Security plan		
Subp. 2	Implementing procedures		С
Subp. 3	Training		C (Item D only)
Subp. 4	Protection of information		С
4731.8060	Local Law Enforcement Agency (LLEA) Coordination	37.45	B (except C for Item C)
4731.8065	Security Zones	37.47	В
4731.8070	Monitoring, Detection, and Assessment	37.49	В
Subp. 1	Monitoring and detection		
Subp. 2	Assessment		
Subp. 3	Personnel communications and data transmission		
Subp. 4	Response		
4731.8075	Maintenance and Testing	37.51	C
4731.8080	Requirements for Mobile Devices	37.53	В
4731.8085	Security Program Review	37.55	C
4731.8090	Reporting of Events	37.57	C
4731.8100	Additional Requirements for Transfer of Category 1 and Category 2 Quantities of	37.71	B (except C for Item D)

	Radioactive Material		
4731.8105	Applicability of Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material During Transit	37.73	В
4731.8110	Preplanning and Coordination of Shipment of Category 1 or Category 2 Quantities of Radioactive Material	37.75	B (except C for item E)
4731.8115	Advance Notification of Shipment of Category 1 Quantities of Radioactive Material	37.77	B (except as noted)
Subp. 1	Advanced notification required		
Subp. 2	Procedures for submitting advance notification		
Subp. 3	Information to be furnished in advance notification of shipment		
Subp. 4	Revision notice		
Subp. 5	Cancellation notice		
Subp. 6	Records		С
4731.8120	Requirements for Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material During Shipment	37.79	В
Subp. 1	Shipments by road		<u>·</u>
Subp. 2	Shipments by rail		
Subp. 3	Investigations		
4731.8125	Reporting of Events	37.81	B (except C for Items G and H)
4731.8130	Form of Records	37.101	C
4731.8135	Records Retention	37.103	C
4731.8140	Category 1 and Category 2 Radioactive Materials	Part 37 Appendix A	В
Subp. 1	Table 1 – category 1 and category 2 threshold		
Subp. 2	Calculations concerning multiple sources or multiple radionuclides		