WSR 23-21-001
PERMANENT RULES
DEPARTMENT OF
SOCIAL AND HEALTH SERVICES
(Developmental Disabilities Administration)
[Filed October 4, 2023, 12:05 p.m., effective November 4, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: The developmental disabilities administration (DDA) amended WAC 388-823-1096 to add the federal medicaid requirements for integrated settings under 42 C.F.R. 441.301 (c)(4) directly into DDA's rules. DDA amended WAC 388-823-1095 to clarify that the integrated settings requirements establish rights in addition to those established under chapter 71A.26 RCW.

Citation of Rules Affected by this Order: Amending WAC 388-823-1095 and 388-823-1096.

Statutory Authority for Adoption: RCW 71A.12.030, 71A.26.040.

Other Authority: RCW 71A.26.030; 42 C.F.R. 441.301 (c)(4).

Adopted under notice filed as WSR 23-16-103 on July 31, 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 1, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 2, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 2, Repealed 0.

Date Adopted: October 4, 2023.

Katherine I. Vasquez
Rules Coordinator

SHS-4979.3

AMENDATORY SECTION (Amending WSR 21-03-003, filed 1/7/21, effective 2/7/21)

WAC 388-823-1095 What are a person's rights as a DDA client or eligible person? (1) The following definitions apply to this section:

(a) "Administration" means the division of the department responsible for providing services to eligible persons, but does not include the division of the department responsible for the licensing and certification of services and facilities for eligible persons.

(b) "Assessment" has the same meaning as defined in RCW 71A.10.020.

(c) "Client" means a person who has a developmental disability as defined in RCW 71A.10.020 and has been determined to be eligible to receive services under chapter 71A.16 RCW.

(d) "Department" means the department of social and health services.

(e) "Developmental disabilities ombuds" means the office created under chapter 43.382 RCW.

(f) "Eligible person" has the same meaning as defined in RCW 71A.10.020.

(g) "Legal representative" means a parent of a client under age ((~~eighteen~~)) 18, a court-appointed guardian or limited guardian under Title 11 RCW if the subject matter is within the scope of the guardianship order, or any other person authorized by law to act for the client.

(h) "Necessary supplemental accommodation representative" means an individual who receives copies of administration correspondence to help a client or eligible person understand the documents and exercise the client or eligible person's rights. The necessary supplemental accommodation representative is identified by the client or eligible person when the client or eligible person does not have a legal guardian and is requesting or receiving services from the administration.

(i) "Provider" means an individual, a facility, or an agency that is one or more of the following: Licensed, certified, contracted by the department, or state operated to provide services to administration clients.

(j) "Restraint" includes:

(i) Physical restraint, which is a manual method, obstacle, or physical or mechanical device, material, or equipment attached or adjacent to the client's body that restricts freedom of movement or access to the client's body, is used for discipline or convenience, and is not required to treat the client's medical symptoms; and

(ii) Chemical restraint, which is a psychopharmacologic drug that is used for discipline or convenience and is not required to treat the client's medical symptoms.

(k) "Restriction" means a limitation on the client's use or enjoyment of property, social activities, or engagement in the community.

(l) "Service plan" means any plan required by the department to deliver the services authorized by the administration to the client.

(2) The rights set forth in this section are the minimal rights guaranteed to all clients of the administration, and are not intended to diminish rights set forth in other state or federal laws that may contain additional rights.

(3) The administration must notify the individual and the individual's legal representative or necessary supplemental accommodation representative of the rights set forth in this section upon determining the individual is an eligible person. The notification the administration provides must be in written form. The administration must document the date that the notification required in this subsection was provided.

(4) The administration must notify a client and a client's legal representative or necessary supplemental accommodation representative of the rights set forth in this section upon conducting a client's assessment. The notification the administration provides must be in written form. The administration must document the date it provided the notification required in this subsection.

(5) The client has the right to exercise autonomy and choice free from provider interference. This includes the client's right to:

(a) Be free from sexual, physical, and mental abuse, corporal punishment, and involuntary seclusion;

(b) Be free from discrimination based on race, color, creed, national origin, religion, sex, age, disability, marital and family status, gender identity, or sexual orientation;

(c) Make choices regarding the type of food available within the client's resources and service plan;

(d) Have visitors at the client's home and associate with persons of the client's choosing and subject to limitations as negotiated with the client's housemates;

(e) Control the client's schedule and choose activities, schedules, and health care that meet the client's needs;

(f) Information about the treatment ordered by the client's health care provider and help plan how the treatment will be implemented;

(g) Be free from unnecessary medication, restraints, and restrictions;

(h) Vote, participate in the democratic process, and help people with getting elected to office;

(i) Manage the client's money or choose a person to assist;

(j) Be part of the community;

(k) Make choices about the client's life;

(l) Choose the clothes and hairstyle the client wears;

(m) Furnish and decorate the client's bedroom to the client's preferences or furnish and decorate the client's home to the client's preferences subject to agreement with the client's housemates;

(n) Seek paid employment;

(o) Receive the services that the client agrees to receive;

(p) Decide whether or not to participate in research after the research has been explained to the client, and after the client or the client's legal representative gives written consent for the client to participate in the research; and

(q) Be free from financial exploitation.

(6) The client has the right to participate in the administration's service planning. This includes the client's right to:

(a) Be present and provide input on the client's service plans written by the administration and providers;

(b) Have meaningful opportunities to lead planning processes;

(c) Have the client's visions for a meaningful life and the client's goals for education, employment, housing, relationships, and recreation included in the planning process;

(d) Choose an advocate to attend the planning processes with the client; and

(e) Have access to current and accurate information about recreation, education, and employment opportunities available in the client's community.

(7) The client has the right to access information about services and health care. This includes the client's right to:

(a) View a copy of all of the client's service plans;

(b) Possess full copies of the client's current service plans;

(c) Review copies of the policies and procedures for any service the client receives, at any time. This includes policies and procedures about how the client may file a complaint to providers and the department;

(d) Examine the results of the department's most recent survey or inspection conducted by state surveyors or inspectors, statements of deficiency, and plans of correction in effect with respect to the client's provider and the client's residence. The client's service pro-

vider must assist the client with locating and accessing this information upon the client's request; and

(e) Receive written notification of enforcement actions taken by the department against the client's provider. The administration's case manager or designee must provide notification to the client and the client's legal representative or necessary supplemental accommodation representative within ((~~twenty~~)) 20 days, excluding weekends and holidays, of the date of enforcement. For purposes of this subsection, a "provider" means an entity that provides residential services received by a client that is operated by or contracted through the administration. An enforcement action that requires this notification includes:

(i) Conditions placed on the provider certification or license;

(ii) Suspension or limited suspension of referrals or admissions;

(iii) Imposition of provisional certification or decertification; or

(iv) Denial, suspension, or revocation of a license or certification.

(8) The client has the right to file complaints and grievances, and to request appeals. This includes the client's right to:

(a) Appeal any decision by the department that denies, reduces, or terminates the client's eligibility, services, or choice of provider as defined in federal medicaid law and state public assistance laws;

(b) Submit grievances to the client's provider about the client's services or other concerns. This includes, but is not limited to, concerns about the behavior of other people where the client lives. The provider must maintain a written policy on the grievance process that includes timelines and possible remedies. If a grievance is unresolved, the provider must provide the client with information on how to submit the grievance to the department;

(c) File complaints and grievances, and request appeals without penalty or retaliation by the department or providers; and

(d) Receive information about how to obtain accommodation for disability in the appeal process.

(9) The client has the right to privacy and confidentiality. This includes the client's right to:

(a) Personal privacy and confidentiality of the client's personal records;

(b) Communicate privately, including the right to send and receive mail and email, and the right to use a telephone in an area where calls can be made without being overheard; and

(c) Meet with and talk privately with the client's friends and family.

(10) The client has rights during discharge, transfer, and termination of services as set forth in this subsection.

(a) Clients who are residents of a long-term care facility that is licensed under chapter 18.20, 72.36, or 70.128 RCW have the rights set forth in RCW 70.129.110.

(b) Clients who receive certified community residential services have the right to:

(i) Remain with the client's provider. Services must not be terminated unless the provider determines and documents that:

(A) The provider cannot meet the needs of the client;

(B) The client's safety or the safety of other individuals in the facility or residence is endangered;

(C) The client's health or the health of other individuals in the facility or residence would otherwise be endangered; or

(D) The provider ceases to operate.

(ii) Receive written notice from the provider of any potential termination of services at least ((~~thirty~~)) 30 days before such termination, except when there is a health and safety emergency that requires termination of service, in which case notice must be provided at least ((~~seventy-two~~)) 72 hours before the date of termination. The notice must be provided to the client and the client's legal representative or necessary supplemental accommodation representative. The notice must include:

(A) The reason for termination of services; and

(B) The effective date of termination of services.

(iii) Receive a transition plan at least two days before the effective date of the termination of services, or if the termination was based on a health and safety emergency receive a transition plan within two days of the administration's receipt of notice for emergency termination. The administration must provide the client and the client's legal representative or necessary supplemental accommodation representative with the plan. The plan must include:

(A) The location where the client will be transferred;

(B) The mode of transportation to the new location; and

(C) The name, address, and telephone number of the developmental disabilities ombuds.

(c) A provider that provides services to clients in a residence owned by the provider must exhaust the procedures for termination of services prior to the commencement of any unlawful detainer action under RCW 59.12.030.

(11) The client has the right to access advocates. The client has the right to receive information from agencies acting as client advocates, and be afforded the opportunity to contact these agencies. The provider must not interfere with the client's access to any of the following:

(a) Any representative of the state;

(b) The resident's individual physician;

(c) The developmental disabilities ombuds; or

(d) Any representative of the organization designated to implement the protection and advocacy program pursuant to RCW 71A.10.080.

(12) If a client is subject to a guardianship order pursuant to chapter ((~~11.88~~)) 11.130 RCW, the rights of the client under this section are exercised by the client's guardian if the subject matter is within the scope of the guardianship order.

(13) In addition to the rights in this section, clients who receive home and community-based services are entitled to receive those services in an integrated setting as described in WAC 388-823-1096.

[Statutory Authority: RCW 71A.12.030 and 71A.26.030. WSR 21-03-003, § 388-823-1095, filed 1/7/21, effective 2/7/21. Statutory Authority: RCW 71A.12.030, 71A.12.120 and 74.08.090. WSR 14-12-046, § 388-823-1095, filed 5/29/14, effective 7/1/14. Statutory Authority: RCW 71A.10.020, 71A.12.030, 71A.12.050, 71A.12.070, 71A.16.020, 71A.16.030, 71A.16.040, 71A.16.050, and chapters 71A.10, 71A.12, and 71A.16 RCW. WSR 05-12-130, § 388-823-1095, filed 6/1/05, effective 7/2/05.]

AMENDATORY SECTION (Amending WSR 18-10-071, filed 4/30/18, effective 5/31/18)

WAC 388-823-1096 What requirements must ((~~my~~)) a home or community-based service setting meet? ((~~If you receive home or community-based services under 42 C.F.R. Section 440.180, the setting must meet requirements under 42 C.F.R. Section 441.301 (c)(4).~~))

(1) **Home and Community-Based Settings.** Home and community-based settings must have all of the following qualities based on the needs of the HCBS participant as indicated in their person-centered service plan:

(a) The setting is integrated in and supports full access of HCBS participants receiving home and community-based services under 42 C.F.R. Section 440.180 ("HCBS") to the greater community, including opportunities to seek employment and work in competitive integrated settings, engage in community life, control personal resources, and receive services in the community, to the same degree of access as people not receiving HCBS.

(b) The setting is selected by the HCBS participant from among setting options including non-disability specific settings and an option for a private unit in a residential setting. The setting options are identified and documented in the person-centered service plan and are based on the HCBS participant's needs, preferences, and, for residential settings, resources available for room and board.

(c) Ensures the HCBS participant's rights of privacy, dignity and respect, and freedom from coercion and restraint.

(d) Optimizes, but does not regiment, individual initiative, autonomy, and independence in making life choices, including but not limited to, daily activities, physical environment, and with whom to interact.

(e) Facilitates individual choice regarding services and supports, and who provides them.

(2) **Provider-owned or controlled residential settings.** In a provider-owned or controlled residential setting, in addition to the qualities under subsection (1) of this section, the following additional conditions must be met:

(a) The unit or dwelling is a specific physical place that can be owned, rented, or occupied under a legally enforceable agreement by the HCBS participant, and the HCBS participant has, at a minimum, the same responsibilities and protections from eviction that tenants have under the Washington State Residential Landlord-Tenant Act, and other applicable county or city tenant protections. For settings in which landlord tenant laws do not apply, the state must ensure that a lease, residency agreement, or other form of written agreement will be in place for each HCBS participant, and that the document provides protections that address eviction processes and appeals comparable to those provided under the jurisdiction's landlord tenant law.

(b) Each HCBS participant has privacy in their sleeping or living unit:

(i) Units have entrance doors lockable by the HCBS participant, with only appropriate staff having keys to doors.

(ii) HCBS participants sharing units have a choice of roommates in that setting.

(iii) HCBS participants have the freedom to furnish and decorate their sleeping or living units within the lease or other agreement.

(c) HCBS participants have the freedom and support to control their own schedules and activities, and have access to food at any time.

(d) HCBS participants are able to have visitors of their choosing at any time.

(e) The setting is physically accessible to the HCBS participant.

(3) **Modifications.** Any modification of the additional conditions, under subsection (2)(a) through (2)(d) of this section, must be supported by a specific assessed need and justified in the person-centered service plan. The following requirements must be documented in the person-centered service plan:

(a) A specific and individualized assessed need.

(b) The positive interventions and supports used prior to any modifications to the person-centered service plan.

(c) Less intrusive methods of meeting the need that have been tried but did not work.

(d) A clear description of the condition that is directly proportionate to the specific assessed need.

(e) Regular collection and review of data to measure the ongoing effectiveness of the modification.

(f) Established time limits for periodic reviews to determine if the modification is still necessary or can be terminated.

(g) The informed consent of the HCBS participant.

(h) An assurance that interventions and supports will cause no harm to the HCBS participant.

(4) **Settings that are not Home and Community-Based.** Home and community-based settings do not include the following:

(a) A nursing facility;

(b) An institution for mental diseases;

(c) An intermediate care facility for individuals with intellectual disabilities;

(d) A hospital; or

(e) Any other locations that have qualities of an institutional setting as determined by the Centers for Medicare and Medicaid Services (CMS). Any setting that is located in a building that is also a publicly or privately operated facility that provides inpatient institutional treatment, or in a building on the grounds of, or immediately adjacent to, a public institution, or any other setting that has the effect of isolating HCBS participants from the broader community of people not receiving HCBS will be presumed to be a setting that has the qualities of an institution unless CMS determines through heightened scrutiny, based on information presented by the State or other parties, that the setting does not have the qualities of an institution and that the setting does have the qualities of home and community-based settings.

[Statutory Authority: RCW 71A.12.030 and 42 C.F.R. § 441.301 (c)(4). WSR 18-10-071, § 388-823-1096, filed 4/30/18, effective 5/31/18.]

WSR 23-21-002
PERMANENT RULES
PROFESSIONAL EDUCATOR
STANDARDS BOARD

[Filed October 4, 2023, 12:36 p.m., effective November 4, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: Repeal of WAC 181-82A-210 regarding who can propose adding a new specialty endorsement and amending WAC 181-82A-212 regarding who can offer a specialty endorsement. The professional educator standards board decided that changes were needed to specialty endorsement policy.

Citation of Rules Affected by this Order: Amending WAC 181-82A-212; [and repealing WAC 181-82A-210].

Statutory Authority for Adoption: Chapter 28A.410 RCW.

Adopted under notice filed as WSR 23-16-014 on July 20, 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 1, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: September 28, 2023.

Michael Nguyen
Rules Coordinator

OTS-4662.1

AMENDATORY SECTION (Amending WSR 22-08-101, filed 4/5/22, effective 5/6/22)

WAC 181-82A-212 Proposal process for an organization to be approved to offer a specialty endorsement. Organizations seeking approval to offer a specialty endorsement follow a one-phase proposal process.

(1) **Organizational eligibility:**

((~~(a) Organizations eligible to apply for approval as a specialty endorsement program provider include those eligible to serve as an in-service education agency under WAC 181-85-045.~~

~~(b) In order to offer a specialty endorsement, providers must maintain status as an approved in-service education agency or~~)) The following organizations are eligible to apply to offer a specialty endorsement:

(a) Professional educator standards board approved educator preparation program providers; or

(b) Other organizations maintaining status as approved in-service education agencies under WAC 181-85-045 in partnership with a professional educator standards board approved educator preparation program provider.

(2) **Proposal process.** The prospective provider will submit a proposal that addresses all requirements published by the board including, but not limited to, the following:

(a) Description of how the organization will determine that a participant has met the requirements for the specialty endorsement, including the essential learnings;

(b) Statement of need for the provider offering the specialty endorsement, demonstrating response to educator, student, and community needs;

(c) Description of strategies and practices the organization will use to recruit and retain participants from historically excluded groups, including participants of color;

(d) Description of how the provider will implement the specialty endorsement offering in a manner aligned and responsive to the cultural competency, diversity, equity, and inclusion (CCDEI) standards under WAC 181-85-204;

(e) At least two letters of support from education or community-related organizations; and

(f) Organizational capacity to support participants in completing a specialty endorsement.

(3) **Reapproval, rescindment, and disapproval.**

(a) Specialty endorsement program providers approved under this section must complete a reapproval process every five years per a schedule posted by the professional educator standards board.

(b) The board, upon receipt of a serious complaint from any source, or upon its own initiative prompted by indications of the need for response, may require a provider to complete the reapproval process.

(c) Approved providers that voluntarily rescind their approval shall be permitted to continue to prepare and recommend for a specialty endorsement. Candidates who have been previously admitted to the program, provided that no recommendations for credentials will be accepted later than 12 months following receipt of the formal letter to rescind provider approval. The provider will notify all currently enrolled candidates of the provider's change in status and notify candidates of the 12-month timeline to complete requirements for recommendation.

(d) Disapproved specialty endorsement programs may reapply for approval by following the specialty endorsement approval process.

[Statutory Authority: Chapter 28A.410 RCW. WSR 22-08-101, § 181-82A-212, filed 4/5/22, effective 5/6/22; WSR 21-20-047, § 181-82A-212, filed 9/28/21, effective 10/29/21.]

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 181-82A-210	Proposal process for a new specialty endorsement in Washington state.

WSR 23-21-005
PERMANENT RULES
PROFESSIONAL EDUCATOR
STANDARDS BOARD

[Filed October 4, 2023, 3:46 p.m., effective November 4, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: The proposed amendment will change and extend the current program review cycle for educator preparation programs. This will allow programs adequate time to meaningfully improve their programs and incorporate legislative requirements and initiatives.

Citation of Rules Affected by this Order: Amending WAC 181-78A-100.

Statutory Authority for Adoption: Chapter 28A.410 RCW.

Adopted under notice filed as WSR 23-16-020 on September 28 [July 20], 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

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Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: September 28, 2023.

Michael Nguyen
Rules Coordinator

OTS-4672.1

AMENDATORY SECTION (Amending WSR 22-01-017, filed 12/2/21, effective 1/2/22)

WAC 181-78A-100 Existing approved programs. Providers of programs approved by the board shall comply with the review process established in this chapter and published by the board.

(1) **Teacher and principal preparation programs:** The board will annually review performance data of all educator preparation programs based on components and indicators established in this chapter and published by the board. The professional educator standards board will provide annual updated written guidance to providers regarding the submission of annual program data.

(a) **Notification:** If annual preparation program data analysis indicates that program performance falls below thresholds during any given review period, the board staff will provide written notification to the educator preparation program provider. The educator preparation program provider may choose to submit a response to the board staff. The response must be received by board staff within four weeks follow-

ing receipt of the notification by the provider. The response should offer evidence of factors and circumstances that explain why program performance is below board approved thresholds on the indicators identified in the notice. The board staff will offer providers guidance on content and timelines for submission of this optional response. The board will review responses concurrently with annual data analysis reports.

(b) **Interventions:** Providers with program performance below indicator thresholds are subject to graduated levels of intervention as follows:

(i) **Intervention 1 - Required self-study report:** If a provider that received written notification of performance below threshold on one or more indicators during the previous review period has performance below thresholds on the same indicator(s) during the subsequent review period, the board will send the provider a second notification. The provider must complete a self-study report related to the components and domain(s) identified in both notifications and submit it to the board. The board will give providers written timelines and guidance for the submission of these materials. In the self-study report, the provider may also submit evidence and a description of the provider's performance related to the indicator(s), components, and domains identified in the notifications. If the board is satisfied with the self-study report, the board will approve it at a board meeting. If the board is not satisfied with the self-study report, staff will give providers additional written timelines and guidance to address the board's concerns.

(ii) **Intervention 2 - Formal review:** If a provider demonstrates performance below thresholds for a third successive review period or more, the professional educator standards board will provide a third notification. Based on its discretion and authorized by a vote, the board also may require a formal review related to the provider's performance in the domains of practice identified in the notifications. Prior to commencing a formal review, the board will consider the notifications, responses, and self-study report to determine whether to proceed with or postpone a formal review.

(A) The formal review will incorporate the following elements:

(I) The board shall determine the schedule, format, and which forms of validation shall be used to evaluate programs.

(II) The provider will submit requested evidence to the board staff.

(III) A review team will review the evidence and request additional information including information provided through interviews with provider staff or affiliates as needed.

(IV) The review team will provide a report to the board identifying areas of practice associated with the previous notifications where the provider is out of compliance with educator preparation program requirements, expectations, and outcomes established in chapter 181-78A WAC. The review team may also identify areas of practice where the provider is out of compliance with educator preparation program requirements that were not associated with previous notifications but were noticed by the review team during the process of review. The report may also identify whether the approved indicators or thresholds are functioning as intended.

(V) Board staff serving on the review team will provide assistance to the review team during the review process but will not serve in an evaluative role.

(VI) The review team will submit its report and other appropriate documentation to the provider and the board within one year of the board designating the program for formal review.

(VII) The board may extend the length of the one-year period for submission of the review team's report up to two years at its discretion.

(B) Providers may submit a reply to the review team report within two weeks following receipt of the report. The reply is to focus on the evidence, conclusions, and recommendations in the report but also may include additional evidence of factors and circumstances that explain why program performance is persistently below board approved thresholds on the indicators identified in the notice and self-study report. The board shall publish the process for submitting and reviewing the reply.

(C) In considering the review team's report, the board may request additional information or review, or take action to extend, or change the program's approval status under WAC 181-78A-110.

(c) A provider may request a hearing in instances where it disagrees with the board's decision to extend or change the program's approval status. The hearing will be conducted through the office of administrative hearings by an administrative law judge under chapter 34.05 RCW and will adhere to the process of brief adjudicated hearings. The provider seeking a hearing will provide a written request to the professional educator standards board under WAC 10-08-035 no more than 30 calendar days from the decision date.

(d) **Curriculum and instruction review:** In addition to annual indicator reviews, the board will publish a schedule for focused curriculum and instruction review for fully approved teacher and principal preparation programs.

((~~(c)~~)) (i) The professional educator standards board shall conduct formal reviews to evaluate curriculum and instruction, with particular focus on the cultural competency, diversity, equity, and inclusion standards; the social and emotional learning standards and benchmarks; and the approved preservice educator role standards. The board shall determine the schedule, format, and which forms of documentation and validation shall be used to evaluate programs. The result of the review will be a report. Based on the findings of the report, the board will decide to either renew full approval status or designate the program on limited approval under WAC 181-78A-110 pending action on the findings of the review report.

((~~(i)~~)) (ii) Curriculum and instruction reviews will be conducted at least every ((~~five~~)) six years and not more frequently than every ((~~three~~)) four years.

((~~(ii)~~)) (iii) Program providers will submit requested evidence to the staff of the board.

((~~(iii)~~)) (iv) A review team will review the evidence and request additional information including information provided through interviews with provider staff or affiliates as needed. One board staff member will serve on the review team to provide assistance to the review team during the review process but will not serve in an evaluative role. Members of the review team shall include two preparation program providers at peer programs, at least one P-12 practitioner and one PEAB member with expertise related to the program scheduled for review, and two individuals with expertise related to culturally responsive practice and social and emotional learning.

((~~(iv)~~)) (v) Following the review, the review team will provide a report identifying any areas where the program is out of compliance

with requirements established under this chapter and the program expectations and outcomes established in WAC 181-78A-220.

(2) **Superintendent programs:** The board will annually review data related to the performance of all superintendent programs according to data reporting guidance published by the board.

(a) **Annual data analysis:** After each annual review period, the board will give superintendent program providers written analysis of the program's annual data submission.

(b) **Superintendent program review:** The professional educator standards board shall determine the schedule for formal reviews.

The board will determine whether a formal review will take place and what forms of documentation and validation shall be used for evaluation.

(i) Superintendent program reviews will be conducted at least every ((~~five~~)) six years and not more frequently than every ((~~three~~)) four years.

(ii) Superintendent program providers will submit requested evidence to the staff of the professional educator standards board.

(iii) A review team will review the evidence and request additional information including information provided through interviews with provider staff or affiliates as needed. One board staff member will serve on the review team to provide assistance to the review team during the review process but will not serve in an evaluative role. Additional members of the review team shall include one member of the program's professional educator advisory board, one P-12 practitioner with expertise related to the program scheduled for review, and two representatives of peer programs. Any two of these review team members, or two additional members, must be identified individuals with expertise related to the domains of practice and standard components identified in annual data analyses or in the program's self-study report.

(iv) One of the two providers with peer representatives on the review team will be scheduled for annual review during the subsequent review period.

(v) Prior to the scheduled review, superintendent program providers must complete a self-study report related to the components and domain(s) identified in the written analyses of annual data submissions. The board will give providers written timelines and guidance for the submission of these materials. In the self-study report, the provider may also provide evidence and a description of the provider's performance related to the indicator(s), components, and domains identified in the notifications. Evidence shall include such data and information from the annual data submissions required under WAC 181-78A-235 as have been designated by the board as evidence pertinent to the program approval process.

(c) Following the review, the review team will provide a report identifying any areas where the program is out of compliance with requirements, expectations, and outcomes established in chapter 181-78A WAC.

(i) The report may also verify or contradict that the approved indicators or thresholds are functioning as intended.

(ii) The board may extend the length of the one-year report period up to two years at its discretion. The review team's report and other appropriate documentation will be submitted to the provider and the board within one year of the board designating the program for formal review.

(iii) Providers may submit a reply to the review team report within two weeks following receipt of the report. The reply is limited to evidence that the review disregarded state standards, failed to follow state procedures for review, or failed to consider evidence that was available at the time of the review. The board shall publish the process for submitting and reviewing the reply.

(iv) In considering the review team's report, the board may request additional information or review, or take action to extend or change the educator preparation program's approval status under WAC 181-78A-110.

(d) A provider may request a hearing in instances where it disagrees with the professional educator standards board's decision to extend or change the program's approval status. The hearing will be conducted through the office of administrative hearings by an administrative law judge under chapter 34.05 RCW and will adhere to the process of brief, adjudicated hearings. The provider seeking a hearing will provide a written request to the board in accordance with WAC 10-08-035 no more than 30 calendar days from the decision date.

(3) **Program administrator programs:** The board will annually review data related to the performance of all program administrator programs according to data and reporting guidelines published by the board.

(a) Program administrator programs implemented in conjunction with principal preparation programs will be reviewed concurrently with that provider's principal preparation program.

(b) Program administrator programs implemented in conjunction with superintendent preparation programs will be reviewed concurrently with that provider's superintendent preparation program.

(c) Program administrator programs not implemented in conjunction with a principal or superintendent program will be reviewed on a schedule published by the board.

(4) **School counselor programs:** School counselor program providers shall comply with accrediting procedures for council for the accreditation for counseling and related education programs, unless the program has been specifically approved to operate under alternative national standards under WAC 181-78A-225. The professional educator standards board will review preparation programs' alignment with any additions to the national standards deemed necessary by the professional educator standards board.

(a) A provider of residency school counselor programs without approval from council for the accreditation for counseling and related education programs shall provide proof to the professional educator standards board that it will seek such accreditation, unless the program has been specifically approved to operate under alternative national standards under WAC 181-78A-225.

(b) The board will place any existing approved residency school counselor program not accredited from the council for the accreditation for counseling and related education programs into disapproval status on November 1, 2022, unless the program provider produces evidence of seeking such accreditation, or unless that program has been specifically approved to operate under alternative national standards under WAC 181-78A-225.

(c) Annual data analysis: After each annual data submission, the board will give school counselor preparation program providers written analysis of the program's annual data submission.

(d) School counselor preparation program review: The board shall determine the schedule, format, and which forms of validation shall be

used to evaluate programs under applicable program approval standards listed in WAC 181-78A-225.

(i) School counselor preparation program reviews will be conducted during the same period of time as their council for the accreditation for counseling and related education programs' review. If the program has been specifically approved to operate under alternative national standards under WAC 181-78A-225, the review will take place as scheduled by the board.

(ii) School counselor preparation program providers will submit requested evidence to the staff of the professional educator standards board. Evidence shall include such data and information from the annual data submissions required under WAC 181-78A-235(3) as have been designated by the board as evidence pertinent to the program approval and review processes.

(iii) A review team will review the evidence and request additional information including information provided through documents and interviews with program provider staff or affiliates as needed. One board staff member will serve as chair on the review team during the review process but will not serve in an evaluative role. Additional members of the review team shall include one member of the program's professional educator advisory board, one P-12 practitioner with expertise related to the program scheduled for review, and two representatives of peer programs. Any two of these review team members, or two additional members must be identified individuals with expertise related to the domains of practice and standard components identified in annual data analyses.

(iv) The review team will use multiple data sources to address the specific goals listed in this section.

(A) The review team and the preparation program provider will use preparation program data available at the time of review.

(B) The review team and the preparation program provider will use evidence compiled by the provider that demonstrates performance aligned with all program standards and requirements. Programs' demonstration of upholding board-approved standards and requirements will be used by the review team to write the review report and will be used by the board in consideration of continued approval status. Staff of the board will offer program providers guidance regarding the evidence required, how it may be gathered and used, and how it must be submitted.

(v) The review team will use available evidence to write the review report that will be used by the board in consideration of continued approval status.

(e) Following the review, the review team will provide a report identifying any areas of practice in which program performance is out of alignment with standards and requirements as listed in WAC 181-78A-225.

(i) The review team's report and other appropriate documentation will be submitted to the provider and the board within six months of the formal review.

(ii) Providers may submit a reply to the review team report within three weeks following receipt of the report. The board shall publish the process for submitting and reviewing the reply.

(iii) In considering the review team's report, the board may request additional information for review, or take action to extend or change the educator preparation program's approval status.

(iv) Based upon the review team's report, the program provider's response, and any subsequent requests for information, as applicable, the board shall take one of the following actions:

(A) The board shall give full approval as described in WAC 181-78A-110 (1)(a).

(B) Limited approval as described in WAC 181-78A-110 (1)(b).

(C) Disapproval as described in WAC 181-78A-110 (1)(c).

(v) A provider may request a hearing in instances where it disagrees with the board's decision to extend or change the program's approval status. The hearing will be conducted through the office of administrative hearings by an administrative law judge under chapter 34.05 RCW and will adhere to the process of brief adjudicated hearings. The provider seeking a hearing will provide a written request to the professional educator standards board in accordance with WAC 10-08-035 no more than 30 calendar days from the decision date.

(5) **School psychologist programs:** Providers of school psychologist programs shall comply with accrediting procedures for the National Association for School Psychologists. School psychologist program providers shall comply with accrediting procedures for the National Association for School Psychologists, unless the program has been specifically approved to operate under alternative national standards under WAC 181-78A-225. The professional educator standards board will review preparation programs' alignment with any additions to the national standards deemed necessary by the professional educator standards board.

(a) A provider of school psychologist programs without approval from the National Association for School Psychologists shall provide proof to the professional educator standards board that it will seek such accreditation, unless the program has been specifically approved to operate under alternative national standards under WAC 181-78A-225.

(b) The board will place any existing approved school psychology program not accredited from the National Association of School Psychologists into disapproval status on November 1, 2022, unless the program provider produces evidence of seeking such accreditation, or unless that program has been specifically approved to operate under alternative national standards under WAC 181-78A-225.

(c) Annual data analysis: After each annual data submission, the board will give school psychologist preparation program providers written analysis of the program's annual data submission.

(d) School psychologist preparation program review: The board shall determine the schedule, format, and which forms of validation shall be used to evaluate programs under applicable program approval standards listed in WAC 181-78A-225.

(i) School psychologist preparation program reviews will be conducted during the same period of time as their National Association for School Psychologist's review. If the program has been specifically approved to operate under alternative national standards under WAC 181-78A-225, the review will take place as scheduled by the board.

(ii) School psychologist preparation program providers will submit requested evidence to the staff of the professional educator standards board. Evidence shall include such data and information from the annual data submissions required under WAC 181-78A-235(3) as have been designated by the board as evidence pertinent to the program approval and review processes.

(iii) A review team will review the evidence and request additional information including information provided through documents and interviews with program provider staff or affiliates as needed.

One board staff member will serve as chair on the review team during the review process but will not serve in an evaluative role. Additional members of the review team shall include one member of the program's professional educator advisory board, one P-12 practitioner with expertise related to the program scheduled for review, and two representatives of peer programs. Any two of these review team members, or two additional members must be identified individuals with expertise related to the domains of practice and standard components identified in annual data analyses.

(iv) The review team will use multiple data sources to address the specific goals listed in this section.

(A) The review team and the preparation program provider will use preparation program data available at the time of review.

(B) The review team and the preparation program provider will use evidence compiled by the provider that demonstrates performance aligned with all program standards and requirements. Programs' demonstration of upholding board-approved standards and requirements will be used by the review team to write the review report and will be used by the board in consideration of continued approval status. Staff of the board will offer program providers guidance regarding the evidence required, how it may be gathered and used, and how it must be submitted.

(v) The review team will use available evidence to write the review report that will be used by the board in consideration of continued approval status.

(e) Following the review, the review team will provide a report identifying any areas of practice in which program performance is out of alignment with standards and requirements as listed in WAC 181-78A-225.

(i) The review team's report and other appropriate documentation will be submitted to the provider and the board within six months of the formal review.

(ii) Providers may submit a reply to the review team report within three weeks following receipt of the report. The board shall publish the process for submitting and reviewing the reply.

(iii) In considering the review team's report, the board may request additional information for review, or take action to extend or change the educator preparation program's approval status.

(iv) Based upon the review team's report, the program provider's response, and any subsequent requests for information, as applicable, the board shall take one of the following actions:

(A) The board shall give full approval as described in WAC 181-78A-110 (1)(a).

(B) Limited approval as described in WAC 181-78A-110 (1)(b).

(C) Disapproval as described in WAC 181-78A-110 (1)(c).

(v) A provider may request a hearing in instances where it disagrees with the board's decision to extend or change the program's approval status. The hearing will be conducted through the office of administrative hearings by an administrative law judge under chapter 34.05 RCW and will adhere to the process of brief adjudicated hearings. The provider seeking a hearing will provide a written request to the professional educator standards board in accordance with WAC 10-08-035 no more than 30 calendar days from the decision date.

(6) **Career and technical education administrator and business and industry route educator preparation programs:** The board will annually review data related to the performance of all such programs according to data reporting guidance published by the board.

(a) **Annual data analysis:** After each annual review period, the board will give career and technical education administrator and business and industry route educator preparation program providers written analysis of the program's annual data submission.

(b) **Career and technical education administrator and business and industry route educator preparation program review:** The board shall determine the schedule, format, and which forms of documentation and validation shall be used to evaluate programs.

(i) Career and technical education administrator and business and industry route educator preparation program reviews will be conducted at least every ((~~five~~)) six years and not more frequently than every ((~~three~~)) four years.

(ii) Prior to their scheduled review, career and technical education administrator and business and industry route educator preparation program providers must complete a self-study report related to the components and domain(s) identified in the written analyses of annual data submissions. The board will give providers written timelines and guidance for the submission of these materials.

(iii) Career and technical education administrator and business and industry route educator preparation program providers will submit requested evidence to the staff of the professional educator standards board. Evidence shall include such data and information from the annual data submissions required under WAC 181-78A-235(3) as have been designated by the board as evidence pertinent to the program approval and review processes.

(iv) A review team will review the evidence and request additional information including information provided through documents and interviews with program provider staff or affiliates as needed. One board staff member will serve as chair on the review team during the review process but will not serve in an evaluative role. Additional members of the review team shall include one member of the program's professional educator advisory board, one P-12 practitioner with expertise in career and technical education related to the program scheduled for review, and two representatives of peer programs. Any two of these review team members, or two additional members, must be identified individuals with expertise related to the domains of practice and standard components identified in annual data analyses or in the program's self-study report. One of the two providers with peer representatives on the review team will be scheduled for the subsequent program review.

(v) The review team will use multiple data sources to address the specific goals listed in this section.

(A) The review team and the preparation program provider will use the self-study report to identify program provider's goals and strategies for improvement.

(B) The review team and the preparation program provider will use preparation program data available at the time of review.

(C) The review team and the preparation program provider will use evidence compiled by the provider that demonstrates performance aligned with all program standards and requirements. Staff of the board will offer program providers guidance regarding the evidence required, how it may be gathered and used, and how it must be submitted.

(vi) The review team will use available evidence to write the review report that will be used by the board in consideration of continued approval status.

(c) Following the review, the review team will provide a report identifying any areas of practice in which program performance is out of alignment with standards and requirements.

(i) The review team's report and other appropriate documentation will be submitted to the provider and the board within six months of the formal review.

(ii) Providers may submit a reply to the review team report within three weeks following receipt of the report. The board shall publish the process for submitting and reviewing the reply.

(iii) In considering the review team's report, the board may request additional information for review, or take action to extend or change the educator preparation program's approval status.

(iv) Based upon the review team's report, the program provider's response, and any subsequent requests for information, as applicable, the board shall take one of the following actions:

(A) The board shall give full approval as described in WAC 181-78A-110 (1)(a).

(B) Limited approval as described in WAC 181-78A-110 (1)(b).

(C) Disapproval as described in WAC 181-78A-110 (1)(c).

(v) A provider may request a hearing in instances where it disagrees with the board's decision to extend or change the program's approval status. The hearing will be conducted through the office of administrative hearings by an administrative law judge under chapter 34.05 RCW and will adhere to the process of brief adjudicated hearings. The provider seeking a hearing will provide a written request to the professional educator standards board in accordance with WAC 10-08-035 no more than 30 calendar days from the decision date.

[Statutory Authority: Chapter 28A.410 RCW. WSR 22-01-017, § 181-78A-100, filed 12/2/21, effective 1/2/22; WSR 21-15-103, § 181-78A-100, filed 7/20/21, effective 8/20/21; WSR 21-08-023, § 181-78A-100, filed 3/29/21, effective 4/29/21; WSR 20-16-027, § 181-78A-100, filed 7/24/20, effective 8/24/20; WSR 18-17-089, § 181-78A-100, filed 8/14/18, effective 9/14/18. Statutory Authority: RCW 28A.410.210. WSR 15-12-123, § 181-78A-100, filed 6/3/15, effective 7/4/15; WSR 14-24-004, § 181-78A-100, filed 11/19/14, effective 12/20/14; WSR 14-12-018, § 181-78A-100, filed 5/23/14, effective 6/23/14; WSR 13-20-028, § 181-78A-100, filed 9/23/13, effective 10/24/13; WSR 12-23-023, § 181-78A-100, filed 11/13/12, effective 12/14/12; WSR 12-12-033, § 181-78A-100, filed 5/29/12, effective 6/29/12; WSR 12-02-028, § 181-78A-100, filed 12/28/11, effective 1/28/12; WSR 10-08-017, § 181-78A-100, filed 3/29/10, effective 4/29/10; WSR 08-16-005, § 181-78A-100, filed 7/23/08, effective 8/23/08; WSR 06-24-082, § 181-78A-100, filed 12/5/06, effective 1/5/07; WSR 06-14-010, § 181-78A-100, filed 6/22/06, effective 7/23/06. WSR 06-02-051, recodified as § 181-78A-100, filed 12/29/05, effective 1/1/06. Statutory Authority: RCW 28A.410.010. WSR 05-15-052, § 180-78A-100, filed 7/12/05, effective 8/12/05; WSR 05-04-056, § 180-78A-100, filed 1/28/05, effective 2/28/05; WSR 04-21-038, § 180-78A-100, filed 10/15/04, effective 11/15/04. Statutory Authority: RCW 28A.305.130 and 28A.410.010. WSR 04-04-090, § 180-78A-100, filed 2/3/04, effective 3/5/04; WSR 02-18-037, § 180-78A-100, filed 8/26/02, effective 9/26/02. Statutory Authority: RCW 28A.305.130 (1) and (2). WSR 00-09-049, § 180-78A-100, filed 4/14/00, effective 5/15/00. Statutory Authority: RCW 28A.305.130 (1) and (2), 28A.410.010 and 28A.150.220(4). WSR 99-01-174, § 180-78A-100, filed 12/23/98, effective 1/23/99.]

WSR 23-21-006
PERMANENT RULES
OFFICE OF MINORITY AND
WOMEN'S BUSINESS ENTERPRISES
[Filed October 4, 2023, 4:11 p.m., effective November 4, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: Amends RCW 39.19.030(7) to adopt rules under chapter 34.05 RCW, the Administrative Procedure Act, governing a public works small business certification program.

Citation of Rules Affected by this Order: Amending WAC 326-20-087.

Statutory Authority for Adoption: SB [2SSB] 5268 amends RCW 39.19.030(7).

Adopted under notice filed as WSR 23-15-020 on July 7, 2023.

Date Adopted: October 3, 2023.

Julie Bracken
Public Records Officer
Rules Coordinator
Records Manager

OTS-4747.1

NEW SECTION

WAC 326-20-087 Public works small business enterprise. (1) To foster small business participation, a race and gender-neutral certification program is created to eliminate obstacles to small business participation.

(2) Public works small business is a race and gender-neutral certification program that does not require social disadvantage under WAC 326-20-046. Other certification criteria, such as proof of economic disadvantage, ownership, business size, and control are required to be eligible for this program.

(3) Whenever issues arise regarding eligibility based on personal net worth, business size, ownership, and control which cannot be resolved by reference to these regulations, 49 C.F.R. Part 26 shall provide guidance to resolve such issues.

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WSR 23-21-012
PERMANENT RULES
DEPARTMENT OF
SOCIAL AND HEALTH SERVICES
(Aging and Long-Term Support Administration)
[Filed October 5, 2023, 3:54 p.m., effective November 6, 2023]

Effective Date of Rule: November 6, 2023.

Purpose: The department is adopting new sections in chapter 388-106 WAC describing long-term services and supports (LTSS) presumptive eligibility (PE) and functional eligibility criteria for clients who are discharging from acute care hospitals or diverting from community psychiatric facilities into an in-home setting with home and community-based services.

Citation of Rules Affected by this Order: New WAC 388-106-1800, 388-106-1805, 388-106-1810, 388-106-1815, 388-106-1820, 388-106-1825, 388-106-1830, 388-106-1835, 388-106-1840, 388-106-1845, 388-106-1850, and 388-106-1[8]55.

Statutory Authority for Adoption: RCW 74.08.090 and 74.39A.030.

Adopted under notice filed as WSR 23-10-058 on May 1, 2023.

Changes Other than Editing from Proposed to Adopted Version: The waitlist language has been removed from WAC 388-106-1830(3) and the department is not proceeding with adopting WAC 388-106-1860. Also, a technical correction was made in WAC 388-106-1815(4): "90 days" was changed to "30 days." This change maintains consistency with WAC 388-106-1805(4).

Number of Sections Adopted in Order to Comply with Federal Statute: New 12, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 12, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 12, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 12, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 12, Amended 0, Repealed 0.

Date Adopted: October 5, 2023.

Katherine I. Vasquez
Rules Coordinator

SHS-4950.4

LONG-TERM SERVICES AND SUPPORTS (LTSS) PRESUMPTIVE ELIGIBILITY (PE)

NEW SECTION

WAC 388-106-1800 What definitions apply to LTSS PE? "Acute care hospital" as defined in chapter 182-550 WAC, may offer inpatient services, outpatient services, continuous nursing services, pharmacy services, food services, and necessary ancillary services. These hospitals may offer specialized patient care services including alcoholism and chemical dependency units or services.

"Care plan" means the document generated using the presumptive eligibility assessment screening tool in CARE that identifies the long-term services and supports you are eligible to receive during the presumptive eligibility period.

"Community psychiatric hospital" means a specialized psychiatric hospital or psychiatric unit within a community hospital that is certified to provide involuntary evaluation and treatment services.

"Diversion" means you have discharged from a local community psychiatric facility onto HCS LTSS and have a 90- or 180-day commitment order for further involuntary treatment; or you are detained through the Involuntary Treatment Act and are stabilized and discharged onto LTSS prior to the need to petition for a 90- or 180- day commitment order.

"LTSS" means Long-term Services and Supports as defined in WAC 182-513-1100.

"MPC" means Medicaid Personal Care which is defined as personal care services in WAC 388-106-0010.

"NFLOC" means nursing facility level of care as defined in WAC 388-106-0355.

"PE screening" means the functional and financial assessment completed using the presumptive eligibility screening tool within CARE to determine presumptive eligibility for LTSS NFLOC PE services or LTSS MPC PE services.

"Presumptive eligibility" means a determination made using a screening process completed by the department to gather preliminary information to determine if you meet the eligibility criteria described in WAC 388-106-1805 and 388-106-1815 of this section to receive services while the final eligibility determination is being completed. This is also known as PE.

[]

NEW SECTION

WAC 388-106-1805 Am I eligible for LTSS NFLOC PE services? You are eligible to receive LTSS NFLOC PE services if you meet the following criteria based upon the attested information in your PE screening:

(1) Meet functional eligibility requirements as defined in WAC 388-106-0355 (1)(a), (b), (c), or (d); and

(2) Meet financial eligibility requirements as defined in WAC 182-513-1315; and

(3) Will be discharging from an acute care hospital or diverting from a community psychiatric hospital; or

(4) Have discharged or diverted from an acute care hospital or community psychiatric hospital in the last 30 days; and

(5) Live in your own home as defined in WAC 388-106-0010; and

(6) Are not receiving any other medicaid funded long-term services and supports.

[]

NEW SECTION

WAC 388-106-1810 What services may I receive under LTSS NFLOC PE? You may receive the following services under LTSS NFLOC PE:

(1) Up to a maximum of 103 hours a month of personal care services as defined in WAC 388-106-0010;

(2) Nurse delegation, as defined in WAC 388-106-0270;

(3) Personal Emergency Response System (PERS), as defined in WAC 388-106-0270;

(4) Home delivered meals, as defined in WAC 388-106-0300;

(5) Specialized medical equipment and supplies, as defined in WAC 388-106-0300;

(6) Assistive/Adaptive technology and equipment, as defined in WAC 388-106-0270;

(7) Community transition or sustainability services as defined in WAC 388-106-0270, which are nonrecurring set-up items and services to assist with expenses to move from an acute care hospital or diversion from a psychiatric hospital stay to an in-home setting and may include:

(a) Security deposits that are required to lease an apartment or home;

(b) Activities to assess need, arrange for, and obtain needed resources, including essential household furnishings;

(c) Set-up fees or deposits for utility or services access, including telephone, electricity, heating, water, and garbage;

(d) Services necessary for your health and safety such as pest eradication and one-time cleaning prior to occupancy;

(e) Moving expenses; and

(f) Minor home accessibility modifications necessary for hospital discharge.

(8) Community choice guide: specialty services providing assistance and support to ensure an individual's successful transition to the community or maintenance of independent living, as defined in WAC 388-106-0300; and

(9) Supportive Housing as defined in WAC 388-106.

[]

NEW SECTION

WAC 388-106-1815 Am I eligible for LTSS MPC PE services? You are eligible to receive LTSS MPC PE services if you meet the following criteria based upon the attested information in your PE screening:

(1) Meet functional eligibility requirements as defined in WAC 388-106-0210; and

(2) Meet financial eligibility requirements as defined in WAC 182-513-1225; and

(3) Will be discharging from an acute care hospital or diverting from a community psychiatric hospital; or

(4) Have discharged or diverted from an acute care hospital or community psychiatric hospital in the last 30 days; and

(5) Live in your own home as defined in WAC 388-106-0010; and

(6) Are not receiving any other medicaid funded long-term services and supports.

[]

NEW SECTION

WAC 388-106-1820 What services may I receive under LTSS MPC PE? Under LTSS MPC PE you may receive up to 34 hours per month of personal care services as defined in WAC 388-106-0010.

[]

NEW SECTION

WAC 388-106-1825 Who can provide long-term care services when I am eligible for LTSS NFLOC or LTSS MPC PE services? The following types of providers can provide long-term care services:

(1) Individual providers (IPs) as defined in WAC 388-115-0503, who provide services to clients in the client's own home.

(2) Home care agencies that provide services to clients in the client's own home. Home care agencies must be licensed under chapter 70.127 RCW and chapter 246-335 WAC and contracted with the department.

(3) Providers who have contracted with the department to perform other services.

[]

NEW SECTION

WAC 388-106-1830 When will the department authorize my LTSS NFLOC or LTSS MPC PE services? The department will authorize LTSS NFLOC PE or LTSS MPC PE services when you:

(1) Are found both financially and functionally eligible for PE services by completing your PE screening which includes the amount of participation toward the cost of your care that you must pay (if any);

(2) Have given consent for services and approved your care plan; and

(3) Have chosen a DSHS qualified provider(s), per WAC 388-71-0510.

[]

NEW SECTION

WAC 388-106-1835 When do LTSS NFLOC PE or LTSS MPC PE services end? (1) Your LTSS NFLOC PE or LTSS MPC PE services end with the earlier date of:

(a) The date the decision was made on your application as defined in WAC 388-106-0010;

(b) The date you were confirmed by a CARE assessment to not meet functional eligibility criteria as defined in WAC 388-106-0355 or 388-106-0210; or

(c) The last day of the month following the month in which your presumptive eligibility services were authorized if you did not submit your application.

(2) You may only receive LTSS NFLOC PE or LTSS MPC PE services once within a 24-month period.

[]

NEW SECTION

WAC 388-106-1840 Where can I receive LTSS NFLOC PE or LTSS MPC PE services? You can receive LTSS NFLOC PE or LTSS MPC PE services:

(1) In your own home as defined in WAC 388-106-0010;

(2) While you are out of your home accessing the community or working while:

(a) within the state of Washington; or

(b) in a recognized out-of-state bordering city as defined in WAC 182-501-0175.

[]

NEW SECTION

WAC 388-106-1845 What do I pay for if I receive LTSS NFLOC PE or LTSS MPC PE services? (1) If you receive LTSS MPC PE services you are not required to pay toward the cost of care for those services.

(2) If you receive LTSS NFLOC PE, you may be required to pay toward the cost of your care as outlined in WAC 182-515-1509. You are allowed to keep some of your income for a maintenance allowance.

[]

NEW SECTION

WAC 388-106-1850 Do I have a right to an administrative hearing on LTSS NFLOC PE or LTSS MPC PE determinations? Applicants do not have an administrative hearing right as defined in chapter 388-02 WAC on LTSS NFLOC PE or LTSS MPC PE eligibility determinations.

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NEW SECTION

WAC 388-106-1855 Can an exception to rule (ETR) be granted for eligibility or service determinations? ETRs will not be granted for LTSS NFLOC PE or LTSS MPC PE eligibility determinations or service determinations.

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WSR 23-21-036
PERMANENT RULES
EMPLOYMENT SECURITY DEPARTMENT
[Filed October 6, 2023, 3:24 p.m., effective November 6, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: The purpose of this rule making is to update the regulations governing the employment security department's (department) public records processes, including the information required to be submitted as part of a public records request and requests for the department to review a response denying a public records request.

Citation of Rules Affected by this Order: Amending WAC 192-02-060 and 192-02-130.

Statutory Authority for Adoption: RCW 42.56.100, 50.13.030, 50A.25.030, and 50B.04.170.

Adopted under notice filed as WSR 23-17-024 on August 8, 2023.

A final cost-benefit analysis is available by contacting Stephanie Frazee, P.O. Box 9046, Olympia, WA 98507-9046, phone 425-465-0313, fax 844-652-7096, TTY relay 711, email rules@esd.wa.gov, website https://www.esd.wa.gov/newsroom/rulemaking/public-records-procedures.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 2, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: October 6, 2023.

Joy E. Adams, Acting Director
Employment System Policy and Integrity

OTS-4742.2

AMENDATORY SECTION (Amending WSR 20-21-071, filed 10/16/20, effective 11/16/20)

WAC 192-02-060 Making a request for public records. (1) To request access to public records of the department, or seek assistance in making such a request, contact the public records officer at:

Public Records Officer
P.O. Box 9046
Olympia, WA 98507-9046
Phone: 1-844-766-8930
Email: recordsdisclosure@esd.wa.gov

(2) Any person wishing to inspect or copy public records of the department shall make the request in writing to the public records officer through one of the following:

(a) On the department's request form;

(b) Through an online portal designated by the department for this purpose;

(c) By letter mailed to the address listed in subsection (1) of this section;

(d) By email sent to the address listed in subsection (1) of this section; or

(e) By submitting the request in person at the address provided on the department's website.

(3) Public records request should include:

(a) The name of requestor;

(b) ((~~The address of requestor;~~

~~(c) Other~~)) Contact information, including telephone number and any email address;

((~~(d)~~)) (c) Identification of the public records adequate for the public records officer to locate the records; and

((~~(e)~~)) (d) The date and time of day of the request.

(4) If the requestor wishes to have copies of the records made instead of simply inspecting them, the requestor should so indicate and make arrangements to pay for copies of the records or a deposit.

(5) A records request form is available for use by requestors at the office of the public records officer and online at the department's website.

(6) If requestors refuse to identify themselves or provide sufficient contact information, the department will respond to the extent feasible and consistent with the law.

[Statutory Authority: RCW 42.56.100, 50.12.010, 50.12.040, 50.13.030, and chapter 50.13 RCW. WSR 20-21-071, § 192-02-060, filed 10/16/20, effective 11/16/20.]

AMENDATORY SECTION (Amending WSR 20-21-071, filed 10/16/20, effective 11/16/20)

WAC 192-02-130 Denials of requests. (1) A denial of a request for records will be accompanied by a written statement of the specific reasons therefor.

(2) If the department denies a requestor access to public records, the requestor may petition in writing to the public records officer for a review of that decision. The petition shall include a copy of or reasonably identify the written statement denying the request.

(3) The department shall promptly review a petition to review a denial of a public records request and either affirm or reverse the denial within two business days following the department's receipt of the petition or within such other time as the department and the requestor mutually agree to.

(4) If the department denies a requestor access to public records because it claims the record is exempt in whole or in part from disclosure, the requestor may request the attorney general's office to review the matter, pursuant to RCW 42.56.530. The attorney general has adopted rules on such requests in WAC 44-06-160.

((~~(3)~~)) (5) Any person may obtain court review of denials of public records requests pursuant to RCW 42.56.550.

[Statutory Authority: RCW 42.56.100, 50.12.010, 50.12.040, 50.13.030, and chapter 50.13 RCW. WSR 20-21-071, § 192-02-130, filed 10/16/20, effective 11/16/20.]

WSR 23-21-054
PERMANENT RULES
HIGHLINE COLLEGE
[Filed October 11, 2023, 10:23 a.m., effective November 11, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: To update our student conduct code to be in compliance with the implementation of HB [2SHB] 1751 (Sam's Law, hazing prevention). This includes amending the definition of hazing, adding student groups to our jurisdiction, adding the definition of a student group to our definition section, and adding a new section about our hazing specific sanctions.

Citation of Rules Affected by this Order: New WAC 132I-126-130; and amending WAC 132I-126-010, 132I-126-050, and 132I-126-100

Statutory Authority for Adoption: HB [2SHB] 1751 (Sam's Law, hazing prevention) was passed into law March 3, 2022, and became effective June 9, 2022.

Adopted under notice filed as WSR 23-18-058 on August 31, 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 1, Amended 3, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 1, Amended 3, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: October 10, 2023.

Isabelle Wroblewski
Associate Director
Community Standards and Student Conduct

OTS-4433.1

AMENDATORY SECTION (Amending WSR 21-14-003, filed 6/23/21, effective 7/24/21)

WAC 132I-126-010 Statement of jurisdiction. ((~~The student conduct code applies to student conduct that occurs on college premises, to conduct that occurs at or in connection with college-sponsored activities, or to off-campus conduct that in the judgment of the college adversely affects the college community or the pursuit of its objectives. Jurisdiction extends to, but is not limited to, locations in which students are engaged in official college activities including, but not limited to, foreign or domestic travel, activities funded by the associated students, athletic events, training internships, cooperative and distance education, online education, practicums, supervised work experiences or any other college-sanctioned social or club activities. Students are responsible for their conduct from the date~~

~~of admission through the actual receipt of a degree, even though conduct may occur before classes begin or after classes end, as well as during the academic year and during periods between terms of actual enrollment. These standards shall apply to a student's conduct even if the student withdraws from college while a disciplinary matter is pending. The college has sole discretion on a case-by-case basis to determine whether the student conduct code will be applied to conduct that occurs off campus.~~))

(1) The student conduct code shall apply to conduct by students and student groups that occurs:

(a) On college premises;

(b) At or in connection with college sponsored activities; or

(c) To off-campus conduct that in the judgment of the college adversely affects the college community or the pursuit of its objectives.

(2) Jurisdiction extends to, but is not limited to, locations in which students or student groups are engaged in official college activities including, but not limited to, foreign or domestic travel, activities funded by the associated students, athletic events, training internships, cooperative and distance education, online education, practicums, supervised work experiences or any other college-sanctioned social or club activities and college-sanctioned housing.

(3) Students are responsible for their conduct from notification of admission to the college through the actual receipt of a certificate or degree, even though conduct may occur before classes begin or after classes end, as well as during the academic year and during periods between terms of actual enrollment.

(4) These standards shall apply to a student's conduct even if the student withdraws from college while a disciplinary matter is pending.

(5) The student conduct officer has sole discretion, on a case-by-case basis, to determine whether the student conduct code will be applied to conduct by students or student groups that occurs off-campus.

[Statutory Authority: Chapter 34.05 RCW and RCW 28B.50.140(13); 20 U.S.C. § 1092(f); Title IX of the Education Amendments of 1972, 20 U.S.C. § 1681 et seq. WSR 21-14-003, § 132I-126-010, filed 6/23/21, effective 7/24/21.]

AMENDATORY SECTION (Amending WSR 21-14-003, filed 6/23/21, effective 7/24/21)

WAC 132I-126-050 Definitions. The following definitions shall apply for the purpose of this student conduct code:

(1) "Business day" means a weekday, excluding weekends and college holidays.

(2) "College premises" shall include all campuses of the college, wherever located, and includes all land, buildings, facilities, vehicles, equipment and other property owned, used or controlled by the college.

(3) "Conduct review officer" is the vice president for student services or designee who is responsible for receiving and for reviewing or referring appeals of student disciplinary actions in accordance with the procedures of this code. The president is authorized to reas-

sign any and all of the conduct review officer's duties or responsibilities as set forth in this chapter as may be reasonably necessary.

(4) "Disciplinary action" is the process by which the student conduct officer imposes discipline against a student for a violation of the student conduct code.

(5) "Disciplinary appeal" is the process by which an aggrieved student can appeal the discipline imposed by the student conduct officer. Disciplinary appeals from a suspension in excess of ((~~ten~~)) 10 instructional days or from a dismissal are heard by the student conduct committee. Appeals of all other appealable disciplinary action are reviewed through brief adjudicative proceedings, unless the case is referred to the committee by the student conduct officer or the conduct review officer.

(6) "Filing" is the process by which a document is officially delivered to a college official responsible for facilitating a disciplinary review. Unless otherwise provided, filing shall be accomplished by:

(a) Hand delivery of the document to the specified college official or college official's assistant; or

(b) Sending the document by email and either intercampus mail or first class mail to the specified college official's office and college email address.

Papers required to be filed shall be deemed filed upon actual receipt during office hours at the office of the specified college official.

(7) "Respondent" is the student against whom disciplinary action is initiated.

(8) "Service" is the process by which a document is officially delivered to a party. Unless otherwise provided, service upon a party shall be accomplished by:

(a) Hand delivery of the document to the party; or

(b) Sending the document by email and by certified mail or first class mail to the party's last known address.

Service is deemed complete upon hand delivery of the document or upon the date the document is emailed and deposited in the mail.

(9) "Student" includes all persons taking courses at or through the college, whether on a full-time or part-time basis, and whether such courses are credit courses, noncredit courses, online courses, or otherwise. Persons who withdraw after allegedly violating the code, who are not officially enrolled for a particular term but who have a continuing relationship with the college, or who have been admitted for admission are considered "students."

(10) "Student conduct officer" is a college administrator designated by the vice president for student services to be responsible for implementing and enforcing the student conduct code. The vice president for student services is authorized to reassign any and all of the student conduct officer's duties or responsibilities as set forth in this chapter as may be reasonably necessary.

(11) "Student group" is a student organization, athletic team, or living group including, but not limited to, student clubs and organizations, members of a class or student cohort, student performance groups, and student living groups within student housing.

(12) "The president" is the president of the college. The president is authorized to delegate any of his or her responsibilities as set forth in this chapter as may be reasonably necessary.

[Statutory Authority: Chapter 34.05 RCW and RCW 28B.50.140(13); 20 U.S.C. § 1092(f); Title IX of the Education Amendments of 1972, 20 U.S.C. § 1681 et seq. WSR 21-14-003, § 132I-126-050, filed 6/23/21, effective 7/24/21.]

AMENDATORY SECTION (Amending WSR 21-14-003, filed 6/23/21, effective 7/24/21)

WAC 132I-126-100 Prohibited student conduct. The college may impose disciplinary sanctions against a student who commits, attempts to commit, aids, abets, incites, encourages, or assists another person to commit, an act(s) of misconduct which include, but are not limited to, the following:

(1) **Academic dishonesty.** Any act of academic dishonesty including, but not limited to, cheating, plagiarism, and fabrication.

(a) Cheating: Includes any attempt to give or obtain unauthorized assistance relating to the completion of an academic assignment.

(b) Plagiarism includes taking and using as one's own, without proper attribution, the ideas, writings, or work of another person in completing an academic assignment. Prohibited conduct may also include the unauthorized submission for credit of academic work that has been submitted for credit in another course.

(c) Fabrication includes falsifying data, information, or citations in completing an academic assignment and also includes providing false or deceptive information to an instructor concerning the completion of an assignment.

(d) Collusion includes assisting another to commit an act of academic dishonesty, such as paying or bribing someone to acquire a test or assignment, or to increase the score on a test or assignment; taking a test or doing an assignment for someone else; allowing someone to do these things for one's own benefit.

(e) Academic misconduct includes intentionally violating college policies, such as altering grades, misrepresenting one's identity failing to report known incident of academic dishonesty or participating in obtaining or distributing any part of the test or any information about a test.

Academic consequences for academic dishonesty or abetting in academic dishonesty may be imposed at the discretion of a faculty member up to and including a failing grade for the course. Students should refer to each of their faculty's course syllabus. Further academic consequences may follow consistent with the provisions in any program handbook. Incidents of academic dishonesty may also be referred to the student conduct officer for disciplinary action consistent with this chapter in addition to the academic consequences identified above.

(2) **Other dishonesty.** Any other acts of dishonesty. Such acts include, but are not limited to:

(a) Forgery, alteration, submission of falsified documents or misuse of any college document, record, or instrument of identification;

(b) Tampering with an election conducted by or for college students; or

(c) Furnishing false information, or failing to furnish correct information, in response to the request or requirement of a college officer or employee.

(3) **Obstructive or disruptive conduct.** Conduct, not otherwise protected by law, that interferes with, impedes, or otherwise unreasonably hinders.

(a) Any instruction, research, administration, disciplinary proceeding, or other college activities, including the obstruction of the free flow of pedestrian or vehicular movement on college property or at a college activity; or

(b) Any activity that is authorized to occur on college property, whether or not actually conducted or sponsored by the college.

(4) **Assault, intimidation, harassment.** Unwanted touching, physical abuse, verbal abuse, threat(s), intimidation, harassment, bullying, or other conduct which harms, threatens, or is reasonably perceived as threatening the health or safety of another person or another person's property. For purposes of this code, "bullying" is defined as repeated or aggressive unwanted behavior, not otherwise protected by law that intentionally humiliates, harms, or intimidates the victims.

(5) **Cyber misconduct.** Cyberstalking, cyberbullying or online harassment. Use of electronic communications including, but not limited to, electronic mail, instant messaging, electronic bulletin boards, and social media sites, to harass, abuse, bully or engage in other conduct which harms, threatens, or is reasonably perceived as threatening the health or safety of another person. Prohibited activities include, but are not limited to, unauthorized monitoring of another's email communications directly or through spyware, sending threatening emails, disrupting electronic communications with spam or by sending a computer virus, sending false messages to third parties using another's email identity, nonconsensual recording of sexual activity, and nonconsensual distribution of a recording of sexual activity.

(6) **Property violation.** Damage to, misappropriation of, unauthorized use or possession of, vandalism or other nonaccidental damaging or destruction of college property or the property of another person. Property for purposes of this subsection includes computer passwords, access codes, identification cards, personal financial account numbers, other confidential personal information, intellectual property and college trademarks.

(7) **Failure to comply with directive.** Failure to comply with the directive of a college officer or employee who is acting in the legitimate performance of his or her duties, including failure to properly identify oneself to such a person when requested to do so.

(8) **Weapons violation.** Possession, holding, wearing, transporting, storage or presence of any firearm, dagger, sword, knife or other cutting or stabbing instrument, club, explosive device, or any other weapon apparently capable of producing bodily harm is prohibited on the college campus, subject to the following exceptions:

(a) Commissioned law enforcement personnel, legally authorized military personnel, or approved contractors, while in performance of their duties;

(b) A student with a valid concealed weapons permit may store a pistol in his or her vehicle parked on campus in accordance with RCW 9.41.050 (2) or (3), provided the vehicle is locked and the weapon is concealed from view; or

(c) The president or designee may grant permission to bring a weapon on campus upon a determination that the weapon is reasonably related to a legitimate pedagogical purpose. Such permission shall be in writing and shall be subject to such terms or conditions incorporated in the written permission.

This policy does not apply to the possession and/or use of disabling and/or self-defense sprays when possessed and/or used for self-defense.

(9) **Hazing.** ((~~Hazing includes, but is not limited to, any initiation into a student organization or any pastime or amusement engaged in with respect to such an organization that causes, or is likely to cause, bodily danger or physical harm, or serious mental or emotional harm, to any student.~~))

(a) Hazing is any act committed as part of:

(i) A person's recruitment, initiation, pledging, admission into, or affiliation with a student group;

(ii) Any pastime or amusement engaged in with respect to such a student group; or

(iii) That causes, or is likely to cause, bodily danger or physical harm, or serious psychological or emotional harm, to any student.

(b) Examples of hazing include, but are not limited to:

(i) Causing, directing, coercing, or forcing a person to consume any food, liquid, alcohol, drug, or other substance which subjects the person to risk of such harm;

(ii) Humiliation by ritual act;

(iii) Striking another person with an object or body part;

(iv) Causing someone to experience excessive fatigue, or physical and/or psychological shock; or

(v) Causing someone to engage in degrading or humiliating games or activities that create a risk of serious psychological, emotional, and/or physical harm.

(c) "Hazing" does not include customary athletic events or other similar contests or competitions.

(d) Consent is not a valid defense against hazing.

(10) **Alcohol, drug, and tobacco violations.**

(a) **Alcohol.** The use, possession, delivery, sale, or being observably under the influence of any alcoholic beverage, except as permitted by law and applicable college policies.

(b) **Marijuana.** The use, possession, delivery, or sale of marijuana or the psychoactive compounds found in marijuana intended for human consumption, regardless of form, or being observably under the influence of marijuana or the psychoactive compounds found in marijuana. While state law permits the recreational use of marijuana, federal law prohibits such use on college premises or in connection with college activities.

(c) **Drugs.** The use, possession, delivery, sale, or being observably under the influence of any legend drug, including anabolic steroids, androgens, or human growth hormones as defined in chapter 69.41 RCW, or any other controlled substance under chapter 69.50 RCW, except as prescribed for a student's use by a licensed practitioner.

(d) **Tobacco, electronic cigarettes, and related products.** The use of tobacco, electronic cigarettes, and related products in any building owned, leased or operated by the college or in any location where such use is prohibited, including ((~~twenty-five~~)) 25 feet from entrances, exits, windows that open, and ventilation intakes of any building owned, leased or operated by the college. The use of tobacco, electronic cigarettes, and related products on the college campus is restricted to designated smoking areas. "Related products" include, but are not limited to, cigarettes, pipes, bidi, clove cigarettes, waterpipes, hookahs, chewing tobacco, vaporizers, and snuff.

(11) **Lewd conduct.** Conduct which is lewd or obscene that is not otherwise protected under the law.

(12) **Discriminatory conduct.** Conduct which harms or adversely affects any member of the college community because of her/his race; color; national origin; sensory, mental or physical disability; use of a service animal; gender, including pregnancy; marital status; age; religion; creed; sexual orientation; gender identity; veteran's status; or any other legally protected classification.

(13) **Sexual misconduct.** The term "sexual misconduct" includes sexual harassment, sexual intimidation, and sexual violence. Sexual harassment prohibited by Title IX is defined in the supplemental procedures to this code. See WAC 132I-126-505 through 132I-126-585 (supplemental Title IX student conduct procedures).

(a) **Sexual harassment.** The term "sexual harassment" means unwelcome sexual or gender-based conduct, including unwelcome sexual advances, requests for sexual favors, quid pro quo harassment, and other verbal, nonverbal, or physical conduct of a sexual or a gendered nature that is sufficiently severe, persistent, or pervasive as to:

(i) Deny or limit the ability of a student to participate in or benefit from the college's educational program;

(ii) Alter the terms or conditions of employment for a college employee(s); and/or

(iii) Create an intimidating, hostile, or offensive environment for other campus community members.

(b) **Sexual intimidation.** The term "sexual intimidation" incorporates the definition of "sexual harassment" and means threatening or emotionally distressing conduct based on sex including, but not limited to, nonconsensual recording of sexual activity or the distribution of such recording.

(c) **Sexual violence.** "Sexual violence" is a type of sexual discrimination and harassment. Nonconsensual sexual intercourse, nonconsensual sexual contact, domestic violence, dating violence, and stalking are all types of sexual violence.

(i) Nonconsensual sexual intercourse. Any actual or attempted sexual intercourse (anal, oral, or vaginal), however slight, with any object or body part, by a person upon another person, that is without consent and/or by force. Sexual intercourse includes anal or vaginal penetration by a penis, tongue, finger, or object, or oral copulation by mouth to genital contact or genital to mouth contact.

(ii) Nonconsensual sexual contact. Any actual or attempted sexual touching, however slight, with any body part or object, by a person upon another person that is without consent and/or by force. Sexual touching includes any bodily contact with the breasts, groin, mouth, or other bodily orifice of another individual, or any other bodily contact in a sexual manner.

(iii) Incest. Sexual intercourse or sexual contact with a person known to be related to them, either legitimately or illegitimately, as an ancestor, descendant, brother, or sister of either wholly or half related. Descendant includes stepchildren and adopted children under the age of ((~~eighteen~~)) 18.

(iv) Statutory rape. Consensual intercourse between a person who is ((~~eighteen~~)) 18 years of age or older, and a person who is under the age of ((~~sixteen~~)) 16.

(v) Domestic violence. Physical violence, bodily injury, assault, the infliction of fear of imminent physical harm, sexual assault, or stalking committed by a person with whom the victim shares a child in common, by a person who is cohabitating with or has cohabitated with the victim as a spouse, by a person similarly situated to a spouse of the victim under the domestic or family violence laws of the state of

Washington, or by any other person against an adult or youth victim who is protected from that person's acts under the domestic or family violence laws of the state of Washington, RCW 26.50.010.

(vi) Dating violence, physical violence, bodily injury, assault, the infliction of fear of imminent physical harm, sexual assault, or stalking committed by a person:

(A) Who is or has been in a social relationship of a romantic or intimate nature with the victim; and

(B) Where the existence of such a relationship shall be determined based on a consideration of the following factors:

(I) The length of the relationship;

(II) The type of relationship; and

(III) The frequency of interaction between the persons involved in the relationship.

(vii) Stalking. Engaging in a course of conduct directed at a specific person that would cause a reasonable person to fear for their safety, or the safety of others, or suffer substantial emotional distress.

(d) For purposes of this code, "consent" means knowing, voluntary, and clear permission by word or action, to engage in mutually agreed upon sexual activity. Each party has the responsibility to make certain that the other has consented before engaging in the activity. For consent to be valid, there must be at the time of the act of sexual intercourse or sexual contact actual words or conduct indicating freely given agreement to have sexual intercourse or sexual contact. A person cannot consent if they are unable to understand what is happening or are disoriented, helpless, asleep, or unconscious for any reason, including due to alcohol or other drugs. An individual who engages in sexual activity when the individual knows, or should know, that the other person is physically or mentally incapacitated has engaged in nonconsensual conduct. Intoxication is not a defense against allegations that an individual has engaged in nonconsensual sexual conduct.

(14) **Harassment.** Unwelcome and offensive conduct, including verbal, nonverbal, or physical conduct, that is directed at a person because of such person's protected status and that is sufficiently serious as to deny or limit, and that does deny or limit, the ability of a student to participate in or benefit from the college's educational program, that changes the terms or conditions of employment for a college employee, or that creates an intimidating, hostile, or offensive environment for other campus community members. Protected status includes a person's race; color; national origin; sensory, mental or physical disability; use of a service animal; gender, including pregnancy; marital status; age; religion; creed; sexual orientation; gender identity; veteran's status; or any other legally protected classification. See "sexual misconduct" for the definition of "sexual harassment." Harassing conduct may include, but is not limited to, physical conduct, verbal, written, social media, and electronic communications.

(15) **Retaliation.** Harming, threatening, intimidating, coercing, or taking adverse action of any kind against a person because such person reported an alleged violation of this code or college policy, provided information about an alleged violation, or participated as a witness or in any other capacity in a college investigation or disciplinary proceeding.

(16) **Misuse of electronic resources.** Theft or other misuse of computer time or other electronic information resources of the college. Such misuse includes, but is not limited to:

(a) Unauthorized use of such resources or opening of a file, message, or other item;

(b) Unauthorized duplication, transfer, or distribution of a computer program, file, message, or other item;

(c) Unauthorized use or distribution of someone else's password or other identification;

(d) Use of such time or resources to interfere with someone else's work;

(e) Use of such time or resources to send, display, or print an obscene or abusive message, text, or image;

(f) Use of such time or resources to interfere with normal operation of the college's computing system or other electronic information resources;

(g) Use of such time or resources in violation of applicable copyright or other law;

(h) Adding to or otherwise altering the infrastructure of the college's electronic information resources without authorization; or

(i) Failure to comply with the college's electronic use policy.

(17) **Unauthorized access.** Unauthorized possession, duplication, or other use of a key, keycard, or other restricted means of access to college property, or unauthorized entry onto or into college property.

(18) **Safety violations.** Nonaccidental conduct that interferes with or otherwise compromises any college policy, equipment, or procedure relating to the safety and security of the campus community, including tampering with fire safety equipment and triggering false alarms or other emergency response systems.

(19) **Violation of other laws or policies.** Violation of any federal, state, or local law, rule, or regulation or other college rules or policies, including college traffic and parking rules.

(20) **Ethical violation.** The breach of any generally recognized and published code of ethics or standards of professional practice that governs the conduct of a particular profession for which the student is taking a course or is pursuing as an educational goal or major.

In addition to initiating discipline proceedings for violation of the student conduct code, the college may refer any violations of federal, state, or local laws to civil and criminal authorities for disposition. The college reserves the right to pursue student disciplinary proceedings regardless of whether the underlying conduct is subject to civil or criminal prosecution.

[Statutory Authority: Chapter 34.05 RCW and RCW 28B.50.140(13); 20 U.S.C. § 1092(f); Title IX of the Education Amendments of 1972, 20 U.S.C. § 1681 et seq. WSR 21-14-003, § 132I-126-100, filed 6/23/21, effective 7/24/21.]

NEW SECTION

WAC 132I-126-130 Hazing prohibited—Sanctions. (1) Hazing by a student or a student group is prohibited pursuant to WAC 132I-126-100(9).

(2) No student may conspire to engage in hazing or participate in hazing of another. State law provides that hazing is a criminal offense, punishable as a misdemeanor.

(3) Washington state law provides that:

(a) Any student group that knowingly permits hazing is strictly liable for harm caused to persons or property resulting from hazing. If the organization, association, or student living group is a corporation whether for profit or nonprofit, the individual directors of the corporation may be held individually liable for damages.

(b) Any person who participates in the hazing of another shall forfeit any entitlement to state-funded grants, scholarships, or awards for a period of time determined by the college.

(c) Student groups that knowingly permits hazing to be conducted by its members or by others subject to its direction or control shall be deprived of any official recognition or approval granted by the college.

(d) Student groups found responsible for violating the code of student conduct, college antihazing policies, or state or federal laws relating to hazing or offenses related to alcohol, drugs, sexual assault, or physical assault will be disclosed in a public report issued by the college setting forth the name of the student group, the date the investigation began, the date the investigation ended, a finding of responsibility, a description of the incident(s) giving rise to the finding, and the details of the sanction(s) imposed.

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WSR 23-21-055
PERMANENT RULES
DEPARTMENT OF HEALTH
[Filed October 11, 2023, 11:28 a.m., effective November 11, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: WAC 246-247-035 National standards adopted by reference for sources of radionuclide emissions. This rule making updates rules which reference the national standards for sources of radionuclide emissions federal regulations to the most recent version of those standards, adopted in 2023. This amendment makes no changes to any requirements previously adopted but is required for the department of health to receive delegation of the Radionuclide Air Emissions Program from the United States Environmental Protection Agency.

Citation of Rules Affected by this Order: Amending WAC 246-247-035.

Statutory Authority for Adoption: RCW 70A.388.040 and 70A.388.050(5).

Adopted under notice filed as WSR 23-15-092 on July 18, 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 1, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 1, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 1, Repealed 0.

Date Adopted: October 11, 2023.

Kristin Peterson, JD
Chief of Policy
for Umair A. Shah, MD, MPH
Secretary

OTS-4674.1

AMENDATORY SECTION (Amending WSR 23-04-063, filed 1/27/23, effective 2/27/23)

WAC 246-247-035 National standards adopted by reference for sources of radionuclide emissions. (1) In addition to other requirements of this chapter, the following federal standards, as in effect on July 1, ((~~2022~~)) 2023, are adopted by reference except as provided in subsection (2) of this section.

(a) For federal facilities:

(i) 40 C.F.R. Part 61, Subpart A - General Provisions.

(ii) 40 C.F.R. Part 61, Subpart H - National Emission Standards for Emissions of Radionuclides Other Than Radon From Department of Energy Facilities.

(iii) 40 C.F.R. Part 61, Subpart I - National Emission Standards for Radionuclide Emissions From Federal Facilities Other Than Nuclear Regulatory Commission Licensees and Not Covered by Subpart H.

(iv) 40 C.F.R. Part 61, Subpart Q - National Emission Standards for Radon Emissions From Department of Energy Facilities.

(b) For nonfederal facilities:

(i) 40 C.F.R. Part 61, Subpart A - General Provisions.

(ii) 40 C.F.R. Part 61, Subpart B - National Emission Standards for Radon Emissions From Underground Uranium Mines.

(iii) 40 C.F.R. Part 61, Subpart K - National Emission Standards for Radionuclide Emissions From Elemental Phosphorus Plants.

(iv) 40 C.F.R. Part 61, Subpart R - National Emissions Standards for Radon from Phosphogypsum Stacks.

(v) 40 C.F.R. Part 61, Subpart T - National Emission Standards for Radon Emissions From the Disposal of Uranium Mill Tailings.

(vi) 40 C.F.R. Part 61, Subpart W - National Emission Standards for Radon Emissions From Operating Mill Tailings.

(2) References to "Administrator" or "EPA" in 40 C.F.R. Part 61 include the department of health except in any section of 40 C.F.R. Part 61 for which a federal rule or delegation indicates that the authority will not be delegated to the state.

[Statutory Authority: RCW 70A.388.040 and 70A.388.050(5). WSR 23-04-063, § 246-247-035, filed 1/27/23, effective 2/27/23. Statutory Authority: RCW 70A.388.040, 70A.388.050(5) and 2020 c 20. WSR 21-22-118, § 246-247-035, filed 11/3/21, effective 12/4/21. Statutory Authority: RCW 70.98.050 and 70.98.080(5). WSR 19-23-039, § 246-247-035, filed 11/12/19, effective 12/13/19. Statutory Authority: RCW 70.98.050, 70.98.080(5) and 40 C.F.R. 63.91. WSR 19-04-042, § 246-247-035, filed 1/29/19, effective 3/1/19. Statutory Authority: RCW 70.98.050 and 70.98.080(5). WSR 18-12-075, § 246-247-035, filed 6/1/18, effective 7/2/18; WSR 17-13-037, § 246-247-035, filed 6/13/17, effective 7/14/17. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 16-15-083, § 246-247-035, filed 7/19/16, effective 8/19/16; WSR 16-06-003, § 246-247-035, filed 2/17/16, effective 3/19/16. Statutory Authority: RCW 70.98.050 and 70.98.080(5). WSR 12-01-071, § 246-247-035, filed 12/19/11, effective 1/19/12. Statutory Authority: RCW 70.98.050. WSR 05-12-059, § 246-247-035, filed 5/26/05, effective 6/26/05.]

WSR 23-21-056
PERMANENT RULES
DEPARTMENT OF HEALTH
[Filed October 11, 2023, 11:46 a.m., effective November 11, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: Radiation protection, compliance with United States Nuclear Regulatory Commission (NRC) rules. The department of health (department) adopted amendments to revise chapter 246-221 WAC, Radiation protection standards, chapter 246-231 WAC, Packaging and transportation of radioactive material, chapter 246-237 WAC, Radiation protection—Physical protection of category 1 and category 2 quantities of radioactive material, and chapter 246-240 WAC, Radiation protection—Medical use of radioactive material to be consistent with NRC rule changes identified by the regulation amendments tracking system (RATS) 2020-2 Social Security Number Fraud Prevention, 2020-3 Miscellaneous Corrections, 2021-1 Miscellaneous Corrections, and 2021-2 Miscellaneous Corrections. This rule making was required to comply with RCW 70A.388.040 State radiation control agency, and 70A.388.110 Federal-state agreements. As stated under this formal state agreement between the governor and NRC, the department is required to remain compatible with NRC rules. This is done through rule amendments to make state rules consistent with, and at-least-as-stringent-as, the NRC's rules.

Citation of Rules Affected by this Order: Amending WAC 246-221-010, 246-221-015, 246-221-030, 246-221-040, 246-221-055, 246-221-060, 246-221-080, 246-221-090, 246-221-100, 246-221-102, 246-221-106, 246-221-117, 246-221-160, 246-221-190, 246-221-230, 246-221-235, 246-221-240, 246-221-250, 246-221-260, 246-221-265, 246-221-270, 246-221-285, 246-221-290, 246-231-010, 246-231-040, 246-231-094, 246-231-098, 246-231-106, 246-231-140, 246-231-170, 246-231-200, 246-267-010, 246-267-011, 246-267-025, 246-267-033, 246-267-045, 246-267-051, 246-267-057, 246-267-079, 246-267-081, 246-267-900, 246-240-010, 246-240-075, 246-240-078, 246-240-210, 246-240-278, 246-240-651, and 246-240-654.

Statutory Authority for Adoption: RCW 70A.388.040.

Other Authority: RCW 70A.388.110.

Adopted under notice filed as WSR 23-15-095 on July 18, 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 48, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 48, Repealed 0.

Date Adopted: October 11, 2023.

Kristen Peterson, JD
Chief of Policy
for Umair A. Shah, MD, MPH
Secretary

OTS-4711.2

AMENDATORY SECTION (Amending WSR 01-05-110, filed 2/21/01, effective 3/24/01)

WAC 246-221-005 Radiation protection programs. (1) Each specific licensee shall develop, document, and implement a radiation protection program sufficient to ensure compliance with the provisions of this chapter.

(2) The licensee shall use, to the extent practical, procedures and engineering controls based upon sound radiation protection principles to achieve occupational doses and doses to members of the public that are as low as is reasonably achievable (ALARA).

(3) The licensee shall review the radiation protection program content and implementation at ((~~the frequency specified in the license~~)) least annually.

(4) To implement the ALARA requirements of subsection (2) of this section, and notwithstanding the requirements of WAC 246-221-060, a constraint on air emission of radioactive material to the environment, excluding radon-220, radon-222 and their daughters, shall be established by licensees such that the individual member of the public likely to receive the highest dose will not be expected to receive a total effective dose equivalent in excess of 0.1 mSv (10 mrem) per year from these emissions. This dose constraint does not apply to sealed sources or to accelerators less than 200MeV. If a licensee subject to this requirement exceeds this dose constraint, the licensee shall report the exceedance as provided in WAC 246-221-260 and promptly take appropriate corrective action to ensure against recurrence.

(5) Each licensee shall maintain records of the radiation protection program, including:

(a) The provisions of the program; and

(b) Audits, where required, and other reviews of program content and implementation.

[Statutory Authority: RCW 70.98.050. WSR 01-05-110, § 246-221-005, filed 2/21/01, effective 3/24/01; WSR 99-15-105, § 246-221-005, filed 7/21/99, effective 8/21/99; WSR 94-01-073, § 246-221-005, filed 12/9/93, effective 1/9/94.]

AMENDATORY SECTION (Amending WSR 18-21-020, filed 10/4/18, effective 11/4/18)

WAC 246-221-010 Occupational dose limits for adults. (1) The licensee or registrant shall control the occupational dose to individual adults, except for planned special exposures pursuant to WAC 246-221-030, to the following dose limits:

(a) An annual limit, which is the more limiting of:

(i) The total effective dose equivalent being equal to 0.05 Sv (((~~5~~)) five rem); or

(ii) The sum of the deep dose equivalent and the committed dose equivalent to any individual organ or tissue other than the lens of the eye being equal to 0.50 Sv (50 rem).

(b) The annual limits to the lens of the eye, to the skin of the whole body, and to the skin of the extremities which are:

(i) A lens dose equivalent of 0.15 Sv (15 rem); and

(ii) A shallow dose equivalent of 0.50 Sv (50 rem) to the skin of the whole body or to the skin of any extremity.

(2) Doses received in excess of the annual limits, including doses received during accidents, emergencies, and planned special exposures, must be subtracted from the limits specified in WAC 246-221-030 for planned special exposures that the individual may receive during the current year and during the individual's lifetime.

(3) When the external exposure is determined by measurement with an external personal monitoring device, the deep-dose equivalent must be used in place of the effective dose equivalent, unless the effective dose equivalent is determined by a dosimetry method approved by the NRC or the department. The assigned deep-dose equivalent must be for the part of the body receiving the highest exposure. The assigned shallow dose equivalent shall be the dose averaged over the contiguous ((~~ten~~)) 10 square centimeters of skin receiving the highest exposure. The deep dose equivalent, lens dose equivalent, and shallow dose equivalent may be assessed from surveys or other radiation measurements for the purpose of demonstrating compliance with the occupational dose limits, if the individual monitoring device was not in the region of highest potential exposure, or the results of the individual monitoring are unavailable.

(4) Derived air concentration (DAC) and annual limit on intake (ALI) values are specified in WAC 246-221-290 and may be used to determine the individual's dose and to demonstrate compliance with the occupational dose limits.

(5) Notwithstanding the annual dose limits, the licensee shall limit the soluble uranium intake by an individual to 10 milligrams in a week in consideration of chemical toxicity.

(6) The licensee or registrant shall reduce the dose that an individual may be allowed to receive in the current year by the amount of occupational dose received while employed by any other person during the current year as determined in accordance with WAC 246-221-020.

[Statutory Authority: RCW 70.98.050, 56 F.R. 23396, 10 C.F.R. 20.1201 (a)(1)(ii). WSR 18-21-020, § 246-221-010, filed 10/4/18, effective 11/4/18. Statutory Authority: RCW 70.98.050. WSR 14-01-077, § 246-221-010, filed 12/16/13, effective 1/16/14; WSR 04-23-093, § 246-221-010, filed 11/17/04, effective 12/18/04; WSR 01-05-110, § 246-221-010, filed 2/21/01, effective 3/24/01; WSR 94-01-073, § 246-221-010, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-221-010, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-010, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. WSR 87-01-031 (Order 2450), § 402-24-020, filed 12/11/86. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-020, filed 12/8/80; Order 1095, § 402-24-020, filed 2/6/76; Order 1, § 402-24-020, filed 1/8/69; Rules (part), filed 10/26/66.]

AMENDATORY SECTION (Amending WSR 01-05-110, filed 2/21/01, effective 3/24/01)

WAC 246-221-015 Compliance with requirements for summation of external and internal doses. (1) If the licensee is required to moni-

tor under both WAC 246-221-090 and 246-221-100, the licensee shall demonstrate compliance with the dose limits by summing external and internal doses. If the licensee is required to monitor only under WAC 246-221-090 or only under WAC 246-221-100, then summation is not required to demonstrate compliance with the dose limits. The licensee may demonstrate compliance with the requirements for summation of external and internal doses under subsections (2), (3), and (4) of this section. The dose equivalents for the lens of the eye, the skin, and the extremities are not included in the summation, but are subject to separate limits.

(2) **Intake by inhalation.** If the only intake of radionuclides is by inhalation, the total effective dose equivalent limit is not exceeded if the sum of the deep dose equivalent divided by the total effective dose equivalent limit, and one of the following, does not exceed unity:

(a) The sum of the fractions of the inhalation ALI for each radionuclide; or

(b) The total number of derived air concentration-hours (DAC-hours) for all radionuclides divided by ((~~two thousand~~)) 2,000; or

(c) The sum of the calculated committed effective dose equivalents to all significantly irradiated organs or tissues (T) calculated from bioassay data using appropriate biological models and expressed as a fraction of the annual limit. For purposes of this requirement, an organ or tissue is deemed to be significantly irradiated if, for that organ or tissue, the product of the weighting factors, w_T, and the committed dose equivalent, $H_{T,50}$, per unit intake is greater than ((~~ten~~)) 10 percent of the maximum weighted value of H_{50}, that is, $w_T H_{T,50}$, per unit intake for any organ or tissue.

(3) **Intake by oral ingestion.** If the occupationally exposed individual also receives an intake of radionuclides by oral ingestion greater than ((~~ten~~)) 10 percent of the applicable oral ALI, the licensee shall account for this intake and include it in demonstrating compliance with the limits.

(4) **Intake through wounds or absorption through skin.** The licensee shall evaluate and, to the extent practical, account for intakes through wounds or skin absorption. The intake through intact skin has been included in the calculation of DAC for hydrogen-3 and does not need to be evaluated or accounted for pursuant to this section.

(5) **External dose from airborne radioactive material.** Licensees shall, when determining the dose from airborne radioactive material, include the contribution to the deep dose equivalent, lens dose equivalent, and shallow dose equivalent from external exposure to the radioactive cloud. Airborne radioactivity measurements and DAC values shall not be used as the primary means to assess the deep dose equivalent when the airborne radioactive material includes radionuclides other than noble gases or if the cloud of airborne radioactive material is not relatively uniform. The determination of the deep dose equivalent to an individual shall be based upon measurements using instruments or individual monitoring devices.

[Statutory Authority: RCW 70.98.050. WSR 01-05-110, § 246-221-015, filed 2/21/01, effective 3/24/01; WSR 94-01-073, § 246-221-015, filed 12/9/93, effective 1/9/94.]

AMENDATORY SECTION (Amending WSR 01-05-110, filed 2/21/01, effective 3/24/01)

WAC 246-221-030 Requirements for planned special exposures. A licensee or registrant may authorize an adult worker to receive doses in addition to and accounted for separately from the doses received under the limits specified in WAC 246-221-010 provided that each of the following conditions is satisfied:

(1) The licensee or registrant authorizes a planned special exposure only in an exceptional situation when alternatives that might avoid the dose estimated to result from the planned special exposure are unavailable or impractical.

(2) The licensee or registrant, and employer if the employer is not the licensee or registrant, specifically authorizes the planned special exposure, in writing, before the exposure occurs.

(3) Before a planned special exposure, the licensee or registrant ensures that each individual involved is:

(a) Informed of the purpose of the planned operation; and

(b) Informed of the estimated doses and associated potential risks and specific radiation levels or other conditions that might be involved in performing the task; and

(c) Instructed in the measures to be taken to keep the dose ALARA considering other risks that may be present.

(4) Prior to permitting an individual to participate in a planned special exposure, the licensee or registrant ascertains prior doses as required by WAC 246-221-020(2) during the lifetime of the individual for each individual involved.

(5) Subject to WAC 246-221-010(2), the licensee or registrant shall not authorize a planned special exposure that would cause an individual to receive a dose from all planned special exposures and all doses in excess of the limits to exceed:

(a) The numerical values of any of the dose limits in WAC 246-221-010(1) in any year; and

(b) Five times the annual dose limits in WAC 246-221-010(1) during the individual's lifetime.

(6) The licensee or registrant maintains records that describe:

(a) The exceptional circumstances requiring the use of a planned special exposure;

(b) The name of the management official who authorized the planned special exposure and a copy of the signed authorization;

(c) What actions were necessary;

(d) Why the actions were necessary;

(e) What precautions were taken to assure that doses were maintained ALARA; and

(f) What individual and collective doses were expected to result.

(7) The licensee or registrant records the best estimate of the dose resulting from the planned special exposure in the individual's record and informs the individual, in writing, of the dose within ((~~thirty~~)) 30 days from the date of the planned special exposure. The dose from planned special exposures shall not be considered in controlling future occupational dose of the individual under WAC 246-221-010(1) but shall be included in evaluations required by subsections (4) and (5) of this section.

(8) The licensee or registrant submits a written report in accordance with WAC 246-221-265.

[Statutory Authority: RCW 70.98.050. WSR 01-05-110, § 246-221-030, filed 2/21/01, effective 3/24/01; WSR 94-01-073, § 246-221-030, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-221-030, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-030, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-027, filed 12/8/80.]

AMENDATORY SECTION (Amending WSR 14-01-077, filed 12/16/13, effective 1/16/14)

WAC 246-221-040 Determination of internal exposure of individuals to concentrations of radioactive materials in restricted areas. (1) For purposes of assessing dose used to determine compliance with occupational dose equivalent limits, the licensee shall, when required under WAC 246-221-100, take suitable and timely measurements of:

(a) Concentrations of radioactive materials in air in work areas; or

(b) Quantities of radionuclides in the body; or

(c) Quantities of radionuclides excreted from the body; or

(d) Combinations of these measurements.

(2) Unless respiratory protective equipment is used, as provided in WAC 246-221-117, or the assessment of intake is based on bioassays, the licensee shall assume that an individual inhales radioactive material at the airborne concentration in which the individual is present.

(3) When specific information on the physical and biochemical properties of the radionuclides taken into the body or the behavior or the material in an individual is known, the licensee may:

(a) Use that information to calculate the committed effective dose equivalent, and, if used, the licensee shall document that information in the individual's record; and

(b) Upon prior approval of the department, adjust the DAC or ALI values to reflect the actual physical and chemical characteristics of airborne radioactive material, for example, aerosol size distribution or density; and

(c) Separately assess the contribution of fractional intakes of Class D, W, or Y compounds of a given radionuclide to the committed effective dose equivalent. See WAC 246-221-290.

(4) If the licensee chooses to assess intakes of Class Y material using the measurements given in subsection (1)(b) or (c) of this section, the licensee may delay the recording and reporting of the assessments for periods up to seven months, unless otherwise required by WAC 246-221-250 or 246-221-260. This delay permits the licensee to make additional measurements basic to the assessments.

(5) If the identity and concentration of each radionuclide in a mixture are known, the fraction of the DAC applicable to the mixture for use in calculating DAC-hours shall be either:

(a) The sum of the ratios of the concentration to the appropriate DAC value, that is, D, W, or Y, from WAC 246-221-290 for each radionuclide in the mixture; or

(b) The ratio of the total concentration for all radionuclides in the mixture to the most restrictive DAC value for any radionuclide in the mixture.

(6) If the identity of each radionuclide in a mixture is known, but the concentration of one or more of the radionuclides in the mixture is not known, the DAC for the mixture shall be the most restrictive DAC of any radionuclide in the mixture.

(7) When a mixture of radionuclides in air exists, a licensee may disregard certain radionuclides in the mixture if:

(a) The licensee uses the total activity of the mixture in demonstrating compliance with the dose limits in WAC 246-221-010 and in complying with the monitoring requirements in WAC 246-221-100; and

(b) The concentration of any radionuclide disregarded is less than ((~~ten~~)) 10 percent of its DAC; and

(c) The sum of these percentages for all of the radionuclides disregarded in the mixture does not exceed ((~~thirty~~)) 30 percent.

(8) When determining the committed effective dose equivalent, the following information may be considered:

(a) In order to calculate the committed effective dose equivalent, the licensee may assume that the inhalation of one ALI, or an exposure of 2,000 DAC-hours, results in a committed effective dose equivalent of 0.05 Sv (((~~5~~)) five rem) for radionuclides that have their ALIs or DACs based on the committed effective dose equivalent.

(b) For an ALI and the associated DAC determined by the nonstochastic organ dose limit of 0.50 Sv (50 rem), the intake of radionuclides that would result in a committed effective dose equivalent of 0.05 Sv (((~~5~~)) five rem), that is, the stochastic ALI, is listed in parentheses in Table I of WAC 246-221-290. The licensee may, as a simplifying assumption, use the stochastic ALIs to determine committed effective dose equivalent. However, if the licensee uses the stochastic ALIs, the licensee shall also demonstrate that the limit in WAC 246-221-010 (1)(a)(ii) is met.

[Statutory Authority: RCW 70.98.050. WSR 14-01-077, § 246-221-040, filed 12/16/13, effective 1/16/14; WSR 94-01-073, § 246-221-040, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-221-040, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-040, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-030, filed 12/8/80; Order 1095, § 402-24-030, filed 2/6/76; Order 1, § 402-24-030, filed 1/8/69; Rules (part), filed 10/26/66.]

AMENDATORY SECTION (Amending WSR 17-12-046, filed 6/1/17, effective 7/2/17)

WAC 246-221-055 Dose equivalent to an embryo/fetus. (1) The licensee or registrant shall ensure that the dose equivalent to an embryo/fetus during the entire pregnancy, due to occupational exposure of a declared pregnant woman, does not exceed ((~~5~~)) five mSv (0.5 rem).

(2) Once pregnancy has been declared, the licensee or registrant shall make every effort to avoid substantial variation above a uniform monthly exposure rate to a declared pregnant woman in order to satisfy the limit in subsection (1) of this section.

(3) If by the time the woman declares pregnancy to the licensee or registrant, the dose equivalent to the embryo/fetus has exceeded

((~~5~~)) five mSv (0.5 rem), or is within 0.50 mSv (0.05 rem) of this dose, the licensee or registrant shall be deemed to be in compliance with subsection (1) of this section if the additional dose equivalent to the embryo/fetus does not exceed 0.50 mSv (0.05 rem) during the remainder of the pregnancy.

(4) The dose equivalent to an embryo/fetus shall be taken as the sum of:

(a) The deep dose equivalent to the declared pregnant woman; and

(b) The dose equivalent to the embryo/fetus from radionuclides in the embryo/fetus and radionuclides in the declared pregnant woman.

(5) The licensee or registrant shall maintain the records of dose equivalent to an embryo/fetus with the records of dose equivalent to the declared pregnant woman. The declaration of pregnancy, including the estimated date of conception, shall also be kept on file, but may be maintained separately from the dose records.

[Statutory Authority: RCW 70.98.010, 70.98.050, and 70.98.080. WSR 17-12-046, § 246-221-055, filed 6/1/17, effective 7/2/17. Statutory Authority: RCW 70.98.050. WSR 01-05-110, § 246-221-055, filed 2/21/01, effective 3/24/01; WSR 94-01-073, § 246-221-055, filed 12/9/93, effective 1/9/94.]

AMENDATORY SECTION (Amending WSR 14-01-077, filed 12/16/13, effective 1/16/14)

WAC 246-221-060 Dose limits for individual members of the public. (1) Each licensee or registrant shall conduct operations so that:

(a) The total effective dose equivalent to individual members of the public from the licensed or registered operation does not exceed ((~~1~~)) one mSv (0.1 rem) in a year, exclusive of the dose contributions from background radiation, from any medical administration the individual has received, from exposure to individuals administered radioactive material and released under chapter 246-240 WAC, from voluntary participation in medical research programs, and from the licensee's or registrant's disposal of radioactive material into sanitary sewerage in accordance with WAC 246-221-190; and

(b) The dose in any unrestricted area from external sources, exclusive of the dose contributions from patients administered radioactive material and released under chapter 246-240 WAC, does not exceed 0.02 mSv (0.002 rem) in any one hour.

(2) If the licensee or registrant permits members of the public to have access to restricted areas, they shall be escorted and the limits for members of the public continue to apply to those individuals.

(3) Notwithstanding subsection (1) of this section, a licensee or registrant may continue to operate a facility constructed and put into operation prior to January 1, 1994, where the annual dose limit for an individual member of the public is more than ((~~1~~)) one mSv (0.1 rem) and less than ((~~5~~)) five mSv (0.5 rem) total effective dose equivalent, if:

(a) The facility's approved operating conditions for each radiation source remain the same. Any increase in the following operating conditions shall require reevaluation by the department and modification of the facility shielding applicable to the source of radiation

to meet the ((~~1~~)) one mSv (0.1 rem) total effective dose equivalent limit for individual members of the public: Size of the radiation source, workload, or occupancy factors associated with the source of radiation; and

(b) Any change in the permanent shielding of the facility due to remodeling, repair or replacement requires the facility to meet the ((~~1~~)) one mSv (0.1 rem) total effective dose equivalent limit for individual members of the public for areas affected by that portion of the shielding.

(4) Each licensee or registrant shall maintain records sufficient to demonstrate compliance with the dose limit for individual members of the public.

[Statutory Authority: RCW 70.98.050. WSR 14-01-077, § 246-221-060, filed 12/16/13, effective 1/16/14; WSR 06-05-019, § 246-221-060, filed 2/6/06, effective 3/9/06; WSR 98-13-037, § 246-221-060, filed 6/8/98, effective 7/9/98; WSR 94-01-073, § 246-221-060, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-221-060, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-060, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. WSR 87-01-031 (Order 2450), § 402-24-040, filed 12/11/86. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-040, filed 12/8/80; Order 1095, § 402-24-040, filed 2/6/76; Order 1, § 402-24-040, filed 1/8/69; Rules (part), filed 10/26/66.]

AMENDATORY SECTION (Amending WSR 14-01-077, filed 12/16/13, effective 1/16/14)

WAC 246-221-080 Leak tests. (1) Each sealed radioactive source possessed under the provisions of a specific license, other than hydrogen-3 (tritium), with a half-life greater than ((~~thirty~~)) 30 days and in any form other than gas, shall be tested and results obtained for leakage or contamination prior to initial use and at six-month intervals or as specified by the license, except that each source designed for the purpose of emitting alpha particles shall be tested at intervals not to exceed three months. If at any other time there is reason to suspect that a sealed source might have been damaged, it shall be tested for leakage and results obtained before further use. In the absence of a certificate from a transferor indicating that a test for leakage has been made within six months prior to the transfer (three months for a source designed to emit alpha particles), the sealed source shall not be put into use until tested and the results received.

(2) Leak tests shall be capable of detecting the presence of 185 Bq (0.005 microcurie) of removable contamination. The results of leak tests made pursuant to subsection (1) of this section shall be recorded in units of becquerel or microcuries and shall be maintained for inspection by the department. Any test conducted pursuant to subsection (1) of this section which reveals the presence of 185 Bq (0.005 microcurie) or more of removable contamination shall be considered evidence that the sealed source is leaking. The licensee shall immediately withdraw the source from use shall take action to prevent the spread of contamination and shall cause it to be decontaminated and

repaired or to be disposed in accordance with WAC 246-232-080. If a sealed source shows evidence of leaking, a report shall be filed with the department within five days of the test, describing the equipment involved, the test results, and the corrective action taken.

(3) Test samples shall be taken from the sealed source or from the internal surfaces or the opening of the container in which the sealed source is stored or from surfaces of devices or equipment in which the sealed source is permanently mounted. Tests for contamination and leakage may be made by wiping appropriate accessible surfaces on which one might expect contamination to accumulate and measuring these wipes for transferred contamination. Test samples shall also be taken from the interior surfaces of the container in which a sealed source of radium is stored.

(4) Leak tests are required for sealed radioactive sources that are greater than 3.7 MBq (100 microcuries) for beta and gamma emitting sources and greater than 370 KBq (10 microcuries) for sources designed to emit alpha particles.

(5) Tests for leakage or contamination shall be performed by persons specifically authorized by the department, an agreement state, or the NRC to perform such services.

[Statutory Authority: RCW 70.98.050. WSR 14-01-077, § 246-221-080, filed 12/16/13, effective 1/16/14; WSR 94-01-073, § 246-221-080, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-221-080, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-080, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. WSR 83-19-050 (Order 2026), § 402-24-060, filed 9/16/83. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-060, filed 12/8/80; Order 1095, § 402-24-060, filed 2/6/76; Order 1, § 402-24-060, filed 1/8/69; Rules (part), filed 10/26/66.]

AMENDATORY SECTION (Amending WSR 01-05-110, filed 2/21/01, effective 3/24/01)

WAC 246-221-090 Personnel monitoring for external dose. Each licensee or registrant shall monitor occupational exposure from sources of radiation at levels sufficient to demonstrate compliance with the occupational dose limits of WAC 246-221-010, 246-221-030, 246-221-050 and 246-221-055.

(1) Each licensee or registrant shall monitor occupational exposure to radiation from licensed (or registered) and unlicensed (or unregistered) radiation sources under the control of the licensee or registrant and shall supply and shall require the use of individual monitoring devices by:

(a) Each adult likely to receive, in one year from sources external to the body, a dose in excess of ((~~ten~~)) 10 percent of the applicable limits specified in WAC 246-221-010(1).

(b) Each minor likely to receive, in one year from sources external to the body, a deep dose equivalent in excess of ((~~1~~)) one mSv (0.1 rem), a lens dose equivalent in excess of 1.5 mSv (0.15 rem), or a shallow dose equivalent to the skin or to the extremities in excess of ((~~5~~)) five mSv (0.5 rem).

(c) Each declared pregnant woman likely to receive during the entire pregnancy, from radiation sources external to the body, a deep dose equivalent in excess of ((1)) one mSv (0.1 rem). All of the occupational dose limits specified in WAC 246-221-010 continue to be applicable to the declared pregnant worker as long as the embryo/fetus dose limit is not exceeded.

(d) Each individual who enters a high or very high radiation area.

(2) Personnel monitoring devices assigned to an individual:

(a) Shall not intentionally be exposed to give a false or erroneous reading;

(b) Shall be assigned to one individual per exposure interval (i.e., weekly, monthly) and used to determine exposure for that individual only;

(c) Shall not be worn by any individual other than that individual originally assigned to the device;

(d) Personnel monitoring devices that are exposed while not being worn by the assigned individual shall be processed and recorded as soon as possible. A replacement monitoring device shall be assigned to the individual immediately. A record of the circumstances of the exposure shall be retained.

(3) All personnel dosimeters, except for direct and indirect reading pocket ionization chambers and those dosimeters used to measure the dose to any extremities, that require processing to determine the radiation dose and that are utilized by licensees or registrants to comply with subsection (1) of this section, with other applicable provisions of chapters 246-220 through 246-255 WAC, or with conditions specified in a licensee's license must be processed and evaluated by a dosimetry processor:

(a) Holding current personnel dosimetry accreditation from either the National Voluntary Laboratory Accreditation Program (NVLAP) of the National Institute of Standards and Technology (formerly known as the National Bureau of Standards) or the United States Department of Energy Laboratory Accreditation Program for Personnel Dosimetry Systems (DOELAP); and

(b) Approved in this accreditation process for the type of radiation or radiations included in the NVLAP or DOELAP program that most closely approximate the type of radiation or radiations for which the individual wearing the dosimeter is monitored.

(4) For the purposes of this section "dosimetry processor" means an individual or an organization that processes and evaluates personnel monitoring devices in order to determine the radiation dose delivered to the device.

(5) Each licensee or registrant shall maintain records of doses received by all individuals for whom monitoring was required under subsection (1) of this section, and records of doses received during planned special exposures, accidents, and emergency conditions. Assessments of dose equivalent and records made using units in effect before January 1, 1994, need not be changed. These records shall include, when applicable:

(a) The deep dose equivalent to the whole body, lens dose equivalent, shallow dose equivalent to the skin, and shallow dose equivalent to the extremities; and

(b) The total effective dose equivalent when required by WAC 246-221-015; and

(c) The total of the deep dose equivalent and the committed dose to the organ receiving the highest total dose (total organ dose equivalent).

(6) The licensee or registrant shall maintain the records specified in subsection (5) of this section on department Form RHF-5A, in accordance with the instructions provided on the form, or in clear and legible records containing all the information required by Form RHF-5A; and shall update the information at least annually.

(7) Each licensee or registrant shall ensure that individuals, for whom they are required to monitor occupational doses in accordance with subsection (1) of this section, wear individual monitoring devices as follows:

(a) An individual monitoring device used for monitoring the dose to the whole body shall be worn at the unshielded or least shielded location of the whole body likely to receive the highest exposure. When a protective apron is worn, the location of the individual monitoring device is typically at the neck (collar).

(b) Any additional individual monitoring device used for monitoring the dose to an embryo/fetus of a declared pregnant woman, pursuant to WAC 246-221-055(1), shall be located at the waist under any protective apron being worn by the woman.

(c) An individual monitoring device used for monitoring the lens dose equivalent, to demonstrate compliance with WAC 246-221-010 (1)(b)(i), shall be located at the neck (collar), outside any protective apron being worn by the monitored individual, or at an unshielded location closer to the eye.

(d) An individual monitoring device used for monitoring the dose to the extremities, to demonstrate compliance with WAC 246-221-010 (1)(b)(ii), shall be worn on the extremity likely to receive the highest exposure. Each individual monitoring device shall be oriented to measure the highest dose to the extremity being monitored.

[Statutory Authority: RCW 70.98.050. WSR 01-05-110, § 246-221-090, filed 2/21/01, effective 3/24/01; WSR 94-01-073, § 246-221-090, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 92-06-008 (Order 245), § 246-221-090, filed 2/21/92, effective 3/23/92. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-090, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-070, filed 12/8/80; Order 1095, § 402-24-070, filed 2/6/76; Order 708, § 402-24-070, filed 8/24/72; Order 1, § 402-24-070, filed 1/8/69; Rules (part), filed 10/26/66.]

AMENDATORY SECTION (Amending WSR 01-05-110, filed 2/21/01, effective 3/24/01)

WAC 246-221-100 Personnel monitoring for internal dose. (1) Each licensee shall monitor, to determine compliance with WAC 246-221-040, the occupational intake of radioactive material by and assess the committed effective dose equivalent to:

(a) Adults likely to receive, in ((~~1~~)) one year, an intake in excess of ((~~ten~~)) 10 percent of the applicable ALI in Table I, Columns 1 and 2, of WAC 246-221-290;

(b) Minors likely to receive, in one year, a committed effective dose equivalent in excess of ((~~1~~)) one mSv (0.1 rem); and

(c) Declared pregnant women likely to receive, during the entire pregnancy, a committed effective dose equivalent in excess of ((~~1~~)) one mSv (0.1 rem).

(2) Where necessary or desirable in order to aid in determining the extent of an individual's exposure to concentrations of radioactive material, the department may incorporate license provisions or issue an order requiring a licensee or registrant to make available to the individual appropriate bioassay services and to furnish a copy of the reports of such services to the department.

(3) Each licensee shall maintain records of doses received by all individuals for whom monitoring was required pursuant to subsections (1) and (2) of this section, and records of doses received during planned special exposures, accidents, and emergency conditions. Assessments of dose equivalent and records made using units in effect before January 1, 1994, need not be changed. These records shall include, when applicable:

(a) The estimated intake or body burden of radionuclides;

(b) The committed effective dose equivalent assigned to the intake or body burden of radionuclides;

(c) The specific information used to calculate the committed effective dose equivalent pursuant to WAC 246-221-040;

(d) The total effective dose equivalent when required by WAC 246-221-015; and

(e) The total of the deep dose equivalent and the committed dose to the organ receiving the highest total dose (total organ dose equivalent).

(4) The licensee or registrant shall maintain the records specified in subsection (3) of this section on department Form RHF-5A, in accordance with the instructions provided on the form, or in clear and legible records containing all the information required by Form RHF-5A; and shall update the information at least annually.

[Statutory Authority: RCW 70.98.050. WSR 01-05-110, § 246-221-100, filed 2/21/01, effective 3/24/01; WSR 94-01-073, § 246-221-100, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-100, filed 12/27/90, effective 1/31/91; Order 1095, § 402-24-080, filed 2/6/76; Order 1, § 402-24-080, filed 1/8/69; Rules (part), filed 10/26/66.]

AMENDATORY SECTION (Amending WSR 94-01-073, filed 12/9/93, effective 1/9/94)

WAC 246-221-102 Control of access to high radiation areas. (1) The licensee or registrant shall ensure that each entrance or access point to a high radiation area has one or more of the following features:

(a) A control device that, upon entry into the area, causes the level of radiation to be reduced below that level at which an individual might receive a deep dose equivalent of ((~~1~~)) one mSv (0.1 rem) in one hour at ((~~thirty~~)) 30 centimeters from the source of radiation or from any surface that the radiation penetrates; or

(b) A control device that energizes a conspicuous visible or audible alarm signal so that the individual entering the high radiation area and the supervisor of the activity are made aware of the entry; or

(c) Entryways that are locked, except during periods when access to the areas is required, with positive control over each individual entry.

(2) In place of the controls required by subsection (1) of this section for a high radiation area, the licensee or registrant may substitute continuous direct or electronic surveillance that is capable of preventing unauthorized entry.

(3) The licensee or registrant may apply to the department for approval of alternative methods for controlling access to high radiation areas.

(4) The licensee or registrant shall establish the controls required by subsections (1) and (3) of this section in a way that does not prevent individuals from leaving a high radiation area.

(5) The licensee is not required to control each entrance or access point to a room or other area that is a high radiation area solely because of the presence of radioactive materials prepared for transport and packaged and labeled in accordance with the regulations of the United States Department of Transportation provided that:

(a) The packages do not remain in the area longer than three days; and

(b) The dose rate at one meter from the external surface of any package does not exceed 0.1 mSv (0.01 rem) per hour.

(6) The licensee is not required to control entrance or access to rooms or other areas in hospitals solely because of the presence of patients containing radioactive material, provided that there are personnel in attendance who are taking the necessary precautions to prevent the exposure of individuals to radiation or radioactive material in excess of the established limits and to operate within the ALARA provisions of the licensee's radiation protection program.

(7) The licensee or registrant is not required to control entrance or access to rooms or other areas as described in this section if the licensee or registrant has met all the specific requirements for access and control specified in other applicable chapters of these regulations, such as, chapter 246-243 WAC for industrial radiography, chapter 246-225 WAC for X-rays in the healing arts, and chapter 246-229 WAC for particle accelerators.

[Statutory Authority: RCW 70.98.050. WSR 94-01-073, § 246-221-102, filed 12/9/93, effective 1/9/94.]

AMENDATORY SECTION (Amending WSR 14-01-077, filed 12/16/13, effective 1/16/14)

WAC 246-221-110 Surveys. (1) Each licensee or registrant shall make or cause to be made such surveys, as defined in WAC 246-220-010, as may be necessary for the licensee or registrant to establish compliance with these regulations and are reasonable under the circumstances to evaluate the magnitude and extent of radiation levels, concentrations or quantities of radioactive material, and potential radiation hazards. Records of such surveys shall be preserved as specified in WAC 246-221-230. Information on performing surveys may be found in the NRC's Regulatory Guide 8.23 "Radiation Safety Surveys at Medical Institutions."

(2) The licensee shall ensure that instruments and equipment used for quantitative radiation measurements, for example, dose rate and

effluent monitoring, are calibrated annually at intervals not to exceed ((~~thirteen~~)) 13 months for the radiation measured.

[Statutory Authority: RCW 70.98.050. WSR 14-01-077, § 246-221-110, filed 12/16/13, effective 1/16/14; WSR 01-05-110, § 246-221-110, filed 2/21/01, effective 3/24/01; WSR 94-01-073, § 246-221-110, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-221-110, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-110, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. WSR 87-01-031 (Order 2450), § 402-24-085, filed 12/11/86; WSR 83-19-050 (Order 2026), § 402-24-085, filed 9/16/83. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-085, filed 12/8/80; Order 1095, § 402-24-085, filed 2/6/76.]

AMENDATORY SECTION (Amending WSR 01-05-110, filed 2/21/01, effective 3/24/01)

WAC 246-221-117 Use of individual respiratory protection equipment. If the licensee assigns or permits the use of respiratory protection equipment to limit the intake of radioactive material:

(1) The licensee shall use only respiratory protection equipment that is:

(a) Tested and certified by the National Institute for Occupational Safety and Health (NIOSH); or

(b) Approved by the department on the basis of the licensee's submittal of an application for authorized use of other respiratory protection equipment, including a demonstration by testing, or a demonstration on the basis of reliable test information, that the material and performance characteristics of the equipment are capable of providing the proposed degree of protection under anticipated conditions of use.

(2) The licensee shall implement and maintain a respiratory protection program that includes:

(a) Air sampling sufficient to identify the potential hazard, permit proper equipment selection, and estimate exposures;

(b) Surveys and bioassays, as appropriate, to evaluate actual intakes;

(c) Testing of respirators for operability (user seal check for face sealing devices and functional check for others) immediately prior to each use;

(d) Written procedures regarding:

(i) Monitoring, including air sampling and bioassays;

(ii) Supervision and training of respirator users;

(iii) Fit testing;

(iv) Respirator selection;

(v) Breathing air quality;

(vi) Inventory and control;

(vii) Storage, issuance, maintenance, repair, testing, and quality assurance of respiratory protection equipment;

(viii) Recordkeeping; and

(ix) Limitations on periods of respirator use and relief from respirator use;

(e) Determination by a physician that the individual user is medically fit to use respiratory protection equipment:

(i) Before the initial fitting of a face sealing respirator;

(ii) Before the first field use of nonface sealing respirators; and

(iii) Either every ((~~twelve~~)) 12 months thereafter, or periodically at a frequency determined by a physician; and

(f) Fit testing, with a fit factor greater than or equal to ((~~ten~~)) 10 times the APF for negative pressure devices, and a fit factor greater than or equal to ((~~five hundred~~)) 500 for any positive pressure, continuous flow, and pressure-demand devices, before the first field use of tight fitting, face sealing respirators, and periodically thereafter at a frequency not to exceed one year. Fit testing must be performed with the facepiece operating in the negative pressure mode.

(3) The licensee shall advise each respirator user that the user may leave the area at any time for relief from respirator use in the event of equipment malfunction, physical or psychological distress, procedural or communication failure, significant deterioration of operating conditions, or any other conditions that might require relief.

(4) The licensee shall also consider limitations appropriate to the type and mode of use. When selecting respiratory devices the licensee shall provide for vision correction, adequate communication, low temperature work environments, and the concurrent use of other safety or radiological protection equipment. The licensee shall use equipment in such a way as not to interfere with the proper operation of the respirator.

(5) Standby rescue persons are required whenever one-piece atmosphere-supplying suits, or any combination of supplied air respiratory protection device and personnel protective equipment are used from which an unaided individual would have difficulty extricating himself or herself. The standby persons must be equipped with respiratory protection devices or other apparatus appropriate for the potential hazards. The standby rescue persons shall observe or otherwise maintain continuous communication with the workers (visual, voice, signal line, telephone, radio, or other suitable means), and be immediately available to assist them in case of a failure of the air supply or for any other reason that requires relief from distress. A sufficient number of standby rescue persons must be immediately available to assist all users of this type of equipment and to provide effective emergency rescue if needed.

(6) Atmosphere-supplying respirators must be supplied with respirable air of grade D quality or better as defined by the Compressed Gas Association in publication G-7.1, "*Commodity Specification for Air,*" 1997 and included in the regulations of the Occupational Safety and Health Administration (29 C.F.R. 1910.134 (i)(1)(ii)(A) through (E)). Grade D quality air criteria include:

(a) Oxygen content (v/v) of 19.5-23.5%;

(b) Hydrocarbon (condensed) content of ((~~5~~)) five milligrams per cubic meter of air or less;

(c) Carbon monoxide (CO) content of 10 ppm or less;

(d) Carbon dioxide content of 1,000 ppm or less; and

(e) Lack of noticeable odor.

(7) The licensee shall ensure that no objects, materials or substances, such as facial hair, or any conditions that interfere with the face-to-facepiece seal or valve function, and that are under the control of the respirator wearer, are present between the skin of the

wearer's face and the sealing surface of a tight-fitting respirator facepiece.

(8) In estimating the dose to individuals from intake of airborne radioactive materials, the concentration of radioactive material in the air that is inhaled when respirators are worn is initially assumed to be the ambient concentration in air without respiratory protection, divided by the assigned protection factor. If the dose is later found to be greater than the estimated dose, the corrected value must be used. If the dose is later found to be less than the estimated dose, the corrected value may be used.

(9) The department may impose restrictions in addition to the provisions of this section, WAC 246-221-113 and 246-221-285, in order to:

(a) Ensure that the respiratory protection program of the licensee is adequate to limit doses to individuals from intakes of airborne radioactive materials consistent with maintaining total effective dose equivalent ALARA; and

(b) Limit the extent to which a licensee may use respiratory protection equipment instead of process or other engineering controls.

(10) The licensee shall obtain authorization from the department before using assigned protection factors in excess of those specified in WAC 246-221-285. The department may authorize a licensee to use higher assigned protection factors on receipt of an application that:

(a) Describes the situation for which a need exists for higher protection factors; and

(b) Demonstrates that the respiratory protection equipment provides these higher protection factors under the proposed conditions of use.

[Statutory Authority: RCW 70.98.050. WSR 01-05-110, § 246-221-117, filed 2/21/01, effective 3/24/01; WSR 98-13-034, § 246-221-117, filed 6/8/98, effective 7/9/98; WSR 94-01-073, § 246-221-117, filed 12/9/93, effective 1/9/94.]

AMENDATORY SECTION (Amending WSR 16-13-054, filed 6/10/16, effective 7/11/16)

WAC 246-221-160 Procedures for picking up, receiving, and opening packages. (1) Each licensee who expects to receive a package containing quantities of radioactive material in excess of the Type A_1 or A_2 quantities specified in WAC 246-231-200 shall make arrangements to receive:

(a) The package when it is offered for delivery by the carrier; or

(b) Immediate notification from the carrier of the arrival of the package at the carrier's terminal.

(2) Each licensee who picks up a package of radioactive material from a carrier's terminal shall pick up the package expeditiously upon receipt of notification from the carrier of its arrival.

(3) Each licensee shall:

(a) Monitor for radioactive contamination the external surfaces of any package labeled with a Radioactive White I, Yellow II or Yellow III label unless the package contains only radioactive material in the form of gas or in special form as defined in WAC 246-231-010; and

(b) Monitor the radiation levels of the external surfaces of any package labeled with a Radioactive White I, Yellow II or Yellow III label unless the package contains quantities of radioactive material that are less than or equal to the Type A quantity, as defined in WAC 246-231-200; and

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

(4) Monitoring shall be performed:

(a) Immediately upon receipt if there is evidence of package degradation or any other evidence of potential contamination or excessive radiation levels; or

(b) As soon as practicable after receipt, but no later than three hours after the package is received at the licensee's facility if received during the licensee's normal working hours, or no later than three hours from the beginning of the next working day if received after normal working hours.

(5) The licensee shall immediately notify the final delivery carrier and, by telephone, facsimile, or email, ((~~or letter,~~)) the department when:

(a) For normal shipments, removable radioactive surface contamination exceeds either 22 dpm/cm^2 for beta-gamma emitting radionuclides, all radionuclides with half-lives less than ((~~ten~~)) 10 days, natural uranium, natural thorium, uranium-235, uranium-238, thorium-232, and thorium-228 and thorium 230 when contained in ores or concentrates; or 2.2 dpm/cm^2 for all other alpha emitting radionuclides; or

(b) For exclusive use shipments, removable radioactive surface contamination exceeds either 220 dpm/cm^2 for beta-gamma emitting radionuclides, all radionuclides with half-lives less than ((~~ten~~)) 10 days, natural uranium, natural thorium, uranium-235, uranium-238, thorium-232, and thorium-228 and thorium 230 when contained in ores or concentrates; or 22 dpm/cm^2 for all other alpha emitting radionuclides; or

(c) For normal or exclusive use shipments, external radiation levels exceed two mSv/hour (200 millirem per hour) at any point on the external surface of the package; or

(d) For exclusive use shipments where the shipment is made in a closed transport vehicle, packages are secured in a fixed position, and no loading or unloading occurs between the beginning and end of transportation, external radiation levels exceed ((~~ten~~)) 10 mSv/hour (1000 millirem per hour) at any point on the external surface of the package.

(6) Each licensee shall establish and maintain procedures for safely opening packages in which radioactive material is received, and shall assure that such procedures are followed and that due consideration is given to instructions for the type of package being opened and the monitoring of potentially contaminated packaging material (including packages containing radioactive material in gaseous form) to assure that only background levels of radiation are present prior to disposal of such material as nonradioactive waste.

(7) Licensees transferring special form sources to and from a work site in vehicles owned or operated by the licensee are exempt from the contamination monitoring requirements of subsection (3)(a) of this section but are not exempt from the monitoring requirement in

subsection (3)(b) of this section for measuring radiation levels to ensure that the source is still properly lodged in its shield.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 16-13-054, § 246-221-160, filed 6/10/16, effective 7/11/16. Statutory Authority: RCW 70.98.050. WSR 14-01-077, § 246-221-160, filed 12/16/13, effective 1/16/14; WSR 99-15-105, § 246-221-160, filed 7/21/99, effective 8/21/99; WSR 94-01-073, § 246-221-160, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-221-160, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-160, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. WSR 87-01-031 (Order 2450), § 402-24-125, filed 12/11/86; WSR 83-19-050 (Order 2026), § 402-24-125, filed 9/16/83. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-125, filed 12/8/80; Order 1095, § 402-24-125, filed 2/6/76.]

AMENDATORY SECTION (Amending WSR 94-01-073, filed 12/9/93, effective 1/9/94)

WAC 246-221-190 Disposal by release into sanitary sewerage systems. (1) No licensee shall discharge radioactive material into a sanitary sewerage system unless:

(a) It is readily soluble or it is biological material which is readily dispersible in water;

(b) The quantity of any radioactive material released in any one month, if diluted by the average monthly quantity of water released by the licensee, will not result in an average concentration exceeding the limits specified in WAC 246-221-290, Table III; and

(c) The sum of the fractions for each radionuclide, if more than one radionuclide is released, will not exceed unity; where the fraction for each radionuclide is determined by dividing the actual monthly average concentration of each radionuclide released by the licensee into the sewer by the concentration of that radionuclide listed in Table III of WAC 246-221-290; and

(d) The total quantity of licensed and other radioactive material that the licensee releases into the sanitary sewerage system in a year does not exceed 185 GBq (((~~5~~)) five Ci) of hydrogen-3, 37 GBq (((~~1~~)) one Ci) of carbon-14, and 37 GBq (((~~1~~)) one Ci) of all other radioactive materials combined.

(2) Excreta from individuals undergoing medical diagnosis or therapy with radioactive material shall be exempt from any limitations contained in this section.

[Statutory Authority: RCW 70.98.050. WSR 94-01-073, § 246-221-190, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-221-190, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-190, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. WSR 83-19-050 (Order 2026), § 402-24-140, filed 9/16/83. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-140, filed 12/8/80; Order 1095, § 402-24-140, filed 2/6/76; Order 1, § 402-24-140, filed 1/8/69; Rules (part), filed 10/26/66.]

AMENDATORY SECTION (Amending WSR 01-05-110, filed 2/21/01, effective 3/24/01)

WAC 246-221-230 Records important to radiation safety. (1) Each licensee or registrant shall make and retain records of activities, program reviews, measurements, and calculations which may be necessary to determine the extent of occupational and public exposure from sources of radiation under the control of the licensee or registrant.

(2) Each record required by this section shall be legible throughout the specified retention period.

(3) Each licensee or registrant shall use the SI units: Becquerel, gray, sievert and coulomb per kilogram, or the special units: Curie, rad, rem, and roentgen, including multiples and subdivisions, and shall clearly indicate the units of all quantities on records required by these regulations.

(4) The licensee or registrant shall make a clear distinction among the quantities entered on the records required by these regulations such as, total effective dose equivalent, total organ dose equivalent, shallow dose equivalent, lens dose equivalent, deep dose equivalent, or committed effective dose equivalent.

(5) Records which must be maintained under this part shall be the original or a reproduced copy or microform if such reproduced copy or microform is duly authenticated by authorized personnel and the microform is capable of producing a clear and legible copy after storage for the period specified by department regulations. The record may also be stored in electronic media with the capability for producing legible, accurate, and complete records during the required retention period. Electronic media data storage systems shall incorporate standard or universally recognized security measures. Records, such as letters, drawings, and specifications, shall include all pertinent information, such as stamps, initials, and signatures.

(6) The licensee shall maintain adequate safeguards against tampering with and loss of records.

(7) The licensee or registrant shall retain the following required records until the department terminates each pertinent license or registration requiring the record, and upon termination of the license or registration, the licensee or registrant shall store for at least ((~~thirty~~)) 30 years:

(a) Records of prior occupational dose and exposure history as recorded on department Form RHF-4 or RHF-4A, or equivalent;

(b) Records on department Form RHF-5 or RHF-5A, or equivalent, of doses received by all individuals for whom monitoring was required pursuant to WAC 246-221-090 and 246-221-100;

(c) Records of doses received during planned special exposures, accidents, and emergency conditions;

(d) The specific information used to calculate the committed effective dose equivalent pursuant to WAC 246-221-040(3);

(e) Records of the results of surveys to determine the dose from external sources of radiation used, in the absence of or in combination with individual monitoring data, in the assessment of individual dose equivalents;

(f) Records of the results of measurements and calculations used to determine individual intakes of radioactive material and used in the assessment of internal dose;

(g) Records showing the results of air sampling, surveys, and bioassays required pursuant to WAC 246-221-117 (1)(b)(i) and (ii);

(h) Records of the results of measurements and calculations used to evaluate the release of radioactive effluents to the environment.

(8) The licensee or registrant shall retain the following records until the department terminates the pertinent license or registration requiring the record:

(a) Records of waste disposal made under the provisions of WAC 246-221-180, 246-221-190, 246-221-210 and 246-221-220, chapter 246-249 WAC, and any burials in soil as previously authorized;

(b) Records of dose to individual members of the public as required by WAC 246-221-060(4);

(c) Records of the provisions of the radiation protection program as required by WAC 246-221-005.

(9) The licensee or registrant shall retain the following records for three years after the record is made:

(a) Records of testing entry control devices for very high radiation areas as required by WAC 246-221-106(3);

(b) Records used in preparing department Form RHF-4 or RHF-4A;

(c) Records showing the results of general surveys required by WAC 246-221-110 and package surveys required by WAC 246-221-160;

(d) Records of calibrations required by WAC 246-221-110;

(e) Records of program audits and other reviews of the content and implementation of the radiation protection program required by WAC 246-221-005;

(f) Records of waste disposal by decay in storage.

(10) If there is a conflict between the department's regulations in this part, license condition, or other written department approval or authorization pertaining to the retention period for the same type of record, the retention period specified in the regulations in this part for such records shall apply unless the department, under WAC 246-220-050, has granted a specific exemption from the record retention requirements specified in the regulations in this part.

(11) The discontinuance or curtailment of activities does not relieve the licensee or registrant of responsibility for retaining all records required by this section.

[Statutory Authority: RCW 70.98.050. WSR 01-05-110, § 246-221-230, filed 2/21/01, effective 3/24/01; WSR 94-01-073, § 246-221-230, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-221-230, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-230, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. WSR 87-01-031 (Order 2450), § 402-24-170, filed 12/11/86; WSR 83-19-050 (Order 2026), § 402-24-170, filed 9/16/83. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-170, filed 12/8/80; Order 1095, § 402-24-170, filed 2/6/76; Order 708, § 402-24-170, filed 8/24/72; Order 1, § 402-24-170, filed 7/2/71; Order 1, § 402-24-170, filed 1/8/69; Rules (part), filed 10/26/66.]

AMENDATORY SECTION (Amending WSR 09-06-003, filed 2/18/09, effective 3/21/09)

WAC 246-221-235 Reports of transactions involving nationally tracked sources. Each licensee who manufactures, transfers, receives, disassembles, or disposes of a nationally tracked source shall com-

plete and submit a National Source Tracking Transaction Report as specified in subsections (1) through (5) of this section for each type of transaction.

(1) Each licensee who manufactures a nationally tracked source shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:

(a) The name, address, and license number of the reporting licensee;

(b) The name of the individual preparing the report;

(c) The manufacturer, model, and serial number of the source;

(d) The radioactive material in the source;

(e) The initial source strength in becquerels (curies) at the time of manufacture; and

(f) The manufacture date of the source.

(2) Each licensee that transfers a nationally tracked source to another person shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:

(a) The name, address, and license number of the reporting licensee;

(b) The name of the individual preparing the report;

(c) The name and license number of the recipient facility and the shipping address;

(d) The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;

(e) The radioactive material in the source;

(f) The initial or current source strength in becquerels (curies);

(g) The date for which the source strength is reported;

(h) The shipping date;

(i) The estimated arrival date; and

(j) For nationally tracked sources transferred as waste under a Uniform Low-Level Radioactive Waste Manifest, the waste manifest number and the container identification of the container with the nationally tracked source.

(3) Each licensee that receives a nationally tracked source shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:

(a) The name, address, and license number of the reporting licensee;

(b) The name of the individual preparing the report;

(c) The name, address, and license number of the person that provided the source;

(d) The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;

(e) The radioactive material in the source;

(f) The initial or current source strength in becquerels (curies);

(g) The date for which the source strength is reported;

(h) The date of receipt; and

(i) For material received under a Uniform Low-Level Radioactive Waste Manifest, the waste manifest number and the container identification with the nationally tracked source.

(4) Each licensee that disassembles a nationally tracked source shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:

(a) The name, address, and license number of the reporting licensee;

(b) The name of the individual preparing the report;

(c) The manufacturer, model, and serial number of the source or, if not available, other information to uniquely identify the source;

(d) The radioactive material in the source;

(e) The initial or current source strength in becquerels (curies);

(f) The date for which the source strength is reported;

(g) The disassemble date of the source.

(5) Each licensee who disposes of a nationally tracked source shall complete and submit a National Source Tracking Transaction Report. The report must include the following information:

(a) The name, address, and license number of the reporting licensee;

(b) The name of the individual preparing the report;

(c) The waste manifest number;

(d) The container identification with the nationally tracked source;

(e) The date of disposal; and

(f) The method of disposal.

(6) The reports discussed in subsections (1) through (5) of this section must be submitted by the close of the next business day after the transaction. A single report may be submitted for multiple sources and transactions. The reports must be submitted to the National Source Tracking System by using:

(a) The online National Source Tracking System;

(b) Electronically using a computer-readable format;

(c) By facsimile;

(d) By mail to the address on the National Source Tracking Transaction Report Form (NRC Form 748); or

(e) By telephone with follow-up by facsimile or mail.

(7) Each licensee shall correct any error in previously filed reports or file a new report for any missed transaction within five business days of the discovery of the error or missed transaction. Such errors may be detected by a variety of methods such as administrative reviews or by physical inventories required by regulation. In addition, each licensee shall reconcile the inventory of nationally tracked sources possessed by the licensee against that licensee's data in the National Source Tracking System. The reconciliation must be conducted during the month of January in each year. The reconciliation process must include resolving any discrepancies between the National Source Tracking System and the actual inventory by filing the reports identified by subsections (1) through (5) of this section. By January 31, of each year, each licensee must submit to the National Source Tracking System confirmation that the data in the National Source Tracking System is correct.

((~~(8) Each licensee that possesses Category 1 or 2 nationally tracked sources shall report its initial inventory of Category 1 or 2 nationally tracked sources to the National Source Tracking System by January 31, 2009. The information may be submitted by using any of the methods identified in subsection (6)(a) through (d) of this section. The initial inventory report shall include the following information:~~

~~(a) The name, address, and license number of the reporting licensee;~~

~~(b) The name of the individual preparing the report;~~

~~(c) The manufacturer, model, and serial number of each nationally tracked source or, if not available, other information to uniquely identify the source;~~

~~(d) The radioactive material in the sealed source;~~
~~(e) The initial or current source strength in becquerels (curies); and~~
~~(f) The date for which the source strength is reported.~~))

[Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 09-06-003, § 246-221-235, filed 2/18/09, effective 3/21/09.]

AMENDATORY SECTION (Amending WSR 16-13-054, filed 6/10/16, effective 7/11/16)

WAC 246-221-240 Reports of stolen, lost or missing radiation sources. (1) Each licensee and registrant shall report by telephone (206-682-5327) and confirm promptly by letter, facsimile, or email to the State Department of Health, Office of Radiation Protection, P.O. Box 47827, Olympia, Washington 98504-7827.

(a) Immediately after its occurrence becomes known to the licensee, stolen, lost, or missing radioactive material in an aggregate quantity equal to or greater than ((~~one thousand~~)) 1,000 times the quantity specified in WAC 246-221-300, Appendix B; or

(b) Within ((~~thirty~~)) 30 days after its occurrence becomes known to the licensee, lost, stolen, or missing radioactive material in an aggregate quantity greater than ((~~ten~~)) 10 times the quantity specified in WAC 246-221-300, Appendix B that is still missing or any item not exempted in chapter 246-232 WAC; or

(c) Immediately after its occurrence becomes known to the registrant, a stolen, lost, or missing radiation machine.

(2) Each licensee or registrant required to make a report pursuant to subsection (1) of this section shall, within ((~~thirty~~)) 30 days after making the telephone report, make a written report to the department setting forth the following information:

(a) A description of the licensed or registered source of radiation involved, including, for radioactive material, the kind, quantity, and chemical and physical form; and, for radiation machines, the manufacturer, model and serial number, type and maximum energy of radiation emitted; and

(b) A description of the circumstances under which the loss or theft occurred; and

(c) A statement of disposition, or probable disposition, of the licensed or registered source of radiation involved; and

(d) Exposures of individuals to radiation, circumstances under which the exposures occurred, and the possible total effective dose equivalent to persons in unrestricted areas; and

(e) Actions that have been taken, or will be taken, to recover the source of radiation; and

(f) Procedures or measures that have been, or will be, adopted to ensure against a recurrence of the loss or theft of licensed or registered sources of radiation.

(3) Subsequent to filing the written report, the licensee or registrant shall also report additional substantive information on the loss or theft within ((~~thirty~~)) 30 days after the licensee or registrant learns of such information.

(4) The licensee or registrant shall prepare any report filed with the department pursuant to this section so that names of individ-

uals who may have received exposure to radiation are stated in a separate and detachable portion of the report.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 16-13-054, § 246-221-240, filed 6/10/16, effective 7/11/16. Statutory Authority: RCW 70.98.050. WSR 14-01-077, § 246-221-240, filed 12/16/13, effective 1/16/14; WSR 94-01-073, § 246-221-240, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-221-240, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-240, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. WSR 87-01-031 (Order 2450), § 402-24-180, filed 12/11/86; WSR 83-19-050 (Order 2026), § 402-24-180, filed 9/16/83. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-180, filed 12/8/80; Order 1095, § 402-24-180, filed 2/6/76; Order 708, § 402-24-180, filed 8/24/72; Order 1, § 402-24-180, filed 7/2/71; Order 1, § 402-24-180, filed 1/8/69; Rules (part), filed 10/26/66.]

AMENDATORY SECTION (Amending WSR 16-13-054, filed 6/10/16, effective 7/11/16)

WAC 246-221-250 Notification of incidents. (1) **Immediate notification.** Notwithstanding other requirements for notification, each licensee and registrant shall immediately (as soon as possible but no later than four hours after discovery of an incident) notify the State Department of Health, Office of Radiation Protection, P.O. Box 47827, Olympia, Washington 98504-7827, by telephone (206-682-5327) and confirming letter, facsimile, or email with a follow-up written report within ((~~thirty~~)) 30 days of any incident involving any radiation source which may have caused or threatens to cause:

(a) An individual to receive:

(i) A total effective dose equivalent of 0.25 Sv (25 rem) or more;

(ii) A lens dose equivalent of 0.75 Sv (75 rem) or more; or

(iii) A shallow dose equivalent to the skin or extremities or a total organ dose equivalent of 2.5 Sv (250 rem) or more;

(b) The release of radioactive material, inside or outside of a restricted area, so that, had an individual been present for ((~~twenty-four~~)) 24 hours, the individual could have received an intake five times the occupational ALI. This provision does not apply to locations where personnel are not normally stationed during routine operations, such as hot-cells or process enclosures; or

(c) The loss of ability to take immediate protective actions necessary to avoid exposure to sources of radiation or releases of radioactive material that could exceed regulatory limits. Events which could cause such a loss of ability include fires, explosions, toxic gas releases, etc.

(2) **Twenty-four hour notification.** Each licensee and registrant shall within ((~~twenty-four~~)) 24 hours of discovery of the event, notify the State Department of Health, Office of Radiation Protection, P.O. Box 47827, Olympia, Washington 98504-7827, by telephone (206-682-5327) and confirming letter, facsimile, or email with a follow-up written report within ((~~thirty~~)) 30 days of any incident in-

volving any radiation source possessed which may have caused or threatens to cause:

(a) An individual to receive, in a period of ((~~twenty-four~~)) 24 hours:

(i) A total effective dose equivalent exceeding 0.05 Sv (((~~5~~)) five rem);

(ii) A lens dose equivalent exceeding 0.15 Sv (15 rem); or

(iii) A shallow dose equivalent to the skin or extremities or a total organ dose equivalent exceeding 0.5 Sv (50 rem);

(b) The release of radioactive material, inside or outside of a restricted area, so that, had an individual been present for ((~~twenty-four~~)) 24 hours, the individual could have received an intake in excess of one occupational ALI. This provision does not apply to locations where personnel are not normally stationed during routine operations, such as hot-cells or process enclosures;

(c) An unplanned contamination incident that:

(i) Requires access to the contaminated area, by workers or the general public, to be restricted for more than ((~~twenty-four~~)) 24 hours by imposing additional radiological controls or by prohibiting entry into the area;

(ii) Involves a quantity of material greater than five times the lowest annual limit on intake specified in WAC 246-221-290; and

(iii) Has access to the area restricted for a reason other than to allow radionuclides with a half-life of less than ((~~twenty-four~~)) 24 hours to decay prior to decontamination;

(d) Equipment failure or inability to function as designed when:

(i) The equipment is required by regulation or license condition to prevent releases exceeding regulatory limits, to prevent exposures to radiation and radioactive material exceeding regulatory limits or to mitigate the consequences of an accident;

(ii) The equipment is required to be available and operable at the time it becomes disabled or fails to function; and

(iii) No redundant equipment is available and operable to perform the required safety functions;

(e) An unplanned medical treatment at a medical facility of an individual with removable radioactive contamination on the individual's clothing or body; or

(f) An unplanned fire or explosion damaging any radioactive material or any device, container or equipment containing radioactive material when:

(i) The quantity of radioactive material involved is greater than five times the lowest annual limit on intake specified in WAC 246-221-290; and

(ii) The damage affects the integrity of the radioactive material or its container.

(3) For each occurrence requiring notification pursuant to this section, a prompt investigation of the situation shall be initiated by the licensee/registrant. A written report of the findings of the investigation shall be sent to the department within ((~~thirty~~)) 30 days.

(4) The licensee or registrant shall prepare each report filed with the department under this section so that names of individuals who have received exposure to sources of radiation are stated in a separate and detachable portion of the report.

Any report filed with the department under this section shall contain the information described in WAC 246-221-260 (2) and (3).

(5) The provisions of this section do not apply to doses that result from planned special exposures, provided such doses are within

the limits for planned special exposures and are reported pursuant to WAC 246-221-265.

(6) Telephone notifications that do not involve immediate or ((~~twenty-four~~)) 24 hour notification should be made to the Tumwater office (360-236-3300).

(7) Telephone notification required under this section shall include, to the extent that the information is available at the time of notification:

(a) The caller's name and call-back telephone number;

(b) A description of the incident including date and time;

(c) The exact location of the incident;

(d) The radionuclides, quantities, and chemical and physical forms of the radioactive materials involved; and

(e) Any personnel radiation exposure data available.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 16-13-054, § 246-221-250, filed 6/10/16, effective 7/11/16. Statutory Authority: RCW 70.98.050. WSR 14-01-077, § 246-221-250, filed 12/16/13, effective 1/16/14; WSR 01-05-110, § 246-221-250, filed 2/21/01, effective 3/24/01; WSR 98-13-037, § 246-221-250, filed 6/8/98, effective 7/9/98; WSR 95-01-108, § 246-221-250, filed 12/21/94, effective 1/21/95; WSR 94-01-073, § 246-221-250, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-221-250, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-250, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.080. WSR 87-01-031 (Order 2450), § 402-24-190, filed 12/11/86; WSR 83-19-050 (Order 2026), § 402-24-190, filed 9/16/83. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-190, filed 12/8/80; Order 1095, § 402-24-190, filed 2/6/76; Order 708, § 402-24-190, filed 8/24/72; Order 1, § 402-24-190, filed 7/2/71; Order 1, § 402-24-190, filed 1/8/69; Rules (part), filed 10/26/66.]

AMENDATORY SECTION (Amending WSR 99-15-105, filed 7/21/99, effective 8/21/99)

WAC 246-221-260 Reports of overexposures and excessive levels and concentrations. (1) In addition to any notification required by WAC 246-221-250, each licensee or registrant shall submit a written report to the department within ((~~thirty~~)) 30 days after learning of any of the following occurrences:

(a) Incidents for which notification is required by WAC 246-221-250; or

(b) Doses in excess of any of the following:

(i) The occupational dose limits for adults in WAC 246-221-010; or

(ii) The occupational dose limits for a minor in WAC 246-221-050; or

(iii) The limits for an embryo/fetus of a declared pregnant woman in WAC 246-221-055; or

(iv) The limits for an individual member of the public in WAC 246-221-060; or

(v) Any applicable limit in the license; or

(vi) The ALARA constraints for air emissions established under WAC 246-221-005; or

(c) Levels of radiation or concentrations of radioactive material in:

(i) A restricted area in excess of applicable limits in the license; or

(ii) An unrestricted area in excess of ((~~ten~~)) 10 times the applicable limit set forth in this chapter or in the license or registration, whether or not involving exposure of any individual in excess of the limits in WAC 246-221-060; or

(d) For source materials milling licensees and nuclear power plants subject to the provisions of United States Environmental Protection Agency's generally applicable environmental radiation standards in 40 C.F.R. 190, levels of radiation or releases of radioactive material in excess of those standards, or of license conditions related to those standards.

(2) Each report required by subsection (1) of this section shall describe:

(a) The incident and its exact location, time and date;

(b) The extent of exposure of individuals to radiation or to radioactive material, including estimates of each individual's dose as required by subsection (3) of this section;

(c) Levels of radiation and concentrations of radioactive material involved, including the radionuclides, quantities, and chemical and physical form;

(d) The cause or probable cause of the exposure, levels of radiation or concentrations;

(e) The manufacturer and model number (if applicable) of any equipment that failed or malfunctioned;

(f) The results of any evaluations or assessments; and

(g) Corrective steps taken or planned to assure against a recurrence, including the schedule for achieving conformance with applicable limits, ALARA constraints, generally applicable environmental standards, and associated license conditions.

(3) Each report filed with the department pursuant to this section shall include for each individual exposed the name, Social Security number, and date of birth, and an estimate of the individual's dose. With respect to the limit for the embryo/fetus in WAC 246-221-055, the identifiers should be those of the declared pregnant woman. The report shall be prepared so that this information is stated in a separate and detachable part of the report.

(4) Individuals shall be notified of reports in accordance with the requirements of WAC 246-222-040.

[Statutory Authority: RCW 70.98.050. WSR 99-15-105, § 246-221-260, filed 7/21/99, effective 8/21/99; WSR 95-01-108, § 246-221-260, filed 12/21/94, effective 1/21/95; WSR 94-01-073, § 246-221-260, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 91-15-112 (Order 184), § 246-221-260, filed 7/24/91, effective 8/24/91. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-260, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-200, filed 12/8/80; Order 1095, § 402-24-200, filed 2/6/76; Order 708, § 402-24-200, filed 8/24/72; Order 1, § 402-24-200, filed 7/2/71; Order 1, § 402-24-200, filed 1/8/69; Rules (part), filed 10/26/66.]

AMENDATORY SECTION (Amending WSR 99-05-013, filed 2/5/99, effective 3/8/99)

WAC 246-221-265 Special reports to the department—Planned special exposures and leaking sources. (1) The licensee or registrant shall submit a written report to the department within ((~~thirty~~)) 30 days following any planned special exposure conducted in accordance with WAC 246-221-030. The written report shall:

(a) Inform the department that a planned special exposure was conducted;

(b) Indicate the date the planned special exposure occurred; and

(c) Provide the information required by WAC 246-221-030.

(2) The licensee shall file a written report with the department within five days after learning that a sealed source is leaking or contaminated. The report shall describe:

(a) The source;

(b) The source holder;

(c) The equipment in which the source is installed;

(d) The test results; and

(e) The corrective action taken.

[Statutory Authority: RCW 70.98.050. WSR 99-05-013, § 246-221-265, filed 2/5/99, effective 3/8/99; WSR 94-01-073, § 246-221-265, filed 12/9/93, effective 1/9/94.]

AMENDATORY SECTION (Amending WSR 00-07-085, filed 3/15/00, effective 4/15/00)

WAC 246-221-270 Vacating premises and release of equipment. (1) Each specific licensee shall notify the department in writing of intent to vacate, at least ((~~thirty~~)) 30 days before vacating or relinquishing possession or control of premises which may have been contaminated with radioactive material as a result of licensed activities.

(2) Each licensee shall permanently decontaminate the premise, before vacating any premise or transferring the premise, in accordance with the standards specified in chapter 246-246 WAC. A survey by the licensee shall be made after the decontamination and the department and the landlord or subsequent tenant or transferee shall be provided with a copy of the survey no later than the date of vacating or relinquishing possession or control of the premise.

(3) No machinery, instruments, laboratory equipment or any other property used in contact with, or close proximity to radioactive material at a licensed premise shall be assigned, sold, leased, or transferred to an unlicensed person unless the property has been decontaminated and meets the standards specified in WAC 246-232-140. A survey shall be made after the decontamination and the department and subsequent owner or transferee shall be provided with a copy of the survey report.

[Statutory Authority: RCW 70.98.050. WSR 00-07-085, § 246-221-270, filed 3/15/00, effective 4/15/00; WSR 94-01-073, § 246-221-270, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 43.70.040. WSR 91-02-049 (Order 121), recodified as § 246-221-270, filed 12/27/90,

effective 1/31/91; Order 1095, § 402-24-210, filed 2/6/76; Order 1, § 402-24-210, filed 1/8/69; Rules (part), filed 10/26/66.]

AMENDATORY SECTION (Amending WSR 01-05-110, filed 2/21/01, effective 3/24/01)

WAC 246-221-285 Assigned protection factors for respirators[a].

		Operating mode	Assigned Protection Factors
I.	Air-Purifying Respirators (Particulate [b] only) [c]:		
	Filtering facepiece disposable [d]	Negative Pressure	([d])
	Facepiece, half [e]	Negative Pressure	10
	Facepiece, full	Negative Pressure	100
	Facepiece, half	Powered air-purifying respirators	50
	Facepiece, full	Powered air-purifying respirators	1000
	Helmet/hood	Powered air-purifying respirators	1000
	Facepiece, loose-fitting	Powered air-purifying respirators	25
II.	Atmosphere-Supplying Respirators (Particulate, gases and vapors[f]):		
	1. Air-line respirator:		
	Facepiece, half	Demand	10
	Facepiece, half	Continuous Flow	50
	Facepiece, half	Pressure Demand	50
	Facepiece, full	Demand	100
	Facepiece, full	Continuous Flow	1000
	Facepiece, full	Pressure Demand	1000
	Helmet/hood	Continuous Flow	1000
	Facepiece, loose-fitting	Continuous Flow	25
	Suit	Continuous Flow	([g])
	2. Self-contained breathing apparatus (SCBA):		
	Facepiece, full	Demand	[h]100
	Facepiece, full	Pressure Demand	[i]10,000
	Facepiece, full	Demand, Recirculating	[h]100
	Facepiece, full	Positive Pressure Recirculating	[i]10,000
III.	Combination Respirators:		
	Any combination of air-purifying and atmosphere-supplying respirators.	Assigned protection factor for type and mode of operation as listed above.	

[a] These assigned protection factors apply only in a respiratory protection program that meets the requirements of this chapter. They are applicable only to airborne radiological hazards and may not be appropriate to circumstances when chemical or other respiratory hazards exist instead of, or in addition to, radioactive hazards. Selection and use of respirators for these circumstances must also comply with Department of Labor regulations.
Radioactive contaminants for which the concentration values in Table 1, Column 3 of WAC 246-221-290, Appendix A, are based on internal dose due to inhalation may, in addition, present external exposure hazards at higher concentrations. Under these circumstances, limitations on occupancy may have to be governed by external dose limits.

[b] Air-purifying respirators with APF <100 must be equipped with particulate filters that are at least 95 percent efficient. Air-purifying respirators with APF = 100 must be equipped with particulate filters that are at least 99 percent efficient. Air-purifying respirators with APFs >100 must be equipped with particulate filters that are at least 99.97 percent efficient.

[c] The licensee may apply to the department for the use of an APF greater than ((+)) one for sorbent cartridges as protection against airborne radioactive gases and vapors (e.g., radioiodine).

d Licensees may permit individuals to use this type of respirator who have not been medically screened or fit tested on the device provided that no credit be taken for their use in estimating intake or dose. It is also recognized that it is difficult to perform an effective positive or negative pressure preuse user seal check on this type of device. All other respiratory protection program requirements listed in WAC 246-221-117 apply. An assigned protection factor has not been assigned for these devices. However, an APF equal to 10 may be used if the licensee can demonstrate a fit factor of at least 100 by use of a validated or evaluated, qualitative or quantitative fit test.

e Under-chin type only. No distinction is made in this section between elastomeric half-masks with replaceable cartridges and those designed with the filter medium as an integral part of the facepiece (e.g., disposable or reusable disposable). Both types are acceptable so long as the seal area of the latter contains some substantial type of seal-enhancing material such as rubber or plastic, the two or more suspension straps are adjustable, the filter medium is at least 95 percent efficient and all other requirements of this part are met.

f The assigned protection factors for gases and vapors are not applicable to radioactive contaminants that present an absorption or submersion hazard. For tritium oxide vapor, approximately ((~~one-third~~)) 1/3 of the intake occurs by absorption through the skin so that an overall protection factor of ((~~3~~)) three is appropriate when atmosphere-supplying respirators are used to protect against tritium oxide. Exposure to radioactive noble gases is not considered a significant respiratory hazard, and protective actions for these contaminants should be based on external (submersion) dose considerations.

g No NIOSH approval schedule is currently available for atmosphere-supplying suits. This equipment may be used in an acceptable respiratory protection program as long as all the other minimum program requirements, with the exception of fit testing, are met (i.e., WAC 246-221-117).

h The licensee should implement institutional controls to assure that these devices are not used in areas immediately dangerous to life or health (IDLH).

i This type of respirator may be used as an emergency device in unknown concentrations for protection against inhalation hazards. External radiation hazards and other limitations to permitted exposure such as skin absorption shall be taken into account in these circumstances. This device may not be used by any individual who experiences perceptible outward leakage of breathing gas while wearing the device.

[Statutory Authority: RCW 70.98.050. WSR 01-05-110, § 246-221-285, filed 2/21/01, effective 3/24/01; WSR 94-01-073, § 246-221-285, filed 12/9/93, effective 1/9/94.]

AMENDATORY SECTION (Amending WSR 11-03-068, filed 1/18/11, effective 2/18/11)

WAC 246-221-290 Appendix A—Annual limits on intake (ALI) and derived air concentrations (DAC) of radionuclides for occupational exposure; effluent concentrations; concentrations for release to sanitary sewerage. For each radionuclide, Table I indicates the chemical form which is to be used for selecting the appropriate ALI or DAC value. The ALIs and DACs for inhalation are given for an aerosol with an activity median aerodynamic diameter (AMAD) of ((~~1~~)) one µm (micron) and for three classes (D,W,Y) of radioactive material, which refer to their retention (approximately days, weeks or years) in the pulmonary region of the lung. This classification applies to a range of clearance half-times for D if less than ((~~ten~~)) 10 days, for W from ((~~ten to one hundred~~)) 10 to 100 days, and for Y greater than ((~~one hundred~~)) 100 days. Table II provides concentration limits for airborne and liquid effluents released to the general environment. Table III provides concentration limits for discharges to sanitary sewerage.

Note: The values in Tables I, II, and III are presented in the computer "E" notation. In this notation a value of 6E-02 represents a value of 6×10^{-2} or 0.06, 6E+2 represents 6×10^{2} or 600, and 6E+0 represents 6×10^{0} or 6.

Table I "Occupational Values"

Note that the columns in Table I of this appendix captioned "Oral Ingestion ALI," "Inhalation ALI," and "DAC," are applicable to occupational exposure to radioactive material.

The ALIs in this appendix are the annual intakes of given radionuclide by "Reference Man" which would result in either: A committed effective dose equivalent of 0.05 Sv (((~~5~~)) five rem), stochastic ALI; or a committed dose equivalent of 0.5 Sv (50 rem) to an organ or tissue, nonstochastic ALI. The stochastic ALIs were derived to result in a risk, due to irradiation of organs and tissues, comparable to the risk associated with deep dose equivalent to the whole body of 0.05 Sv (((~~5~~)) five rem). The derivation includes multiplying the committed dose equivalent to an organ or tissue by a weighting factor, w_T. This weighting factor is the proportion of the risk of stochastic effects

resulting from irradiation of the organ or tissue, T, to the total risk of stochastic effects when the whole body is irradiated uniformly. The values of w_T are listed under the definition of weighting factor in WAC 246-221-005. The nonstochastic ALIs were derived to avoid nonstochastic effects, such as prompt damage to tissue or reduction in organ function.

A value of $w_T = 0.06$ is applicable to each of the five organs or tissues in the "remainder" category receiving the highest dose equivalents, and the dose equivalents of all other remaining tissues may be disregarded. The following portions of the GI tract — stomach, small intestine, upper large intestine, and lower large intestine — are to be treated as four separate organs.

Note that the dose equivalents for an extremity, elbows, arms below the elbows, feet and lower legs, knees, and legs below the knees, skin, and lens of the eye are not considered in computing the committed effective dose equivalent, but are subject to limits that must be met separately.

When an ALI is defined by the stochastic dose limit, this value alone is given. When an ALI is determined by the non-stochastic dose limit to an organ, the organ or tissue to which the limit applies is shown, and the ALI for the stochastic limit is shown in parentheses. Abbreviated organ or tissue designations are used:

LLI wall	=	lower large intestine wall;
St. wall	=	stomach wall;
Blad wall	=	bladder wall; and
Bone surf	=	bone surface.

The use of the ALIs listed first, the more limiting of the stochastic and nonstochastic ALIs, will ensure that nonstochastic effects are avoided and that the risk of stochastic effects is limited to an acceptably low value. If, in a particular situation involving a radionuclide for which the nonstochastic ALI is limiting, use of that nonstochastic ALI is considered unduly conservative, the licensee may use the stochastic ALI to determine the committed effective dose equivalent. However, the licensee shall also ensure that the 0.5 Sv (50 rem) dose equivalent limit for any organ or tissue is not exceeded by the sum of the external deep dose equivalent plus the internal committed dose equivalent to that organ, not the effective dose. For the case where there is no external dose contribution, this would be demonstrated if the sum of the fractions of the nonstochastic ALIs (ALI_{ns}) that contribute to the committed dose equivalent to the organ receiving the highest dose does not exceed unity, that is, $\sum$ (intake (in µCi) of each radionuclide/ALI_{ns}) ≤ 1.0. If there is an external deep dose equivalent contribution of H_d, then this sum must be less than ((1)) one - (H_d/50), instead of ≤ 1.0.

The derived air concentration (DAC) values are derived limits intended to control chronic occupational exposures. The relationship between the DAC and the ALI is given by:

DAC = ALI (in µCi)/(2000 hours per working year x 60 minutes/hour x 2 x 10^4 ml per minute) = [ALI/2.4 x 10^9] µCi/ml,

where 2 x 10^4 ml per minute is the volume of air breathed per minute at work by Reference Man under working conditions of light work.

The DAC values relate to one of two modes of exposure: Either external submersion or the internal committed dose equivalents resulting from inhalation of radioactive materials. DACs based upon submersion are for immersion in a semi-infinite cloud of uniform concentration and apply to each radionuclide separately.

The ALI and DAC values include contributions to exposure by the single radionuclide named and any in-growth of daughter radionuclides produced in the body by decay of the parent. However, intakes that include both the parent and daughter radionuclides should be treated by the general method appropriate for mixtures.

The values of ALI and DAC do not apply directly when the individual both ingests and inhales a radionuclide, when the individual is exposed to a mixture of radionuclides by either inhalation or ingestion or both, or when the individual is exposed to both internal and external irradiation. See WAC 246-221-015. When an individual is exposed to radioactive materials which fall under several of the translocation classifications of the same radionuclide, such as, Class D, Class W, or Class Y, the exposure may be evaluated as if it were a mixture of different radionuclides.

It should be noted that the classification of a compound as Class D, W, or Y is based on the chemical form of the compound and does not take into account the radiological half-life of different radionuclides. For this reason, values are given for Class D, W, and Y compounds, even for very short-lived radionuclides.

Table II "Effluent Concentrations"

The columns in Table II of this appendix captioned "Effluents," "Air" and "Water" are applicable to the assessment and control of dose to the public, particularly in the implementation of the provisions of WAC 246-221-070. The concentration values given in Columns 1 and 2 of Table II are equivalent to the radionuclide concentrations which, if inhaled or ingested continuously over the course of a year, would produce a total effective dose equivalent of 0.50 mSv (0.05 rem).

Consideration of nonstochastic limits has not been included in deriving the air and water effluent concentration limits because nonstochastic effects are presumed not to occur at or below the dose levels established for individual members of the public. For radionuclides, where the nonstochastic limit was governing in deriving the occupational DAC, the stochastic ALI was used in deriving the corresponding airborne effluent limit in Table II. For this reason, the DAC and airborne effluent limits are not always proportional as was the case in the previous Appendix A of this chapter.

The air concentration values listed in Table II, Column 1 were derived by one of two methods. For those radionuclides for which the stochastic limit is governing, the occupational stochastic inhalation ALI was divided by 2.4×10^9, relating the inhalation ALI to the DAC, as explained above, and then divided by a factor of ((~~three hundred~~)) 300. The factor of ((~~three hundred~~)) 300 includes the following components: A factor of ((~~fifty~~)) 50 to relate the 0.05 Sv (((~~5~~)) five rem) annual occupational dose limit to the ((~~1~~)) one mSv (0.1 rem) limit for members of the public, a factor of three to adjust for the difference in exposure time and the inhalation rate for a worker and that for members of the public; and a factor of two to adjust the occupa-

tional values, derived for adults, so that they are applicable to other age groups.

For those radionuclides for which submersion, that is external dose, is limiting, the occupational DAC in Table I, Column 3 was divided by ((~~two hundred nineteen~~)) 219. The factor of ((~~two hundred nineteen~~)) 219 is composed of a factor of ((~~fifty~~)) 50, as described above, and a factor of 4.38 relating occupational exposure for ((~~two thousand~~)) 2,000 hours per year to full-time exposure (((~~eight thousand seven hundred sixty~~)) 8,760 hours per year). Note that an additional factor of two for age considerations is not warranted in the submersion case.

The water concentrations were derived by taking the most restrictive occupational stochastic oral ingestion ALI and dividing by 7.3×10^7. The factor of 7.3×10^7 (ml) includes the following components: The factors of ((~~fifty~~)) 50 and two described above and a factor of 7.3×10^5 (ml) which is the annual water intake of Reference Man.

Note 2 of this appendix provides groupings of radionuclides which are applicable to unknown mixtures of radionuclides. These groupings, including occupational inhalation ALIs and DACs, air and water effluent concentrations and releases to sewer, require demonstrating that the most limiting radionuclides in successive classes are absent. The limit for the unknown mixture is defined when the presence of one of the listed radionuclides cannot be definitely excluded as being present either from knowledge of the radionuclide composition of the source or from actual measurements.

Table III "Releases to Sewers"

The monthly average concentrations for release to sanitary sewerage are applicable to the provisions in WAC 246-221-190. The concentration values were derived by taking the most restrictive occupational stochastic oral ingestion ALI and dividing by 7.3×10^6 (ml). The factor of 7.3×10^6 (ml) is composed of a factor of 7.3×10^5 (ml), the annual water intake by Reference Man, and a factor of ((~~ten~~)) 10, such that the concentrations, if the sewage released by the licensee were the only source of water ingested by a Reference Man during a year, would result in a committed effective dose equivalent of ((~~5~~)) five mSv (0.5 rem).

LIST OF ELEMENTS

Name	Symbol	Atomic Number	Name	Symbol	Atomic Number
Actinium	Ac	89	Molybdenum	Mo	42
Aluminum	Al	13	Neodymium	Nd	60
Americium	Am	95	Neptunium	Np	93
Antimony	Sb	51	Nickel	Ni	28
Argon	Ar	18	Nitrogen	N	7
Arsenic	As	33	Niobium	Nb	41
Astatine	At	85	Osmium	Os	76
Barium	Ba	56	Oxygen	O	8
Berkelium	Bk	97	Palladium	Pd	46
Beryllium	Be	4	Phosphorus	P	15
Bismuth	Bi	83	Platinum	Pt	78
Bromine	Br	35	Plutonium	Pu	94

LIST OF ELEMENTS

Name	Symbol	Atomic Number	Name	Symbol	Atomic Number
Cadmium	Cd	48	Polonium	Po	84
Calcium	Ca	20	Potassium	K	19
Californium	Cf	98	Praseodymium	Pr	59
Carbon	C	6	Promethium	Pm	61
Cerium	Ce	58	Protactinium	Pa	91
Cesium	Cs	55	Radium	Ra	88
Chlorine	Cl	17	Radon	Rn	86
Chromium	Cr	24	Rhenium	Re	75
Cobalt	Co	27	Rhodium	Rh	45
Copper	Cu	29	Rubidium	Rb	37
Curium	Cm	96	Ruthenium	Ru	44
Dysprosium	Dy	66	Samarium	Sm	62
Einsteinium	Es	99	Scandium	Sc	21
Erbium	Er	68	Selenium	Se	34
Europium	Eu	63	Silicon	Si	14
Fermium	Fm	100	Silver	Ag	47
Fluorine	F	9	Sodium	Na	11
Francium	Fr	87	Strontium	Sr	38
Gadolinium	Gd	64	Sulfur	S	16
Gallium	Ga	31	Tantalum	Ta	73
Germanium	Ge	32	Technetium	Tc	43
Gold	Au	79	Tellurium	Te	52
Hafnium	Hf	72	Terbium	Tb	65
Holmium	Ho	67	Thallium	Tl	81
Hydrogen	H	1	Thorium	Th	90
Indium	In	49	Thulium	Tm	69
Iodine	I	53	Tin	Sn	50
Iridium	Ir	77	Titanium	Ti	22
Iron	Fe	26	Tungsten	W	74
Krypton	Kr	36	Uranium	U	92
Lanthanum	La	57	Vanadium	V	23
Lead	Pb	82	Xenon	Xe	54
Lutetium	Lu	71	Ytterbium	Yb	70
Magnesium	Mg	12	Yttrium	Y	39
Manganese	Mn	25	Zinc	Zn	30
Mendelevium	Md	101	Zirconium	Zr	40
Mercury	Hg	80			

			Table 1 Occupational Values			Table II Effluent Concentration		Table III Releases to Sewers
			Col. 1	Col. 2	Col. 3	Col. 1	Col. 2	
			Oral Ingestion	Inhalation				Monthly Average Concentration
Atomic No.	Radionuclide	Class	ALI µCi	ALI µCi	DAC µCi/ml	Air µCi/ml	Water µCi/ml	µCi/ml
1	Hydrogen-3	Water, DAC includes skin absorption	8E+4	8E+4	2E-5	1E-7	1E-3	1E-2

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
	Gas (HT or T_2) Submersion[1]: Use above values as HT and T_2 oxidize in air and in the body to HTO.							
4	Beryllium-7	W, all compounds except those given for Y	4E+4	2E+4	9E-6	3E-8	6E-4	6E-3
		Y, oxides, halides, and nitrates	-	2E+4	8E-6	3E-8	-	-
4	Beryllium-10	W, see ^{7}Be	1E+3	2E+2	6E-8	2E-10	-	-
			LLI wall (1E+3)	-	-	-	2E-5	2E-4
		Y, see ^{7}Be	-	1E+1	6E-9	2E-11	-	-
6	Carbon-11[2]	Monoxide	-	1E+6	5E-4	2E-6	-	-
		Dioxide	-	6E+5	3E-4	9E-7	-	-
		Compounds	4E+5	4E+5	2E-4	6E-7	6E-3	6E-2
6	Carbon-14	Monoxide	-	2E+6	7E-4	2E-6	-	-
		Dioxide	-	2E+5	9E-5	3E-7	-	-
		Compounds	2E+3	2E+3	1E-6	3E-9	3E-5	3E-4
7	Nitrogen-13[2]	Submersion[1]	-	-	4E-6	2E-8	-	-
8	Oxygen-15[2]	Submersion[1]	-	-	4E-6	2E-8	-	-
9	Fluorine-18[2]	D, fluorides of H, Li, Na, K, Rb, Cs, and Fr	5E+4	7E+4	3E-5	1E-7	-	-
			St wall (5E+4)	-	-	-	7E-4	7E-3
		W, fluorides of Be, Mg, Ca, Sr, Ba, Ra, Al, Ga, In, Tl, As, Sb, Bi, Fe, Ru, Os, Co, Ni, Pd, Pt, Cu, Ag, Au, Zn, Cd, Hg, Sc, Y, Ti, Zr, V, Nb, Ta, Mn, Tc, and Re	-	9E+4	4E-5	1E-7	-	-
		Y, lanthanum fluoride	-	8E+4	3E-5	1E-7	-	-
11	Sodium-22	D, all compounds	4E+2	6E+2	3E-7	9E-10	6E-6	6E-5
11	Sodium-24	D, all compounds	4E+3	5E+3	2E-6	7E-9	5E-5	5E-4
12	Magnesium-28	D, all compounds except those given for W	7E+2	2E+3	7E-7	2E-9	9E-6	9E-5
		W, oxides, hydroxides, carbides, halides, and nitrates	-	1E+3	5E-7	2E-9	-	-
13	Aluminum-26	D, all compounds except those given for W	4E+2	6E+1	3E-8	9E-11	6E-6	6E-5
		W, oxides, hydroxides, carbides, halides, and nitrates	-	9E+1	4E-8	1E-10	-	-
14	Silicon-31	D, all compounds except those given for W and Y	9E+3	3E+4	1E-5	4E-8	1E-4	1E-3
		W, oxides, hydroxides, carbides, and nitrates	-	3E+4	1E-5	5E-8	-	-
		Y, aluminosilicate glass	-	3E+4	1E-5	4E-8	-	-
14	Silicon-32	D, see ^{31}Si	2E+3	2E+2	1E-7	3E-10	-	-
			LLI wall (3E+3)	-	-	-	4E-5	4E-4
		W, see ^{31}Si	-	1E+2	5E-8	2E-10	-	-
		Y, see ^{31}Si	-	5E+0	2E-9	7E-12	-	-
15	Phosphorus-32	D, all compounds except phosphates given for W	6E+2	9E+2	4E-7	1E-9	9E-6	9E-5
		W, phosphates of Zn^{2+}, S^{3+}, Mg^{2+}, Fe^{3+}, Bi^{3+}, and lanthanides	-	4E+2	2E-7	5E-10	-	-
15	Phosphorus-33	D, see ^{32}P	6E+3	8E+3	4E-6	1E-8	8E-5	8E-4
		W, see ^{32}P	-	3E+3	1E-6	4E-9	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
16	Sulfur-35	Vapor	-	1E+4	6E-6	2E-8	-	-
		D, sulfides and sulfates except those given for W	1E+4	2E+4	7E-6	2E-8	-	-
			LLI wall (8E+3)	-	-	-	1E-4	1E-3
		W, elemental sulfur, sulfides of Sr, Ba, Ge, Sn, Pb, As, Sb, Bi, Cu, Ag, Au, Zn, Cd, Hg, W, and Mo. Sulfates of Ca, Sr, Ba, Ra, As, Sb, and Bi	6E+3					
			-	2E+3	9E-7	3E-9	-	-
17	Chlorine-36	D, chlorides of H, Li, Na, K, Rb, Cs, and Fr	2E+3	2E+3	1E-6	3E-9	2E-5	2E-4
		W, chlorides of lantha-nides, Be, Mg, Ca, Sr, Ba, Ra, Al, Ga, In, Tl, Ge, Sn, Pb, As, Sb, Bi, Fe, Ru, Os, Co, Rh, Ir, Ni, Pd, Pt, Cu, Ag, Au, Zn, Cd, Hg, Sc, Y, Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, Mn, Tc, and Re	-	2E+2	1E-7	3E-10	-	-
17	Chlorine-38[2]	D, see ^{36}Cl	2E+4	4E+4	2E-5	6E-8	-	-
			St wall (3E+4)	-	-	-	3E-4	3E-3
		W, see ^{36}Cl	-	5E+4	2E-5	6E-8	-	-
17	Chlorine-39[2]	D, see ^{36}Cl	2E+4	5E+4	2E-5	7E-8	-	-
			St wall (4E+4)	-	-	-	5E-4	5E-3
		W, see ^{36}Cl	-	6E+4	2E-5	8E-8	-	-
18	Argon-37	Submersion[1]	-	-	1E+0	6E-3	-	-
18	Argon-39	Submersion[1]	-	-	2E-4	8E-7	-	-
18	Argon-41	Submersion[1]	-	-	3E-6	1E-8	-	-
19	Potassium-40	D, all compounds	3E+2	4E+2	2E-7	6E-10	4E-6	4E-5
19	Potassium-42	D, all compounds	5E+3	5E+3	2E-6	7E-9	6E-5	6E-4
19	Potassium-43	D, all compounds	6E+3	9E+3	4E-6	1E-8	9E-5	9E-4
19	Potassium-44[2]	D, all compounds	2E+4	7E+4	3E-5	9E-8	-	-
			St wall (4E+4)	-	-	-	5E-4	5E-3
19	Potassium-45[2]	D, all compounds	3E+4	1E+5	5E-5	2E-7	-	-
			St wall (5E+4)	-	-	-	7E-4	7E-3
20	Calcium-41	W, all compounds	3E+3	4E+3	2E-6	-	-	-
			Bone surf (4E+3)	Bone surf (4E+3)	-	5E-9	6E-5	6E-4
20	Calcium-45	W, all compounds	2E+3	8E+2	4E-7	1E-9	2E-5	2E-4
20	Calcium-47	W, all compounds	8E+2	9E+2	4E-7	1E-9	1E-5	1E-4
21	Scandium-43	Y, all compounds	7E+3	2E+4	9E-6	3E-8	1E-4	1E-3
21	Scandium-44m	Y, all compounds	5E+2	7E+2	3E-7	1E-9	7E-6	7E-5
21	Scandium-44	Y, all compounds	4E+3	1E+4	5E-6	2E-8	5E-5	5E-4
21	Scandium-46	Y, all compounds	9E+2	2E+2	1E-7	3E-10	1E-5	1E-4
21	Scandium-47	Y, all compounds	2E+3	3E+3	1E-6	4E-9	-	-
			LLI wall (3E+3)	-	-	-	4E-5	4E-4
21	Scandium-48	Y, all compounds	8E+2	1E+3	6E-7	2E-9	1E-5	1E-4
21	Scandium-49[2]	Y, all compounds	2E+4	5E+4	2E-5	8E-8	3E-4	3E-3

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
22	Titanium-44	D, all compounds except those given for W and Y	3E+2	1E+1	5E-9	2E-11	4E-6	4E-5
		W, oxides, hydroxides, carbides, halides, and nitrates	-	3E+1	1E-8	4E-11	-	-
		Y, SrTi0	-	6E+0	2E-9	8E-12	-	-
22	Titanium-45	D, see ^{44}Ti	9E+3	3E+4	1E-5	3E-8	1E-4	1E-3
		W, see ^{44}Ti	-	4E+4	1E-5	5E-8	-	-
		Y, see ^{44}Ti	-	3E+4	1E-5	4E-8	-	-
23	Vanadium-472	D, all compounds except those given for W	3E+4	8E+4	3E-5	1E-7	-	-
			St wall (3E+4)	-	-	-	4E-4	4E-3
		W, oxides, hydroxides, carbides, and halides	-	1E+5	4E-5	1E-7	-	-
23	Vanadium-48	D, see ^{47}V	6E+2	1E+3	5E-7	2E-9	9E-6	9E-5
		W, see ^{47}V	-	6E+2	3E-7	9E-10	-	-
23	Vanadium-49	D, see ^{47}V	7E+4	3E+4	1E-5	-	-	-
			LLI wall (9E+4)	Bone surf (3E+4)	-	5E-8	1E-3	1E-2
		W, see ^{47}V	-	2E+4	8E-6	2E-8	-	-
24	Chromium-48	D, all compounds except those given for W and Y	6E+3	1E+4	5E-6	2E-8	8E-5	8E-4
		W, halides and nitrates	-	7E+3	3E-6	1E-8	-	-
		Y, oxides and hydroxides	-	7E+3	3E-6	1E-8	-	-
24	Chromium-49[2]	D, see ^{48}Cr	3E+4	8E+4	4E-5	1E-7	4E-4	4E-3
		W, see ^{48}Cr	-	1E+5	4E-5	1E-7	-	-
		Y, see ^{48}Cr	-	9E+4	4E-5	1E-7	-	-
24	Chromium-51	D, see ^{48}Cr	4E+4	5E+4	2E-5	6E-8	5E-4	5E-3
		W, see ^{48}Cr	-	2E+4	1E-5	3E-8	-	-
		Y, see ^{48}Cr	-	2E+4	8E-6	3E-8	-	-
25	Manganese-51[2]	D, all compounds except those given for W	2E+4	5E+4	2E-5	7E-8	3E-4	3E-3
		W, oxides, hydroxides, halides, and nitrates	-	6E+4	3E-5	8E-8	-	-
25	Manganese-52m[2]	D, see ^{51}Mn	3E+4	9E+4	4E-5	1E-7	-	-
			St wall (4E+4)	-	-	-	5E-4	5E-3
		W, see ^{51}Mn	-	1E+5	4E-5	1E-7	-	-
25	Manganese-52	D, see ^{51}Mn	7E+2	1E+3	5E-7	2E-9	1E-5	1E-4
		W, see ^{51}Mn	-	9E+2	4E-7	1E-9	-	-
25	Manganese-53	D, see ^{51}Mn	5E+4	1E+4	5E-6	-	7E-4	7E-3
			-	Bone surf (2E+4)	-	3E-8	-	-
		W, see ^{51}Mn	-	1E+4	5E-6	2E-8	-	-
25	Manganese-54	D, see ^{51}Mn	2E+3	9E+2	4E-7	1E-9	3E-5	3E-4
		W, see ^{51}Mn	-	8E+2	3E-7	1E-9	-	-
25	Manganese-56	D, see ^{51}Mn	5E+3	2E+4	6E-6	2E-8	7E-5	7E-4
		W, see ^{51}Mn	-	2E+4	9E-6	3E-8	-	-
26	Iron-52	D, all compounds except those given for W	9E+2	3E+3	1E-6	4E-9	1E-5	1E-4

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Table 1 Occupational Values Col. 2 Inhalation ALI µCi	Table 1 Occupational Values Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Table II Effluent Concentration Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		W, oxides, hydroxides, and halides	-	2E+3	1E-6	3E-9	-	-
26	Iron-55	D, see ^{52}Fe	9E+3	2E+3	8E-7	3E-9	1E-4	1E-3
		W, see ^{52}Fe	-	4E+3	2E-6	6E-9	-	-
26	Iron-59	D, see ^{52}Fe	8E+2	3E+2	1E-7	5E-10	1E-5	1E-4
		W, see ^{52}Fe	-	5E+2	2E-7	7E-10	-	-
26	Iron-60	D, see ^{52}Fe	3E+1	6E+0	3E-9	9E-12	4E-7	4E-6
		W, see ^{52}Fe	-	2E+1	8E-9	3E-11	-	-
27	Cobalt-55	W, all compounds except those given for Y	1E+3	3E+3	1E-6	4E-9	2E-5	2E-4
		Y, oxides, hydroxides, halides, and nitrates	-	3E+3	1E-6	4E-9	-	-
27	Cobalt-56	W, see ^{55}Co	5E+2	3E+2	1E-7	4E-10	6E-6	6E-5
		Y, see ^{55}Co	4E+2	2E+2	8E-8	3E-10	-	-
27	Cobalt-57	W, see ^{55}Co	8E+3	3E+3	1E-6	4E-9	6E-5	6E-4
		Y, see ^{55}Co	4E+3	7E+2	3E-7	9E-10	-	-
27	Cobalt-58m	W, see ^{55}Co	6E+4	9E+4	4E-5	1E-7	8E-4	8E-3
		Y, see ^{55}Co	-	6E+4	3E-5	9E-8	-	-
27	Cobalt-58	W, see ^{55}Co	2E+3	1E+3	5E-7	2E-9	2E-5	2E-4
		Y, see ^{55}Co	1E+3	7E+2	3E-7	1E-9	-	-
27	Cobalt-60m[2]	W, see ^{55}Co	1E+6	4E+6	2E-3	6E-6	-	-
			St wall (1E+6)	-	-	-	2E-2	2E-1
		Y, see ^{55}Co	-	3E+6	1E-3	4E-6	-	-
27	Cobalt-60	W, see ^{55}Co	5E+2	2E+2	7E-8	2E-10	3E-6	3E-5
		Y, see ^{55}Co	2E+2	3E+1	1E-8	5E-11	-	-
27	Cobalt-61[2]	W, see ^{55}Co	2E+4	6E+4	3E-5	9E-8	3E-4	3E-3
		Y, see ^{55}Co	2E+4	6E+4	2E-5	8E-8	-	-
27	Cobalt-62m[2]	W, see ^{55}Co	4E+4	2E+5	7E-5	2E-7	-	-
			St wall (5E+4)	-	-	-	7E-4	7E-3
		Y, see ^{55}Co	-	2E+5	6E-5	2E-7	-	-
28	Nickel-56	D, all compounds except those given for W	1E+3	2E+3	8E-7	3E-9	2E-5	2E-4
		W, oxides, hydroxides, and carbides	-	1E+3	5E-7	2E-9	-	-
		Vapor	-	1E+3	5E-7	2E-9	-	-
28	Nickel-57	D, see ^{56}Ni	2E+3	5E+3	2E-6	7E-9	2E-5	2E-4
		W, see ^{56}Ni	-	3E+3	1E-6	4E-9	-	-
		Vapor	-	6E+3	3E-6	9E-9	-	-
28	Nickel-59	D, see ^{56}Ni	2E+4	4E+3	2E-6	5E-9	3E-4	3E-3
		W, see ^{56}Ni	-	7E+3	3E-6	1E-8	-	-
		Vapor	-	2E+3	8E-7	3E-9	-	-
28	Nickel-63	D, see ^{56}Ni	9E+3	2E+3	7E-7	2E-9	1E-4	1E-3
		W, see ^{56}Ni	-	3E+3	1E-6	4E-9	-	-
		Vapor	-	8E+2	3E-7	1E-9	-	-
28	Nickel-65	D, see ^{56}Ni	8E+3	2E+4	1E-5	3E-8	1E-4	1E-3
		W, see ^{56}Ni	-	3E+4	1E-5	4E-8	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		Vapor	-	2E+4	7E-6	2E-8	-	-
28	Nickel-66	D, see ^{56}Ni	4E+2	2E+3	7E-7	2E-9	-	-
			LLI wall (5E+2)	-	-	-	6E-6	6E-5
		W, see ^{56}Ni	-	6E+2	3E-7	9E-10	-	-
		Vapor	-	3E+3	1E-6	4E-9	-	-
29	Copper-60[2]	D, all compounds except those given for W and Y	3E+4	9E+4	4E-5	1E-7	-	-
			St wall (3E+4)	-	-	-	4E-4	4E-3
		W, sulfides, halides, and nitrates	-	1E+5	5E-5	2E-7	-	-
		Y, oxides and hydroxides	-	1E+5	4E-5	1E-7	-	-
29	Copper-61	D, see ^{60}Cu	1E+4	3E+4	1E-5	4E-8	2E-4	2E-3
		W, see ^{60}Cu	-	4E+4	2E-5	6E-8	-	-
		Y, see ^{60}Cu	-	4E+4	1E-5	5E-8	-	-
29	Copper-64	D, see ^{60}Cu	1E+4	3E+4	1E-5	4E-8	2E-4	2E-3
		W, see ^{60}Cu	-	2E+4	1E-5	3E-8	-	-
		Y, see ^{60}Cu	-	2E+4	9E-6	3E-8	-	-
29	Copper-67	D, see ^{60}Cu	5E+3	8E+3	3E-6	1E-8	6E-5	6E-4
		W, see ^{60}Cu	-	5E+3	2E-6	7E-9	-	-
		Y, see ^{60}Cu	-	5E+3	2E-6	6E-9	-	-
30	Zinc-62	Y, all compounds	1E+3	3E+3	1E-6	4E-9	2E-5	2E-4
30	Zinc-63[2]	Y, all compounds	2E+4	7E+4	3E-5	9E-8	-	-
			St wall (3E+4)	-	-	-	3E-4	3E-3
30	Zinc-65	Y, all compounds	4E+2	3E+2	1E-7	4E-10	5E-6	5E-5
30	Zinc-69m	Y, all compounds	4E+3	7E+3	3E-6	1E-8	6E-5	6E-4
30	Zinc-69[2]	Y, all compounds	6E+4	1E+5	6E-5	2E-7	8E-4	8E-3
30	Zinc-71m	Y, all compounds	6E+3	2E+4	7E-6	2E-8	8E-5	8E-4
30	Zinc-72	Y, all compounds	1E+3	1E+3	5E-7	2E-9	1E-5	1E-4
31	Gallium-65[2]	D, all compounds ((~~excep [except]~~)) except those given for W	5E+4	2E+5	7E-5	2E-7	-	-
			St wall (6E+4)	-	-	-	9E-4	9E-3
		W, oxides, hydroxides, carbides, halides, and nitrates	-	2E+5	8E-5	3E-7	-	-
31	Gallium-66	D, see ^{65}Ga	1E+3	4E+3	1E-6	5E-9	1E-5	1E-4
		W, see ^{65}Ga	-	3E+3	1E-6	4E-9	-	-
31	Gallium-67	D, see ^{65}Ga	7E+3	1E+4	6E-6	2E-8	1E-4	1E-3
		W, see ^{65}Ga	-	1E+4	4E-6	1E-8	-	-
31	Gallium-68[2]	D, see ^{65}Ga	2E+4	4E+4	2E-5	6E-8	2E-4	2E-3
		W, see ^{65}Ga	-	5E+4	2E-5	7E-8	-	-
31	Gallium-70[2]	D, see ^{65}Ga	5E+4	2E+5	7E-5	2E-7	-	-
			St wall (7E+4)	-	-	-	1E-3	1E-2
		W, see ^{65}Ga	-	2E+5	8E-5	3E-7	-	-
31	Gallium-72	D, see ^{65}Ga	1E+3	4E+3	1E-6	5E-9	2E-5	2E-4
		W, see ^{65}Ga	-	3E+3	1E-6	4E-9	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
31	Gallium-73	D, see ^{65}Ga	5E+3	2E+4	6E-6	2E-8	7E-5	7E-4
		W, see ^{65}Ga	-	2E+4	6E-6	2E-8	-	-
32	Germanium-66	D, all compounds except those given for W	2E+4	3E+4	1E-5	4E-8	3E-4	3E-3
		W, oxides, sulfides, and halides	-	2E+4	8E-6	3E-8	-	-
32	Germanium-67[2]	D, see ^{66}Ge	3E+4	9E+4	4E-5	1E-7	-	-
			St wall (4E+4)	-	-	-	6E-4	6E-3
		W, see ^{66}Ge	-	1E+5	4E-5	1E-7	-	-
32	Germanium-68	D, see ^{66}Ge	5E+3	4E+3	2E-6	5E-9	6E-5	6E-4
		W, see ^{66}Ge	-	1E+2	4E-8	1E-10	-	-
32	Germanium-69	D, see ^{66}Ge	1E+4	2E+4	6E-6	2E-8	2E-4	2E-3
		W, see ^{66}Ge	-	8E+3	3E-6	1E-8	-	-
32	Germanium-71	D, see ^{66}Ge	5E+5	4E+5	2E-4	6E-7	7E-3	7E-2
		W, see ^{66}Ge	-	4E+4	2E-5	6E-8	-	-
32	Germanium-75[2]	D, see ^{66}Ge	4E+4	8E+4	3E-5	1E-7	-	-
			St wall (7E+4)	-	-	-	9E-4	9E-3
		W, see ^{66}Ge	-	8E+4	4E-5	1E-7	-	-
32	Germanium-77	D, see ^{66}Ge	9E+3	1E+4	4E-6	1E-8	1E-4	1E-3
		W, see ^{66}Ge	-	6E+3	2E-6	8E-9	-	-
32	Germanium-78[2]	D, see ^{66}Ge	2E+4	2E+4	9E-6	3E-8	-	-
			St wall (2E+4)	-	-	-	3E-4	3E-3
		W, see ^{66}Ge	-	2E+4	9E-6	3E-8	-	-
33	Arsenic-69[2]	W, all compounds	3E+4	1E+5	5E-5	2E-7	-	-
			St wall (4E+4)	-	-	-	6E-4	6E-3
33	Arsenic-70[2]	W, all compounds	1E+4	5E+4	2E-5	7E-8	2E-4	2E-3
33	Arsenic-71	W, all compounds	4E+3	5E+3	2E-6	6E-9	5E-5	5E-4
33	Arsenic-72	W, all compounds	9E+2	1E+3	6E-7	2E-9	1E-5	1E-4
33	Arsenic-73	W, all compounds	8E+3	2E+3	7E-7	2E-9	1E-4	1E-3
33	Arsenic-74	W, all compounds	1E+3	8E+2	3E-7	1E-9	2E-5	2E-4
33	Arsenic-76	W, all compounds	1E+3	1E+3	6E-7	2E-9	1E-5	1E-4
33	Arsenic-77	W, all compounds	4E+3	5E+3	2E-6	7E-9	-	-
			LLI wall (5E+3)	-	-	-	6E-5	6E-4
33	Arsenic-78[2]	W, all compounds	8E+3	2E+4	9E-6	3E-8	1E-4	1E-3
34	Selenium-70[2]	D, all compounds except those given for W	2E+4	4E+4	2E-5	5E-8	1E-4	1E-3
		W, oxides, hydroxides, carbides, and elemental Se	1E+4	4E+4	2E-5	6E-8	-	-
34	Selenium-73m[2]	D, see ^{70}Se	6E+4	2E+5	6E-5	2E-7	4E-4	4E-3
		W, see ^{70}Se	3E+4	1E+5	6E-5	2E-7	-	-
34	Selenium-73	D, see ^{70}Se	3E+3	1E+4	5E-6	2E-8	4E-5	4E-4
		W, see ^{70}Se	-	2E+4	7E-6	2E-8	-	-
34	Selenium-75	D, see ^{70}Se	5E+2	7E+2	3E-7	1E-9	7E-6	7E-5
		W, see ^{70}Se	-	6E+2	3E-7	8E-10	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
34	Selenium-79	D, see ^{70}Se	6E+2	8E+2	3E-7	1E-9	8E-6	8E-5
		W, see ^{70}Se	-	6E+2	2E-7	8E-10	-	-
34	Selenium-81m[2]	D, see ^{70}Se	4E+4	7E+4	3E-5	9E-8	3E-4	3E-3
		W, see ^{70}Se	2E+4	7E+4	3E-5	1E-7	-	-
34	Selenium-81[2]	D, see ^{70}Se	6E+4	2E+5	9E-5	3E-7	-	-
			St wall (8E+4)	-	-	-	1E-3	1E-2
		W, see ^{70}Se	-	2E+5	1E-4	3E-7	-	-
34	Selenium-83[2]	D, see ^{70}Se	4E+4	1E+5	5E-5	2E-7	4E-4	4E-3
		W, see ^{70}Se	3E+4	1E+5	5E-5	2E-7	-	-
35	Bromine-74m[2]	D, bromides of H, Li, Na, K, Rb, Cs, and Fr	1E+4	4E+4	2E-5	5E-8	-	-
			St wall (2E+4)	-	-	-	3E-4	3E-3
		W, bromides of lantha-nides, Be, Mg, Ca, Sr, Ba, Ra, Al, Ga, In, Tl, Ge, Sn, Pb, As, Sb, Bi, Fe, Ru, Os, Co, Rh, Ir, Ni, Pd, Pt, Cu, Ag, Au, Zn, Cd, Hg, Sc, Y, Ti, Zr, Hf, V, Nb, Ta, Mn, Tc, and Re	-	4E+4	2E-5	6E-8	-	-
35	Bromine-74[2]	D, see ^{74m}Br	2E+4	7E+4	3E-5	1E-7	-	-
			St wall (4E+4)	-	-	-	5E-45E-3	-
		W, see ^{74m}Br	-	8E+4	4E-5	1E-7	-	-
35	Bromine-75[2]	D, see ^{74m}Br	3E+4	5E+4	2E-5	7E-8	-	-
			St wall (4E+4)	-	-	-	5E-4	5E-3
		W, see ^{74m}Br	-	5E+4	2E-5	7E-8	-	-
35	Bromine-76	D, see ^{74m}Br	4E+3	5E+3	2E-6	7E-9	5E-5	5E-4
		W, see ^{74m}Br	-	4E+3	2E-6	6E-9	-	-
35	Bromine-77	D, see ^{74m}Br	2E+4	2E+4	1E-5	3E-8	2E-4	2E-3
		W, see ^{74m}Br	-	2E+4	8E-6	3E-8	-	-
35	Bromine-80m	D, see ^{74m}Br	2E+4	2E+4	7E-6	2E-8	3E-4	3E-3
		W, see ^{74m}Br	-	1E+4	6E-6	2E-8	-	-
35	Bromine-80[2]	D, see ^{74m}Br	5E+4	2E+5	8E-5	3E-7	-	-
			St wall (9E+4)	-	-	-	1E-3	1E-2
		W, see ^{74m}Br	-	2E+5	9E-5	3E-7	-	-
35	Bromine-82	D, see ^{74m}Br	3E+3	4E+3	2E-6	6E-9	4E-5	4E-4
		W, see ^{74m}Br	-	4E+3	2E-6	5E-9	-	-
35	Bromine-83	D, see ^{74m}Br	5E+4	6E+4	3E-5	9E-8	-	-
			St wall (7E+4)	-	-	-	9E-4	9E-3
		W, see ^{74m}Br	-	6E+4	3E-5	9E-8	-	-
35	Bromine-84[2]	D, see ^{74m}Br	2E+4	6E+4	2E-5	8E-8	-	-
			St wall (3E+4)	-	-	-	4E-4	4E-3
		W, see ^{74m}Br	-	6E+4	3E-5	9E-8	-	-
36	Krypton-74[2]	Submersion[1]	-	-	3E-6	1E-8	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
36	Krypton-76	Submersion[1]	-	-	9E-6	4E-8	-	-
36	Krypton-77[2]	Submersion[1]	-	-	4E-6	2E-8	-	-
36	Krypton-79	Submersion[1]	-	-	2E-5	7E-8	-	-
36	Krypton-81	Submersion[1]	-	-	7E-4	3E-6	-	-
36	Krypton-83m[2]	Submersion[1]	-	-	1E-2	5E-5	-	-
36	Krypton-85m	Submersion[1]	-	-	2E-5	1E-7	-	-
36	Krypton-85	Submersion[1]	-	-	1E-4	7E-7	-	-
36	Krypton-87[2]	Submersion[1]	-	-	5E-6	2E-8	-	-
36	Krypton-88	Submersion[1]	-	-	2E-6	9E-9	-	-
37	Rubidium-79[2]	D, all compounds	4E+4	1E+5	5E-5	2E-7	-	-
			St wall (6E+4)	-	-	-	8E-4	8E-3
37	Rubidium-81m[2]	D, all compounds	2E+5	3E+5	1E-4	5E-7	-	-
			St wall (3E+5)	-	-	-	4E-3	4E-2
37	Rubidium-81	D, all compounds	4E+4	5E+4	2E-5	7E-8	5E-4	5E-3
37	Rubidium-82m	D, all compounds	1E+4	2E+4	7E-6	2E-8	2E-4	2E-3
37	Rubidium-83	D, all compounds	6E+2	1E+3	4E-7	1E-9	9E-6	9E-5
37	Rubidium-84	D, all compounds	5E+2	8E+2	3E-7	1E-9	7E-6	7E-5
37	Rubidium-86	D, all compounds	5E+2	8E+2	3E-7	1E-9	7E-6	7E-5
37	Rubidium-87	D, all compounds	1E+3	2E+3	6E-7	2E-9	1E-5	1E-4
37	Rubidium-88[2]	D, all compounds	2E+4	6E+4	3E-5	9E-8	-	-
			St wall (3E+4)	-	-	-	4E-4	4E-3
37	Rubidium-89[2]	D, all compounds	4E+4	1E+5	6E-5	2E-7	-	-
			St wall (6E+4)	-	-	-	9E-4	9E-3
38	Strontium-80[2]	D, all soluble compound except SrTiO	4E+3	1E+4	5E-6	2E-8	6E-5	6E-4
		Y, all insoluble compounds and SrTi0	-	1E+4	5E-6	2E-8	-	-
38	Strontium-81[2]	D, see ^{80}Sr	3E+4	8E+4	3E-5	1E-7	3E-4	3E-3
		Y, see ^{80}Sr	2E+4	8E+4	3E-5	1E-7	-	-
38	Strontium-82	D, see ^{80}Sr	3E+2	4E+2	2E-7	6E-10	-	-
			LLI wall (2E+2)	-	-	-	3E-6	3E-5
		Y, see ^{80}Sr	2E+2	9E+1	4E-8	1E-10	-	-
38	Strontium-83	D, see ^{80}Sr	3E+3	7E+3	3E-6	1E-8	3E-5	3E-4
		Y, see ^{80}Sr	2E+3	4E+3	1E-6	5E-9	-	-
38	Strontium-85m[2]	D, see ^{80}Sr	2E+5	6E+5	3E-4	9E-7	3E-3	3E-2
		Y, see ^{80}Sr	-	8E+5	4E-4	1E-6	-	-
38	Strontium-85	D, see ^{80}Sr	3E+3	3E+3	1E-6	4E-9	4E-5	4E-4
		Y, see ^{80}Sr	-	2E+3	6E-7	2E-9	-	-
38	Strontium-87m	D, see ^{80}Sr	5E+4	1E+5	5E-5	2E-7	6E-4	6E-3
		Y, see ^{80}Sr	4E+4	2E+5	6E-5	2E-7	-	-
38	Strontium-89	D, see ^{80}Sr	6E+2	8E+2	4E-7	1E-9	-	-
			LLI wall (6E+2)	-	-	-	8E-6	8E-5
		Y, see ^{80}Sr	5E+2	1E+2	6E-8	2E-10	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Table 1 Occupational Values Col. 2 Inhalation ALI µCi	Table 1 Occupational Values Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Table II Effluent Concentration Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
38	Strontium-90	D, see ^{80}Sr	3E+1	2E+1	8E-9	-	-	-
			Bone surf (4E+1)	Bone surf (2E+1)	-	3E-11	5E-7	5E-6
		Y, see ^{80}Sr	-	4E+0	2E-9	6E-12	-	-
38	Strontium-91	D, see ^{80}Sr	2E+3	6E+3	2E-6	8E-9	2E-5	2E-4
		Y, see ^{80}Sr	-	4E+3	1E-6	5E-9	-	-
38	Strontium-92	D, see ^{80}Sr	3E+3	9E+3	4E-6	1E-8	4E-5	4E-4
		Y, see ^{80}Sr	-	7E+3	3E-6	9E-9	-	-
39	Yttrium-86m[2]	W, all compounds except those given for Y	2E+4	6E+4	2E-5	8E-8	3E-4	3E-3
		Y, oxides and hydroxides	-	5E+4	2E-5	8E-8	-	-
39	Yttrium-86	W, see ^{86m}Y	1E+3	3E+3	1E-6	5E-9	2E-5	2E-4
		Y, see ^{86m}Y	-	3E+3	1E-6	5E-9	-	-
39	Yttrium-87	W, see ^{86m}Y	2E+3	3E+3	1E-6	5E-9	3E-5	3E-4
		Y, see ^{86m}Y	-	3E+3	1E-6	5E-9	-	-
39	Yttrium-88	W, see ^{86m}Y	1E+3	3E+2	1E-7	3E-10	1E-5	1E-4
		Y, see ^{86m}Y	-	2E+2	1E-7	3E-10	-	-
39	Yttrium-90m	W, see ^{86m}Y	8E+3	1E+4	5E-6	2E-8	1E-4	1E-3
		Y, see ^{86m}Y	-	1E+4	5E-6	2E-8	-	-
39	Yttrium-90	W, see ^{86m}Y	4E+2	7E+2	3E-7	9E-10	-	-
			LLI wall (5E+2)	-	-	-	7E-6	7E-5
		Y, see ^{86m}Y	-	6E+2	3E-7	9E-10	-	-
39	Yttrium-91m[2]	W, see ^{86m}Y	1E+5	2E+5	1E-4	3E-7	2E-3	2E-2
		Y, see ^{86m}Y	-	2E+5	7E-5	2E-7	-	-
39	Yttrium-91	W, see ^{86m}Y	5E+2	2E+2	7E-8	2E-10	-	-
			LLI wall (6E+2)	-	-	-	8E-6	8E-5
		Y, see ^{86m}Y	-	1E+2	5E-8	2E-10	-	-
39	Yttrium-92	W, see ^{86m}Y	3E+3	9E+3	4E-6	1E-8	4E-5	4E-4
		Y, see ^{86m}Y	-	8E+3	3E-6	1E-8	-	-
39	Yttrium-93	W, see ^{86m}Y	1E+3	3E+3	1E-6	4E-9	2E-5	2E-4
		Y, see ^{86m}Y	-	2E+3	1E-6	3E-9	-	-
39	Yttrium-94[2]	W, see ^{86m}Y	2E+4	8E+4	3E-5	1E-7	-	-
			St wall (3E+4)	-	-	-	4E-4	4E-3
		Y, see ^{86m}Y	-	8E+4	3E-5	1E-7	-	-
39	Yttrium-95[2]	W, see ^{86m}Y	4E+4	2E+5	6E-5	2E-7	-	-
			St wall (5E+4)	-	-	-	7E-4	7E-3
		Y, see ^{86m}Y	-	1E+5	6E-5	2E-7	-	-
40	Zirconium-86	D, all compounds except those given for W and Y	1E+3	4E+3	2E-6	6E-9	2E-5	2E-4
		W, oxides, hydroxides, halides, and nitrates	-	3E+3	1E-6	4E-9	-	-
		Y, carbide	-	2E+3	1E-6	3E-9	-	-
40	Zirconium-88	D, see ^{86}Zr	4E+3	2E+2	9E-8	3E-10	5E-5	5E-4
		W, see ^{86}Zr	-	5E+2	2E-7	7E-10	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		Y, see ^{86}Zr	-	3E+2	1E-7	4E-10	-	-
40	Zirconium-89	D, see ^{86}Zr	2E+3	4E+3	1E-6	5E-9	2E-5	2E-4
		W, see ^{86}Zr	-	2E+3	1E-6	3E-9	-	-
		Y, see ^{86}Zr	-	2E+3	1E-6	3E-9	-	-
40	Zirconium-93	D, see ^{86}Zr	1E+3	6E+0	3E-9	-	-	-
			Bone surf (3E+3)	Bone surf (2E+1)	-	2E-11	4E-5	4E-4
		W, see ^{86}Zr	-	2E+1	1E-8	-	-	-
			-	Bone surf (6E+1)	-	9E-11	-	-
		Y, see ^{86}Zr	-	6E+1	2E-8	-	-	-
			-	Bone surf (7E+1)	-	9E-11	-	-
40	Zirconium-95	D, see ^{86}Zr	1E+3	1E+2	5E-8	-	2E-5	2E-4
			-	Bone surf (3E+2)	-	4E-10	-	-
		W, see ^{86}Zr	-	4E+2	2E-7	5E-10	-	-
		Y, see ^{86}Zr	-	3E+2	1E-7	4E-10	-	-
40	Zirconium-97	D, see ^{86}Zr	6E+2	2E+3	8E-7	3E-9	9E-6	9E-5
		W, see ^{86}Zr	-	1E+3	6E-7	2E-9	-	-
		Y, see ^{86}Zr	-	1E+3	5E-7	2E-9	-	-
41	Niobium-88[2]	W, all compounds except those given for Y	5E+4	2E+5	9E-5	3E-7	-	-
			St wall (7E+4)	-	-	-	1E-3	1E-2
		Y, oxides and hydroxides	-	2E+5	9E-5	3E-7	-	-
41	Niobium-89[2] (66 min)	W, see ^{88}Nb	1E+4	4E+4	2E-5	6E-8	1E-4	1E-3
		Y, see ^{88}Nb	-	4E+4	2E-5	5E-8	-	-
41	Niobium-89 (122 min)	W, see ^{88}Nb	5E+3	2E+4	8E-6	3E-8	7E-5	7E-4
		Y, see ^{88}Nb	-	2E+4	6E-6	2E-8	-	-
41	Niobium-90	W, see ^{88}Nb	1E+3	3E+3	1E-6	4E-9	1E-5	1E-4
		Y, see ^{88}Nb	-	2E+3	1E-6	3E-9	-	-
41	Niobium-93m	W, see ^{88}Nb	9E+3	2E+3	8E-7	3E-9	-	-
			LLI wall (1E+4)	-	-	-	2E-4	2E-3
		Y, see ^{88}Nb	-	2E+2	7E-8	2E-10	-	-
41	Niobium-94	W, see ^{88}Nb	9E+2	2E+2	8E-8	3E-10	1E-5	1E-4
		Y, see ^{88}Nb	-	2E+1	6E-9	2E-11	-	-
41	Niobium-95m	W, see ^{88}Nb	2E+3	3E+3	1E-6	4E-9	-	-
			LLI wall (2E+3)	-	-	-	3E-5	3E-4
		Y, see ^{88}Nb	-	2E+3	9E-7	3E-9	-	-
41	Niobium-95	W, see ^{88}Nb	2E+3	1E+3	5E-7	2E-9	3E-5	3E-4
		Y, see ^{88}Nb	-	1E+3	5E-7	2E-9	-	-
41	Niobium-96	W, see ^{88}Nb	1E+3	3E+3	1E-6	4E-9	2E-5	2E-4
		Y, see ^{88}Nb	-	2E+3	1E-6	3E-9	-	-
41	Niobium-97[2]	W, see ^{88}Nb	2E+4	8E+4	3E-5	1E-7	3E-4	3E-3

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		Y, see ^{88}Nb	-	7E+4	3E-5	1E-7	-	-
41	Niobium-98[2]	W, see ^{88}Nb	1E+4	5E+4	2E-5	8E-8	2E-4	2E-3
		Y, see ^{88}Nb	-	5E+4	2E-5	7E-8	-	-
42	Molybdenum-90	D, all compounds except those given for Y	4E+3	7E+3	3E-6	1E-8	3E-5	3E-4
		Y, oxides, hydroxides, and MoS	2E+3	5E+3	2E-6	6E-9	-	-
42	Molybdenum-93m	D, see ^{90}Mo	9E+3	2E+4	7E-6	2E-8	6E-5	6E-4
		Y, see ^{90}Mo	4E+3	1E+4	6E-6	2E-8	-	-
42	Molybdenum-93	D, see ^{90}Mo	4E+3	5E+3	2E-6	8E-9	5E-5	5E-4
		Y, see ^{90}Mo	2E+4	2E+2	8E-8	2E-10	-	-
42	Molybdenum-99	D, see ^{90}Mo	2E+3	3E+3	1E-6	4E-9	-	-
			LLI wall (1E+3)	-	-	-	2E-5	2E-4
		Y, see ^{90}Mo	1E+3	1E+3	6E-7	2E-9	-	-
42	Molybdenum-101[2]	D, see ^{90}Mo	4E+4	1E+5	6E-5	2E-7	-	-
			St wall (5E+4)	-	-	-	7E-4	7E-3
		Y, see ^{90}Mo	-	1E+5	6E-5	2E-7	-	-
43	Technetium-93m[2]	D, all compounds except those given for W	7E+4	2E+5	6E-5	2E-7	1E-3	1E-2
		W, oxides, hydroxides, halides, and nitrates	-	3E+5	1E-4	4E-7	-	-
43	Technetium-93	D, see ^{93m}Tc	3E+4	7E+4	3E-5	1E-7	4E-4	4E-3
		W, see ^{93m}Tc	-	1E+5	4E-5	1E-7	-	-
43	Technetium-94m[2]	D, see ^{93m}Tc	2E+4	4E+4	2E-5	6E-8	3E-4	3E-3
		W, see ^{93m}Tc	-	6E+4	2E-5	8E-8	-	-
43	Technetium-94	D, see ^{93m}Tc	9E+3	2E+4	8E-6	3E-8	1E-4	1E-3
		W, see ^{93m}Tc	-	2E+4	1E-5	3E-8	-	-
43	Technetium-95m	D, see ^{93m}Tc	4E+3	5E+3	2E-6	8E-9	5E-5	5E-4
		W, see ^{93m}Tc	-	2E+3	8E-7	3E-9	-	-
43	Technetium-95	D, see ^{93m}Tc	1E+4	2E+4	9E-6	3E-8	1E-4	1E-3
		W, see ^{93m}Tc	-	2E+4	8E-6	3E-8	-	-
43	Technetium-96m[2]	D, see ^{93m}Tc	2E+5	3E+5	1E-4	4E-7	2E-3	2E-2
		W, see ^{93m}Tc	-	2E+5	1E-4	3E-7	-	-
43	Technetium-96	D, see ^{93m}Tc	2E+3	3E+3	1E-6	5E-9	3E-5	3E-4
		W, see ^{93m}Tc	-	2E+3	9E-7	3E-9	-	-
43	Technetium-97m	D, see ^{93m}Tc	5E+3	7E+3	3E-6	-	6E-5	6E-4
			-	St wall (7E+3)	-	1E-8	-	-
		W, see ^{93m}Tc	-	1E+3	5E-7	2E-9	-	-
43	Technetium-97	D, see ^{93m}Tc	4E+4	5E+4	2E-5	7E-8	5E-4	5E-3
		W, see ^{93m}Tc	-	6E+3	2E-6	8E-9	-	-
43	Technetium-98	D, see ^{93m}Tc	1E+3	2E+3	7E-7	2E-9	1E-5	1E-4
		W, see ^{93m}Tc	-	3E+2	1E-7	4E-10	-	-
43	Technetium-99m	D, see ^{93m}Tc	8E+4	2E+5	6E-5	2E-7	1E-3	1E-2
		W, see ^{93m}Tc	-	2E+5	1E-4	3E-7	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
43	Technetium-99	D, see ^{93m}Tc	4E+3	5E+3	2E-6	-	6E-5	6E-4
			-	St wall (6E+3)	-	8E-9	-	-
		W, see ^{93m}Tc	-	7E+2	3E-7	9E-10	-	-
43	Technetium-101[2]	D, see ^{93m}Tc	9E+4	3E+5	1E-4	5E-7	-	-
			St wall (1E+5)	-	-	-	2E-3	2E-2
		W, see ^{93m}Tc	-	4E+5	2E-4	5E-7	-	-
43	Technetium-104[2]	D, see ^{93m}Tc	2E+4	7E+4	3E-5	1E-7	-	-
			St wall (3E+4)	-	-	-	4E-4	4E-3
		W, see ^{93m}Tc	-	9E+4	4E-5	1E-7	-	-
44	Ruthenium-94[2]	D, all compounds except those given for W and Y	2E+4	4E+4	2E-5	6E-8	2E-4	2E-3
		W, halides	-	6E+4	3E-5	9E-8	-	-
		Y, oxides and hydroxides	-	6E+4	2E-5	8E-8	-	-
44	Ruthenium-97	D, see ^{94}Ru	8E+3	2E+4	8E-6	3E-8	1E-4	1E-3
		W, see ^{94}Ru	-	1E+4	5E-6	2E-8	-	-
		Y, see ^{94}Ru	-	1E+4	5E-6	2E-8	-	-
44	Ruthenium-103	D, see ^{94}Ru	2E+3	2E+3	7E-7	2E-9	3E-5	3E-4
		W, see ^{94}Ru	-	1E+3	4E-7	1E-9	-	-
		Y, see ^{94}Ru	-	6E+2	3E-7	9E-10	-	-
44	Ruthenium-105	D, see ^{94}Ru	5E+3	1E+4	6E-6	2E-8	7E-5	7E-4
		W, see ^{94}Ru	-	1E+4	6E-6	2E-8	-	-
		Y, see ^{94}Ru	-	1E+4	5E-6	2E-8	-	-
44	Ruthenium-106	D, see ^{94}Ru	2E+2	9E+1	4E-8	1E-10	-	-
			LLI wall (2E+2)	-	-	-	3E-6	3E-5
		W, see ^{94}Ru	-	5E+1	2E-8	8E-11	-	-
		Y, see ^{94}Ru	-	1E+1	5E-9	2E-11	-	-
45	Rhodium-99m	D, all compounds except those given for W and Y	2E+4	6E+4	2E-5	8E-8	2E-4	2E-3
		W, halides	-	8E+4	3E-5	1E-7	-	-
		Y, oxides and hydroxides	-	7E+4	3E-5	9E-8	-	-
45	Rhodium-99	D, see ^{99m}Rh	2E+3	3E+3	1E-6	4E-9	3E-5	3E-4
		W, see ^{99m}Rh	-	2E+3	9E-7	3E-9	-	-
		Y, see ^{99m}Rh	-	2E+3	8E-7	3E-9	-	-
45	Rhodium-100	D, see ^{99m}Rh	2E+3	5E+3	2E-6	7E-9	2E-5	2E-4
		W, see ^{99m}Rh	-	4E+3	2E-6	6E-9	-	-
		Y, see ^{99m}Rh	-	4E+3	2E-6	5E-9	-	-
45	Rhodium-101m	D, see ^{99m}Rh	6E+3	1E+4	5E-6	2E-8	8E-5	8E-4
		W, see ^{99m}Rh	-	8E+3	4E-6	1E-8	-	-
		Y, see ^{99m}Rh	-	8E+3	3E-6	1E-8	-	-
45	Rhodium-101	D, see ^{99m}Rh	2E+3	5E+2	2E-7	7E-10	3E-5	3E-4
		W, see ^{99m}Rh	-	8E+2	3E-7	1E-9	-	-
		Y, see ^{99m}Rh	-	2E+2	6E-8	2E-10	-	-
45	Rhodium-102m	D, see ^{99m}Rh	1E+3	5E+2	2E-7	7E-10	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Table 1 Occupational Values Col. 2 Inhalation ALI µCi	Table 1 Occupational Values Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Table II Effluent Concentration Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
			LLI wall (1E+3)	-	-	-	2E-5	2E-4
		W, see ^{99m}Rh	-	4E+2	2E-7	5E-10	-	-
		Y, see ^{99m}Rh	-	1E+2	5E-8	2E-10	-	-
45	Rhodium-102	D, see ^{99m}Rh	6E+2	9E+1	4E-8	1E-10	8E-6	8E-5
		W, see ^{99m}Rh	-	2E+2	7E-8	2E-10	-	-
		Y, see ^{99m}Rh	-	6E+1	2E-8	8E-11	-	-
45	Rhodium-103m[2]	D, see ^{99m}Rh	4E+5	1E+6	5E-4	2E-6	6E-3	6E-2
		W, see ^{99m}Rh	-	1E+6	5E-4	2E-6	-	-
		Y, see ^{99m}Rh	-	1E+6	5E-4	2E-6	-	-
45	Rhodium-105	D, see ^{99m}Rh	4E+3	1E+4	5E-6	2E-8	-	-
			LLI wall (4E+3)	-	-	-	5E-5	5E-4
		W, see ^{99m}Rh	-	6E+3	3E-6	9E-9	-	-
		Y, see ^{99m}Rh	-	6E+3	2E-6	8E-9	-	-
45	Rhodium-106m	D, see ^{99m}Rh	8E+3	3E+4	1E-5	4E-8	1E-4	1E-3
		W, see ^{99m}Rh	-	4E+4	2E-5	5E-8	-	-
		Y, see ^{99m}Rh	-	4E+4	1E-5	5E-8	-	-
45	Rhodium-107[2]	D, see ^{99m}Rh	7E+4	2E+5	1E-4	3E-7	-	-
			St wall (9E+4)	-	-	-	1E-3	1E-2
		W, see ^{99m}Rh	-	3E+5	1E-4	4E-7	-	-
		Y, see ^{99m}Rh	-	3E+5	1E-4	3E-7	-	-
46	Palladium-100	D, all compounds except those given for W and Y	1E+3	1E+3	6E-7	2E-9	2E-5	2E-4
		W, nitrates	-	1E+3	5E-7	2E-9	-	-
		Y, oxides and hydroxides	-	1E+3	6E-7	2E-9	-	-
46	Palladium-101	D, see ^{100}Pd	1E+4	3E+4	1E-5	5E-8	2E-4	2E-3
		W, see ^{100}Pd	-	3E+4	1E-5	5E-8	-	-
		Y, see ^{100}Pd	-	3E+4	1E-5	4E-8	-	-
46	Palladium-103	D, see ^{100}Pd	6E+3	6E+3	3E-6	9E-9	-	-
			LLI wall (7E+3)	-	-	-	1E-4	1E-3
		W, see ^{100}Pd	-	4E+3	2E-6	6E-9	-	-
		Y, see ^{100}Pd	-	4E+3	1E-6	5E-9	-	-
46	Palladium-107	D, see ^{100}Pd	3E+4	2E+4	9E-6	-	-	-
			LLI wall (4E+4)	Kidneys (2E+4)	-	3E-8	5E-4	5E-3
		W, see ^{100}Pd	-	7E+3	3E-6	1E-8	-	-
		Y, see ^{100}Pd	-	4E+2	2E-7	6E-10	-	-
46	Palladium-109	D, see ^{100}Pd	2E+3	6E+3	3E-6	9E-9	3E-5	3E-4
		W, see ^{100}Pd	-	5E+3	2E-6	8E-9	-	-
		Y, see ^{100}Pd	-	5E+3	2E-6	6E-9	-	-
47	Silver-102[2]	D, all compounds except those given for W and Y	5E+4	2E+5	8E-5	2E-7	-	-
			St wall (6E+4)	-	-	-	9E-4	9E-3
		W, nitrates and sulfides	-	2E+5	9E-5	3E-7	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		Y, oxides and hydroxides	-	2E+5	8E-5	3E-7	-	-
47	Silver-103[2]	D, see ^{102}Ag	4E+4	1E+5	4E-5	1E-7	5E-4	5E-3
		W, see ^{102}Ag	-	1E+5	5E-5	2E-7	-	-
		Y, see ^{102}Ag	-	1E+5	5E-5	2E-7	-	-
47	Silver-104m[2]	D, see ^{102}Ag	3E+4	9E+4	4E-5	1E-7	4E-4	4E-3
		W, see ^{102}Ag	-	1E+5	5E-5	2E-7	-	-
		Y, see ^{102}Ag	-	1E+5	5E-5	2E-7	-	-
47	Silver-104[2]	D, see ^{102}Ag	2E+4	7E+4	3E-5	1E-7	3E-4	3E-3
		W, see ^{102}Ag	-	1E+5	6E-5	2E-7	-	-
		Y, see ^{102}Ag	-	1E+5	6E-5	2E-7	-	-
47	Silver-105	D, see ^{102}Ag	3E+3	1E+3	4E-7	1E-9	4E-5	4E-4
		W, see ^{102}Ag	-	2E+3	7E-7	2E-9	-	-
		Y, see ^{102}Ag	-	2E+3	7E-7	2E-9	-	-
47	Silver-106m	D, see ^{102}Ag	8E+2	7E+2	3E-7	1E-9	1E-5	1E-4
		W, see ^{102}Ag	-	9E+2	4E-7	1E-9	-	-
		Y, see ^{102}Ag	-	9E+2	4E-7	1E-9	-	-
47	Silver-106[2]	D, see ^{102}Ag	6E+4	2E+5	8E-5	3E-7	-	-
			St. wall (6E+4)	-	-	-	9E-4	9E-3
		W, see ^{102}Ag	-	2E+5	9E-5	3E-7	-	-
		Y, see ^{102}Ag	-	2E+5	8E-5	3E-7	-	-
47	Silver-108m	D, see ^{102}Ag	6E+2	2E+2	8E-8	3E-10	9E-6	9E-5
		W, see ^{102}Ag	-	3E+2	1E-7	4E-10	-	-
		Y, see ^{102}Ag	-	2E+1	1E-8	3E-11	-	-
47	Silver-110m	D, see ^{102}Ag	5E+2	1E+2	5E-8	2E-10	6E-6	6E-5
		W, see ^{102}Ag	-	2E+2	8E-8	3E-10	-	-
		Y, see ^{102}Ag	-	9E+1	4E-8	1E-10	-	-
47	Silver-111	D, see ^{102}Ag	9E+2	2E+3	6E-7	-	-	-
			LLI wall (1E+3)	Liver (2E+3)	-	2E-9	2E-5	2E-4
		W, see ^{102}Ag	-	9E+2	4E-7	1E-9	-	-
		Y, see ^{102}Ag	-	9E+2	4E-7	1E-9	-	-
47	Silver-112	D, see ^{102}Ag	3E+3	8E+3	3E-6	1E-8	4E-5	4E-4
		W, see ^{102}Ag	-	1E+4	4E-6	1E-8	-	-
		Y, see ^{102}Ag	-	9E+3	4E-6	1E-8	-	-
47	Silver-115[2]	D, see ^{102}Ag	3E+4	9E+4	4E-5	1E-7	-	-
			St wall (3E+4)	-	-	-	4E-4	4E-3
		W, see ^{102}Ag	-	9E+4	4E-5	1E-7	-	-
		Y, see ^{102}Ag	-	8E+4	3E-5	1E-7	-	-
48	Cadmium-104[2]	D, all compounds except those given for W and Y	2E+4	7E+4	3E-5	9E-8	3E-4	3E-3
		W, sulfides, halides, and nitrates	-	1E+5	5E-5	2E-7	-	-
		Y, oxides and hydroxides	-	1E+5	5E-5	2E-7	-	-
48	Cadmium-107	D, see ^{104}Cd	2E+4	5E+4	2E-5	8E-8	3E-4	3E-3
		W, see ^{104}Cd	-	6E+4	2E-5	8E-8	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		Y, see ^{104}Cd	-	5E+4	2E-5	7E-8	-	-
48	Cadmium-109	D, see ^{104}Cd	3E+2	4E+1	1E-8	-	-	-
			Kidneys (4E+2)	Kidneys (5E+1)	-	7E-11	6E-6	6E-5
		W, see ^{104}Cd	-	1E+2	5E-8	-	-	-
			-	Kidneys (1E+2)	-	2E-10	-	-
		Y, see ^{104}Cd	-	1E+2	5E-8	2E-10	-	-
48	Cadmium-113m	D, see ^{104}Cd	2E+1	2E+0	1E-9	-	-	-
			Kidneys (4E+1)	Kidneys (4E+0)	-	5E-12	5E-7	5E-6
		W, see ^{104}Cd	-	8E+0	4E-9	-	-	-
			-	Kidneys (1E+1)	-	2E-11	-	-
		Y, see ^{104}Cd	-	1E+1	5E-9	2E-11	-	-
48	Cadmium-113	D, see ^{104}Cd	2E+1	2E+0	9E-10	-	-	-
			Kidneys (3E+1)	Kidneys (3E+0)	-	5E-12	4E-7	4E-6
		W, see ^{104}Cd	-	8E+0	3E-9	-	-	-
			-	Kidneys (1E+1)	-	2E-11	-	-
		Y, see ^{104}Cd	-	1E+1	6E-9	2E-11	-	-
48	Cadmium-115m	D, see ^{104}Cd	3E+2	5E+1	2E-8	-	4E-6	4E-5
			-	Kidneys (8E+1)	-	1E-10	-	-
		W, see ^{104}Cd	-	1E+2	5E-8	2E-10	-	-
		Y, see ^{104}Cd	-	1E+2	6E-8	2E-10	-	-
48	Cadmium-115	D, see ^{104}Cd	9E+2	1E+3	6E-7	2E-9	-	-
			LLI wall (1E+3)	-	-	-	1E-5	1E-4
		W, see ^{104}Cd	-	1E+3	5E-7	2E-9	-	-
		Y, see ^{104}Cd	-	1E+3	6E-7	2E-9	-	-
48	Cadmium-117m	D, see ^{104}Cd	5E+3	1E+4	5E-6	2E-8	6E-5	6E-4
		W, see ^{104}Cd	-	2E+4	7E-6	2E-8	-	-
		Y, see ^{104}Cd	-	1E+4	6E-6	2E-8	-	-
48	Cadmium-117	D, see ^{104}Cd	5E+3	1E+4	5E-6	2E-8	6E-5	6E-4
		W, see ^{104}Cd	-	2E+4	7E-6	2E-8	-	-
		Y, see ^{104}Cd	-	1E+4	6E-6	2E-8	-	-
49	Indium-109	D, all compounds except those given for W	2E+4	4E+4	2E-5	6E-8	3E-4	3E-3
		W, oxides, hydroxides, halides, and nitrates	-	6E+4	3E-5	9E-8	-	-
49	Indium-110[2]	D, see ^{109}In	2E+4	4E+4	2E-5	6E-8	2E-4	2E-3
	(69.1 min)	W, see ^{109}In	-	6E+4	2E-5	8E-8	-	-
49	Indium-110	D, see ^{109}In	5E+3	2E+4	7E-6	2E-8	7E-5	7E-4
	(4.9 h)	W, see ^{109}In	-	2E+4	8E-6	3E-8	-	-
49	Indium-111	D, see ^{109}In	4E+3	6E+3	3E-6	9E-9	6E-5	6E-4
		W, see ^{109}In	-	6E+3	3E-6	9E-9	-	-
49	Indium-112[2]	D, see ^{109}In	2E+5	6E+5	3E-4	9E-7	2E-3	2E-2

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		W, see ^{109}In	-	7E+5	3E-4	1E-6	-	-
49	Indium-113m[2]	D, see ^{109}In	5E+4	1E+5	6E-5	2E-7	7E-4	7E-3
		W, see ^{109}In	-	2E+5	8E-5	3E-7	-	-
49	Indium-114m	D, see ^{109}In	3E+2	6E+1	3E-8	9E-11	-	-
			LLI wall (4E+2)	-	-	-	5E-6	5E-5
		W, see ^{109}In	-	1E+2	4E-8	1E-10	-	-
49	Indium-115m	D, see ^{109}In	1E+4	4E+4	2E-5	6E-8	2E-4	2E-3
		W, see ^{109}In	-	5E+4	2E-5	7E-8	-	-
49	Indium-115	D, see ^{109}In	4E+1	1E+0	6E-10	2E-12	5E-7	5E-6
		W, see ^{109}In	-	5E+0	2E-9	8E-12	-	-
49	Indium-116m[2]	D, see ^{109}In	2E+4	8E+4	3E-5	1E-7	3E-4	3E-3
		W, see ^{109}In	-	1E+5	5E-5	2E-7	-	-
49	Indium-117m[2]	D, see ^{109}In	1E+4	3E+4	1E-5	5E-8	2E-4	2E-3
		W, see ^{109}In	-	4E+4	2E-5	6E-8	-	-
49	Indium-117[2]	D, see ^{109}In	6E+4	2E+5	7E-5	2E-7	8E-4	8E-3
		W, see ^{109}In	-	2E+5	9E-5	3E-7	-	-
49	Indium-119m[2]	D, see ^{109}In	4E+4	1E+5	5E-5	2E-7	-	-
			St wall (5E+4)	-	-	-	7E-4	7E-3
		W, see ^{109}In	-	1E+5	6E-5	2E-7	-	-
50	Tin-110	D, all compounds except those given for W	4E+3	1E+4	5E-6	2E-8	5E-5	5E-4
		W, sulfides, oxides, hydroxides, halides, nitrates, and stannic phosphate	-	1E+4	5E-6	2E-8	-	-
50	Tin-111[2]	D, see ^{110}Sn	7E+4	2E+5	9E-5	3E-7	1E-3	1E-2
		W, see ^{110}Sn	-	3E+5	1E-4	4E-7	-	-
50	Tin-113	D, see ^{110}Sn	2E+3	1E+3	5E-7	2E-9	-	-
			LLI wall (2E+3)	-	-	-	3E-5	3E-4
		W, see ^{110}Sn	-	5E+2	2E-7	8E-10	-	-
50	Tin-117m	D, see ^{110}Sn	2E+3	1E+3	5E-7	-	-	-
			LLI wall (2E+3)	Bone surf (2E+3)	-	3E-9	3E-5	3E-4
		W, see ^{110}Sn	-	1E+3	6E-7	2E-9	-	-
50	Tin-119m	D, see ^{110}Sn	3E+3	2E+3	1E-6	3E-9	-	-
			LLI wall (4E+3)	-	-	-	6E-5	6E-4
		W, see ^{110}Sn	-	1E+3	4E-7	1E-9	-	-
50	Tin-121m	D, see ^{110}Sn	3E+3	9E+2	4E-7	1E-9	-	-
			LLI wall (4E+3)	-	-	-	5E-5	5E-4
		W, see ^{110}Sn	-	5E+2	2E-7	8E-10	-	-
50	Tin-121	D, see ^{110}Sn	6E+3	2E+4	6E-6	2E-8	-	-
			LLI wall (6E+3)	-	-	-	8E-5	8E-4
		W, see ^{110}Sn	-	1E+4	5E-6	2E-8	-	-
50	Tin-123m[2]	D, see ^{110}Sn	5E+4	1E+5	5E-5	2E-7	7E-4	7E-3

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Table 1 Occupational Values Col. 2 Inhalation ALI µCi	Table 1 Occupational Values Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Table II Effluent Concentration Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		W, see ^{110}Sn	-	1E+5	6E-5	2E-7	-	-
50	Tin-123	D, see ^{110}Sn	5E+2	6E+2	3E-7	9E-10	-	-
			LLI wall (6E+2)	-	-	-	9E-6	9E-5
		W, see ^{110}Sn	-	2E+2	7E-8	2E-10	-	-
50	Tin-125	D, see ^{110}Sn	4E+2	9E+2	4E-7	1E-9	-	-
			LLI wall (5E+2)	-	-	-	6E-6	6E-5
		W, see ^{110}Sn	-	4E+2	1E-7	5E-10	-	-
50	Tin-126	D, see ^{110}Sn	3E+2	6E+1	2E-8	8E-11	4E-6	4E-5
		W, see ^{110}Sn	-	7E+1	3E-8	9E-11	-	-
50	Tin-127	D, see ^{110}Sn	7E+3	2E+4	8E-6	3E-8	9E-5	9E-4
		W, see ^{110}Sn	-	2E+4	8E-6	3E-8	-	-
50	Tin-128[2]	D, see ^{110}Sn	9E+3	3E+4	1E-5	4E-8	1E-4	1E-3
		W, see ^{110}Sn	-	4E+4	1E-5	5E-8	-	-
51	Antimony-115[2]	D, all compounds except those given for W	8E+4	2E+5	1E-4	3E-7	1E-3	1E-2
		W, oxides, hydroxides, halides, sulfides, sulfates, and nitrates	-	3E+5	1E-4	4E-7	-	-
51	Antimony-116m[2]	D, see ^{115}Sb	2E+4	7E+4	3E-5	1E-7	3E-4	3E-3
		W, see ^{115}Sb	-	1E+5	6E-5	2E-7	-	-
51	Antimony-116[2]	D, see ^{115}Sb	7E+4	3E+5	1E-4	4E-7	-	-
			St wall (9E+4)	-	-	-	1E-3	1E-2
		W, see ^{115}Sb	-	3E+5	1E-4	5E-7	-	-
51	Antimony-117	D, see ^{115}Sb	7E+4	2E+5	9E-5	3E-7	9E-4	9E-3
		W, see ^{115}Sb	-	3E+5	1E-4	4E-7	-	-
51	Antimony-118m	D, see ^{115}Sb	6E+3	2E+4	8E-6	3E-8	7E-5	7E-4
		W, see ^{115}Sb	5E+3	2E+4	9E-6	3E-8	-	-
51	Antimony-119	D, see ^{115}Sb	2E+4	5E+4	2E-5	6E-8	2E-4	2E-3
		W, see ^{115}Sb	2E+4	3E+4	1E-5	4E-8	-	-
51	Antimony-120[2] (16 min)	D, see ^{115}Sb	1E+5	4E+5	2E-4	6E-7	-	-
			St wall (2E+5)	-	-	-	2E-3	2E-2
		W, see ^{115}Sb	-	5E+5	2E-4	7E-7	-	-
51	Antimony-120 (5.76 d)	D, see ^{115}Sb	1E+3	2E+3	9E-7	3E-9	1E-5	1E-4
		W, see ^{115}Sb	9E+2	1E+3	5E-7	2E-9	-	-
51	Antimony-122	D, see ^{115}Sb	8E+2	2E+3	1E-6	3E-9	-	-
			LLI wall (8E+2)	-	-	-	1E-5	1E-4
		W, see ^{115}Sb	7E+2	1E+3	4E-7	2E-9	-	-
51	Antimony-124m[2]	D, see ^{115}Sb	3E+5	8E+5	4E-4	1E-6	3E-3	3E-2
		W, see ^{115}Sb	2E+5	6E+5	2E-4	8E-7	-	-
51	Antimony-124	D, see ^{115}Sb	6E+2	9E+2	4E-7	1E-9	7E-6	7E-5
		W, see ^{115}Sb	5E+2	2E+2	1E-7	3E-10	-	-
51	Antimony-125	D, see ^{115}Sb	2E+3	2E+3	1E-6	3E-9	3E-5	3E-4

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		W, see ^{115}Sb	-	5E+2	2E-7	7E-10	-	-
51	Antimony-126m[2]	D, see ^{115}Sb	5E+4	2E+5	8E-5	3E-7	-	-
			St wall (7E+4)	-	-	-	9E-4	9E-3
		W, see ^{115}Sb	-	2E+5	8E-5	3E-7	-	-
51	Antimony-126	D, see ^{115}Sb	6E+2	1E+3	5E-7	2E-9	7E-6	7E-5
		W, see ^{115}Sb	5E+2	5E+2	2E-7	7E-10	-	-
51	Antimony-127	D, see ^{115}Sb	8E+2	2E+3	9E-7	3E-9	-	-
			LLI wall (8E+2)	-	-	-	1E-5	1E-4
		W, see ^{115}Sb	7E+2	9E+2	4E-7	1E-9	-	-
51	Antimony-128[2] (10.4 min)	D, see ^{115}Sb	8E+4	4E+5	2E-4	5E-7	-	-
			St wall (1E+5)	-	-	-	1E-3	1E-2
		W, see ^{115}Sb	-	4E+5	2E-4	6E-7	-	-
51	Antimony-128	D, see ^{115}Sb	1E+3	4E+3	2E-6	6E-9	2E-5	2E-4
	(9.01 h)	W, see ^{115}Sb	-	3E+3	1E-6	5E-9	-	-
51	Antimony-129	D, see ^{115}Sb	3E+3	9E+3	4E-6	1E-8	4E-5	4E-4
		W, see ^{115}Sb	-	9E+3	4E-6	1E-8	-	-
51	Antimony-130[2]	D, see ^{115}Sb	2E+4	6E+4	3E-5	9E-8	3E-4	3E-3
		W, see ^{115}Sb	-	8E+4	3E-5	1E-7	-	-
51	Antimony-131[2]	D, see ^{115}Sb	1E+4	2E+4	1E-5	-	-	-
			Thyroid (2E+4)	Thyroid (4E+4)	-	6E-8	2E-4	2E-3
		W, see ^{115}Sb	-	2E+4	1E-5		-	-
			-	Thyroid (4E+4)	-	6E-8	-	-
52	Tellurium-116	D, all compounds except those given for W	8E+3	2E+4	9E-6	3E-8	1E-4	1E-3
		W, oxides, hydroxides, and nitrates	-	3E+4	1E-5	4E-8	-	-
52	Tellurium-121m	D, see ^{116}Te	5E+2	2E+2	8E-8	-	-	-
			Bone surf (7E+2)	Bone surf (4E+2)	-	5E-10	1E-5	1E-4
		W, see ^{116}Te	-	4E+2	2E-7	6E-10	-	-
52	Tellurium-121	D, see ^{116}Te	3E+3	4E+3	2E-6	6E-9	4E-5	4E-4
		W, see ^{116}Te	-	3E+3	1E-6	4E-9	-	-
52	Tellurium-123m	D, see ^{116}Te	6E+2	2E+2	9E-8	-	-	-
			Bone surf (1E+3)	Bone surf (5E+2)	-	8E-10	1E-5	1E-4
		W, see ^{116}Te	-	5E+2	2E-7	8E-10	-	-
52	Tellurium-123	D, see ^{116}Te	5E+2	2E+2	8E-8	-	-	-
			Bone surf (1E+3)	Bone surf (5E+2)	-	7E-10	2E-5	2E-4
		W, see ^{116}Te	-	4E+2	2E-7	-	-	-
			-	Bone surf (1E+3)	-	2E-9	-	-
52	Tellurium-125m	D, see ^{116}Te	1E+3	4E+2	2E-7	-	-	-
			Bone surf (1E+3)	Bone surf (1E+3)	-	1E-9	2E-5	2E-4

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		W, see ^{116}Te	-	7E+2	3E-7	1E-9	-	-
52	Tellurium-127m	D, see ^{116}Te	6E+2	3E+2	1E-7	-	9E-6	9E-5
			-	Bone surf (4E+2)	-	6E-10	-	-
		W, see ^{116}Te	-	3E+2	1E-7	4E-10	-	-
52	Tellurium-127	D, see ^{116}Te	7E+3	2E+4	9E-6	3E-8	1E-4	1E-3
		W, see ^{116}Te	-	2E+4	7E-6	2E-8	-	-
52	Tellurium-129m	D, see ^{116}Te	5E+2	6E+2	3E-7	9E-10	7E-6	7E-5
		W, see ^{116}Te	-	2E+2	1E-7	3E-10	-	-
52	Tellurium-129[2]	D, see ^{116}Te	3E+4	6E+4	3E-5	9E-8	4E-4	4E-3
		W, see ^{116}Te	-	7E+4	3E-5	1E-7	-	-
52	Tellurium-131m	D, see ^{116}Te	3E+2	4E+2	2E-7	-	-	-
			Thyroid (6E+2)	Thyroid (1E+3)	-	2E-9	8E-6	8E-5
		W, see ^{116}Te	-	4E+2	2E-7	-	-	-
			-	Thyroid (9E+2)	-	1E-9	-	-
52	Tellurium-131[2]	D, see ^{116}Te	3E+3	5E+3	2E-6	-	-	-
			Thyroid (6E+3)	Thyroid (1E+4)	-	2E-8	8E-5	8E-4
		W, see ^{116}Te	-	5E+3	2E-6	-	-	-
			-	Thyroid (1E+4)	-	2E-8	-	-
52	Tellurium-132	D, see ^{116}Te	2E+2	2E+2	9E-8	-	-	-
			Thyroid (7E+2)	Thyroid (8E+2)	-	1E-9	9E-6	9E-5
		W, see ^{116}Te	-	2E+2	9E-8	-	-	-
			-	Thyroid (6E+2)	-	9E-10	-	-
52	Tellurium-133m[2]	D, see ^{116}Te	3E+3	5E+3	2E-6	-	-	-
			Thyroid (6E+3)	Thyroid (1E+4)	-	2E-8	9E-5	9E-4
		W, see ^{116}Te	-	5E+3	2E-6	-	-	-
			-	Thyroid (1E+4)	-	2E-8	-	-
52	Tellurium-133[2]	D, see ^{116}Te	1E+4	2E+4	9E-6	-	-	-
			Thyroid (3E+4)	Thyroid (6E+4)	-	8E-8	4E-4	4E-3
		W, see ^{116}Te	-	2E+4	9E-6	-	-	-
			-	Thyroid (6E+4)	-	8E-8	-	-
52	Tellurium-134[2]	D, see ^{116}Te	2E+4	2E+4	1E-5	-	-	-
			Thyroid (2E+4)	Thyroid (5E+4)	-	7E-8	3E-4	3E-3
		W, see ^{116}Te	-	2E+4	1E-5	-	-	-
			-	Thyroid (5E+4)	-	7E-8	-	-
53	Iodine-120m[2]	D, all compounds	1E+4	2E+4	9E-6	3E-8	-	-
			Thyroid (1E+4)	-	-	-	2E-4	2E-3
53	Iodine-120[2]	D, all compounds	4E+3	9E+3	4E-6	-	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
			Thyroid (8E+3)	Thyroid (1E+4)	-	2E-8	1E-4	1E-3
53	Iodine-121	D, all compounds	1E+4	2E+4	8E-6	-	-	-
			Thyroid (3E+4)	Thyroid (5E+4)	-	7E-8	4E-4	4E-3
53	Iodine-123	D, all compounds	3E+3	6E+3	3E-6	-	-	-
			Thyroid (1E+4)	Thyroid (2E+4)	-	2E-8	1E-4	1E-3
53	Iodine-124	D, all compounds	5E+1	8E+1	3E-8	-	-	-
			Thyroid (2E+2)	Thyroid (3E+2)	-	4E-10	2E-6	2E-5
53	Iodine-125	D, all compounds	4E+1	6E+1	3E-8	-	-	-
			Thyroid (1E+2)	Thyroid (2E+2)	-	3E-10	2E-6	2E-5
53	Iodine-126	D, all compounds	2E+1	4E+1	1E-8	-	-	-
			Thyroid (7E+1)	Thyroid (1E+2)	-	2E-10	1E-6	1E-5
53	Iodine-128[2]	D, all compounds	4E+4	1E+5	5E-5	2E-7	-	-
			St wall (6E+4)	-	-	-	8E-4	8E-3
53	Iodine-129	D, all compounds	5E+0	9E+0	4E-9	-	-	-
			Thyroid (2E+1)	Thyroid (3E+1)	-	4E-11	2E-7	2E-6
53	Iodine-130	D, all compounds	4E+2	7E+2	3E-7	-	-	-
			Thyroid (1E+3)	Thyroid (2E+3)	-	3E-9	2E-5	2E-4
53	Iodine-131	D, all compounds	3E+1	5E+1	2E-8	-	-	-
			Thyroid (9E+1)	Thyroid (2E+2)	-	2E-10	1E-6	1E-5
53	Iodine-132m[2]	D, all compounds	4E+3	8E+3	4E-6	-	-	-
			Thyroid (1E+4)	Thyroid (2E+4)	-	3E-8	1E-4	1E-3
53	Iodine-132	D, all compounds	4E+3	8E+3	3E-6	-	-	-
			Thyroid (9E+3)	Thyroid (1E+4)	-	2E-8	1E-4	1E-3
53	Iodine-133	D, all compounds	1E+2	3E+2	1E-7	-	-	-
			Thyroid (5E+2)	Thyroid (9E+2)	-	1E-9	7E-6	7E-5
53	Iodine-134[2]	D, all compounds	2E+4	5E+4	2E-5	6E-8	-	-
			Thyroid (3E+4)	-	-	-	4E-4	4E-3
53	Iodine-135	D, all compounds	8E+2	2E+3	7E-7	-	-	-
			Thyroid (3E+3)	Thyroid (4E+3)	-	6E-9	3E-5	3E-4
54	Xenon-120[2]	Submersion[1]	-	-	1E-5	4E-8	-	-
54	Xenon-121[2]	Submersion[1]	-	-	2E-6	1E-8	-	-
54	Xenon-122	Submersion[1]	-	-	7E-5	3E-7	-	-
54	Xenon-123	Submersion[1]	-	-	6E-6	3E-8	-	-
54	Xenon-125	Submersion[1]	-	-	2E-5	7E-8	-	-
54	Xenon-127	Submersion[1]	-	-	1E-5	6E-8	-	-
54	Xenon-129m	Submersion[1]	-	-	2E-4	9E-7	-	-
54	Xenon-131m	Submersion[1]	-	-	4E-4	2E-6	-	-
54	Xenon-133m	Submersion[1]	-	-	1E-4	6E-7	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
54	Xenon-133	Submersion[1]	-	-	1E-4	5E-7	-	-
54	Xenon-135m[2]	Submersion[1]	-	-	9E-6	4E-8	-	-
54	Xenon-135	Submersion[1]	-	-	1E-5	7E-8	-	-
54	Xenon-138[2]	Submersion[1]	-	-	4E-6	2E-8	-	-
55	Cesium-125[2]	D, all compounds	5E+4	1E+5	6E-5	2E-7	-	-
			St wall (9E+4)	-	-	-	1E-3	1E-2
55	Cesium-127	D, all compounds	6E+4	9E+4	4E-5	1E-7	9E-4	9E-3
55	Cesium-129	D, all compounds	2E+4	3E+4	1E-5	5E-8	3E-4	3E-3
55	Cesium-130[2]	D, all compounds	6E+4	2E+5	8E-5	3E-7	-	-
			St wall (1E+5)	-	-	-	1E-3	1E-2
55	Cesium-131	D, all compounds	2E+4	3E+4	1E-5	4E-8	3E-4	3E-3
55	Cesium-132	D, all compounds	3E+3	4E+3	2E-6	6E-9	4E-5	4E-4
55	Cesium-134m	D, all compounds	1E+5	1E+5	6E-5	2E-7	-	-
			St wall (1E+5)	-	-	-	2E-3	2E-2
55	Cesium-134	D, all compounds	7E+1	1E+2	4E-8	2E-10	9E-7	9E-6
55	Cesium-135m[2]	D, all compounds	1E+5	2E+5	8E-5	3E-7	1E-3	1E-2
55	Cesium-135	D, all compounds	7E+2	1E+3	5E-7	2E-9	1E-5	1E-4
55	Cesium-136	D, all compounds	4E+2	7E+2	3E-7	9E-10	6E-6	6E-5
55	Cesium-137	D, all compounds	1E+2	2E+2	6E-8	2E-10	1E-6	1E-5
55	Cesium-138[2]	D, all compounds	2E+4	6E+4	2E-5	8E-8	-	-
			St wall (3E+4)	-	-	-	4E-4	4E-3
56	Barium-126[2]	D, all compounds	6E+3	2E+4	6E-6	2E-8	8E-5	8E-4
56	Barium-128	D, all compounds	5E+2	2E+3	7E-7	2E-9	7E-6	7E-5
56	Barium-131m[2]	D, all compounds	4E+5	1E+6	6E-4	2E-6	-	-
			St wall (5E+5)	-	-	-	7E-3	7E-2
56	Barium-131	D, all compounds	3E+3	8E+3	3E-6	1E-8	4E-5	4E-4
56	Barium-133m	D, all compounds	2E+3	9E+3	4E-6	1E-8	-	-
			LLI wall (3E+3)	-	-	-	4E-5	4E-4
56	Barium-133	D, all compounds	2E+3	7E+2	3E-7	9E-10	2E-5	2E-4
56	Barium-135m	D, all compounds	3E+3	1E+4	5E-6	2E-8	4E-5	4E-4
56	Barium-139[2]	D, all compounds	1E+4	3E+4	1E-5	4E-8	2E-4	2E-3
56	Barium-140	D, all compounds	5E+2	1E+3	6E-7	2E-9	-	-
			LLI wall (6E+2)	-	-	-	8E-6	8E-5
56	Barium-141[2]	D, all compounds	2E+4	7E+4	3E-5	1E-7	3E-4	3E-3
56	Barium-142[2]	D, all compounds	5E+4	1E+5	6E-5	2E-7	7E-4	7E-3
57	Lanthanum-131[2]	D, all compounds except those given for W	5E+4	1E+5	5E-5	2E-7	6E-4	6E-3
		W, oxides and hydroxides	-	2E+5	7E-5	2E-7	-	-
57	Lanthanum-132	D, see ^{131}La	3E+3	1E+4	4E-6	1E-8	4E-5	4E-4
		W, see ^{131}La	-	1E+4	5E-6	2E-8	-	-
57	Lanthanum-135	D, see ^{131}La	4E+4	1E+5	4E-5	1E-7	5E-4	5E-3
		W, see ^{131}La	-	9E+4	4E-5	1E-7	-	-
57	Lanthanum-137	D, see ^{131}La	1E+4	6E+1	3E-8	-	2E-4	2E-3

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
			-	Liver (7E+1)	-	1E-10	-	-
		W, see ^{131}La	-	3E+2	1E-7	-	-	-
			-	Liver (3E+2)	-	4E-10	-	-
57	Lanthanum-138	D, see ^{131}La	9E+2	4E+0	1E-9	5E-12	1E-5	1E-4
		W, see ^{131}La	-	1E+1	6E-9	2E-11	-	-
57	Lanthanum-140	D, see ^{131}La	6E+2	1E+3	6E-7	2E-9	9E-6	9E-5
		W, see ^{131}La	-	1E+3	5E-7	2E-9	-	-
57	Lanthanum-141	D, see ^{131}La	4E+3	9E+3	4E-6	1E-8	5E-5	5E-4
		W, see ^{131}La	-	1E+4	5E-6	2E-8	-	-
57	Lanthanum-142[2]	D, see ^{131}La	8E+3	2E+4	9E-6	3E-8	1E-4	1E-3
		W, see ^{131}La	-	3E+4	1E-5	5E-8	-	-
57	Lanthanum-143[2]	D, see ^{131}La	4E+4	1E+5	4E-5	1E-7	-	-
			St wall (4E+4)	-	-	-	5E-4	5E-3
		W, see ^{131}La	-	9E+4	4E-5	1E-7	-	-
58	Cerium-134	W, all compounds except those given for Y	5E+2	7E+2	3E-7	1E-9	-	-
			LLI wall (6E+2)	-	-	-	8E-6	8E-5
		Y, oxides, hydroxides, and fluorides	-	7E+2	3E-7	9E-10	-	-
58	Cerium-135	W, see ^{134}Ce	2E+3	4E+3	2E-6	5E-9	2E-5	2E-4
		Y, see ^{134}Ce	-	4E+3	1E-6	5E-9	-	-
58	Cerium-137m	W, see ^{134}Ce	2E+3	4E+3	2E-6	6E-9	-	-
			LLI wall (2E+3)	-	-	-	3E-5	3E-4
		Y, see ^{134}Ce	-	4E+3	2E-6	5E-9	-	-
58	Cerium-137	W, see ^{134}Ce	5E+4	1E+5	6E-5	2E-7	7E-4	7E-3
		Y, see ^{134}Ce	-	1E+5	5E-5	2E-7	-	-
58	Cerium-139	W, see ^{134}Ce	5E+3	8E+2	3E-7	1E-9	7E-5	7E-4
		Y, see ^{134}Ce	-	7E+2	3E-7	9E-10	-	-
58	Cerium-141	W, see ^{134}Ce	2E+3	7E+2	3E-7	1E-9	-	-
			LLI wall (2E+3)	-	-	-	3E-5	3E-4
		Y, see ^{134}Ce	-	6E+2	2E-7	8E-10	-	-
58	Cerium-143	W, see ^{134}Ce	1E+3	2E+3	8E-7	3E-9	-	-
			LLI wall (1E+3)	-	-	-	2E-5	2E-4
		Y, see ^{134}Ce	-	2E+3	7E-7	2E-9	-	-
58	Cerium-144	W, see ^{134}Ce	2E+2	3E+1	1E-8	4E-11	-	-
			LLI wall (3E+2)	-	-	-	3E-6	3E-5
		Y, see ^{134}Ce	-	1E+1	6E-9	2E-11	-	-
59	Praseodymium-136[2]	W, all compounds except those given for Y	5E+4	2E+5	1E-4	3E-7	-	-
			St wall (7E+4)	-	-	-	1E-3	1E-2

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Table 1 Occupational Values Col. 2 Inhalation ALI µCi	Table 1 Occupational Values Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Table II Effluent Concentration Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		Y, oxides, hydroxides, carbides, and fluorides	-	2E+5	9E-5	3E-7	-	-
59	Praseodymium-137[2]	W, see ^{136}Pr	4E+4	2E+5	6E-5	2E-7	5E-4	5E-3
		Y, see ^{136}Pr	-	1E+5	6E-5	2E-7	-	-
59	Praseodymium-138m	W, see ^{136}Pr	1E+4	5E+4	2E-5	8E-8	1E-4	1E-3
		Y, see ^{136}Pr	-	4E+4	2E-5	6E-8	-	-
59	Praseodymium-139	W, see ^{136}Pr	4E+4	1E+5	5E-5	2E-7	6E-4	6E-3
		Y, see ^{136}Pr	-	1E+5	5E-5	2E-7	-	-
59	Praseodymium-142m[2]	W, see ^{136}Pr	8E+4	2E+5	7E-5	2E-7	1E-3	1E-2
		Y, see ^{136}Pr	-	1E+5	6E-5	2E-7	-	-
59	Praseodymium-142	W, see ^{136}Pr	1E+3	2E+3	9E-7	3E-9	1E-5	1E-4
		Y, see ^{136}Pr	-	2E+3	8E-7	3E-9	-	-
59	Praseodymium-143	W, see ^{136}Pr	9E+2	8E+2	3E-7	1E-9	-	-
			LLI wall (1E+3)	-	-	-	2E-5	2E-4
		Y, see ^{136}Pr	-	7E+2	3E-7	9E-10	-	-
59	Praseodymium-144[2]	W, see ^{136}Pr	3E+4	1E+5	5E-5	2E-7	-	-
			St wall (4E+4)	-	-	-	6E-4	6E-3
		Y, see ^{136}Pr	-	1E+5	5E-5	2E-7	-	-
59	Praseodymium-145	W, see ^{136}Pr	3E+3	9E+3	4E-6	1E-8	4E-5	4E-4
		Y, see ^{136}Pr	-	8E+3	3E-6	1E-8	-	-
59	Praseodymium-147[2]	W, see ^{136}Pr	5E+4	2E+5	8E-5	3E-7	-	-
			St wall (8E+4)	-	-	-	1E-3	1E-2
		Y, see ^{136}Pr	-	2E+5	8E-5	3E-7	-	-
60	Neodymium-136[2]	W, all compounds except those given for Y	1E+4	6E+4	2E-5	8E-8	2E-4	2E-3
		Y, oxides, hydroxides, carbides, and fluorides	-	5E+4	2E-5	8E-8	-	-
60	Neodymium-138	W, see ^{136}Nd	2E+3	6E+3	3E-6	9E-9	3E-5	3E-4
		Y, see ^{136}Nd	-	5E+3	2E-6	7E-9	-	-
60	Neodymium-139m	W, see ^{136}Nd	5E+3	2E+4	7E-6	2E-8	7E-5	7E-4
		Y, see ^{136}Nd	-	1E+4	6E-6	2E-8	-	-
60	Neodymium-139[2]	W, see ^{136}Nd	9E+4	3E+5	1E-4	5E-7	1E-3	1E-2
		Y, see ^{136}Nd	-	3E+5	1E-4	4E-7	-	-
60	Neodymium-141	W, see ^{136}Nd	2E+5	7E+5	3E-4	1E-6	2E-3	2E-2
		Y, see ^{136}Nd	-	6E+5	3E-4	9E-7	-	-
60	Neodymium-147	W, see ^{136}Nd	1E+3	9E+2	4E-7	1E-9	-	-
			LLI wall (1E+3)	-	-	-	2E-5	2E-4
		Y, see ^{136}Nd	-	8E+2	4E-7	1E-9	-	-
60	Neodymium-149[2]	W, see ^{136}Nd	1E+4	3E+4	1E-5	4E-8	1E-4	1E-3
		Y, see ^{136}Nd	-	2E+4	1E-5	3E-8	-	-
60	Neodymium-151[2]	W, see ^{136}Nd	7E+4	2E+5	8E-5	3E-7	9E-4	9E-3
		Y, see ^{136}Nd	-	2E+5	8E-5	3E-7	-	-
61	Promethium-141[2]	W, all compounds except those given for Y	5E+4	2E+5	8E-5	3E-7	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
			St wall (6E+4)	-	-	-	8E-4	8E-3
		Y, oxides, hydroxides, carbides, and fluorides	-	2E+5	7E-5	2E-7	-	-
61	Promethium-143	W, see ^{141}Pm	5E+3	6E+2	2E-7	8E-10	7E-5	7E-4
		Y, see ^{141}Pm	-	7E+2	3E-7	1E-9	-	-
61	Promethium-144	W, see ^{141}Pm	1E+3	1E+2	5E-8	2E-10	2E-5	2E-4
		Y, see ^{141}Pm	-	1E+2	5E-8	2E-10	-	-
61	Promethium-145	W, see ^{141}Pm	1E+4	2E+2	7E-8	-	1E-4	1E-3
			-	Bone surf (2E+2)	-	3E-10	-	-
		Y, see ^{141}Pm	-	2E+2	8E-8	3E-10	-	-
61	Promethium-146	W, see ^{141}Pm	2E+3	5E+1	2E-8	7E-11	2E-5	2E-4
		Y, see ^{141}Pm	-	4E+1	2E-8	6E-11	-	-
61	Promethium-147	W, see ^{141}Pm	4E+3	1E+2	5E-8	-	-	-
			LLI wall (5E+3)	Bone surf (2E+2)	-	3E-10	7E-5	7E-4
		Y, see ^{141}Pm	-	1E+2	6E-8	2E-10	-	-
61	Promethium-148m	W, see ^{141}Pm	7E+2	3E+2	1E-7	4E-10	1E-5	1E-4
		Y, see ^{141}Pm	-	3E+2	1E-7	5E-10	-	-
61	Promethium-148	W, see ^{141}Pm	4E+2	5E+2	2E-7	8E-10	-	-
			LLI wall (5E+2)	-	-	-	7E-6	7E-5
		Y, see ^{141}Pm	-	5E+2	2E-7	7E-10	-	-
61	Promethium-149	W, see ^{141}Pm	1E+3	2E+3	8E-7	3E-9	-	-
			LLI wall (1E+3)	-	-	-	2E-5	2E-4
		Y, see ^{141}Pm	-	2E+3	8E-7	2E-9	-	-
61	Promethium-150	W, see ^{141}Pm	5E+3	2E+4	8E-6	3E-8	7E-5	7E-4
		Y, see ^{141}Pm	-	2E+4	7E-6	2E-8	-	-
61	Promethium-151	W, see ^{141}Pm	2E+3	4E+3	1E-6	5E-9	2E-5	2E-4
		Y, see ^{141}Pm	-	3E+3	1E-6	4E-9	-	-
62	Samarium-141m[2]	W, all compounds	3E+4	1E+5	4E-5	1E-7	4E-4	4E-3
62	Samarium-141[2]	W, all compounds	5E+4	2E+5	8E-5	2E-7	-	-
			St wall (6E+4)	-	-	-	8E-4	8E-3
62	Samarium-142[2]	W, all compounds	8E+3	3E+4	1E-5	4E-8	1E-4	1E-3
62	Samarium-145	W, all compounds	6E+3	5E+2	2E-7	7E-10	8E-5	8E-4
62	Samarium-146	W, all compounds	1E+1	4E-2	1E-11	-	-	-
			Bone surf (3E+1)	Bone surf (6E-2)	-	9E-14	3E-7	3E-6
62	Samarium-147	W, all compounds	2E+1	4E-2	2E-11	-	-	-
			Bone surf (3E+1)	Bone surf (7E-2)	-	1E-13	4E-7	4E-6
62	Samarium-151	W, all compounds	1E+4	1E+2	4E-8	-	-	-
			LLI wall (1E+4)	Bone surf (2E+2)	-	2E-10	2E-4	2E-3
62	Samarium-153	W, all compounds	2E+3	3E+3	1E-6	4E-9	-	-
			LLI wall (2E+3)	-	-	-	3E-5	3E-4

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
62	Samarium-155[2]	W, all compounds	6E+4	2E+5	9E-5	3E-7	-	-
			St wall (8E+4)	-	-	-	1E-3	1E-2
62	Samarium-156	W, all compounds	5E+3	9E+3	4E-6	1E-8	7E-5	7E-4
63	Europium-145	W, all compounds	2E+3	2E+3	8E-7	3E-9	2E-5	2E-4
63	Europium-146	W, all compounds	1E+3	1E+3	5E-7	2E-9	1E-5	1E-4
63	Europium-147	W, all compounds	3E+3	2E+3	7E-7	2E-9	4E-5	4E-4
63	Europium-148	W, all compounds	1E+3	4E+2	1E-7	5E-10	1E-5	1E-4
63	Europium-149	W, all compounds	1E+4	3E+3	1E-6	4E-9	2E-4	2E-3
63	Europium-150 (12.62h)	W, all compounds	3E+3	8E+3	4E-6	1E-8	4E-5	4E-4
63	Europium-150 (34.2 y)	W, all compounds	8E+2	2E+1	8E-9	3E-11	1E-5	1E-4
63	Europium-152m	W, all compounds	3E+3	6E+3	3E-6	9E-9	4E-5	4E-4
63	Europium-152	W, all compounds	8E+2	2E+1	1E-8	3E-11	1E-5	1E-4
63	Europium-154	W, all compounds	5E+2	2E+1	8E-9	3E-11	7E-6	7E-5
63	Europium-155	W, all compounds	4E+3	9E+1	4E-8	-	5E-5	5E-4
			-	Bone surf (1E+2)	-	2E-10	-	-
63	Europium-156	W, all compounds	6E+2	5E+2	2E-7	6E-10	8E-6	8E-5
63	Europium-157	W, all compounds	2E+3	5E+3	2E-6	7E-9	3E-5	3E-4
63	Europium-158[2]	W, all compounds	2E+4	6E+4	2E-5	8E-8	3E-4	3E-3
64	Gadolinium-145[2]	D, all compounds except those given for W	5E+4	2E+5	6E-5	2E-7	-	-
			St wall (5E+4)	-	-	-	6E-4	6E-3
		W, oxides, hydroxides, and fluorides	-	2E+5	7E-5	2E-7	-	-
64	Gadolinium-146	D, see ^{145}Gd	1E+3	1E+2	5E-8	2E-10	2E-5	2E-4
		W, see ^{145}Gd	-	3E+2	1E-7	4E-10	-	-
64	Gadolinium-147	D, see ^{145}Gd	2E+3	4E+3	2E-6	6E-9	3E-5	3E-4
		W, see ^{145}Gd	-	4E+3	1E-6	5E-9	-	-
64	Gadolinium-148	D, see ^{145}Gd	1E+1	8E+3	3E-12	-	-	-
			Bone surf (2E+1)	Bone surf (2E+2)	-	2E-14	3E-7	3E-6
		W, see ^{145}Gd	-	3E-2	1E-11	-	-	-
			-	Bone surf (6E-2)	-	8E-14	-	-
64	Gadolinium-149	D, see ^{145}Gd	3E+3	2E+3	9E-7	3E-9	4E-5	4E-4
		W, see ^{145}Gd	-	2E+3	1E-6	3E-9	-	-
64	Gadolinium-151	D, see ^{145}Gd	6E+3	4E+2	2E-7	-	9E-5	9E-4
			-	Bone surf (6E+2)	-	9E-10	-	-
		W, see ^{145}Gd	-	1E+3	5E-7	2E-9	-	-
64	Gadolinium-152	D, see ^{145}Gd	2E+1	1E-2	4E-12	-	-	-
			Bone surf (3E+1)	Bone surf (2E-2)	-	3E-14	4E-7	4E-6
		W, see ^{145}Gd	-	4E-2	2E-11	-	-	-
			-	Bone surf (8E-2)	-	1E-13	-	-
64	Gadolinium-153	D, see ^{145}Gd	5E+3	1E+2	6E-8	-	6E-5	6E-4

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
			-	Bone surf (2E+2)	-	3E-10	-	-
		W, see ^{145}Gd	-	6E+2	2E-7	8E-10	-	-
64	Gadolinium-159	D, see ^{145}Gd	3E+3	8E+3	3E-6	1E-8	4E-5	4E-4
		W, see ^{145}Gd	-	6E+3	2E-6	8E-9	-	-
65	Terbium-147[2]	W, all compounds	9E+3	3E+4	1E-5	5E-8	1E-4	1E-3
65	Terbium-149	W, all compounds	5E+3	7E+2	3E-7	1E-9	7E-5	7E-4
65	Terbium-150	W, all compounds	5E+3	2E+4	9E-6	3E-8	7E-5	7E-4
65	Terbium-151	W, all compounds	4E+3	9E+3	4E-6	1E-8	5E-5	5E-4
65	Terbium-153	W, all compounds	5E+3	7E+3	3E-6	1E-8	7E-5	7E-4
65	Terbium-154	W, all compounds	2E+3	4E+3	2E-6	6E-9	2E-5	2E-4
65	Terbium-155	W, all compounds	6E+3	8E+3	3E-6	1E-8	8E-5	8E-4
65	Terbium-156m (5.0 h)	W, all compounds	2E+4	3E+4	1E-5	4E-8	2E-4	2E-3
65	Terbium-156m (24.4 h)	W, all compounds	7E+3	8E+3	3E-6	1E-8	1E-4	1E-3
65	Terbium-156	W, all compounds	1E+3	1E+3	6E-7	2E-9	1E-5	1E-4
65	Terbium-157	W, all compounds	5E+4	3E+2	1E-7	-	-	-
			LLI wall (5E+4)	Bone surf (6E+2)	-	8E-10	7E-4	7E-3
65	Terbium-158	W, all compounds	1E+3	2E+1	8E-9	3E-11	2E-5	2E-4
65	Terbium-160	W, all compounds	8E+2	2E+2	9E-8	3E-10	1E-5	1E-4
65	Terbium-161	W, all compounds	2E+3	2E+3	7E-7	2E-9	-	-
			LLI wall (2E+3)	-	-	-	3E-5	3E-4
66	Dysprosium-155	W, all compounds	9E+3	3E+4	1E-5	4E-8	1E-4	1E-3
66	Dysprosium-157	W, all compounds	2E+4	6E+4	3E-5	9E-8	3E-4	3E-3
66	Dysprosium-159	W, all compounds	1E+4	2E+3	1E-6	3E-9	2E-4	2E-3
66	Dysprosium-165	W, all compounds	1E+4	5E+4	2E-5	6E-8	2E-4	2E-3
66	Dysprosium-166	W, all compounds	6E+2	7E+2	3E-7	1E-9	-	-
			LLI wall (8E+2)	-	-	-	1E-5	1E-4
67	Holmium-155[2]	W, all compounds	4E+4	2E+5	6E-5	2E-7	6E-4	6E-3
67	Holmium-157[2]	W, all compounds	3E+5	1E+6	6E-4	2E-6	4E-3	4E-2
67	Holmium-159[2]	W, all compounds	2E+5	1E+6	4E-4	1E-6	3E-3	3E-2
67	Holmium-161	W, all compounds	1E+5	4E+5	2E-4	6E-7	1E-3	1E-2
67	Holmium-162m[2]	W, all compounds	5E+4	3E+5	1E-4	4E-7	7E-4	7E-3
67	Holmium-162[2]	W, all compounds	5E+5	2E+6	1E-3	3E-6	-	-
			St wall (8E+5)	-	-	-	1E-2	1E-1
67	Holmium-164m[2]	W, all compounds	1E+5	3E+5	1E-4	4E-7	1E-3	1E-2
67	Holmium-164[2]	W, all compounds	2E+5	6E+5	3E-4	9E-7	-	-
			St wall (2E+5)	-	-	-	3E-3	3E-2
67	Holmium-166m	W, all compounds	6E+2	7E+0	3E-9	9E-12	9E-6	9E-5
67	Holmium-166	W, all compounds	9E+2	2E+3	7E-7	2E-9	-	-
			LLI wall (9E+2)	-	-	-	1E-5	1E-4
67	Holmium-167	W, all compounds	2E+4	6E+4	2E-5	8E-8	2E-4	2E-3
68	Erbium-161	W, all compounds	2E+4	6E+4	3E-5	9E-8	2E-4	2E-3
68	Erbium-165	W, all compounds	6E+4	2E+5	8E-5	3E-7	9E-4	9E-3

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
68	Erbium-169	W, all compounds	3E+3	3E+3	1E-6	4E-9	-	-
			LLI wall (4E+3)	-	-	-	5E-5	5E-4
68	Erbium-171	W, all compounds	4E+3	1E+4	4E-6	1E-8	5E-5	5E-4
68	Erbium-172	W, all compounds	1E+3	1E+3	6E-7	2E-9	-	-
			LLI wall (E+3)	-	-	-	2E-5	2E-4
69	Thulium-162[2]	W, all compounds	7E+4	3E+5	1E-4	4E-7	-	-
			St wall (7E+4)	-	-	-	1E-3	1E-2
69	Thulium-166	W, all compounds	4E+3	1E+4	6E-6	2E-8	6E-5	6E-4
69	Thulium-167	W, all compounds	2E+3	2E+3	8E-7	3E-9	-	-
			LLI wall (2E+3)	-	-	-	3E-5	3E-4
69	Thulium-170	W, all compounds	8E+2	2E+2	9E-8	3E-10	-	-
			LLI wall (1E+3)	-	-	-	1E-5	1E-4
69	Thulium-171	W, all compounds	1E+4	3E+2	1E-7	-	-	-
			LLI wall (1E+4)	Bone surf (6E+2)	-	8E-10	2E-4	2E-3
69	Thulium-172	W, all compounds	7E+2	1E+3	5E-7	2E-9	-	-
			LLI wall (8E+2)	-	-	-	1E-5	1E-4
69	Thulium-173	W, all compounds	4E+3	1E+4	5E-6	2E-8	6E-5	6E-4
69	Thulium-175[2]	W, all compounds	7E+4	3E+5	1E-4	4E-7	-	-
			St wall (9E+4)	-	-	-	1E-3	1E-2
70	Ytterbium-162[2]	W, all compounds except those given for Y	7E+4	3E+5	1E-4	4E-7	1E-3	1E-2
		Y, oxides, hydroxides, and fluorides	-	3E+5	1E-4	4E-7	-	-
70	Ytterbium-166	W, see ^{162}Yb	1E+3	2E+3	8E-7	3E-9	2E-5	2E-4
		Y, see ^{162}Yb	-	2E+3	8E-7	3E-9	-	-
70	Ytterbium-167[2]	W, see ^{162}Yb	3E+5	8E+5	3E-4	1E-6	4E-3	4E-2
		Y, see ^{162}Yb	-	7E+5	3E-4	1E-6	-	-
70	Ytterbium-169	W, see ^{162}Yb	2E+3	8E+2	4E-7	1E-9	2E-5	2E-4
		Y, see ^{162}Yb	-	7E+2	3E-7	1E-9	-	-
70	Ytterbium-175	W, see ^{162}Yb	3E+3	4E+3	1E-6	5E-9	-	-
			LLI wall (3E+3)	-	-	-	4E-5	4E-4
		Y, see ^{162}Yb	-	3E+3	1E-6	5E-9	-	-
70	Ytterbium-177[2]	W, see ^{162}Yb	2E+4	5E+4	2E-5	7E-8	2E-4	2E-3
		Y, see ^{162}Yb	-	5E+4	2E-5	6E-8	-	-
70	Ytterbium-178[2]	W, see ^{162}Yb	1E+4	4E+4	2E-5	6E-8	2E-4	2E-3
		Y, see ^{162}Yb	-	4E+4	2E-5	5E-8	-	-
71	Lutetium-169	W, all compounds except those given for Y	3E+3	4E+3	2E-6	6E-9	3E-5	3E-4
		Y, oxides, hydroxides, and fluorides	-	4E+3	2E-6	6E-9	-	-
71	Lutetium-170	W, see ^{169}Lu	1E+3	2E+3	9E-7	3E-9	2E-5	2E-4
		Y, see ^{169}Lu	-	2E+3	8E-7	3E-9	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
71	Lutetium-171	W, see ^{169}Lu	2E+3	2E+3	8E-7	3E-9	3E-5	3E-4
		Y, see ^{169}Lu	-	2E+3	8E-7	3E-9	-	-
71	Lutetium-172	W, see ^{169}Lu	1E+3	1E+3	5E-7	2E-9	1E-5	1E-4
		Y, see ^{169}Lu	-	1E+3	5E-7	2E-9	-	-
71	Lutetium-173	W, see ^{169}Lu	5E+3	3E+2	1E-7	-	7E-5	7E-4
			-	Bone surf (5E+2)	-	6E-10	-	-
		Y, see ^{169}Lu	-	3E+2	1E-7	4E-10	-	-
71	Lutetium-174m	W, see ^{169}Lu	2E+3	2E+2	1E-7	-	-	-
			LLI wall (3E+3)	Bone surf (3E+2)	-	5E-10	4E-5	4E-4
		Y, see ^{169}Lu	-	2E+2	9E-8	3E-10	-	-
71	Lutetium-174	W, see ^{169}Lu	5E+3	1E+2	5E-8	-	7E-5	7E-4
			-	Bone surf (2E+2)	-	3E-10	-	-
		Y, see ^{169}Lu	-	2E+2	6E-8	2E-10	-	-
71	Lutetium-176m	W, see ^{169}Lu	8E+3	3E+4	1E-5	3E-8	1E-4	1E-3
		Y, see ^{169}Lu	-	2E+4	9E-6	3E-8	-	-
71	Lutetium-176	W, see ^{169}Lu	7E+2	5E+0	2E-9	-	1E-5	1E-4
			-	Bone surf (1E+1)	-	2E-11	-	-
		Y, see ^{169}Lu	-	8E+0	3E-9	1E-11	-	-
71	Lutetium-177m	W, see ^{169}Lu	7E+2	1E+2	5E-8	-	1E-5	1E-4
			-	Bone surf (1E+2)	-	2E-10	-	-
		Y, see ^{169}Lu	-	8E+1	3E-8	1E-10	-	-
71	Lutetium-177	W, see ^{169}Lu	2E+3	2E+3	9E-7	3E-9	-	-
			LLI wall (3E+3)	-	-	-	4E-5	4E-4
		Y, see ^{169}Lu	-	2E+3	9E-7	3E-9	-	-
71	Lutetium-178m[2]	W, see ^{169}Lu	5E+4	2E+5	8E-5	3E-7	-	-
			St. wall (6E+4)	-	-	-	8E-4	8E-3
		Y, see ^{169}Lu	-	2E+5	7E-5	2E-7	-	-
71	Lutetium-178[2]	W, see ^{169}Lu	4E+4	1E+5	5E-5	2E-7	-	-
			St wall (4E+4)	-	-	-	6E-4	6E-3
		Y, see ^{169}Lu	-	1E+5	5E-5	2E-7	-	-
71	Lutetium-179	W, see ^{169}Lu	6E+3	2E+4	8E-6	3E-8	9E-5	9E-4
		Y, see ^{169}Lu	-	2E+4	6E-6	3E-8	-	-
72	Hafnium-170	D, all compounds except those given for W	3E+3	6E+3	2E-6	8E-9	4E-5	4E-4
		W, oxides, hydroxides, carbides, and nitrates	-	5E+3	2E-6	6E-9	-	-
72	Hafnium-172	D, see ^{170}Hf	1E+3	9E+0	4E-9	-	2E-5	2E-4
			-	Bone surf (2E+1)	-	3E-11	-	-
		W, see ^{170}Hf	-	4E+1	2E-8	-	-	-
			-	Bone surf (6E+1)	-	8E-11	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
72	Hafnium-173	D, see ^{170}Hf	5E+3	1E+4	5E-6	2E-8	7E-5	7E-4
		W, see ^{170}Hf	-	1E+4	5E-6	2E-8	-	-
72	Hafnium-175	D, see ^{170}Hf	3E+3	9E+2	4E-7	-	4E-5	4E-4
			-	Bone surf (1E+3)	-	1E-9	-	-
		W, see ^{170}Hf	-	1E+3	5E-7	2E-9	-	-
72	Hafnium-177m[2]	D, see ^{170}Hf	2E+4	6E+4	2E-5	8E-8	3E-4	3E-3
		W, see ^{170}Hf	-	9E+4	4E-5	1E-7	-	-
72	Hafnium-178m	D, see ^{170}Hf	3E+2	1E+0	5E-10	-	3E-6	3E-5
			-	Bone surf (2E+0)	-	3E-12	-	-
		W, see ^{170}Hf	-	5E+0	2E-9	-	-	-
			-	Bone surf (9E+0)	-	1E-11	-	-
72	Hafnium-179m	D, see ^{170}Hf	1E+3	3E+2	1E-7	-	1E-5	1E-4
			-	Bone surf (6E+2)	-	8E-10	-	-
		W, see ^{170}Hf	-	6E+2	3E-7	8E-10	-	-
72	Hafnium-180m	D, see ^{170}Hf	7E+3	2E+4	9E-6	3E-8	1E-4	1E-3
		W, see ^{170}Hf	-	3E+4	1E-5	4E-8	-	-
72	Hafnium-181	D, see ^{170}Hf	1E+3	2E+2	7E-8	-	2E-5	2E-4
			-	Bone surf (4E+2)	-	6E-10	-	-
		W, see ^{170}Hf	-	4E+2	2E-7	6E-10	-	-
72	Hafnium-182m[2]	D, see ^{170}Hf	4E+4	9E+4	4E-5	1E-7	5E-4	5E-3
		W, see ^{170}Hf	-	1E+5	6E-5	2E-7	-	-
72	Hafnium-182	D, see ^{170}Hf	2E+2	8E-1	3E-10	-	-	-
			Bone surf (4E+2)	Bone surf (2E+0)	-	2E-12	5E-6	5E-5
		W, see ^{170}Hf	-	3E+0	1E-9	-	-	-
			-	Bone surf (7E+0)	-	1E-11	-	-
72	Hafnium-183[2]	D, see ^{170}Hf	2E+4	5E+4	2E-5	6E-8	3E-4	3E-3
		W, see ^{170}Hf	-	6E+4	2E-5	8E-8	-	-
72	Hafnium-184	D, see ^{170}Hf	2E+3	8E+3	3E-6	1E-8	3E-5	3E-4
		W, see ^{170}Hf	-	6E+3	3E-6	9E-9	-	-
73	Tantalum-172[2]	W, all compounds except those given for Y	4E+4	1E+5	5E-5	2E-7	5E-4	5E-3
		Y, elemental Ta, oxides, hydroxides, halides, carbides, nitrates, and nitrides	-	1E+5	4E-5	1E-7	-	-
73	Tantalum-173	W, see ^{172}Ta	7E+3	2E+4	8E-6	3E-8	9E-5	9E-4
		Y, see ^{172}Ta	-	2E+4	7E-6	2E-8	-	-
73	Tantalum-174[2]	W, see ^{172}Ta	3E+4	1E+5	4E-5	1E-7	4E-4	4E-3
		Y, see ^{172}Ta	-	9E+4	4E-5	1E-7	-	-
73	Tantalum-175	W, see ^{172}Ta	6E+3	2E+4	7E-6	2E-8	8E-5	8E-4
		Y, see ^{172}Ta	-	1E+4	6E-6	2E-8	-	-
73	Tantalum-176	W, see ^{172}Ta	4E+3	1E+4	5E-6	2E-8	5E-5	5E-4
		Y, see ^{172}Ta	-	1E+4	5E-6	2E-8	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
73	Tantalum-177	W, see ^{172}Ta	1E+4	2E+4	8E-6	3E-8	2E-4	2E-3
		Y, see ^{172}Ta	-	2E+4	7E-6	2E-8	-	-
73	Tantalum-178	W, see ^{172}Ta	2E+4	9E+4	4E-5	1E-7	2E-4	2E-3
		Y, see ^{172}Ta	-	7E+4	3E-5	1E-7	-	-
73	Tantalum-179	W, see ^{172}Ta	2E+4	5E+3	2E-6	8E-9	3E-4	3E-3
		Y, see ^{172}Ta	-	9E+2	4E-7	1E-9	-	-
73	Tantalum-180m	W, see ^{172}Ta	2E+4	7E+4	3E-5	9E-8	3E-4	3E-3
		Y, see ^{172}Ta	-	6E+4	2E-5	8E-8	-	-
73	Tantalum-180	W, see ^{172}Ta	1E+3	4E+2	2E-7	6E-10	2E-5	2E-4
		Y, see ^{172}Ta	-	2E+1	1E-8	3E-11	-	-
73	Tantalum-182m[2]	W, see ^{172}Ta	2E+5	5E+5	2E-4	8E-7	-	-
			St wall (2E+5)	-	-	-	3E-3	3E-2
		Y, see ^{172}Ta	-	4E+5	2E-4	6E-7	-	-
73	Tantalum-182	W, see ^{172}Ta	8E+2	3E+2	1E-7	5E-10	1E-5	1E-4
		Y, see ^{172}Ta	-	1E+2	6E-8	2E-10	-	-
73	Tantalum-183	W, see ^{172}Ta	9E+2	1E+3	5E-7	2E-9	-	-
			LLI wall (1E+3)	-	-	-	2E-5	2E-4
		Y, see ^{172}Ta	-	1E+3	4E-7	1E-9	-	-
73	Tantalum-184	W, see ^{172}Ta	2E+3	5E+3	2E-6	8E-9	3E-5	3E-4
		Y, see ^{172}Ta	-	5E+3	2E-6	7E-9	-	-
73	Tantalum-185[2]	W, see ^{172}Ta	3E+4	7E+4	3E-5	1E-7	4E-4	4E-3
		Y, see ^{172}Ta	-	6E+4	3E-5	9E-8	-	-
73	Tantalum-186[2]	W, see ^{172}Ta	5E+4	2E+5	1E-4	3E-7	-	-
			St wall (7E+4)	-	-	-	1E-3	1E-2
		Y, see ^{172}Ta	-	2E+5	9E-5	3E-7	-	-
74	Tungsten-176	D, all compounds	1E+4	5E+4	2E-5	7E-8	1E-4	1E-3
74	Tungsten-177	D, all compounds	2E+4	9E+4	4E-5	1E-7	3E-4	3E-3
74	Tungsten-178	D, all compounds	5E+3	2E+4	8E-6	3E-8	7E-5	7E-4
74	Tungsten-179[2]	D, all compounds	5E+5	2E+6	7E-4	2E-6	7E-3	7E-2
74	Tungsten-181	D, all compounds	2E+4	3E+4	1E-5	5E-8	2E-4	2E-3
74	Tungsten-185	D, all compounds	2E+3	7E+3	3E-6	9E-9	-	-
			LLI wall (3E+3)	-	-	-	4E-5	4E-4
74	Tungsten-187	D, all compounds	2E+3	9E+3	4E-6	1E-8	3E-5	3E-4
74	Tungsten-188	D, all compounds	4E+2	1E+3	5E-7	2E-9	-	-
			LLI wall (5E+2)	-	-	-	7E-6	7E-5
75	Rhenium-177[2]	D, all compounds except those given for W	9E+4	3E+5	1E-4	4E-7	-	-
			St wall (1E+5)	-	-	-	2E-3	2E-2
		W, oxides, hydroxides, and nitrates	-	4E+5	1E-4	5E-7	-	-
75	Rhenium-178[2]	D, see ^{177}Re	7E+4	3E+5	1E-4	4E-7	-	-
			St wall (1E+5)	-	-	-	1E-3	1E-2

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		W, see ^{177}Re	-	3E+5	1E-4	4E-7	-	-
75	Rhenium-181	D, see ^{177}Re	5E+3	9E+3	4E-6	1E-8	7E-5	7E-4
		W, see ^{177}Re	-	9E+3	4E-6	1E-8	-	-
75	Rhenium-182	D, see ^{177}Re	7E+3	1E+4	5E-6	2E-8	9E-5	9E-4
	(12.7 h)	W, see ^{177}Re	-	2E+4	6E-6	2E-8	-	-
75	Rhenium-182	D, see ^{177}Re	1E+3	2E+3	1E-6	3E-9	2E-5	2E-4
	(64.0 h)	W, see ^{177}Re	-	2E+3	9E-7	3E-9	-	-
75	Rhenium-184m	D, see ^{177}Re	2E+3	3E+3	1E-6	4E-9	3E-5	3E-4
		W, see ^{177}Re	-	4E+2	2E-7	6E-10	-	-
75	Rhenium-184	D, see ^{177}Re	2E+3	4E+3	1E-6	5E-9	3E-5	3E-4
		W, see ^{177}Re	-	1E+3	6E-7	2E-9	-	-
75	Rhenium-186m	D, see ^{177}Re	1E+3	2E+3	7E-7	-	-	-
			St wall (2E+3)	St wall (2E+3)	-	3E-9	2E-5	2E-4
		W, see ^{177}Re	-	2E+2	6E-8	2E-10	-	-
75	Rhenium-186	D, see ^{177}Re	2E+3	3E+3	1E-6	4E-9	3E-5	3E-4
		W, see ^{177}Re	-	2E+3	7E-7	2E-9	-	-
75	Rhenium-187	D, see ^{177}Re	6E+5	8E+5	4E-4	-	8E-3	8E-2
			-	St wall (9E+5)	-	1E-6	-	-
		W, see ^{177}Re	-	1E+5	4E-5	1E-7	-	-
75	Rhenium-188m[2]	D, see ^{177}Re	8E+4	1E+5	6E-5	2E-7	1E-3	1E-2
		W, see ^{177}Re	-	1E+5	6E-5	2E-7	-	-
75	Rhenium-188	D, see ^{177}Re	2E+3	3E+3	1E-6	4E-9	2E-5	2E-4
		W, see ^{177}Re	-	3E+3	1E-6	4E-9	-	-
75	Rhenium-189	D, see ^{177}Re	3E+3	5E+3	2E-6	7E-9	4E-5	4E-4
		W, see ^{177}Re	-	4E+3	2E-6	6E-9	-	-
76	Osmium-180[2]	D, all compounds except those given for W and Y	1E+5	4E+5	2E-4	5E-7	1E-3	1E-2
		W, halides and nitrates	-	5E+5	2E-4	7E-7	-	-
		Y, oxides and hydroxides	-	5E+5	2E-4	6E-7	-	-
76	Osmium-181[2]	D, see ^{180}Os	1E+4	4E+4	2E-5	6E-8	2E-4	2E-3
		W, see ^{180}Os	-	5E+4	2E-5	6E-8	-	-
		Y, see ^{180}Os	-	4E+4	2E-5	6E-8	-	-
76	Osmium-182	D, see ^{180}Os	2E+3	6E+3	2E-6	8E-9	3E-5	3E-4
		W, see ^{180}Os	-	4E+3	2E-6	6E-9	-	-
		Y, see ^{180}Os	-	4E+3	2E-6	6E-9	-	-
76	Osmium-185	D, see ^{180}Os	2E+3	5E+2	2E-7	7E-10	3E-5	3E-4
		W, see ^{180}Os	-	8E+2	3E-7	1E-9	-	-
		Y, see ^{180}Os	-	8E+2	3E-7	1E-9	-	-
76	Osmium-189m	D, see ^{180}Os	8E+4	2E+5	1E-4	3E-7	1E-3	1E-2
		W, see ^{180}Os	-	2E+5	9E-5	3E-7	-	-
		Y, see ^{180}Os	-	2E+5	7E-5	2E-7	-	-
76	Osmium-191m	D, see ^{180}Os	1E+4	3E+4	1E-5	4E-8	2E-4	2E-3
		W, see ^{180}Os	-	2E+4	8E-6	3E-8	-	-
		Y, see ^{180}Os	-	2E+4	7E-6	2E-8	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
76	Osmium-191	D, see ^{180}Os	2E+3	2E+3	9E-7	3E-9	-	-
			LLI wall (3E+3)	-	-	-	3E-5	3E-4
		W, see ^{180}Os	-	2E+3	7E-7	2E-9	-	-
		Y, see ^{180}Os	-	1E+3	6E-7	2E-9	-	-
76	Osmium-193	D, see ^{180}Os	2E+3	5E+3	2E-6	6E-9	-	-
			LLI wall (2E+3)	-	-	-	2E-5	2E-4
		W, see ^{180}Os	-	3E+3	1E-6	4E-9	-	-
		Y, see ^{180}Os	-	3E+3	1E-6	4E-9	-	-
76	Osmium-194	D, see ^{180}Os	4E+2	4E+1	2E-8	6E-11	-	-
			LLI wall (6E+2)	-	-	-	8E-6	8E-5
		W, see ^{180}Os	-	6E+1	2E-8	8E-11	-	-
		Y, see ^{180}Os	-	8E+0	3E-9	1E-11	-	-
77	Iridium-182[2]	D, all compounds except those given for W and Y	4E+4	1E+5	6E-5	2E-7	-	-
			St wall (4E+4)	-	-	-	6E-4	6E-3
		W, halides, nitrates, and metallic iridium	-	2E+5	6E-5	2E-7	-	-
		Y, oxides and hydroxides	-	1E+5	5E-5	2E-7	-	-
77	Iridium-184	D, see ^{182}Ir	8E+3	2E+4	1E-5	3E-8	1E-4	1E-3
		W, see ^{182}Ir	-	3E+4	1E-5	5E-8	-	-
		Y, see ^{182}Ir	-	3E+4	1E-5	4E-8	-	-
77	Iridium-185	D, see ^{182}Ir	5E+3	1E+4	5E-6	2E-8	7E-5	7E-4
		W, see ^{182}Ir	-	1E+4	5E-6	2E-8	-	-
		Y, see ^{182}Ir	-	1E+4	4E-6	1E-8	-	-
77	Iridium-186	D, see ^{182}Ir	2E+3	8E+3	3E-6	1E-8	3E-5	3E-4
		W, see ^{182}Ir	-	6E+3	3E-6	9E-9	-	-
		Y, see ^{182}Ir	-	6E+3	2E-6	8E-9	-	-
77	Iridium-187	D, see ^{182}Ir	1E+4	3E+4	1E-5	5E-8	1E-4	1E-3
		W, see ^{182}Ir	-	3E+4	1E-5	4E-8	-	-
		Y, see ^{182}Ir	-	3E+4	1E-5	4E-8	-	-
77	Iridium-188	D, see ^{182}Ir	2E+3	5E+3	2E-6	6E-9	3E-5	3E-4
		W, see ^{182}Ir	-	4E+3	1E-6	5E-9	-	-
		Y, see ^{182}Ir	-	3E+3	1E-6	5E-9	-	-
77	Iridium-189	D, see ^{182}Ir	5E+3	5E+3	2E-6	7E-9	-	-
			LLI wall (5E+3)	-	-	-	7E-5	7E-4
		W, see ^{182}Ir	-	4E+3	2E-6	5E-9	-	-
		Y, see ^{182}Ir	-	4E+3	1E-6	5E-9	-	-
77	Iridium-190m[2]	D, see ^{182}Ir	2E+5	2E+5	8E-5	3E-7	2E-3	2E-2
		W, see ^{182}Ir	-	2E+5	9E-5	3E-7	-	-
		Y, see ^{182}Ir	-	2E+5	8E-5	3E-7	-	-
77	Iridium-190	D, see ^{182}Ir	1E+3	9E+2	4E-7	1E-9	1E-5	1E-4
		W, see ^{182}Ir	-	1E+3	4E-7	1E-9	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		Y, see ^{182}Ir	-	9E+2	4E-7	1E-9	-	-
77	Iridium-192m	D, see ^{182}Ir	3E+3	9E+1	4E-8	1E-10	4E-5	4E-4
		W, see ^{182}Ir	-	2E+2	9E-8	3E-10	-	-
		Y, see ^{182}Ir	-	2E+1	6E-9	2E-11	-	-
77	Iridium-192	D, see ^{182}Ir	9E+2	3E+2	1E-7	4E-10	1E-5	1E-4
		W, see ^{182}Ir	-	4E+2	2E-7	6E-10	-	-
		Y, see ^{182}Ir	-	2E+2	9E-8	3E-10	-	-
77	Iridium-194m	D, see ^{182}Ir	6E+2	9E+1	4E-8	1E-10	9E-6	9E-5
		W, see ^{182}Ir	-	2E+2	7E-8	2E-10	-	-
		Y, see ^{182}Ir	-	1E+2	4E-8	1E-10	-	-
77	Iridium-194	D, see ^{182}Ir	1E+3	3E+3	1E-6	4E-9	1E-5	1E-4
		W, see ^{182}Ir	-	2E+3	9E-7	3E-9	-	-
		Y, see ^{182}Ir	-	2E+3	8E-7	3E-9	-	-
77	Iridium-195m	D, see ^{182}Ir	8E+3	2E+4	1E-5	3E-8	1E-4	1E-3
		W, see ^{182}Ir	-	3E+4	1E-5	4E-8	-	-
		Y, see ^{182}Ir	-	2E+4	9E-6	3E-8	-	-
77	Iridium-195	D, see ^{182}Ir	1E+4	4E+4	2E-5	6E-8	2E-4	2E-3
		W, see ^{182}Ir	-	5E+4	2E-5	7E-8	-	-
		Y, see ^{182}Ir	-	4E+4	2E-5	6E-8	-	-
78	Platinum-186	D, all compounds	1E+4	4E+4	2E-5	5E-8	2E-4	2E-3
78	Platinum-188	D, all compounds	2E+3	2E+3	7E-7	2E-9	2E-5	2E-4
78	Platinum-189	D, all compounds	1E+4	3E+4	1E-5	4E-8	1E-4	1E-3
78	Platinum-191	D, all compounds	4E+3	8E+3	4E-6	1E-8	5E-5	5E-4
78	Platinum-193m	D, all compounds	3E+3	6E+3	3E-6	8E-9	-	-
			LLI wall (3E+4)	-	-	-	4E-5	4E-4
78	Platinum-193	D, all compounds	4E+4	2E+4	1E-5	3E-8	-	-
			LLI wall (5E+4)	-	-	-	6E-4	6E-3
78	Platinum-195m	D, all compounds	2E+3	4E+3	2E-6	6E-9	-	-
			LLI wall (2E+3)	-	-	-	3E-5	3E-4
78	Platinum-197m[2]	D, all compounds	2E+4	4E+4	2E-5	6E-8	2E-4	2E-3
78	Platinum-197	D, all compounds	3E+3	1E+4	4E-6	1E-8	4E-5	4E-4
78	Platinum-199[2]	D, all compounds	5E+4	1E+5	6E-5	2E-7	7E-4	7E-3
78	Platinum-200	D, all compounds	1E+3	3E+3	1E-6	5E-9	2E-5	2E-4
79	Gold-193	D, all compounds except those given for W and Y	9E+3	3E+4	1E-5	4E-8	1E-4	1E-3
		W, halides and nitrates	-	2E+4	9E-6	3E-8	-	-
		Y, oxides and hydroxides	-	2E+4	8E-6	3E-8	-	-
79	Gold-194	D, see ^{193}Au	3E+3	8E+3	3E-6	1E-8	4E-5	4E-4
		W, see ^{193}Au	-	5E+3	2E-6	8E-9	-	-
		Y, see ^{193}Au	-	5E+3	2E-6	7E-9	-	-
79	Gold-195	D, see ^{193}Au	5E+3	1E+4	5E-6	2E-8	7E-5	7E-4
		W, see ^{193}Au	-	1E+3	6E-7	2E-9	-	-
		Y, see ^{193}Au	-	4E+2	2E-7	6E-10	-	-
79	Gold-198m	D, see ^{193}Au	1E+3	3E+3	1E-6	4E-9	1E-5	1E-4

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		W, see ^{193}Au	-	1E+3	5E-7	2E-9	-	-
		Y, see ^{193}Au	-	1E+3	5E-7	2E-9	-	-
79	Gold-198	D, see ^{193}Au	1E+3	4E+3	2E-6	5E-9	2E-5	2E-4
		W, see ^{193}Au	-	2E+3	8E-7	3E-9	-	-
		Y, see ^{193}Au	-	2E+3	7E-7	2E-9	-	-
79	Gold-199	D, see ^{193}Au	3E+3	9E+3	4E-6	1E-8	-	-
			LLI wall (3E+3)	-	-	-	4E-5	4E-4
		W, see ^{193}Au	-	4E+3	2E-6	6E-9	-	-
		Y, see ^{193}Au	-	4E+3	2E-6	5E-9	-	-
79	Gold-200m	D, see ^{193}Au	1E+3	4E+3	1E-6	5E-9	2E-5	2E-4
		W, see ^{193}Au	-	3E+3	1E-6	4E-9	-	-
		Y, see ^{193}Au	-	2E+4	1E-6	3E-9	-	-
79	Gold-200[2]	D, see ^{193}Au	3E+4	6E+4	3E-5	9E-8	4E-4	4E-3
		W, see ^{193}Au	-	8E+4	3E-5	1E-7	-	-
		Y, see ^{193}Au	-	7E+4	3E-5	1E-7	-	-
79	Gold-201[2]	D, see ^{193}Au	7E+4	2E+5	9E-5	3E-7	-	-
			St wall (9E+4)	-	-	-	1E-3	1E-2
		W, see ^{193}Au	-	2E+5	1E-4	3E-7	-	-
		Y, see ^{193}Au	-	2E+5	9E-5	3E-7	-	-
80	Mercury-193m	Vapor	-	8E+3	4E-6	1E-8	-	-
		Organic D	4E+3	1E+4	5E-6	2E-8	6E-5	6E-4
		D, sulfates	3E+3	9E+3	4E-6	1E-8	4E-5	4E-4
		W, oxides, hydroxides, halides, nitrates, and sulfides	-	8E+3	3E-6	1E-8	-	-
80	Mercury-193	Vapor	-	3E+4	1E-5	4E-8	-	-
		Organic D	2E+4	6E+4	3E-5	9E-8	3E-4	3E-3
		D, see ^{193m}Hg	2E+4	4E+4	2E-5	6E-8	2E-4	2E-3
		W, see ^{193m}Hg	-	4E+4	2E-5	6E-8	-	-
80	Mercury-194	Vapor	-	3E+1	1E-8	4E-11	-	-
		Organic D	2E+1	3E+1	1E-8	4E-11	2E-7	2E-6
		D, see ^{193m}Hg	8E+2	4E+1	2E-8	6E-11	1E-5	1E-4
		W, see ^{193m}Hg	-	1E+2	5E-8	2E-10	-	-
80	Mercury-195m	Vapor	-	4E+3	2E-6	6E-9	-	-
		Organic D	3E+3	6E+3	3E-6	8E-9	4E-5	4E-4
		D, see ^{193m}Hg	2E+3	5E+3	2E-6	7E-9	3E-5	3E-4
		W, see ^{193m}Hg	-	4E+3	2E-6	5E-9	-	-
80	Mercury-195	Vapor	-	3E+4	1E-5	4E-8	-	-
		Organic D	2E+4	5E+4	2E-5	6E-8	2E-4	2E-3
		D, see ^{193m}Hg	1E+4	4E+4	1E-5	5E-8	2E-4	2E-3
		W, see ^{193m}Hg	-	3E+4	1E-5	5E-8	-	-
80	Mercury-197m	Vapor	-	5E+3	2E-6	7E-9	-	-
		Organic D	4E+3	9E+3	4E-6	1E-8	5E-5	5E-4
		D, see ^{193m}Hg	3E+3	7E+3	3E-6	1E-8	4E-5	4E-4
		W, see ^{193m}Hg	-	5E+3	2E-6	7E-9	-	-
80	Mercury-197	Vapor	-	8E+3	4E-6	1E-8	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		Organic D	7E+3	1E+4	6E-6	2E-8	9E-5	9E-4
		D, see ^{193m}Hg	6E+3	1E+4	5E-6	2E-8	8E-5	8E-4
		W, see ^{193m}Hg	-	9E+3	4E-6	1E-8	-	-
80	Mercury-199m[2]	Vapor	-	8E+4	3E-5	1E-7	-	-
		Organic D	6E+4	2E+5	7E-5	2E-7	-	-
			St wall (1E+5)	-	-	-	1E-3	1E-2
		D, see ^{193m}Hg	6E+4	1E+5	6E-5	2E-7	8E-4	8E-3
		W, see ^{193m}Hg	-	2E+5	7E-5	2E-7	-	-
80	Mercury-203	Vapor	-	8E+2	4E-7	1E-9	-	-
		Organic D	5E+2	8E+2	3E-7	1E-9	7E-6	7E-5
		D, see ^{193m}Hg	2E+3	1E+3	5E-7	2E-9	3E-5	3E-4
		W, see ^{193m}Hg	-	1E+3	5E-7	2E-9	-	-
81	Thallium-194m[2]	D, all compounds	5E+4	2E+5	6E-5	2E-7	-	-
			St wall (7E+4)	-	-	-	1E-3	1E-2
81	Thallium-194[2]	D, all compounds	3E+5	6E+5	2E-4	8E-7	-	-
			St wall (3E+5)	-	-	-	4E-3	4E-2
81	Thallium-195[2]	D, all compounds	6E+4	1E+5	5E-5	2E-7	9E-4	9E-3
81	Thallium-197	D, all compounds	7E+4	1E+5	5E-5	2E-7	1E-3	1E-2
81	Thallium-198m[2]	D, all compounds	3E+4	5E+4	2E-5	8E-8	4E-4	4E-3
81	Thallium-198	D, all compounds	2E+4	3E+4	1E-5	5E-8	3E-4	3E-3
81	Thallium-199	D, all compounds	6E+4	8E+4	4E-5	1E-7	9E-4	9E-3
81	Thallium-200	D, all compounds	8E+3	1E+4	5E-6	2E-8	1E-4	1E-3
81	Thallium-201	D, all compounds	2E+4	2E+4	9E-6	3E-8	2E-4	2E-3
81	Thallium-202	D, all compounds	4E+3	5E+3	2E-6	7E-9	5E-5	5E-4
81	Thallium-204	D, all compounds	2E+3	2E+3	9E-7	3E-9	2E-5	2E-4
82	Lead-195m[2]	D, all compounds	6E+4	2E+5	8E-5	3E-7	8E-4	8E-3
82	Lead-198	D, all compounds	3E+4	6E+4	3E-5	9E-8	4E-4	4E-3
82	Lead-199[2]	D, all compounds	2E+4	7E+4	3E-5	1E-7	3E-4	3E-3
82	Lead-200	D, all compounds	3E+3	6E+3	3E-6	9E-9	4E-5	4E-4
82	Lead-201	D, all compounds	7E+3	2E+4	8E-6	3E-8	1E-4	1E-3
82	Lead-202m	D, all compounds	9E+3	3E+4	1E-5	4E-8	1E-4	1E-3
82	Lead-202	D, all compounds	1E+2	5E+1	2E-8	7E-11	2E-6	2E-5
82	Lead-203	D, all compounds	5E+3	9E+3	4E-6	1E-8	7E-5	7E-4
82	Lead-205	D, all compounds	4E+3	1E+3	6E-7	2E-9	5E-5	5E-4
82	Lead-209	D, all compounds	2E+4	6E+4	2E-5	8E-8	3E-4	3E-3
82	Lead-210	D, all compounds	6E-1	2E-1	1E-10	-	-	-
			Bone surf (1E+0)	Bone surf (4E-1)	-	6E-13	1E-8	1E-7
82	Lead-211[2]	D, all compounds	1E+4	6E+2	3E-7	9E-10	2E-4	2E-3
82	Lead-212	D, all compounds	8E+1	3E+1	1E-8	5E-11	-	-
			Bone surf (1E+2)	-	-	-	2E-6	2E-5
82	Lead-214[2]	D, all compounds	9E+3	8E+2	3E-7	1E-9	1E-4	1E-3
83	Bismuth-200[2]	D, nitrates	3E+4	8E+4	4E-5	1E-7	4E-4	4E-3
		W, all other compounds	-	1E+5	4E-5	1E-7	-	-
83	Bismuth-201[2]	D, see ^{200}Bi	1E+4	3E+4	1E-5	4E-8	2E-4	2E-3

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		W, see ^{200}Bi	-	4E+4	2E-5	5E-8	-	-
83	Bismuth-202[2]	D, see ^{200}Bi	1E+4	4E+4	2E-5	6E-8	2E-4	2E-3
		W, see ^{200}Bi	-	8E+4	3E-5	1E-7	-	-
83	Bismuth-203	D, see ^{200}Bi	2E+3	7E+3	3E-6	9E-9	3E-5	3E-4
		W, see ^{200}Bi	-	6E+3	3E-6	9E-9	-	-
83	Bismuth-205	D, see ^{200}Bi	1E+3	3E+3	1E-6	3E-9	2E-5	2E-4
		W, see ^{200}Bi	-	1E+3	5E-7	2E-9	-	-
83	Bismuth-206	D, see ^{200}Bi	6E+2	1E+3	6E-7	2E-9	9E-6	9E-5
		W, see ^{200}Bi	-	9E+2	4E-7	1E-9	-	-
83	Bismuth-207	D, see ^{200}Bi	1E+3	2E+3	7E-7	2E-9	1E-5	1E-4
		W, see ^{200}Bi	-	4E+2	1E-7	5E-10	-	-
83	Bismuth-210m	D, see ^{200}Bi	4E+1	5E+0	2E-9	-	-	-
			Kidneys (6E+1)	Kidneys (6E+0)	-	9E-12	8E-7	8E-6
		W, see ^{200}Bi	-	7E-1	3E-10	9E-13	-	-
83	Bismuth-210	D, see ^{200}Bi	8E+2	2E+2	1E-7	-	1E-5	1E-4
			- -	Kidneys (4E+2)	-	5E-10	-	-
		W, see ^{200}Bi	-	3E+1	1E-8	4E-11	-	-
83	Bismuth-212[2]	D, see ^{200}Bi	5E+3	2E+2	1E-7	3E-10	7E-5	7E-4
		W, see ^{200}Bi	-	3E+2	1E-7	4E-10	-	-
83	Bismuth-213[2]	D, see ^{200}Bi	7E+3	3E+2	1E-7	4E-10	1E-4	1E-3
		W, see ^{200}Bi	-	4E+2	1E-7	5E-10	-	-
83	Bismuth-214[2]	D, see ^{200}Bi	2E+4	8E+2	3E-7	1E-9	-	-
			St wall (2E+4)	-	-	-	3E-4	3E-3
		W, see ^{200}Bi	-	9E-2	4E-7	1E-9	-	-
84	Polonium-203[2]	D, all compounds except those given for W	3E+4	6E+4	3E-5	9E-8	3E-4	3E-3
		W, oxides, hydroxides, and nitrates	-	9E+4	4E-5	1E-7	-	-
84	Polonium-205[2]	D, see ^{203}Po	2E+4	4E+4	2E-5	5E-8	3E-4	3E-3
		W, see ^{203}Po	-	7E+4	3E-5	1E-7	-	-
84	Polonium-207	D, see ^{203}Po	8E+3	3E+4	1E-5	3E-8	1E-4	1E-3
		W, see ^{203}Po	-	3E+4	1E-5	4E-8	-	-
84	Polonium-210	D, see ^{203}Po	3E+0	6E-1	3E-10	9E-13	4E-8	4E-7
		W, see ^{203}Po	-	6E-1	3E-10	9E-13	-	-
85	Astatine-207[2]	D, halides	6E+3	3E+3	1E-6	4E-9	8E-5	8E-4
		W	-	2E+3	9E-7	3E-9	-	-
85	Astatine-211	D, halides	1E+2	8E+1	3E-8	1E-10	2E-6	2E-5
		W	-	5E+1	2E-8	8E-11	-	-
86	Radon-220	With daughters removed	-	2E+4	7E-6	2E-8	-	-
		With daughters present	-	2E+1 (or 12 working level months)	9E-9	3E-11 (or 1.0 working level)	-	-
86	Radon-222	With daughters removed	-	1E+4	4E-6	1E-8	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		With daughters present	-	1E+2 (or 4 working level months)	3E-8	1E-10 (or 0.33 working level)	-	-
87	Francium-222[2]	D, all compounds	2E+3	5E+2	2E-7	6E-10	3E-5	3E-4
87	Francium-223[2]	D, all compounds	6E+2	8E+2	3E-7	1E-9	8E-6	8E-5
88	Radium-223	W, all compounds	5E+0	7E-1	3E-10	9E-13	-	-
			Bone surf (9E+0)	-	-	-	1E-7	1E-6
88	Radium-224	W, all compounds	8E+0	2E+0	7E-10	2E-12	-	-
			Bone surf (2E+1)	-	-	-	2E-7	2E-6
88	Radium-225	W, all compounds	8E+0	7E-1	3E-10	9E-13	-	-
			Bone surf (2E+1)	-	-	-	2E-7	2E-6
88	Radium-226	W, all compounds	2E+0	6E-1	3E-10	9E-13	-	-
			Bone surf (5E+0)	-	-	-	6E-8	6E-7
88	Radium-227[2]	W, all compounds	2E+4	1E+4	6E-6	-	-	-
			Bone surf (2E+4)	Bone surf (2E+4)	-	3E-8	3E-4	3E-3
88	Radium-228	W, all compounds	2E+0	1E+0	5E-10	2E-12	-	-
			Bone surf (4E+0)	-	-	-	6E-8	6E-7
89	Actinium-224	D, all compounds except those given for W and Y	2E+3	3E+1	1E-8	-	-	-
			LLI wall (2E+3)	Bone surf (4E+1)	-	5E-11	3E-5	3E-4
		W, halides and nitrates	-	5E+1	2E-8	7E-11	-	-
		Y, oxides and hydroxides	-	5E+1	2E-8	6E-11	-	-
89	Actinium-225	D, see ^{224}Ac	5E+1	3E-1	1E-10	-	-	-
			LLI wall (5E+1)	Bone surf (5E-1)	-	7E-13	7E-7	7E-6
		W, see ^{224}Ac	-	6E-1	3E-10	9E-13	-	-
		Y, see ^{224}Ac	-	6E-1	3E-10	9E-13	-	-
89	Actinium-226	D, see ^{224}Ac	1E+2	3E+0	1E-9	-	-	-
			LLI wall (1E+2)	Bone surf (4E+0)	-	5E-12	2E-6	2E-5
		W, see ^{224}Ac	-	5E+0	2E-9	7E-12	-	-
		Y, see ^{224}Ac	-	5E+0	2E-9	6E-12	-	-
89	Actinium-227	D, see ^{224}Ac	2E-1	4E-4	2E-13	-	-	-
			Bone surf (4E-1)	Bone surf (8E-4)	-	1E-15	5E-9	5E-8
		W, see ^{224}Ac	-	2E-3	7E-13	-	-	-
			-	Bone surf (3E-3)	-	4E-15	-	-
		Y, see ^{224}Ac	-	4E-3	2E-12	6E-15	-	-
89	Actinium-228	D, see ^{224}Ac	2E+3	9E+0	4E-9	-	3E-5	3E-4
			-	Bone surf (2E+1)	-	2E-11	-	-
		W, see ^{224}Ac	-	4E+1	2E-8	-	-	-
				Bone surf				

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
			-	(6E+1)	-	8E-11	-	-
		Y, see ^{224}Ac	-	4E+1	2E-8	6E-11	-	-
90	Thorium-226[2]	W, all compounds except those given for Y	5E+3	2E+2	6E-8	2E-10	-	-
			St wall (5E+3)	-	-	-	7E-5	7E-4
		Y, oxides and hydroxides	-	1E+2	6E-8	2E-10	-	-
90	Thorium-227	W, see ^{226}Th	1E+2	3E-1	1E-10	5E-13	2E-6	2E-5
		Y, see ^{226}Th	-	3E-1	1E-10	5E-13	-	-
90	Thorium-228	W, see ^{226}Th	6E+0	1E-2	4E-12	-	-	-
			Bone surf (1E+1)	Bone surf (2E-2)	-	3E-14	2E-7	2E-6
		Y, see ^{226}Th	-	2E-2	7E-12	2E-14	-	-
90	Thorium-229	W, see ^{226}Th	6E-1	9E-4	4E-13	-	-	-
			Bone surf (1E+0)	Bone surf (2E-3)	-	3E-15	2E-8	2E-7
		Y, see ^{226}Th	-	2E-3	1E-12	-	-	-
			-	Bone surf (3E-3)	-	4E-15	-	-
90	Thorium-230	W, see ^{226}Th	4E+0	6E-3	3E-12	-	-	-
			Bone surf (9E+0)	Bone surf (2E-2)	-	2E-14	1E-7	1E-6
		Y, see ^{226}Th	-	2E-2	6E-12	-	-	-
			-	Bone surf (2E-2)	-	3E-14	-	-
90	Thorium-231	W, see ^{226}Th	4E+3	6E+3	3E-6	9E-9	5E-5	5E-4
		Y, see ^{226}Th	-	6E+3	3E-6	9E-9	-	-
90	Thorium-232	W, see ^{226}Th	7E-1	1E-3	5E-13	-	-	-
			Bone surf (2E+0)	Bone surf (3E-3)	-	4E-15	3E-8	3E-7
		Y, see ^{226}Th	-	3E-3	1E-12	-	-	-
			-	Bone surf (4E-3)	-	6E-15	-	-
90	Thorium-234	W, see ^{226}Th	3E+2	2E+2	8E-8	3E-10	-	-
			LLI wall (4E+2)	-	-	-	5E-6	5E-5
		Y, see ^{226}Th	-	2E+2	6E-8	2E-10	-	-
91	Protactinium-227[2]	W, all compounds except those given for Y	4E+3	1E+2	5E-8	2E-10	5E-5	5E-4
		Y, oxides and hydroxides	-	1E+2	4E-8	1E-10	-	-
91	Protactinium-228	W, see ^{227}Pa	1E+3	1E+1	5E-9	-	2E-5	2E-4
			-	Bone surf (2E+1)	-	3E-11	-	-
		Y, see ^{227}Pa	-	1E+1	5E-9	2E-11	-	-
91	Protactinium-230	W, see ^{227}Pa	6E+2	5E+0	2E-9	7E-12	-	-
			Bone surf (9E+2)	-	-	-	1E-5	1E-4
		Y, see ^{227}Pa	-	4E+0	1E-9	5E-12	-	-
91	Protactinium-231	W, see ^{227}Pa	2E-1	2E-3	6E-13	-	-	-
			Bone surf (5E-1)	Bone surf (4E-3)	-	6E-15	6E-9	6E-8

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Table 1 Occupational Values Col. 2 Inhalation ALI µCi	Table 1 Occupational Values Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Table II Effluent Concentration Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		Y, see ^{227}Pa	-	4E-3	2E-12	-	-	-
			-	Bone surf (6E-3)	-	8E-15	-	-
91	Protactinium-232	W, see ^{227}Pa	1E+3	2E+1	9E-9	-	2E-5	2E-4
			-	Bone surf (6E+1)	-	8E-11	-	-
		Y, see ^{227}Pa	-	6E+1	2E-8	-	-	-
			-	Bone surf (7E+1)	-	1E-10	-	-
91	Protactinium-233	W, see ^{227}Pa	1E+3	7E+2	3E-7	1E-9	-	-
			LLI wall (2E+3)	-	-	-	2E-5	2E-4
		Y, see ^{227}Pa	-	6E+2	2E-7	8E-10	-	-
91	Protactinium-234	W, see ^{227}Pa	2E+3	8E+3	3E-6	1E-8	3E-5	3E-4
		Y, see ^{227}Pa	-	7E+3	3E-6	9E-9	-	-
92	Uranium-230	D, UF_6, UO_2F_2, $UO_2(NO_3)_2$	4E+0	4E-1	2E-10	-	-	-
			Bone surf (6E+0)	Bone surf (6E-1)	-	8E-13	8E-8	8E-7
		W, UO_3, UF_4, UCl_4	-	4E-1	1E-10	5E-13	-	-
		Y, UO_2, U_3O_8	-	3E-1	1E-10	4E-13	-	-
92	Uranium-231	D, see ^{230}U	5E+3	8E+3	3E-6	1E-8	-	-
			LLI wall (4E+3)	-	-	-	6E-5	6E-4
		W, see ^{230}U	-	6E+3	2E-6	8E-9	-	-
		Y, see ^{230}U	-	5E+3	2E-6	6E-9	-	-
92	Uranium-232	D, see ^{230}U	2E+0	2E-1	9E-11	-	-	-
			Bone surf (4E+0)	Bone surf (4E-1)	-	6E-13	6E-8	6E-7
		W, see ^{230}U	-	4E-1	2E-10	5E-13	-	-
		Y, see ^{230}U	-	8E-3	3E-12	1E-14	-	-
92	Uranium-233	D, see ^{230}U	1E+1	1E+0	5E-10	-	-	-
			Bone surf (2E+1)	Bone surf (2E+0)	-	3E-12	3E-7	3E-6
		W, see ^{230}U	-	7E-1	3E-10	1E-12	-	-
		Y, see ^{230}U	-	4E-2	2E-11	5E-14	-	-
92	Uranium-234[3]	D, see ^{230}U	1E+1	1E+0	5E-10	-	-	-
			Bone surf (2E+1)	Bone surf (2E+0)	-	3E-12	3E-7	3E-6
		W, see ^{230}U	-	7E-1	3E-10	1E-12	-	-
		Y, see ^{230}U	-	4E-2	2E-11	5E-14	-	-
92	Uranium-235[3]	D, see ^{230}U	1E+1	1E+0	6E-10	-	-	-
			Bone surf (2E+1)	Bone surf (2E+0)	-	3E-12	3E-7	3E-6
		W, see ^{230}U	-	8E-1	3E-10	1E-12	-	-
		Y, see ^{230}U	-	4E-2	2E-11	6E-14	-	-
92	Uranium-236	D, see ^{230}U	1E+1	1E+0	5E-10	-	-	-
			Bone surf (2E+1)	Bone surf (2E+0)	-	3E-12	3E-7	3E-6
		W, see ^{230}U	-	8E-1	3E-10	1E-12	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		Y, see ^{230}U	-	4E-2	2E-11	6E-14	-	-
92	Uranium-237	D, see ^{230}U	2E+3	3E+3	1E-6	4E-9	-	-
			LLI wall (2E+3)	-	-	-	3E-5	3E-4
		W, see ^{230}U	-	2E+3	7E-7	2E-9	-	-
		Y, see ^{230}U	-	2E+3	6E-7	2E-9	-	-
92	Uranium-238[3]	D, see ^{230}U	1E+1	1E+0	6E-10	-	-	-
			Bone surf (2E+1)	Bone surf (2E+0)	-	3E-12	3E-7	3E-6
		W, see ^{230}U	-	8E-1	3E-10	1E-12	-	-
		Y, see ^{230}U	-	4E-2	2E-11	6E-14	-	-
92	Uranium-239[2]	D, see ^{230}U	7E+4	2E+5	8E-5	3E-7	9E-4	9E-3
		W, see ^{230}U	-	2E+5	7E-5	2E-7	-	-
		Y, see ^{230}U	-	2E+5	6E-5	2E-7	-	-
92	Uranium-240	D, see ^{230}U	1E+3	4E+3	2E-6	5E-9	2E-5	2E-4
		W, see ^{230}U	-	3E+3	1E-6	4E-9	-	-
		Y, see ^{230}U	-	2E+3	1E-6	3E-9	-	-
92	Uranium-natural[3]	D, see ^{230}U	1E+1	1E+0	5E-10	-	-	-
			Bone surf (2E+1)	Bone surf (2E+0)	-	3E-12	3E-7	3E-6
		W, see ^{230}U	-	8E-1	3E-10	9E-13	-	-
		Y, see ^{230}U	-	5E-2	2E-11	9E-14	-	-
93	Neptunium-232[2]	W, all compounds	1E+5	2E+3	7E-7	-	2E-3	2E-2
			-	Bone surf (5E+2)	-	6E-9	-	-
93	Neptunium-233[2]	W, all compounds	8E+5	3E+6	1E-3	4E-6	1E-2	1E-1
93	Neptunium-234	W, all compounds	2E+3	3E+3	1E-6	4E-9	3E-5	3E-4
93	Neptunium-235	W, all compounds	2E+4	8E+2	3E-7	-	-	-
			LLI wall (2E+4)	Bone surf (1E+3)	-	2E-9	3E-4	3E-3
93	Neptunium-236 (1.15E+5 y)	W, all compounds	3E+0	2E-2	9E-12	-	-	-
			Bone surf (6E+0)	Bone surf (5E-2)	-	8E-14	9E-8	9E-7
93	Neptunium-236 (22.5 h)	W, all compounds	3E+3	3E+1	1E-8	-	-	-
			Bone surf (4E+3)	Bone surf (7E+1)	-	1E-10	5E-5	5E-4
93	Neptunium-237	W, all compounds	5E-1	4E-3	2E-12	-	-	-
			Bone surf (1E+0)	Bone surf (1E-2)	-	1E-14	2E-8	2E-7
93	Neptunium-238	W, all compounds	1E+3	6E+1	3E-8	-	2E-5	2E-4
			-	Bone surf (2E+2)	-	2E-10	-	-
93	Neptunium-239	W, all compounds	2E+3	2E+3	9E-7	3E-9	-	-
			LLI wall (2E+3)	-	-	-	2E-5	2E-4
93	Neptunium-240[2]	W, all compounds	2E+4	8E+4	3E-5	1E-7	3E-4	3E-3
94	Plutonium-234	W, all compounds except PuO_2	8E+3	2E+2	9E-8	3E-10	1E-4	1E-3
		Y, PuO_2	-	2E+2	8E-8	3E-10	-	-
94	Plutonium-235[2]	W, see ^{234}Pu	9E+5	3E+6	1E-3	4E-6	1E-2	1E-1
		Y, see ^{234}Pu	-	3E+6	1E-3	3E-6	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
94	Plutonium-236	W, see ^{234}Pu	2E+0	2E-2	8E-12	-	-	-
			Bone surf (4E+0)	Bone surf (4E-2)	-	5E-14	6E-8	6E-7
		Y, see ^{234}Pu	-	4E-2	2E-11	6E-14	-	-
94	Plutonium-237	W, see ^{234}Pu	1E+4	3E+3	1E-6	5E-9	2E-4	2E-3
		Y, see ^{234}Pu	-	3E+3	1E-6	4E-9	-	-
94	Plutonium-238	W, see ^{234}Pu	9E-1	7E-3	3E-12	-	-	-
			Bone surf (2E+0)	Bone surf (1E-2)	-	2E-14	2E-8	2E-7
		Y, see ^{234}Pu	-	2E-2	8E-12	2E-14	-	-
94	Plutonium-239	W, see ^{234}Pu	8E-1	6E-3	3E-12	-	-	-
			Bone surf (1E+0)	Bone surf (1E-2)	-	2E-14	2E-8	2E-7
		Y, see ^{234}Pu	-	2E-2	7E-12	-	-	-
			-	Bone surf (2E-2)	-	2E-14	-	-
94	Plutonium-240	W, see ^{234}Pu	8E-1	6E-3	3E-12	-	-	-
			Bone surf (1E+0)	Bone surf (1E-2)	-	2E-14	2E-8	2E-7
		Y, see ^{234}Pu	-	2E-2	7E-12	-	-	-
			-	Bone surf (2E-2)	-	2E-14	-	-
94	Plutonium-241	W, see ^{234}Pu	4E+1	3E-1	1E-10	-	-	-
			Bone surf (7E+1)	Bone surf (6E-1)	-	8E-13	1E-6	1E-5
		Y, see ^{234}Pu	-	8E-1	3E-10	-	-	-
			-	Bone surf (1E+0)	-	1E-12	-	-
94	Plutonium-242	W, see ^{234}Pu	8E-1	7E-3	3E-12	-	-	-
			Bone surf (1E+0)	Bone surf (1E-2)	-	2E-14	2E-8	2E-7
		Y, see ^{234}Pu	-	2E-2	7E-12	-	-	-
			-	Bone surf (2E-2)	-	2E-14	-	-
94	Plutonium-243	W, see ^{234}Pu	2E+4	4E+4	2E-5	5E-8	2E-4	2E-3
		Y, see ^{234}Pu	-	4E+4	2E-5	5E-8	-	-
94	Plutonium-244	W, see ^{234}Pu	8E-1	7E-3	3E-12	-	-	-
			Bone surf (2E+0)	Bone surf (1E-2)	-	2E-14	2E-8	2E-7
		Y, see ^{234}Pu	-	2E-2	7E-12	-	-	-
			-	Bone surf (2E-2)	-	2E-14	-	-
94	Plutonium-245	W, see ^{234}Pu	2E+3	5E+3	2E-6	6E-9	3E-5	3E-4
		Y, see ^{234}Pu	-	4E+3	2E-6	6E-9	-	-
94	Plutonium-246	W, see ^{234}Pu	4E+2	3E+2	1E-7	4E-10	-	-
			LLI wall (4E+2)	-	-	-	6E-6	6E-5
		Y, see ^{234}Pu	-	3E+2	1E-7	4E-10	-	-
95	Americium-237[2]	W, all compounds	8E+4	3E+5	1E-4	4E-7	1E-3	1E-2
95	Americium-238[2]	W, all compounds	4E+4	3E+3	1E-6	-	5E-4	5E-3

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Table 1 Occupational Values Col. 2 Inhalation ALI µCi	Table 1 Occupational Values Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Table II Effluent Concentration Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
			-	Bone surf (6E+3)	-	9E-9	-	-
95	Americium-239	W, all compounds	5E+3	1E+4	5E-6	2E-8	7E-5	7E-4
95	Americium-240	W, all compounds	2E+3	3E+3	1E-6	4E-9	3E-5	3E-4
95	Americium-241	W, all compounds	8E-1	6E-3	3E-12	-	-	-
			Bone surf (1E+0)	Bone surf (1E-2)	-	2E-14	2E-8	2E-7
95	Americium-242m	W, all compounds	8E-1	6E-3	3E-12	-	-	-
			Bone surf (1E+0)	Bone surf (1E-2)	-	2E-14	2E-8	2E-7
95	Americium-242	W, all compounds	4E+3	8E+1	4E-8	-	5E-5	5E-4
			-	Bone surf (9E+1)	-	1E-10	-	-
95	Americium-243	W, all compounds	8E-1	6E-3	3E-12	-	-	-
			Bone surf (1E+0)	Bone surf (1E-2)	-	2E-14	2E-8	2E-7
95	Americium-244m[2]	W, all compounds	6E+4	4E+3	2E-6	-	-	-
			St wall (8E+4)	Bone surf (7E+3)	-	1E-8	1E-3	1E-2
95	Americium-244	W, all compounds	3E+3	2E+2	8E-8	-	4E-5	4E-4
			-	Bone surf (3E+2)	-	4E-10	-	-
95	Americium-245	W, all compounds	3E+4	8E+4	3E-5	1E-7	4E-4	4E-3
95	Americium-246m[2]	W, all compounds	5E+4	2E+5	8E-5	3E-7	-	-
			St wall (6E+4)	-	-	-	8E-4	8E-3
95	Americium-246[2]	W, all compounds	3E+4	1E+5	4E-5	1E-7	4E-4	4E-3
96	Curium-238	W, all compounds	2E+4	1E+3	5E-7	2E-9	2E-4	2E-3
96	Curium-240	W, all compounds	6E+1	6E-1	2E-10	-	-	-
			Bone surf (8E+1)	Bone surf (6E-1)	-	9E-13	1E-6	1E-5
96	Curium-241	W, all compounds	1E+3	3E+1	1E-8	-	2E-5	2E-4
			-	Bone surf (4E+1)	-	5E-11	-	-
96	Curium-242	W, all compounds	3E+1	3E-1	1E-10	-	-	-
			Bone surf (5E+1)	Bone surf (3E-1)	-	4E-13	7E-7	7E-6
96	Curium-243	W, all compounds	1E+0	9E-3	4E-12	-	-	-
			Bone surf (2E+0)	Bone surf (2E-2)	-	2E-14	3E-8	3E-7
96	Curium-244	W, all compounds	1E+0	1E-2	5E-12	-	-	-
			Bone surf (3E+0)	Bone surf (2E-2)	-	3E-14	3E-8	3E-7
96	Curium-245	W, all compounds	7E-1	6E-3	3E-12	-	-	-
			Bone surf (1E+0)	Bone surf (1E-2)	-	2E-14	2E-8	2E-7
96	Curium-246	W, all compounds	7E-1	6E-3	3E-12	-	-	-
			Bone surf (1E+0)	Bone surf (1E-2)	-	2E-14	2E-8	2E-7
96	Curium-247	W, all compounds	8E-1	6E-3	3E-12	-	-	-
			Bone surf (1E+0)	Bone surf (1E-2)	-	2E-14	2E-8	2E-7
96	Curium-248	W, all compounds	2E-1	2E-3	7E-13	-	-	-

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
			Bone surf (4E-1)	Bone surf (3E-3)	-	4E-15	5E-9	5E-8
96	Curium-249[2]	W, all compounds	5E+4	2E+4	7E-6	-	7E-4	7E-3
			-	Bone surf (3E+4)	-	4E-8	-	-
96	Curium-250	W, all compounds	4E-2	3E-4	1E-13	-	-	-
			Bone surf (6E-2)	Bone surf (5E-4)	-	8E-16	9E-10	9E-9
97	Berkelium-245	W, all compounds	2E+3	1E+3	5E-7	2E-9	3E-5	3E-4
97	Berkelium-246	W, all compounds	3E+3	3E+3	1E-6	4E-9	4E-5	4E-4
97	Berkelium-247	W, all compounds	5E-1	4E-3	2E-12	-	-	-
			Bone surf (1E+0)	Bone surf (9E-3)	-	1E-14	2E-8	2E-7
97	Berkelium-249	W, all compounds	2E+2	2E+0	7E-10	-	-	-
			Bone surf (5E+2)	Bone surf (4E+0)	-	5E-12	6E-6	6E-5
97	Berkelium-250	W, all compounds	9E+3	3E+2	1E-7	-	1E-4	1E-3
			-	Bone surf (7E+2)	-	1E-9	-	-
98	Californium-244[2]	W, all compounds except those given for Y	3E+4	6E+2	2E-7	8E-10	-	-
			St wall (3E+4)	-	-	-	4E-4	4E-3
		Y, oxides and hydroxides	-	6E+2	2E-7	8E-10	-	-
98	Californium-246	W, see ^{244}Cf	4E+2	9E+0	4E-9	1E-11	5E-6	5E-5
		Y, see ^{244}Cf	-	9E+0	4E-9	1E-11	-	-
98	Californium-248	W, see ^{244}Cf	8E+0	6E-2	3E-11	-	-	-
			Bone surf (2E+1)	Bone surf (1E-1)	-	2E-13	2E-7	2E-6
		Y, see ^{244}Cf	-	1E-1	4E-11	1E-13	-	-
98	Californium-249	W, see ^{244}Cf	5E-1	4E-3	2E-12	-	-	-
			Bone surf (1E+0)	Bone surf (9E-3)	-	1E-14	2E-8	2E-7
		Y, see ^{244}Cf	-	1E-2	4E-12	-	-	-
			-	Bone surf (1E-2)	-	2E-14	-	-
98	Californium-250	W, see ^{244}Cf	1E+0	9E-3	4E-12	-	-	-
			Bone surf (2E+0)	Bone surf (2E-2)	-	3E-14	3E-8	3E-7
		Y, see ^{244}Cf	-	3E-2	1E-11	4E-14	-	-
98	Californium-251	W, see ^{244}Cf	5E-1	4E-3	2E-12	-	-	-
			Bone surf (1E+0)	Bone surf (9E-3)	-	1E-14	2E-8	2E-7
		Y, see ^{244}Cf	-	1E-2	4E-12	-	-	-
			-	Bone surf (1E-2)	-	2E-14	-	-
98	Californium-252	W, see ^{244}Cf	2E+0	2E-2	8E-12	-	-	-
			Bone surf (5E+0)	Bone surf (4E-2)	-	5E-14	7E-8	7E-7
		Y, see ^{244}Cf	-	3E-2	1E-11	5E-14	-	-
98	Californium-253	W, see ^{244}Cf	2E+2	2E+0	8E-10	3E-12	-	-
			Bone surf (4E+2)	-	-	-	5E-6	5E-5

Atomic No.	Radionuclide	Class	Table 1 Occupational Values Col. 1 Oral Ingestion ALI µCi	Col. 2 Inhalation ALI µCi	Col. 3 Inhalation DAC µCi/ml	Table II Effluent Concentration Col. 1 Air µCi/ml	Col. 2 Water µCi/ml	Table III Releases to Sewers Monthly Average Concentration µCi/ml
		Y, see ^{244}Cf	-	2E+0	7E-10	2E-12	-	-
98	Californium-254	W, see ^{244}Cf	2E+0	2E-2	9E-12	3E-14	3E-8	3E-7
		Y, see ^{244}Cf	-	2E-2	7E-12	2E-14	-	-
99	Einsteinium-250	W, all compounds	4E+4	5E+2	2E-7	-	6E-4	6E-3
			-	Bone surf (1E+3)	-	2E-9	-	-
99	Einsteinium-251	W, all compounds	7E+3	9E+2	4E-7	-	1E-4	1E-3
			-	Bone surf (1E+3)	-	2E-9	-	-
99	Einsteinium-253	W, all compounds	2E+2	1E+0	6E-10	2E-12	2E-6	2E-5
99	Einsteinium-254m	W, all compounds	3E+2	1E+1	4E-9	1E-11	-	-
			LLI wall (3E+2)	-	-	-	4E-6	4E-5
99	Einsteinium-254	W, all compounds	8E+0	7E-2	3E-11	-	-	-
			Bone surf (2E+1)	Bone surf (1E-1)	-	2E-13	2E-7	2E-6
100	Fermium-252	W, all compounds	5E+2	1E+1	5E-9	2E-11	6E-6	6E-5
100	Fermium-253	W, all compounds	1E+3	1E+1	4E-9	1E-11	1E-5	1E-4
100	Fermium-254	W, all compounds	3E+3	9E+1	4E-8	1E-10	4E-5	4E-4
100	Fermium-255	W, all compounds	5E+2	2E+1	9E-9	3E-11	7E-6	7E-5
100	Fermium-257	W, all compounds	2E+1	2E-1	7E-11	-	-	-
			Bone surf (4E+1)	Bone surf (2E-1)	-	3E-13	5E-7	5E-6
101	Mendelevium-257	W, all compounds	7E+3	8E+1	4E-8	-	1E-4	1E-3
			-	Bone surf (9E+1)	-	1E-10	-	-
101	Mendelevium-258	W, all compounds	3E+1	2E-1	1E-10	-	-	-
			Bone surf (5E+1)	Bone surf (3E-1)	-	5E-13	6E-7	6E-6
-	Any single radionuclide not listed above with decay mode other than alpha emission or spontaneous fission and with radioactive half-life less than ((2)) two hours	Submersion[1]	-	2E+2	1E-7	1E-9	-	-
-	Any single radionuclide not listed above with decay mode other than alpha emission or spontaneous fission and with radioactive half-life greater than ((2)) two hours	. . . .	-	2E-1	1E-10	1E-12	1E-8	1E-7
-	Any single radionuclide not listed above that decays by alpha emission or spontaneous fission, or any mixture for which either the identity or the concentration of any radionuclide in the mixture is not known	. . . .	-	4E-4	2E-13	1E-15	2E-9	2E-8

FOOTNOTES:

[1]"Submersion" means that values given are for submersion in a hemispherical semi-infinite cloud of airborne material.

[2]These radionuclides have radiological half-lives of less than ((2)) two hours. The total effective dose equivalent received during operations with these radionuclides might include a significant contribution from external exposure. The DAC values for all radionuclides, other than those designated Class "Submersion," are based upon the committed effective dose equivalent due to the intake of the radionuclide into the body and do NOT include potentially significant contributions to dose equivalent from external exposures. The licensee may substitute 1E-7 µCi/ml for the listed DAC to account for the submersion dose prospectively, but should use individual monitoring devices or other radiation measuring instruments that measure external exposure to demonstrate compliance with the limits. (See WAC 246-221-015(5).)

[3]For soluble mixtures of U-238, U-234, and U-235 in air, chemical toxicity may be the limiting factor (see WAC 246-221-010(5)). If the percent by weight (enrichment) of U-235 is not greater than ((5)) five, the concentration value for a 40-hour workweek is 0.2 milligrams uranium per cubic meter of air average. For any enrichment, the product of the average concentration and time of exposure during a 40-hour workweek shall not exceed 8E-3 (SA) µCi-hr/ml, where SA is the specific activity of the uranium inhaled. The specific activity for natural uranium is 6.77E-7 curies per gram U. The specific activity for other mixtures of U-238, U-235, and U-234, if not known, shall be:

SA = 3.6E-7 curies/gram U, U-depleted

SA = [0.4 + 0.38 (enrichment) + 0.0034 (enrichment)^2] E-6, enrichment ≥ 0.72 where enrichment is the percentage by weight of U-235, expressed as percent.

NOTE:

1. If the identity of each radionuclide in a mixture is known but the concentration of one or more of the radionuclides in the mixture is not known, the DAC for the mixture shall be the most restrictive DAC of any radionuclide in the mixture.
2. If the identity of each radionuclide in the mixture is not known, but it is known that certain radionuclides specified in this appendix are not present in the mixture, the inhalation ALI, DAC, and effluent and sewage concentrations for the mixture are the lowest values specified in this appendix for any radionuclide that is not known to be absent from the mixture; or

If it is known that Ac-227-D and Cm-250-W are not present	-	7E-4	3E-13	-	-	-
If, in addition, it is known that Ac-227-W,Y, Th-229-W,Y, Th-230-W, Th-232-W,Y, Pa-231-W,Y, Np-237-W, Pu-239-W, Pu-240-W, Pu-242-W, Am-241-W, Am-242m-W, Am-243-W, Cm-245-W, Cm-246-W, Cm-247-W, Cm-248-W, Bk-247-W, Cf-249-W, and Cf-251-W are not present	-	7E-3	3E-12	-	-	-
If, in addition, it is known that Sm-146-W, Sm-147-W, Gd-148-D,W, Gd-152-D,W, Th-228-W,Y, Th-230-Y, U-232-Y, U-233-Y, U-234-Y, U-235-Y, U-236-Y, U-238-Y, Np-236-W, Pu-236-W,Y, Pu-238-W,Y, Pu-239-Y, Pu-240-Y, Pu-242-Y, Pu-244-W,Y, Cm-243-W, Cm-244-W, Cf-248-W, Cf-249-Y, Cf-250-W,Y, Cf-251-Y, Cf-252-W,Y, and Cf-254-W,Y are not present	-	7E-2	3E-11	-	-	-
If, in addition, it is known that Pb-210-D, Bi-210m-W, Po-210-D,W, Ra-223-W, Ra-225-W, Ra-226-W, Ac-225-D,W,Y, Th-227-W,Y, U-230-D,W,Y, U-232-D,W, Pu-241-W, Cm-240-W, Cm-242-W, Cf-248-Y, Es-254-W, Fm-257-W, and Md-258-W are not present	-	7E-1	3E-10	-	-	-
If, in addition, it is known that Si-32-Y, Ti-44-Y, Fe-60-D, Sr-90-Y, Zr-93-D, Cd-113m-D, Cd-113-D, In-115-D,W, La-138-D, Lu-176-W, Hf-178m-D,W, Hf-182-D,W, Bi-210m-D, Ra-224-W, Ra-228-W, Ac-226-D,W,Y, Pa-230-W,Y, U-233-D,W, U-234-D,W, U-235-D,W, U-236-D,W, U-238-D,W, Pu-241-Y, Bk-249-W, Cf-253-W,Y, and Es-253-W are not present	-	7E+0	3E-9	-	-	-
If it is known that Ac-227-D,W,Y, Th-229-W,Y, Th-232-W,Y, Pa-231-W,Y, Cm-248-W, and Cm-250-W are not present	-	-	-	1E-14	-	-
If, in addition, it is known that Sm-146-W, Gd-148-D,W, Gd-152-D, Th-228-W,Y, Th-230-W,Y, U-232-Y, U-233-Y, U-234-Y, U-235-Y, U-236-Y, U-238-Y, U-Nat-Y, Np-236-W, Np-237-W, Pu-236-W,Y, Pu-238-W,Y, Pu-239-W,Y, Pu-240-W,Y, Pu-242-W,Y, Pu-244-W,Y, Am-241-W, Am-242m-W, Am-243-W, Cm-243-W, Cm-244-W, Cm-245-W, Cm-246-W, Cm-247-W, Bk-247-W, Cf-249-W,Y, Cf-250-W,Y, Cf-251-W,Y, Cf-252-W,Y, and Cf-254-W,Y are not present	-	-	-	1E-13	-	-
If, in addition, it is known that Sm-147-W, Gd-152-W, Pb-210-D, Bi-210m-W, Po-210-D,W, Ra-223-W, Ra-225-W, Ra-226-W, Ac-225-D,W,Y, Th-227-W,Y, U-230-D,W,Y, U-232-D,W, U-Nat-W, Pu-241-W, Cm-240-W, Cm-242-W, Cf-248-W,Y, Es-254-W, Fm-257-W, and Md-258-W are not present	-	-	-	-	1E-12	-
If, in addition, it is known that Fe-60, Sr-90, Cd-113m, Cd-113, In-115, I-129, Cs-134, Sm-145, Sm-147, Gd-148, Gd-152, Hg-194 (organic), Bi-210m, Ra-223, Ra-224, Ra-225, Ac-225, Th-228, Th-230, U-233, U-234, U-235, U-236, U-238, U-Nat, Cm-242, Cf-248, Es-254, Fm-257, and Md-258 are not present	-	-	-	-	1E-6	1E-5

3. If a mixture of radionuclides consists of uranium and its daughters in ore dust (10 µm AMAD particle distribution assumed) prior to chemical separation of the uranium from the ore, the following values may be used for the DAC of the mixture: 6E-11 µCi of gross alpha activity from uranium-238, uranium-234, thorium-230, and radium-226 per milliliter of air; 3E-11 µCi of natural uranium per milliliter of air; or 45 micrograms of natural uranium per cubic meter of air.

4. If the identity and concentration of each radionuclide in a mixture are known, the limiting values should be derived as follows:
Determine, for each radionuclide in the mixture, the ratio between the concentration present in the mixture and the concentration otherwise established in this section for the specific radionuclide when not in a mixture. The sum of such ratios for all of the radionuclides in the mixture may not exceed "1" (i.e., "unity").

Example: If radionuclides "A," "B," and "C" are present in concentrations CA, CB, and CC, and if the applicable DACs are DAC_A, DAC_B, and DAC_C, respectively, then the concentrations shall be limited so that the following relationship exists:

$$\frac{C_A}{DAC_A} + \frac{C_B}{DAC_B} + \frac{C_C}{DAC_C} \leq 1$$

[Statutory Authority: RCW 70.98.050. WSR 11-03-068, § 246-221-290, filed 1/18/11, effective 2/18/11. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 09-06-003, § 246-221-290, filed 2/18/09, effective 3/21/09. Statutory Authority: RCW 70.98.050. WSR 94-01-073, § 246-221-290, filed 12/9/93, effective 1/9/94. Statutory Authority: RCW 43.70 040. WSR 91-02-049 (Order 121), recodified as § 246-221-290, filed 12/27/90, effective 1/31/91. Statutory Authority: RCW 70.98.050. WSR 81-01-011 (Order 1570), § 402-24-220, filed 12/8/80; Order 1095, § 402-24-220, filed 2/6/76; Order 1, § 402-24-220, filed 1/8/69; Rules (part), filed 10/26/66.]

OTS-4712.1

AMENDATORY SECTION (Amending WSR 17-01-034, filed 12/12/16, effective 1/12/17)

WAC 246-231-010 Definitions, abbreviations, and acronyms. The definitions, abbreviations, and acronyms in this section and in WAC 246-220-010 apply throughout this chapter unless the context clearly indicates otherwise. To ensure compatibility with international transportation standards, all limits in this chapter are given in terms of dual units: The International System of Units (SI) followed or preceded by U.S. standard or customary units. The U.S. customary units are not exact equivalents, but are rounded to a convenient value, providing a functionally equivalent unit. For the purpose of this chapter, either unit may be used.

(1) "A1" means the maximum activity of special form radioactive material permitted in a Type A package. This value is either listed in WAC 246-231-200, Table A-1 or may be derived in accordance with the procedures prescribed in WAC 246-231-200.

(2) "A2" means the maximum activity of radioactive material, other than special form material, LSA and SCO material, permitted in a Type A package. This value is either listed in WAC 246-231-200, Table A-1, or may be derived in accordance with the procedure prescribed in WAC 246-231-200.

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

(4) "Certificate holder" means a person who has been issued a certificate of compliance or other package approval by NRC.

(5) "Certificate of compliance" means the certificate issued by NRC under 10 C.F.R. 71 Subpart D which approves the design of a package for the transportation of radioactive material.

(6) "Close reflection by water" means immediate contact by water of sufficient thickness for maximum reflection of neutrons.

(7) "Consignment" means each shipment of a package or groups of packages or load of radioactive material offered by a shipper for transport.

(8) "Containment system" means the assembly of components of the packaging intended to retain the radioactive material during transport.

(9) "Contamination" means the presence of a radioactive substance on a surface in quantities in excess of 0.4 Bq/cm^2($1x10^{-5}$ µCi/cm^2) for beta and gamma emitters and low toxicity alpha emitters, or 0.04 Bq/cm^2($1x10^{-6}$ µCi/cm^2) for all other alpha emitters.

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

(b) Nonfixed contamination means contamination that can be removed from a surface during normal conditions of transport.

(10) "Conveyance" means:

(a) For transport by public highway or rail any transport vehicle or large freight container;

(b) For transport by water any vessel, or any hold, compartment, or defined deck area of a vessel including any transport vehicle on board the vessel; and

(c) For transport by any aircraft.

(11) "Criticality safety index (CSI)" means the dimensionless number (rounded up to the next tenth) assigned to and placed on the label of a fissile material package, to designate the degree of control of accumulation of packages, overpacks, or freight containers containing fissile material during transportation. Determination of the criticality safety index is described in WAC 246-231-094, 246-231-096, and 10 C.F.R. 71.22, 71.23, and 71.59. The criticality safety index for an overpack, freight container, consignment, or conveyance containing fissile material packages is the arithmetic sum of the criticality safety indices of all the fissile material packages contained within the overpack, freight container, consignment, or conveyance.

(12) "Deuterium" means, for the purposes of WAC 246-231-040 and 246-231-094, deuterium and any deuterium compounds, including heavy water, in which the ratio of deuterium atoms to hydrogen atoms exceeds 1:5000.

(13) "DOT" means the United States Department of Transportation. DOT regulations are found in Code of Federal Regulations Title 49 Transportation.

(14) "Exclusive use" means the sole use by a single consignor of a conveyance for which all initial, intermediate, and final loading and unloading are carried out in accordance with the direction of the consignor or consignee. The consignor and the carrier must ensure that any loading or unloading is performed by personnel having radiological training and resources appropriate for safe handling of the consignment. The consignor must issue specific instructions, in writing, for maintenance of exclusive use shipment controls, and include them with the shipping paper information provided to the carrier by the consignor.

(15) "Fissile material" means the radionuclides uranium-233, uranium-235, plutonium-239, and plutonium-241, or any combination of these radionuclides. Fissile material means the fissile nuclides themselves, not material containing fissile nuclides. Unirradiated natural uranium and depleted uranium, and natural uranium or depleted uranium that has been irradiated in thermal reactors only are not included in this definition. Certain exclusions from fissile material controls are provided in WAC 246-231-040.

(16) "Graphite" means graphite with a boron equivalent content less than ((~~5~~)) five parts per million and density greater than 1.5 grams per cubic centimeter.

(17) "Indian Tribe" means an Indian or Alaskan native Tribe, band, nation, pueblo, village, or community that the Secretary of the Interior acknowledges to exist as an Indian Tribe pursuant to the Federally Recognized Indian Tribe List Act of 1994, 25 U.S.C. 479a. A current listing of officially recognized Indian Tribes may be found at: http://www.bia.gov/cs/groups/mywcsp/documents/text/idc-020733.pdf.

(18) "Low specific activity (LSA) material" means radioactive material with limited specific activity which is nonfissile or is excepted under WAC 246-231-040 or 10 C.F.R. 71.15 and which satisfies the descriptions and limits set forth below. Shielding materials surrounding the LSA material may not be considered in determining the estimated average specific activity of the package contents. LSA material must be in one of three groups:

(a) LSA-I.

(i) Uranium and thorium ores, concentrates of uranium and thorium ores, and other ores containing naturally occurring radioactive radionuclides which are intended to be processed for the use of these radionuclides;

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

(iii) Radioactive material other than fissile material for which the A2 value is unlimited; or

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

(b) LSA-II.

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

(ii) Other radioactive material in which the activity is distributed throughout, and the estimated average specific activity does not exceed $1x10^{-4}$ A2/g for solids and gases, and $1x10^{-5}$ A2/g for liquids.

(c) LSA-III. Solids (e.g., consolidated wastes, activated materials), excluding powders, that satisfy the requirements of the 10 C.F.R. 71.77, in which:

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

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

(iii) The estimated average specific activity of the solid, excluding any shielding material, does not exceed $2x10^{-3}$ A2/g.

(19) "Low toxicity alpha emitters" means natural uranium, depleted uranium, natural thorium; uranium-235, uranium-238, thorium-232, thorium-228 or thorium-230 when contained in ores or physical or chemical concentrates or tailings; or alpha emitters with a half-life of less than ((~~ten~~)) 10 days.

(20) "Maximum normal operating pressure" means the maximum gauge pressure that would develop in the containment system in a period of one year under the heat condition specified in NRC regulations 10 C.F.R. 71.71 (c)(1), in the absence of venting, external cooling by an ancillary system, or operational controls during transport.

(21) "Natural thorium" means thorium with the naturally occurring distribution of thorium isotopes (essentially 100 weight percent thorium-232).

(22) "Normal form radioactive material" means radioactive material that has not been demonstrated to qualify as "special form radioactive material."

(23) "Nuclear waste" as used in WAC 246-231-140 means any quantity of radioactive material (not including radiography sources being returned to the manufacturer) required to be in Type B packaging while transported to, through, or across state boundaries to a disposal site, or to a collection point for transport to a disposal site. Nuclear waste, as used in these regulations, is a special classification of radioactive waste.

(24) "Optimum interspersed hydrogenous moderation" means the presence of hydrogenous material between packages to such an extent that the maximum nuclear reactivity results.

(25) "Package" means the packaging together with its radioactive contents as presented for transport.

(a) "Fissile material package" or Type AF package, Type BF package, Type B(U)F package or Type B(M)F package means a fissile material packaging together with its fissile material contents.

(b) "Type A package" means a Type A packaging together with its radioactive contents. A Type A package is defined and must comply with the DOT regulations in 49 C.F.R. 173.

(c) "Type B package" means a Type B packaging together with its radioactive contents. Upon approval by NRC, a Type B package design is designated by NRC as B(U) unless the package has a maximum normal operating pressure of more than 700 kPa (100 lbs/in^2) gauge or a pressure relief device that would allow the release of radioactive material to the environment under the tests specified in NRC regulations 10 C.F.R. 71.73 (hypothetical accident conditions), in which case it will receive a designation B(M). B(U) refers to the need for unilateral approval of international shipments; B(M) refers to the need for multilateral approval of international shipments. There is no distinction made in how packages with these designations may be used in domestic transportation. To determine their distinction for international transportation, see DOT regulations in 49 C.F.R. 173. A Type B package approved before September 6, 1983, was designated only as Type B. Limitations on its use are specified in 10 C.F.R. 71.19.

(26) "Packaging" means the assembly of components necessary to ensure compliance with the packaging requirements of this chapter. It may consist of one or more receptacles, absorbent materials, spacing structures, thermal insulation, radiation shielding, and devices for cooling or absorbing mechanical shocks. The vehicle, tie-down system, and auxiliary equipment may be designated as part of the packaging.

(27) "Special form radioactive material" means radioactive material that satisfies the following conditions:

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

(b) The piece or capsule has at least one dimension not less than ((~~5~~)) five mm (0.2 in); and

(c) It satisfies the requirements of 10 C.F.R. 71.75. A special form encapsulation designed in accordance with the requirements of 10 C.F.R. 71.4 in effect on June 30, 1983, (see 10 C.F.R. 71, revised as of January 1, 1983), and constructed before July 1, 1985; a special form encapsulation designed in accordance with the requirements of 10 C.F.R. 71.4 in effect on March 31, 1996 (see 10 C.F.R. 71, revised as of January 1, 1996), and constructed before April 1, 1998; and special form material that was successfully tested before September 10, 2015, in accordance with the requirements of 10 C.F.R. 71.75(d) in effect before September 10, 2015, may continue to be used. Any other special form encapsulation must meet the specifications of this definition.

(28) "Specific activity of a radionuclide" means the radioactivity of the radionuclide per unit mass of that nuclide. The specific activity of a material in which the radionuclide is essentially uniformly distributed is the radioactivity per unit mass of the material.

(29) "Spent nuclear fuel" or "spent fuel" means fuel that has been withdrawn from a nuclear reactor following irradiation, has undergone at least one year's decay since being used as a source of energy in a power reactor, and has not been chemically separated into its constituent elements by reprocessing. Spent fuel includes the special nuclear material, by-product material, source material, and other radioactive materials associated with fuel assemblies.

(30) "State" means a state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

(31) "Surface contaminated object (SCO)" means a solid object that is not itself classed as radioactive material, but which has radioactive material distributed on any of its surfaces. SCO must be in one of two groups with surface activity not exceeding the following limits:

(a) SCO-I: A solid object on which:

(i) The nonfixed contamination on the accessible surface averaged over 300 cm^2 (or the area of the surface if less than 300 cm^2) does not exceed ((~~4~~)) four Bq/cm^2 ($1x10^{-4}$ microcurie/cm^2) for beta and gamma and low toxicity alpha emitters, or 0.4 Bq/cm^2 ($1x10^{-5}$ microcurie/cm^2) for all other alpha emitters;

(ii) The fixed contamination on the accessible surface averaged over 300 cm^2 (or the area of the surface if less than 300 cm^2) does not exceed $4x10^4$ Bq/cm^2 (1.0 microcurie/cm^2) for beta and gamma and low toxicity alpha emitters, or $4x10^3$ Bq/cm^2 (0.1 microcurie/cm^2) for all other alpha emitters; and

(iii) The nonfixed contamination plus the fixed contamination on the inaccessible surface averaged over 300 cm^2 (or the area of the surface if less than 300 cm^2) does not exceed $4x10^4$ Bq/cm^2 (((~~1~~)) one microcurie/cm^2) for beta and gamma and low toxicity alpha emitters, or $4x10^3$ Bq/cm^2 (0.1 microcurie/cm^2) for all other alpha emitters.

(b) SCO-II: A solid object on which the limits for SCO-I are exceeded and on which:

(i) The nonfixed contamination on the accessible surface averaged over 300 cm^2 (or the area of the surface if less than 300 cm^2) does not exceed 400 Bq/cm^2 ($1x10^{-2}$ microcurie/cm^2) for beta and gamma and low toxicity alpha emitters or 40 Bq/cm^2 ($1x10^{-3}$ microcurie/cm^2) for all other alpha emitters;

(ii) The fixed contamination on the accessible surface averaged over 300 cm^2 (or the area of the surface if less than 300 cm^2) does not exceed $8x10^5$ Bq/cm^2 (20 microcuries/cm^2) for beta and gamma and low toxicity alpha emitters, or $8x10^4$ Bq/cm^2 (((~~2~~)) two microcuries/cm^2) for all other alpha emitters; and

(iii) The nonfixed contamination plus the fixed contamination on the inaccessible surface averaged over 300 cm^2 (or the area of the surface if less than 300 cm^2) does not exceed $8x10^5$ Bq/cm^2 (20 microcuries/cm^2) for beta and gamma and low toxicity alpha emitters, or $8x10^4$ Bq/cm^2 (((~~2~~)) two microcuries/cm^2) for all other alpha emitters.

(32) "Transport index (TI)" means the dimensionless number (rounded up to the next tenth) placed on the label of a package, to designate the degree of control to be exercised by the carrier during transportation. The transport index is the number determined by multiplying the maximum radiation level in millisievert (mSv) per hour at ((~~1~~)) one meter (3.3 ft) from the external surface of the package by 100 (equivalent to the maximum radiation level in millirem per hour at ((~~1~~)) one meter (3.3 ft)).

(33) "Tribal official" means the highest ranking individual who represents Tribal leadership, such as the chief, president, or Tribal council leadership.

(34) "Type A quantity" means a quantity of radioactive material, the aggregate radioactivity of which does not exceed A1 for special form radioactive material, or A2 for normal form radioactive material, where A1 and A2 are given in Table A-1 of WAC 246-231-200, or may be determined by procedures described in WAC 246-231-200.

(35) "Type B quantity" means a quantity of radioactive material greater than a Type A quantity.

(36) "Unirradiated uranium" means uranium containing not more than $2x10^3$ Bq of plutonium per gram of uranium-235, not more than $9x10^6$ Bq of fission products per gram of uranium-235, and not more than $5x10^{-3}$ g of uranium-236 per gram of uranium-235.

(37) Uranium-natural, depleted, enriched.

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

(b) "Depleted uranium" means uranium containing less uranium-235 than the naturally occurring distribution of uranium isotopes.

(c) "Enriched uranium" means uranium containing more uranium-235 than the naturally occurring distribution of uranium isotopes.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 17-01-034, § 246-231-010, filed 12/12/16, effective 1/12/17. Statutory Authority: RCW 70.98.050. WSR 14-09-017, § 246-231-010, filed 4/7/14, effective 5/8/14; WSR 08-09-093, § 246-231-010, filed 4/18/08, effective 5/19/08; WSR 99-15-105, § 246-231-010, filed 7/21/99, effective 8/21/99.]

AMENDATORY SECTION (Amending WSR 17-01-034, filed 12/12/16, effective 1/12/17)

WAC 246-231-040 Exemptions. (1) Common and contract carriers, freight forwarders, warehouse workers, and the U.S. Postal Service are exempt from this chapter and chapters 246-232, 246-233, 246-235, 246-237, 246-240, 246-243, and 246-244 WAC to the extent that they transport or store radioactive material in the regular course of their carriage for another or storage incident thereto.

(2) Any licensee who delivers radioactive material to a carrier for transport, where such transport is subject to the regulations of the United States Postal Service, is exempt from the provisions of WAC 246-231-005.

(3) **Exemption of physicians.** Any physician as defined in WAC 246-220-010 who is licensed by the department, NRC or an agreement state, to dispense drugs in the practice of medicine, is exempt from WAC 246-220-030 with respect to transport by the physician of licensed material for use in the practice of medicine. However, any physician operating under this exemption must be licensed under chapter 246-240 WAC, 10 C.F.R. 35, or the equivalent agreement state regulations.

(4) **Exemption for low-level materials.** A licensee is exempt from all requirements of this chapter with respect to shipment or carriage of the following low-level materials:

(a) Natural material and ores containing naturally occurring radionuclides that are either in their natural state, or have only been processed for purposes other than for the extraction of the radionuclides, and which are not intended to be processed for use of these radionuclides, provided the activity concentration of the material does not exceed ((~~ten~~)) 10 times the applicable radionuclide activity concentration values specified in WAC 246-231-200, Table A-2 or Table A-3.

(b) Materials for which the activity concentration is not greater than the activity concentration values specified in WAC 246-231-200, Table A-2 or Table A-3, or for which the consignment activity is not greater than the limit for an exempt consignment found in WAC 246-231-200, Table A-2 or Table A-3.

(c) Nonradioactive solid objects with radioactive substances present on any surfaces in quantities not in excess of the levels cited in the definition of contamination in WAC 246-231-010.

(5) A licensee is exempt from all the requirements of this chapter, other than 10 C.F.R. 71.5 and 71.88, with respect to shipment or carriage of the following packages, provided the packages do not contain any fissile material, or the material is exempt from classification as fissile material in this subsection;

(a) A package that contains no more than a Type A quantity of radioactive material;

(b) A package transported within the United States that contains no more than 0.74 TBq (20 Ci) of special form plutonium-244; or

(c) The package contains only LSA or SCO radioactive material, provided:

(i) That the LSA or SCO material has an external radiation dose of less than or equal to 10 mSv/h (((~~1~~)) one rem/h), at a distance of three meters from the unshielded material; or

(ii) That the package contains only LSA-I or SCO-I material.

(6) **Exemption from classification as fissile material.** Fissile material meeting at least one of the requirements in (a) through (f) of this subsection is exempt from classification as fissile material

and from the fissile material package standards of 10 C.F.R. 71.55 and 71.59, but are subject to all other requirements of this chapter, except as noted.

(a) Individual package containing ((~~2~~)) two grams or less fissile material.

(b) Individual or bulk packaging containing 15 grams or less of fissile material provided the package has at least 200 grams of solid nonfissile material for every gram of fissile material. Lead, beryllium, graphite, and hydrogenous material enriched in deuterium may be present in the package but must not be included in determining the required mass for solid nonfissile material.

(c)(i) Low concentrations of solid fissile material commingled with solid nonfissile material, provided that:

(A) There are at least 2000 grams of solid nonfissile material for every gram of fissile material; and

(B) There are no more than 180 grams of fissile material distributed within 360 kg of contiguous nonfissile material.

(ii) Lead, beryllium, graphite, and hydrogenous material enriched in deuterium may be present in the package but must not be included in determining the required mass of solid nonfissile material.

(d) Uranium enriched in uranium-235 to a maximum of ((~~1~~)) one percent by weight, and with total plutonium and uranium-233 content of up to ((~~1~~)) one percent of the mass of uranium-235, provided that the mass of any beryllium, graphite, and hydrogenous material enriched in deuterium constitutes less than ((~~5~~)) five percent of the uranium mass, and that the fissile material is distributed homogeneously and does not form a lattice arrangement within the package.

(e) Liquid solutions of uranyl nitrate enriched in uranium-235 to a maximum of ((~~2~~)) two percent by mass, with a total plutonium and uranium-233 content not exceeding 0.002 percent of the mass of uranium, and with a minimum nitrogen to uranium atomic ratio (N/U) of ((~~2~~)) two. The material must be contained in at least a DOT Type A package.

(f) Packages containing, individually, a total plutonium mass of not more than 1000 grams, of which not more than 20 percent by mass may consist of plutonium-239, plutonium-241, or any combination of these radionuclides.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 17-01-034, § 246-231-040, filed 12/12/16, effective 1/12/17; WSR 16-13-054, § 246-231-040, filed 6/10/16, effective 7/11/16. Statutory Authority: RCW 70.98.050. WSR 14-09-017, § 246-231-040, filed 4/7/14, effective 5/8/14; WSR 08-09-093, § 246-231-040, filed 4/18/08, effective 5/19/08; WSR 99-15-105, § 246-231-040, filed 7/21/99, effective 8/21/99.]

AMENDATORY SECTION (Amending WSR 14-09-017, filed 4/7/14, effective 5/8/14)

WAC 246-231-094 General license—Fissile material. (1) A general license is issued to any licensee of the department, NRC, or an agreement state, to transport fissile material, or to deliver fissile material to a carrier for transport, if the material is shipped in accordance with this section. The fissile material need not be contained in a package which meets the standards of 10 C.F.R. 71 Subparts E and

F; however, the material must be contained in a Type A package. The Type A package must also meet the DOT requirements of 49 C.F.R. 173.417(a).

(2) The general license applies only to a licensee who has a quality assurance program approved by NRC as satisfying the provisions of 10 C.F.R. 71 Subpart H.

(3) The general license applies only when a package's contents:

(a) Contain no more than a Type A quantity of radioactive material; and

(b) Contain less than 500 total grams of beryllium, graphite, or hydrogenous material enriched in deuterium.

(4) The general license applies only to packages containing fissile material that are labeled with a CSI which:

(a) Has been determined in accordance with subsection (5) of this section;

(b) Has a value less than or equal to 10; and

(c) For a shipment of multiple packages containing fissile material, the sum of the CSIs must be less than or equal to 50 (for shipment on a nonexclusive use conveyance) and less than or equal to 100 (for shipment on an exclusive use conveyance).

(5)(a) The value for the CSI must be greater than or equal to the number calculated by the following equation:

$$CSI = 10\left[\frac{\text{grams of } {}^{235}U}{X} + \frac{\text{grams of } {}^{233}U}{Y} + \frac{\text{grams of Pu}}{Z}\right];$$

(b) The calculated CSI must be rounded up to the first decimal place;

(c) The values of X, Y, and Z used in the CSI equation must be taken from WAC 246-231-200 Table-1 or Table-2, as appropriate;

(d) If Table-2 is used to obtain the value of X, then the values for the terms in the equation for uranium-233 and plutonium must be assumed to be zero; and

(e) Values from Table-1 for X, Y, and Z must be used to determine the CSI if:

(i) Uranium-233 is present in the package;

(ii) The mass of plutonium exceeds ((1)) one percent of the mass of uranium-235;

(iii) The uranium is of unknown uranium-235 enrichment or greater than 24 weight percent enrichment; or

(iv) Substances having a moderating effectiveness (i.e., an average hydrogen density greater than H_2O) (e.g., certain hydrocarbon oils or plastics) are present in any form, except as polyethylene used for packing or wrapping.

Table-1.
Mass Limits for General License Packages Containing Mixed Quantities of Fissile Material or Uranium-235 of Unknown Enrichment per WAC 246-231-094(5)

Fissile material	Fissile material mass mixed with moderating substances having an average hydrogen density less than or equal to H_2O (grams)	Fissile material mass mixed with moderating substances having an average hydrogen density greater than H_2O[a] (grams)
^{235}U (X)	60	38
^{233}U (Y)	43	27
^{239}Pu or ^{241}Pu (Z)	37	24

[a] When mixtures of moderating substances are present, the lower mass limits shall be used if more than 15 percent of the moderating substance has an average hydrogen density greater than H_2O.

Table-2.
Mass Limits for General License Packages Containing Uranium-235 of Known Enrichment per WAC 246-231-094(5)

Uranium enrichment in weight percent of ^{235}U not exceeding	Fissile material mass of ^{235}U (X) (grams)
24	60
20	63
15	67
11	72
10	76
9.5	78
9	81
8.5	82
8	85
7.5	88
7	90
6.5	93
6	97
5.5	102
5	108
4.5	114
4	120
3.5	132
3	150
2.5	180
2	246
1.5	408
1.35	480
1	1,020
0.92	1,800

[Statutory Authority: RCW 70.98.050. WSR 14-09-017, § 246-231-094, filed 4/7/14, effective 5/8/14; WSR 08-09-093, § 246-231-094, filed 4/18/08, effective 5/19/08.]

AMENDATORY SECTION (Amending WSR 14-09-017, filed 4/7/14, effective 5/8/14)

WAC 246-231-098 External radiation standards for all packages. (1) Except as provided in subsection (2) of this section, each package of radioactive materials offered for transportation must be designed and prepared for shipment so that under conditions normally incident to transportation the radiation level does not exceed ((~~2~~)) two mSv/hour (200 mrem/hour) at any point on the external surface of the package, and the transport index does not exceed 10.

(2) A package that exceeds the radiation level limits specified in subsection (1) of this section must be transported by exclusive use shipment only, and the radiation levels for such shipment must not exceed the following during transportation:

(a) ((~~2~~)) Two mSv/hour (200 mrem/hour) on the external surface of the package, unless the following conditions are met, in which case the limit is 10 mSv/hour (1000 mrem/hour):

(i) The shipment is made in a closed transport vehicle;

(ii) The package is secured within the vehicle so that its position remains fixed during transportation; and

(iii) There are no loading or unloading operations between the beginning and end of the transportation;

(b) ((~~2~~)) Two mSv/hour (200 mrem/hour) at any point on the outer surface of the vehicle, including the top and underside of the vehicle; or in the case of a flat-bed style vehicle, at any point on the vertical planes projected from the outer edges of the vehicle, on the upper surface of the load or enclosure, if used, and on the lower external surface of the vehicle; and

(c) 0.1 mSv/hour (10 mrem/hour) at any point ((~~2~~)) two meters (80 in) from the outer lateral surfaces of the vehicle (excluding the top and underside of the vehicle); or in the case of a flat-bed style vehicle, at any point ((~~2~~)) two meters (6.6 feet) from the vertical planes projected by the outer edges of the vehicle (excluding the top and underside of the vehicle); and

(d) 0.02 mSv/hour (((~~2~~)) two mrem/hour) in any normally occupied space, except that this provision does not apply to private carriers, if exposed personnel under their control wear radiation dosimetry devices in conformance with WAC 246-221-090 and 246-221-100.

(3) For shipments made under the provisions of subsection (2) of this section, the shipper shall provide specific written instructions to the carrier for maintenance of the exclusive use shipment controls. The instructions must be included with the shipping paper information.

(4) The written instructions required for exclusive use shipments must be sufficient so that, when followed, they will cause the carrier to avoid actions that will unnecessarily delay delivery or unnecessarily result in increased radiation levels or radiation exposures to transport workers or members of the general public.

[Statutory Authority: RCW 70.98.050. WSR 14-09-017, § 246-231-098, filed 4/7/14, effective 5/8/14; WSR 08-09-093, § 246-231-098, filed 4/18/08, effective 5/19/08.]

AMENDATORY SECTION (Amending WSR 17-01-034, filed 12/12/16, effective 1/12/17)

WAC 246-231-106 Preliminary determinations. Before the first use of any packaging for the shipment of licensed material:

(1) The licensee shall ascertain that there are no cracks, pinholes, uncontrolled voids, or other defects that could significantly reduce the effectiveness of the packaging;

(2) Where the maximum normal operating pressure will exceed 35 kPa (((~~5~~)) five lbs/in^2) gauge, the licensee shall test the containment system at an internal pressure at least ((~~fifty~~)) 50 percent higher than the maximum normal operating pressure, to verify the capability of that system to maintain its structural integrity at that pressure;

(3) The licensee shall conspicuously and durably mark the packaging with its model number, serial number, gross weight, and a package identification number assigned by NRC. Before applying the model number, the licensee shall determine that the packaging has been fabricated in accordance with the design approved by NRC; and

(4) The licensee shall ascertain that the determinations in subsections (1) through (3) of this section have been made.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 17-01-034, § 246-231-106, filed 12/12/16, effective 1/12/17. Statutory Authority: RCW 70.98.050. WSR 14-09-017, § 246-231-106, filed 4/7/14, effective 5/8/14; WSR 08-09-093, § 246-231-106, filed 4/18/08, effective 5/19/08.]

AMENDATORY SECTION (Amending WSR 22-11-063, filed 5/16/22, effective 6/16/22)

WAC 246-231-140 Advance notification of shipment of irradiated reactor fuel and nuclear waste. (1)(a) As specified in subsections (2), (3), and (4) of this section, each licensee shall provide advance notification to the governor of a state, or the governor's designee, of the shipment of licensed material, within or across the boundary of the state, before the transport, or delivery to a carrier, for transport, of licensed material outside the confines of the licensee's plant or other place of use or storage.

(b) As specified in subsections (2), (3), and (4) of this section, after June 11, 2013, each licensee shall provide advance notification to the Tribal official of participating tribes referenced in subsection (3)(c)(iii) of this section, or the official's designee, of the shipment of licensed material within or across the boundary of the Tribe's reservation before the transport, or delivery to a carrier for transport, of licensed material outside the confines of the licensee's plant or other place of use or storage.

(2) Advance notification is required under this section for shipments of irradiated reactor fuel in quantities less than that subject to advance notification requirements of NRC regulations 10 C.F.R. 73.37(f). Advance notification is also required under this section for shipment of licensed material, other than irradiated fuel, meeting the following three conditions:

(a) The licensed material is required by this section to be in Type B packaging for transportation;

(b) The licensed material is being transported to or across a state boundary ((~~en route~~)) enroute to a disposal facility or to a collection point for transport to a disposal facility; and

(c) The quantity of licensed material in a single package exceeds the least of the following:

(i) Three thousand times the A1 value of the radionuclides as specified in WAC 246-231-200, Table A-1 for special form radioactive material;

(ii) Three thousand times the A2 value of the radionuclides as specified in WAC 246-231-200, Table A-1 for normal form radioactive material; or

(iii) One thousand TBq (27,000 Ci).

(3) Procedures for submitting advance notification.

(a) The notification must be made in writing to the office of each appropriate governor or governor's designee, to the office of each appropriate Tribal official or Tribal official's designee, and to the Director, Office of Nuclear Security and Incident Response.

(b) A notification delivered by mail must be postmarked at least seven days before the beginning of the seven-day period during which departure of the shipment is estimated to occur.

(c) A notification delivered by any other means than mail must reach the office of the governor or the governor's designee, or of the Tribal official or the Tribal official's designee, at least four days before the beginning of the seven-day period during which departure of the shipment is estimated to occur.

(i) ((~~A list of the names and mailing addresses of the governors' designees receiving advance notification of transportation of nuclear waste was published in the *Federal Register* on June 30, 1995, (60 FR 34306).~~)) Reserved.

(ii) Contact information for each state, including telephone and mailing addresses of governors and governors' designees, and participating Tribes, including telephone and mailing addresses of Tribal officials and Tribal official's designees, is available on the NRC website at https://scp.nrc.gov/special/designee.pdf.

(iii) A list of the names and mailing addresses of the governors' designees and Tribal officials' designees of participating Tribes is available on request from the Director, Division of Materials Safety, Security, State, and Tribal Programs, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001.

(d) The licensee shall retain a copy of the notification as a record for three years.

(4) Information to be furnished in advance notification of shipment. Each advance notification of shipment of irradiated reactor fuel or nuclear waste must contain the following information:

(a) The name, address, and telephone number of the shipper, carrier, and receiver of the irradiated reactor fuel or nuclear waste shipment;

(b) A description of the irradiated reactor fuel or nuclear waste contained in the shipment, as specified in the regulations of DOT in 49 C.F.R. 172.202 and 172.203(d);

(c) The point of origin of the shipment and the seven-day period during which departure of the shipment is estimated to occur;

(d) The seven-day period during which arrival of the shipment at state boundaries or Tribal reservation boundaries is estimated to occur;

(e) The destination of the shipment, and the seven-day period during which arrival of the shipment is estimated to occur; and

(f) A point of contact, with a telephone number, for current shipment information.

(5) Revision notice. A licensee who finds that schedule information previously furnished to a governor or governor's designee, or a Tribal official or Tribal official's designee, in accordance with this section, will not be met, shall telephone a responsible individual in the office of the governor of the state or of the governor's designee or the Tribal official or the Tribal official's designee, and inform that individual of the extent of the delay beyond the schedule originally reported. The licensee shall maintain a record of the name of the individual contacted for three years.

(6) Cancellation notice.

(a) Each licensee who cancels an irradiated reactor fuel or nuclear waste shipment for which advance notification has been sent shall send a cancellation notice to the governor of each state or to the governor's designee previously notified, to each Tribal official or to the Tribal official's designee previously notified, and to the Director, Office of Nuclear Security and Incident Response.

(b) The licensee shall state in the notice that it is a cancellation and identify the advance notification that is being canceled. The licensee shall retain a copy of the notice as a record for three years.

[Statutory Authority: RCW 70A.388.040 and 70A.388.110. WSR 22-11-063, § 246-231-140, filed 5/16/22, effective 6/16/22. Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 17-01-034, § 246-231-140, filed 12/12/16, effective 1/12/17. Statutory Authority: RCW 70.98.050. WSR 14-09-017, § 246-231-140, filed 4/7/14, effective 5/8/14; WSR 08-09-093, § 246-231-140, filed 4/18/08, effective 5/19/08; WSR 99-15-105, § 246-231-140, filed 7/21/99, effective 8/21/99.]

AMENDATORY SECTION (Amending WSR 17-01-034, filed 12/12/16, effective 1/12/17)

WAC 246-231-174 Changes to quality assurance program. (1) Each quality assurance program approval holder shall submit, in accordance with 10 C.F.R. 71.1(a), a description of a proposed change to its NRC-approved quality assurance program that will reduce commitments in the program description as approved by the NRC. The quality assurance program approval holder shall not implement the change before receiving NRC approval.

(a) The description of a proposed change to the NRC-approved quality assurance program must identify the change, the reason for the change, the basis for concluding that the revised program incorporat-

ing the change continues to satisfy the applicable requirements of 10 C.F.R. Subpart H.

(b) (Reserved.)

(2) Each quality assurance program approval holder may change a previously approved quality assurance program without prior NRC approval, if the change does not reduce the commitments in the quality assurance program previously approved by the NRC. Changes to the quality assurance program that do not reduce the commitments shall be submitted to the NRC every ((~~twenty-four~~)) 24 months, in accordance with 10 C.F.R. 71.1(a). In addition to quality assurance program changes involving administrative improvements and clarifications, spelling corrections, and nonsubstantive changes to punctuation or editorial items, the following changes are not considered reductions in commitment:

(a) The use of a quality assurance standard approved by the NRC that is more recent than the quality assurance standard in the certificate holder's or applicant's current quality assurance program at the time of the change;

(b) The use of generic organizational position titles that clearly denote the position function, supplemented as necessary by descriptive text, rather than specific titles, provided that there is no substantive change to either the functions of the position or reporting responsibilities;

(c) The use of generic organization charts to indicate functional relationships, authorities, and responsibilities, or alternatively, the use of descriptive text, provided that there is no substantive change to the functional relationships, authorities, or responsibilities;

(d) The elimination of quality assurance program information that duplicates language in quality assurance regulatory guides and quality assurance standards to which the quality assurance program approval holder has committed to on record; and

(e) Organizational revisions that ensure that persons and organizations performing quality assurance functions continue to have the requisite authority and organizational freedom, including sufficient independence from cost and schedule when opposed to safety considerations.

(3) Each quality assurance program approval holder shall maintain records of quality assurance program changes.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 17-01-034, § 246-231-174, filed 12/12/16, effective 1/12/17.]

AMENDATORY SECTION (Amending WSR 17-01-034, filed 12/12/16, effective 1/12/17)

WAC 246-231-200 Appendix A—Determination of A1 and A2. (1) Values of A1 and A2 for individual radionuclides, which are the basis for many activity limits elsewhere in these regulations, are given in this section, Table A-1. The curie (Ci) values specified are obtained by converting from the Terabecquerel (TBq) value. The Terabecquerel values are the regulatory standard. The curie values are for information only and are not intended to be the regulatory standard. Where values of A1 or A2 are unlimited, it is for radiation control purposes

only. For nuclear criticality safety, some materials are subject to controls placed on fissile material.

(2)(a) For individual radionuclides whose identities are known, but which are not listed in this section, Table A-1, the A1 and A2 values contained in this section, Table A-3 may be used. Otherwise, the licensee shall obtain prior NRC approval of the A1 and A2 values for radionuclides not listed in this section, Table A-1, before shipping the material.

(b) For individual radionuclides whose identities are known, but which are not listed in this section, Table A-2, the exempt material activity concentration and exempt consignment activity values contained in this section, Table A-3 may be used. Otherwise, the licensee shall obtain prior NRC approval of the exempt material activity concentration and exempt consignment activity values for radionuclides not listed in this section, Table A-2, before shipping the material.

(c) The licensee shall submit requests for prior approval, described under (a) and (b) of this subsection, to NRC in accordance with 10 C.F.R. 71.1.

(3) In the calculations of A1 and A2 for a radionuclide not in this section, Table A-1, a single radioactive decay chain, in which radionuclides are present in their naturally occurring proportions, and in which no daughter radionuclide has a half-life either longer than ((~~ten~~)) 10 days, or longer than that of the parent radionuclide, shall be considered as a single radionuclide, and the activity to be taken into account, and the A1 or A2 value to be applied shall be those corresponding to the parent radionuclide of that chain. In the case of radioactive decay chains in which any daughter radionuclide has a half-life either longer than ((~~ten~~)) 10 days, or greater than that of the parent radionuclide, the parent and those daughter radionuclides shall be considered as mixtures of different radionuclides.

(4) For mixtures of radionuclides whose identities and respective activities are known, the following conditions apply:

(a) For special form radioactive material, the maximum quantity transported in a Type A package is as follows:

$$\sum_i \frac{B(i)}{A_1(i)} \leq 1$$

Where B(i) is the activity of radionuclide i in special form, and $A_1(i)$ is the A_1 value for radionuclide i.

(b) For normal form radioactive material, the maximum quantity transported in a Type A package:

$$\sum_i \frac{B(i)}{A_2(i)} \leq 1$$

Where B(i) is the activity of radionuclide i in normal form, and $A_2(i)$ is the A_2 value for radionuclide i.

(c) If the package contains both special and normal form radioactive material, the activity that may be transported in a Type A package is as follows:

$$\sum_i \frac{B(i)}{A_1(i)} + \sum_j \frac{C(j)}{A_2(j)} \leq 1$$

Where B(i) is the activity of radionuclide i as special form radioactive material, $A_1(i)$ is the A_1 value for radionuclide i, C(j) is the activity of radionuclide j as normal form radioactive material, and $A_2(j)$ is the A_2 value for radionuclide j.

(d) Alternatively, the A1 value for mixtures of special form material may be determined as follows:

$$A_1 \text{ for mixture} = \frac{1}{\sum_i \frac{f(i)}{A_1(i)}}$$

Where f(i) is the fraction of activity for radionuclide i in the mixture and A1(i) is the appropriate A1 value for radionuclide i.

(e) Alternatively, the A2 value for mixtures of normal form material may be determined as follows:

$$A_2 \text{ for mixture} = \frac{1}{\sum_i \frac{f(i)}{A_2(i)}}$$

Where f(i) is the fraction of activity for radionuclide i in the mixture and A2(i) is the appropriate A2 value for radionuclide i.

(f) The exempt activity concentration for mixtures of nuclides may be determined as follows:

$$\text{Exempt activity concentration for mixture} = \frac{1}{\sum_i \frac{f(i)}{[A](i)}}$$

Where f(i) is the fraction of activity concentration of radionuclide i in the mixture, and [A](i) is the activity concentration for exempt material containing radionuclide i.

(g) The activity limit for an exempt consignment for mixtures of radionuclides may be determined as follows:

$$\text{Exempt consignment activity limit for mixture} = \frac{1}{\sum_i \frac{f(i)}{A(i)}}$$

Where f(i) is the fraction of activity of radionuclide i in the mixture and A(i) is the activity limit for exempt consignments for radionuclide i.

(5)(a) When the identity of each radionuclide is known, but the individual activities of some of the radionuclides are not known, the radionuclides may be grouped and the lowest A1 or A2 value, as appropriate, for the radionuclides in each group may be used in applying the formulas in subsection (4) of this section. Groups may be based on the total alpha activity and the total beta/gamma activity when these are known, using the lowest A1 or A2 values for the alpha emitters and beta/gamma emitters.

(b) When the identity of each radionuclide is known but the individual activities of some of the radionuclides are not known, the radionuclides may be grouped and the lowest [A] (activity concentration

for exempt material) or A (activity limit for exempt consignment) value, as appropriate, for the radionuclides in each group may be used in applying the formulas in paragraph IV of this appendix. Groups may be based on the total alpha activity and the total beta/gamma activity when these are known, using the lowest [A] or A values for the alpha emitters and beta/gamma emitters, respectively.

Table A-1.—A1 and A2 Values for Radionuclides

Symbol of radionuclide	Element and atomic number	A1 (TBq)	A1 (Ci)[b]	A2 (TBq)	A2 (Ci)[b]	Specific activity	
						(TBq/g)	(Ci/g)
Ac-225 (a)	Actinium (89)	$8.0X10^{-1}$	$2.2X10^{1}$	$6.0X10^{-3}$	$1.6X10^{-1}$	$2.1X10^{3}$	$5.8X10^{4}$
Ac-227 (a)		$9.0X10^{-1}$	$2.4X10^{1}$	$9.0X10^{-5}$	$2.4X10^{-3}$	2.7	$7.2X10^{1}$
Ac-228		$6.0X10^{-1}$	$1.6X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$8.4X10^{4}$	$2.2X10^{6}$
Ag-105	Silver (47)	2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$1.1X10^{3}$	$3.0X10^{4}$
Ag-108m (a)		$7.0X10^{-1}$	$1.9X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$9.7X10^{-1}$	$2.6X10^{1}$
Ag-110m (a)		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$1.8X10^{2}$	$4.7X10^{3}$
Ag-111		2.0	$5.4X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$5.8X10^{3}$	$1.6X10^{5}$
Al-26	Aluminum (13)	$1.0X10^{-1}$	2.7	$1.0X10^{-1}$	2.7	$7.0X10^{-4}$	$1.9X10^{-2}$
Am-241	Americium (95)	$1.0X10^{1}$	$2.7X10^{2}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$1.3X10^{-1}$	3.4
Am-242m (a)		$1.0X10^{1}$	$2.7X10^{2}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$3.6X10^{-1}$	$1.0X10^{1}$
Am-243 (a)		5.0	$1.4X10^{2}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$7.4X10^{-3}$	$2.0X10^{-1}$
Ar-37	Argon (18)	$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$3.7X10^{3}$	$9.9X10^{4}$
Ar-39		$4.0X10^{1}$	$1.1X10^{3}$	$2.0X10^{1}$	$5.4X10^{2}$	1.3	$3.4X10^{1}$
Ar-41		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$1.5X10^{6}$	$4.2X10^{7}$
As-72	Arsenic (33)	$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$6.2X10^{4}$	$1.7X10^{6}$
As-73		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$8.2X10^{2}$	$2.2X10^{4}$
As-74		1.0	$2.7X10^{1}$	$9.0X10^{-1}$	$2.4X10^{1}$	$3.7X10^{3}$	$9.9X10^{4}$
As-76		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$5.8X10^{4}$	$1.6X10^{6}$
As-77		$2.0X10^{1}$	$5.4X10^{2}$	$7.0X10^{-1}$	$1.9X10^{1}$	$3.9X10^{4}$	$1.0X10^{6}$
At-211 (a)	Astatine (85)	$2.0X10^{1}$	$5.4X10^{2}$	$5.0X10^{-1}$	$1.4X10^{1}$	$7.6X10^{4}$	$2.1X10^{6}$
Au-193	Gold (79)	7.0	$1.9X10^{2}$	2.0	$5.4X10^{1}$	$3.4X10^{4}$	$9.2X10^{5}$
Au-194		1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$1.5X10^{4}$	$4.1X10^{5}$
Au-195		$1.0X10^{1}$	$2.7X10^{2}$	6.0	$1.6X10^{2}$	$1.4X10^{2}$	$3.7X10^{3}$
Au-198		1.0	$2.7X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$9.0X10^{3}$	$2.4X10^{5}$
Au-199		$1.0X10^{1}$	$2.7X10^{2}$	$6.0X10^{-1}$	$1.6X10^{1}$	$7.7X10^{3}$	$2.1X10^{5}$
Ba-131 (a)	Barium (56)	2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$3.1X10^{3}$	$8.4X10^{4}$
Ba-133		3.0	$8.1X10^{1}$	3.0	$8.1X10^{1}$	9.4	$2.6X10^{2}$
Ba-133m		$2.0X10^{1}$	$5.4X10^{2}$	$6.0X10^{-1}$	$1.6X10^{1}$	$2.2X10^{4}$	$6.1X10^{5}$
Ba-140 (a)		$5.0X10^{-1}$	$1.4X10^{1}$	$3.0X10^{-1}$	8.1	$2.7X10^{3}$	$7.3X10^{4}$
Be-7	Beryllium (4)	$2.0X10^{1}$	$5.4X10^{2}$	$2.0X10^{1}$	$5.4X10^{2}$	$1.3X10^{4}$	$3.5X10^{5}$
Be-10		$4.0X10^{1}$	$1.1X10^{3}$	$6.0X10^{-1}$	$1.6X10^{1}$	$8.3X10^{-4}$	$2.2X10^{-2}$
Bi-205	Bismuth (83)	$7.0X10^{-1}$	$1.9X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$1.5X10^{3}$	$4.2X10^{4}$
Bi-206		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$3.8X10^{3}$	$1.0X10^{5}$
Bi-207		$7.0X10^{-1}$	$1.9X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	1.9	$5.2X10^{1}$
Bi-210		1.0	$2.7X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$4.6X10^{3}$	$1.2X10^{5}$
Bi-210m (a)		$6.0X10^{-1}$	$1.6X10^{1}$	$2.0X10^{-2}$	$5.4X10^{-1}$	$2.1X10^{-5}$	$5.7X10^{-4}$
Bi-212 (a)		$7.0X10^{-1}$	$1.9X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$5.4X10^{5}$	$1.5X10^{7}$
Bk-247	Berkelium (97)	8.0	$2.2X10^{2}$	$8.0X10^{-4}$	$2.2X10^{-2}$	$3.8X10^{-2}$	1.0
Bk-249 (a)		$4.0X10^{1}$	$1.1X10^{3}$	$3.0X10^{-1}$	8.1	$6.1X10^{1}$	$1.6X10^{3}$
Br-76	Bromine (35)	$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$9.4X10^{4}$	$2.5X10^{6}$

Symbol of radionuclide	Element and atomic number	A1 (TBq)	A1 (Ci)[b]	A2 (TBq)	A2 (Ci)[b]	Specific activity	
						(TBq/g)	(Ci/g)
Br-77		3.0	$8.1X10^{1}$	3.0	$8.1X10^{1}$	$2.6X10^{4}$	$7.1X10^{5}$
Br-82		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{4}$	$1.1X10^{6}$
C-11	Carbon (6)	1.0	$2.7X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$3.1X10^{7}$	$8.4X10^{8}$
C-14		$4.0X10^{1}$	$1.1X10^{3}$	3.0	$8.1X10^{1}$	$1.6X10^{-1}$	4.5
Ca-41	Calcium (20)	Unlimited	Unlimited	Unlimited	Unlimited	$3.1X10^{-3}$	$8.5X10^{-2}$
Ca-45		$4.0X10^{1}$	$1.1X10^{3}$	1.0	$2.7X10^{1}$	$6.6X10^{2}$	$1.8X10^{4}$
Ca-47 (a)		3.0	$8.1X10^{1}$	$3.0X10^{-1}$	8.1	$2.3X10^{4}$	$6.1X10^{5}$
Cd-109	Cadmium (48)	$3.0X10^{1}$	$8.1X10^{2}$	2.0	$5.4X10^{1}$	$9.6X10^{1}$	$2.6X10^{3}$
Cd-113m		$4.0X10^{1}$	$1.1X10^{3}$	$5.0X10^{-1}$	$1.4X10^{1}$	8.3	$2.2X10^{2}$
Cd-115 (a)		3.0	$8.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$1.9X10^{4}$	$5.1X10^{5}$
Cd-115m		$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$9.4X10^{2}$	$2.5X10^{4}$
Ce-139	Cerium (58)	7.0	$1.9X10^{2}$	2.0	$5.4X10^{1}$	$2.5X10^{2}$	$6.8X10^{3}$
Ce-141		$2.0X10^{1}$	$5.4X10^{2}$	$6.0X10^{-1}$	$1.6X10^{1}$	$1.1X10^{3}$	$2.8X10^{4}$
Ce-143		$9.0X10^{-1}$	$2.4X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$2.5X10^{4}$	$6.6X10^{5}$
Ce-144 (a)		$2.0X10^{-1}$	5.4	$2.0X10^{-1}$	5.4	$1.2X10^{2}$	$3.2X10^{3}$
Cf-248	Californium (98)	$4.0X10^{1}$	$1.1X10^{3}$	$6.0X10^{-3}$	$1.6X10^{-1}$	$5.8X10^{1}$	$1.6X10^{3}$
Cf-249		3.0	$8.1X10^{1}$	$8.0X10^{-4}$	$2.2X10^{-2}$	$1.5X10^{-1}$	4.1
Cf-250		$2.0X10^{1}$	$5.4X10^{2}$	$2.0X10^{-3}$	$5.4X10^{-2}$	4.0	$1.1X10^{2}$
Cf-251		7.0	$1.9X10^{2}$	$7.0X10^{-4}$	$1.9X10^{-2}$	$5.9X10^{-2}$	1.6
Cf-252		$1.0X10^{-1}$	2.7	$3.0X10^{-3}$	$8.1X10^{-2}$	$2.0X10^{1}$	$5.4X10^{2}$
Cf-253 (a)		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{-2}$	1.1	$1.1X10^{3}$	$2.9X10^{4}$
Cf-254		$1.0X10^{-3}$	$2.7X10^{-2}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$3.1X10^{2}$	$8.5X10^{3}$
Cl-36	Chlorine (17)	$1.0X10^{1}$	$2.7X10^{2}$	$6.0X10^{-1}$	$1.6X10^{1}$	$1.2X10^{-3}$	$3.3X10^{-2}$
Cl-38		$2.0X10^{-1}$	5.4	$2.0X10^{-1}$	5.4	$4.9X10^{6}$	$1.3X10^{8}$
Cm-240	Curium (96)	$4.0X10^{1}$	$1.1X10^{3}$	$2.0X10^{-2}$	$5.4X10^{-1}$	$7.5X10^{2}$	$2.0X10^{4}$
Cm-241		2.0	$5.4X10^{1}$	1.0	$2.7X10^{1}$	$6.1X10^{2}$	$1.7X10^{4}$
Cm-242		$4.0X10^{1}$	$1.1X10^{3}$	$1.0X10^{-2}$	$2.7X10^{-1}$	$1.2X10^{2}$	$3.3X10^{3}$
Cm-243		9.0	$2.4X10^{2}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$1.9X10^{-3}$	$5.2X10^{1}$
Cm-244		$2.0X10^{1}$	$5.4X10^{2}$	$2.0X10^{-3}$	$5.4X10^{-2}$	3.0	$8.1X10^{1}$
Cm-245		9.0	$2.4X10^{2}$	$9.0X10^{-4}$	$2.4X10^{-2}$	$6.4X10^{-3}$	$1.7X10^{-1}$
Cm-246		9.0	$2.4X10^{2}$	$9.0X10^{-4}$	$2.4X10^{-2}$	$1.1X10^{-2}$	$3.1X10^{-1}$
Cm-247 (a)		3.0	$8.1X10^{1}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$3.4X10^{-6}$	$9.3X10^{-5}$
Cm-248		$2.0X10^{-2}$	$5.4X10^{-1}$	$3.0X10^{-4}$	$8.1X10^{-3}$	$1.6X10^{-4}$	$4.2X10^{-3}$
Co-55	Cobalt (27)	$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$1.1X10^{5}$	$3.1X10^{6}$
Co-56		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$1.1X10^{3}$	$3.0X10^{4}$
Co-57		$1.0X10^{1}$	$2.7X10^{2}$	$1.0X10^{1}$	$2.7X10^{2}$	$3.1X10^{2}$	$8.4X10^{3}$
Co-58		1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$1.2X10^{3}$	$3.2X10^{4}$
Co-58m		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$2.2X10^{5}$	$5.9X10^{6}$
Co-60		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$4.2X10^{1}$	$1.1X10^{3}$
Cr-51	Chromium (24)	$3.0X10^{1}$	$8.1X10^{2}$	$3.0X10^{1}$	$8.1X10^{2}$	$3.4X10^{3}$	$9.2X10^{4}$
Cs-129	Cesium (55)	4.0	$1.1X10^{2}$	4.0	$1.1X10^{2}$	$2.8X10^{4}$	$7.6X10^{5}$
Cs-131		$3.0X10^{1}$	$8.1X10^{2}$	$3.0X10^{1}$	$8.1X10^{2}$	$3.8X10^{3}$	$1.0X10^{5}$
Cs-132		1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$5.7X10^{3}$	$1.5X10^{5}$
Cs-134		$7.0X10^{-1}$	$1.9X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$4.8X10^{1}$	$1.3X10^{3}$
Cs-134m		$4.0X10^{1}$	$1.1X10^{3}$	$6.0X10^{-1}$	$1.6X10^{1}$	$3.0X10^{5}$	$8.0X10^{6}$
Cs-135		$4.0X10^{1}$	$1.1X10^{3}$	1.0	$2.7X10^{1}$	$4.3X10^{-5}$	$1.2X10^{-3}$
Cs-136		$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$2.7X10^{3}$	$7.3X10^{4}$

Symbol of radionuclide	Element and atomic number	A1 (TBq)	A1 (Ci)[b]	A2 (TBq)	A2 (Ci)[b]	Specific activity	
						(TBq/g)	(Ci/g)
Cs-137 (a)		2.0	$5.4X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	3.2	$8.7X10^{1}$
Cu-64	Copper (29)	6.0	$1.6X10^{2}$	1.0	$2.7X10^{1}$	$1.4X10^{5}$	$3.9X10^{6}$
Cu-67		$1.0X10^{1}$	$2.7X10^{2}$	$7.0X10^{-1}$	$1.9X10^{1}$	$2.8X10^{4}$	$7.6X10^{5}$
Dy-159	Dysprosium (66)	$2.0X10^{1}$	$5.4X10^{2}$	$2.0X10^{1}$	$5.4X10^{2}$	$2.1X10^{2}$	$5.7X10^{3}$
Dy-165		$9.0X10^{-1}$	$2.4X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$3.0X10^{5}$	$8.2X10^{6}$
Dy-166 (a)		$9.0X10^{-1}$	$2.4X10^{1}$	$3.0X10^{-1}$	8.1	$8.6X10^{3}$	$2.3X10^{5}$
Er-169	Erbium (68)	$4.0X10^{1}$	$1.1X10^{3}$	1.0	$2.7X10^{1}$	$3.1X10^{3}$	$8.3X10^{4}$
Er-171		$8.0X10^{-1}$	$2.2X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$9.0X10^{4}$	$2.4X10^{6}$
Eu-147	Europium (63)	2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$1.4X10^{3}$	$3.7X10^{4}$
Eu-148		$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$6.0X10^{2}$	$1.6X10^{4}$
Eu-149		$2.0X10^{1}$	$5.4X10^{2}$	$2.0X10^{1}$	$5.4X10^{2}$	$3.5X10^{2}$	$9.4X10^{3}$
Eu-150 (short lived)		2.0	$5.4X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$6.1X10^{4}$	$1.6X10^{6}$
Eu-150 (long lived)		$7.0X10^{-1}$	$1.9X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$6.1X10^{4}$	$1.6X10^{6}$
Eu-152		1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	6.5	$1.8X10^{2}$
Eu-152m		$8.0X10^{-1}$	$2.2X10^{1}$	$8.0X10^{-1}$	$2.2X10^{1}$	$8.2X10^{4}$	$2.2X10^{6}$
Eu-154		$9.0X10^{-1}$	$2.4X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	9.8	$2.6X10^{2}$
Eu-155		$2.0X10^{1}$	$5.4X10^{2}$	3.0	$8.1X10^{1}$	$1.8X10^{1}$	$4.9X10^{2}$
Eu-156		$7.0X10^{-1}$	$1.9X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$2.0X10^{3}$	$5.5X10^{4}$
F-18	Fluorine (9)	1.0	$2.7X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$3.5X10^{6}$	$9.5X10^{7}$
Fe-52 (a)	Iron (26)	$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$2.7X10^{5}$	$7.3X10^{6}$
Fe-55		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$8.8X10^{1}$	$2.4X10^{3}$
Fe-59		$9.0X10^{-1}$	$2.4X10^{1}$	$9.0X10^{-1}$	$2.4X10^{1}$	$1.8X10^{3}$	$5.0X10^{4}$
Fe-60 (a)		$4.0X10^{1}$	$1.1X10^{3}$	$2.0X10^{-1}$	5.4	$7.4X10^{-4}$	$2.0X10^{-2}$
Ga-67	Gallium (31)	7.0	$1.9X10^{2}$	3.0	$8.1X10^{1}$	$2.2X10^{4}$	$6.0X10^{5}$
Ga-68		$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$1.5X10^{6}$	$4.1X10^{7}$
Ga-72		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$1.1X10^{5}$	$3.1X10^{6}$
Gd-146 (a)	Gadolinium (64)	$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$6.9X10^{2}$	$1.9X10^{4}$
Gd-148		$2.0X10^{1}$	$5.4X10^{2}$	$2.0X10^{-3}$	$5.4X10^{-2}$	1.2	$3.2X10^{1}$
Gd-153		$1.0X10^{1}$	$2.7X10^{2}$	9.0	$2.4X10^{2}$	$1.3X10^{2}$	$3.5X10^{3}$
Gd-159		3.0	$8.1X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$3.9X10^{4}$	$1.1X10^{6}$
Ge-68 (a)	Germanium (32)	$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$2.6X10^{2}$	$7.1X10^{3}$
Ge-71		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$5.8X10^{3}$	$1.6X10^{5}$
Ge-77		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$1.3X10^{5}$	$3.6X10^{6}$
Hf-172 (a)	Hafnium (72)	$6.0X10^{-1}$	$1.6X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$4.1X10^{1}$	$1.1X10^{3}$
Hf-175		3.0	$8.1X10^{1}$	3.0	$8.1X10^{1}$	$3.9X10^{2}$	$1.1X10^{4}$
Hf-181		2.0	$5.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$6.3X10^{2}$	$1.7X10^{4}$
Hf-182		Unlimited	Unlimited	Unlimited	Unlimited	$8.1X10^{-6}$	$2.2X10^{-4}$
Hg-194 (a)	Mercury (80)	1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$1.3X10^{-1}$	3.5
Hg-195m (a)		3.0	$8.1X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$1.5X10^{4}$	$4.0X10^{5}$
Hg-197		$2.0X10^{1}$	$5.4X10^{2}$	$1.0X10^{1}$	$2.7X10^{2}$	$9.2X10^{3}$	$2.5X10^{5}$
Hg-197m		$1.0X10^{1}$	$2.7X10^{2}$	$4.0X10^{-1}$	$1.1X10^{1}$	$2.5X10^{4}$	$6.7X10^{5}$
Hg-203		5.0	$1.4X10^{2}$	1.0	$2.7X10^{1}$	$5.1X10^{2}$	$1.4X10^{4}$
Ho-166	Holmium (67)	$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$2.6X10^{4}$	$7.0X10^{5}$
Ho-166m		$6.0X10^{-1}$	$1.6X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$6.6X10^{-2}$	1.8
I-123	Iodine (53)	6.0	$1.6X10^{2}$	3.0	$8.1X10^{1}$	$7.1X10^{4}$	$1.9X10^{6}$
I-124		1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$9.3X10^{3}$	$2.5X10^{5}$
I-125		$2.0X10^{1}$	$5.4X10^{2}$	3.0	$8.1X10^{1}$	$6.4X10^{2}$	$1.7X10^{4}$

Symbol of radionuclide	Element and atomic number	A1 (TBq)	A1 (Ci)[b]	A2 (TBq)	A2 (Ci)[b]	Specific activity	
						(TBq/g)	(Ci/g)
I-126		2.0	$5.4X10^{1}$	1.0	$2.7X10^{1}$	$2.9X10^{3}$	$8.0X10^{4}$
I-129		Unlimited	Unlimited	Unlimited	Unlimited	$6.5X10^{-6}$	$1.8X10^{-4}$
I-131		3.0	$8.1X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$4.6X10^{3}$	$1.2X10^{5}$
I-132		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$3.8X10^{5}$	$1.0X10^{7}$
I-133		$7.0X10^{-1}$	$1.9X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$4.2X10^{4}$	$1.1X10^{6}$
I-134		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$9.9X10^{5}$	$2.7X10^{7}$
I-135 (a)		$6.0X10^{-1}$	$1.6X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$1.3X10^{5}$	$3.5X10^{6}$
In-111	Indium (49)	3.0	$8.1X10^{1}$	3.0	$8.1X10^{1}$	$1.5X10^{4}$	$4.2X10^{5}$
In-113m		4.0	$1.1X10^{2}$	2.0	$5.4X10^{1}$	$6.2X10^{5}$	$1.7X10^{7}$
In-114m (a)		$1.0X10^{1}$	$2.7X10^{2}$	$5.0X10^{-1}$	$1.4X10^{1}$	$8.6X10^{2}$	$2.3X10^{4}$
In-115m		7.0	$1.9X10^{2}$	1.0	$2.7X10^{1}$	$2.2X10^{5}$	$6.1X10^{6}$
Ir-189 (a)	Iridium (77)	$1.0X10^{1}$	$2.7X10^{2}$	$1.0X10^{1}$	$2.7X10^{2}$	$1.9X10^{3}$	$5.2X10^{4}$
Ir-190		$7.0X10^{-1}$	$1.9X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$2.3X10^{3}$	$6.2X10^{4}$
Ir-192		[c]1.0	[c]$2.7X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$3.4X10^{2}$	$9.2X10^{3}$
Ir-194		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$3.1X10^{4}$	$8.4X10^{5}$
K-40	Potassium (19)	$9.0X10^{-1}$	$2.4X10^{1}$	$9.0X10^{-1}$	$2.4X10^{1}$	$2.4X10^{-7}$	$6.4X10^{-6}$
K-42		$2.0X10^{-1}$	5.4	$2.0X10^{-1}$	5.4	$2.2X10^{5}$	$6.0X10^{6}$
K-43		$7.0X10^{-1}$	$1.9X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$1.2X10^{5}$	$3.3X10^{6}$
Kr-79	Krypton (36)	4.0	$1.1X10^{2}$	2.0	$5.4X10^{1}$	$4.2X10^{4}$	$1.1X10^{6}$
Kr-81		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$7.8X10^{-4}$	$2.1X10^{-2}$
Kr-85		$1.0X10^{1}$	$2.7X10^{2}$	$1.0X10^{1}$	$2.7X10^{2}$	$1.5X10^{1}$	$3.9X10^{2}$
Kr-85m		8.0	$2.2X10^{2}$	3.0	$8.1X10^{1}$	$3.0X10^{5}$	$8.2X10^{6}$
Kr-87		$2.0X10^{-1}$	5.4	$2.0X10^{-1}$	5.4	$1.0X10^{6}$	$2.8X10^{7}$
La-137	Lanthanum (57)	$3.0X10^{1}$	$8.1X10^{2}$	6.0	$1.6X10^{2}$	$1.6X10^{-3}$	$4.4X10^{-2}$
La-140		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$2.1X10^{4}$	$5.6X10^{5}$
Lu-172	Lutetium (71)	$6.0X10^{-1}$	$1.6X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$4.2X10^{3}$	$1.1X10^{5}$
Lu-173		8.0	$2.2X10^{2}$	8.0	$2.2X10^{2}$	$5.6X10^{1}$	$1.5X10^{3}$
Lu-174		9.0	$2.4X10^{2}$	9.0	$2.4X10^{2}$	$2.3X10^{1}$	$6.2X10^{2}$
Lu-174m		$2.0X10^{1}$	$5.4X10^{2}$	$1.0X10^{1}$	$2.7X10^{2}$	$2.0X10^{2}$	$5.3X10^{3}$
Lu-177		$3.0X10^{1}$	$8.1X10^{2}$	$7.0X10^{-1}$	$1.9X10^{1}$	$4.1X10^{3}$	$1.1X10^{5}$
Mg-28 (a)	Magnesium (12)	$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$2.0X10^{5}$	$5.4X10^{6}$
Mn-52	Manganese (25)	$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$1.6X10^{4}$	$4.4X10^{5}$
Mn-53		Unlimited	Unlimited	Unlimited	Unlimited	$6.8X10^{-5}$	$1.8X10^{-3}$
Mn-54		1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$2.9X10^{2}$	$7.7X10^{3}$
Mn-56		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$8.0X10^{5}$	$2.2X10^{7}$
Mo-93	Molybdenum (42)	$4.0X10^{1}$	$1.1X10^{3}$	$2.0X10^{1}$	$5.4X10^{2}$	$4.1X10^{-2}$	1.1
Mo-99 (a) (h)		1.0	$2.7X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$1.8X10^{4}$	$4.8X10^{5}$
N-13	Nitrogen (7)	$9.0X10^{-1}$	$2.4X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$5.4X10^{7}$	$1.5X10^{9}$
Na-22	Sodium (11)	$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$2.3X10^{2}$	$6.3X10^{3}$
Na-24		$2.0X10^{-1}$	5.4	$2.0X10^{-1}$	5.4	$3.2X10^{5}$	$8.7X10^{6}$
Nb-93m	Niobium (41)	$4.0X10^{1}$	$1.1X10^{3}$	$3.0X10^{1}$	$8.1X10^{2}$	8.8	$2.4X10^{2}$
Nb-94		$7.0X10^{-1}$	$1.9X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$6.9X10^{-3}$	$1.9X10^{-1}$
Nb-95		1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$1.5X10^{3}$	$3.9X10^{4}$
Nb-97		$9.0X10^{-1}$	$2.4X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$9.9X10^{5}$	$2.7X10^{7}$
Nd-147	Neodymium (60)	6.0	$1.6X10^{2}$	$6.0X10^{-1}$	$1.6X10^{1}$	$3.0X10^{3}$	$8.1X10^{4}$
Nd-149		$6.0X10^{-1}$	$1.6X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$4.5X10^{5}$	$1.2X10^{7}$

Symbol of radionuclide	Element and atomic number	A1 (TBq)	A1 (Ci)[b]	A2 (TBq)	A2 (Ci)[b]	Specific activity	
						(TBq/g)	(Ci/g)
Ni-59	Nickel (28)	Unlimited	Unlimited	Unlimited	Unlimited	$3.0X10^{-3}$	$8.0X10^{-2}$
Ni-63		$4.0X10^{1}$	$1.1X10^{3}$	$3.0X10^{1}$	$8.1X10^{2}$	2.1	$5.7X10^{1}$
Ni-65		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$7.1X10^{5}$	$1.9X10^{7}$
Np-235	Neptunium (93)	$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$5.2X10^{1}$	$1.4X10^{3}$
Np-236 (short-lived)		$2.0X10^{1}$	$5.4X10^{2}$	2.0	$5.4X10^{1}$	$4.7X10^{-4}$	$1.3X10^{-2}$
Np-236 (long-lived)		9.0	$2.4X10^{2}$	$2.0X10^{-2}$	$5.4X10^{-1}$	$4.7X10^{-4}$	$1.3X10^{-2}$
Np-237		$2.0X10^{1}$	$5.4X10^{2}$	$2.0X10^{-3}$	$5.4X10^{-2}$	$2.6X10^{-5}$	$7.1X10^{-4}$
Np-239		7.0	$1.9X10^{2}$	$4.0X10^{-1}$	$1.1X10^{1}$	$8.6X10^{3}$	$2.3X10^{5}$
Os-185	Osmium (76)	1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$2.8X10^{2}$	$7.5X10^{3}$
Os-191		$1.0X10^{1}$	$2.7X10^{2}$	2.0	$5.4X10^{1}$	$1.6X10^{3}$	$4.4X10^{4}$
Os-191m		$4.0X10^{1}$	$1.1X10^{3}$	$3.0X10^{1}$	$8.1X10^{2}$	$4.6X10^{4}$	$1.3X10^{6}$
Os-193		2.0	$5.4X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	b$2.0X10^{4}$	$5.3X10^{5}$
Os-194 (a)		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$1.1X10^{1}$	$3.1X10^{2}$
P-32	Phosphorus (15)	$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$1.1X10^{4}$	$2.9X10^{5}$
P-33		$4.0X10^{1}$	$1.1X10^{3}$	1.0	$2.7X10^{1}$	$5.8X10^{3}$	$1.6X10^{5}$
Pa-230 (a)	Protactinium (91)	2.0	$5.4X10^{1}$	$7.0X10^{-2}$	1.9	$1.2X10^{3}$	$3.3X10^{4}$
Pa-231		4.0	$1.1X10^{2}$	$4.0X10^{-4}$	$1.1X10^{-2}$	$1.7X10^{-3}$	$4.7X10^{-2}$
Pa-233		5.0	$1.4X10^{2}$	$7.0X10^{-1}$	$1.9X10^{1}$	$7.7X10^{2}$	$2.1X10^{4}$
Pb-201	Lead (82)	1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$6.2X10^{4}$	$1.7X10^{6}$
Pb-202		$4.0X10^{1}$	$1.1X10^{3}$	$2.0X10^{1}$	$5.4X10^{2}$	$1.2X10^{-4}$	$3.4X10^{-3}$
Pb-203		4.0	$1.1X10^{2}$	3.0	$8.1X10^{1}$	$1.1X10^{4}$	$3.0X10^{5}$
Pb-205		Unlimited	Unlimited	Unlimited	Unlimited	$4.5X10^{-6}$	$1.2X10^{-4}$
Pb-210 (a)		1.0	$2.7X10^{1}$	$5.0X10^{-2}$	1.4	2.8	$7.6X10^{1}$
Pb-212 (a)		$7.0X10^{-1}$	$1.9X10^{1}$	$2.0X10^{-1}$	5.4	$5.1X10^{4}$	$1.4X10^{6}$
Pd-103 (a)	Palladium (46)	$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$2.8X10^{3}$	$7.5X10^{4}$
Pd-107		Unlimited	Unlimited	Unlimited	Unlimited	$1.9X10^{-5}$	$5.1X10^{-4}$
Pd-109		2.0	$5.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$7.9X10^{4}$	$2.1X10^{6}$
Pm-143	Promethium (61)	3.0	$8.1X10^{1}$	3.0	$8.1X10^{1}$	$1.3X10^{2}$	$3.4X10^{3}$
Pm-144		$7.0X10^{-1}$	$1.9X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$9.2X10^{1}$	$2.5X10^{3}$
Pm-145		$3.0X10^{1}$	$8.1X10^{2}$	$1.0X10^{1}$	$2.7X10^{2}$	5.2	$1.4X10^{2}$
Pm-147		$4.0X10^{1}$	$1.1X10^{3}$	2.0	$5.4X10^{1}$	$3.4X10^{1}$	$9.3X10^{2}$
Pm-148m (a)		$8.0X10^{-1}$	$2.2X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$7.9X10^{2}$	$2.1X10^{4}$
Pm-149		2.0	$5.4X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$1.5X10^{4}$	$4.0X10^{5}$
Pm-151		2.0	$5.4X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$2.7X10^{4}$	$7.3X10^{5}$
Po-210	Polonium (84)	$4.0X10^{1}$	$1.1X10^{3}$	$2.0X10^{-2}$	$5.4X10^{-1}$	$1.7X10^{2}$	$4.5X10^{3}$
Pr-142	Praseodymium (59)	$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$4.3X10^{4}$	$1.2X10^{6}$
Pr-143		3.0	$8.1X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$2.5X10^{3}$	$6.7X10^{4}$
Pt-188 (a)	Platinum (78)	1.0	$2.7X10^{1}$	$8.0X10^{-1}$	$2.2X10^{1}$	$2.5X10^{3}$	$6.8X10^{4}$
Pt-191		4.0	$1.1X10^{2}$	3.0	$8.1X10^{1}$	$8.7X10^{3}$	$2.4X10^{5}$
Pt-193		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	1.4	$3.7X10^{1}$
Pt-193m		$4.0X10^{1}$	$1.1X10^{3}$	$5.0X10^{-1}$	$1.4X10^{1}$	$5.8X10^{3}$	$1.6X10^{5}$
Pt-195m		$1.0X10^{1}$	$2.7X10^{2}$	$5.0X10^{-1}$	$1.4X10^{1}$	$6.2X10^{3}$	$1.7X10^{5}$
Pt-197		$2.0X10^{1}$	$5.4X10^{2}$	$6.0X10^{-1}$	$1.6X10^{1}$	$3.2X10^{4}$	$8.7X10^{5}$
Pt-197m		$1.0X10^{1}$	$2.7X10^{2}$	$6.0X10^{-1}$	$1.6X10^{1}$	$3.7X10^{5}$	$1.0X10^{7}$
Pu-236	Plutonium (94)	$3.0X10^{1}$	$8.1X10^{2}$	$3.0X10^{-3}$	$8.1X10^{-2}$	$2.0X10^{1}$	$5.3X10^{2}$

Symbol of radionuclide	Element and atomic number	A1 (TBq)	A1 (Ci)[b]	A2 (TBq)	A2 (Ci)[b]	Specific activity	
						(TBq/g)	(Ci/g)
Pu-237		$2.0X10^{1}$	$5.4X10^{2}$	$2.0X10^{1}$	$5.4X10^{2}$	$4.5X10^{2}$	$1.2X10^{4}$
Pu-238		$1.0X10^{1}$	$2.7X10^{2}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$6.3X10^{-1}$	$1.7X10^{1}$
Pu-239		$1.0X10^{1}$	$2.7X10^{2}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$2.3X10^{-3}$	$6.2X10^{-2}$
Pu-240		$1.0X10^{1}$	$2.7X10^{2}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$8.4X10^{-3}$	$2.3X10^{-1}$
Pu-241 (a)		$4.0X10^{1}$	$1.1X10^{3}$	$6.0X10^{-2}$	1.6	3.8	$1.0X10^{2}$
Pu-242		$1.0X10^{1}$	$2.7X10^{2}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$1.5X10^{-4}$	$3.9X10^{-3}$
Pu-244 (a)		$4.0X10^{-1}$	$1.1X10^{1}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$6.7X10^{-7}$	$1.8X10^{-5}$
Ra-223 (a)	Radium (88)	$4.0X10^{-1}$	$1.1X10^{1}$	$7.0X10^{-3}$	$1.9X10^{-1}$	$1.9X10^{3}$	$5.1X10^{4}$
Ra-224 (a)		$4.0X10^{-1}$	$1.1X10^{1}$	$2.0X10^{-2}$	$5.4X10^{-1}$	$5.9X10^{3}$	$1.6X10^{5}$
Ra-225 (a)		$2.0X10^{-1}$	5.4	$4.0X10^{-3}$	$1.1X10^{-1}$	$1.5X10^{3}$	$3.9X10^{4}$
Ra-226 (a)		$2.0X10^{-1}$	5.4	$3.0X10^{-3}$	$8.1X10^{-2}$	$3.7X10^{-2}$	1.0
Ra-228 (a)		$6.0X10^{-1}$	$1.6X10^{1}$	$2.0X10^{-2}$	$5.4X10^{-1}$	$1.0X10^{1}$	$2.7X10^{2}$
Rb-81	Rubidium (37)	2.0	$5.4X10^{1}$	$8.0X10^{-1}$	$2.2X10^{1}$	$3.1X10^{5}$	$8.4X10^{6}$
Rb-83 (a)		2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$6.8X10^{2}$	$1.8X10^{4}$
Rb-84		1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$1.8X10^{3}$	$4.7X10^{4}$
Rb-86		$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$3.0X10^{3}$	$8.1X10^{4}$
Rb-87		Unlimited	Unlimited	Unlimited	Unlimited	$3.2X10^{-9}$	$8.6X10^{-8}$
Rb (nat)		Unlimited	Unlimited	Unlimited	Unlimited	$6.7X10^{6}$	$1.8X10^{8}$
Re-184	Rhenium (75)	1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$6.9X10^{2}$	$1.9X10^{4}$
Re-184m		3.0	$8.1X10^{1}$	1.0	$2.7X10^{1}$	$1.6X10^{2}$	$4.3X10^{3}$
Re-186		2.0	$5.4X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$6.9X10^{3}$	$1.9X10^{5}$
Re-187		Unlimited	Unlimited	Unlimited	Unlimited	$1.4X10^{-9}$	$3.8X10^{-8}$
Re-188		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$3.6X10^{4}$	$9.8X10^{5}$
Re-189 (a)		3.0	$8.1X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$2.5X10^{4}$	$6.8X10^{5}$
Re (nat)		Unlimited	Unlimited	Unlimited	Unlimited	0.0	$2.4X10^{-8}$
Rh-99	Rhodium (45)	2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$3.0X10^{3}$	$8.2X10^{4}$
Rh-101		4.0	$1.1X10^{2}$	3.0	$8.1X10^{1}$	$4.1X10^{1}$	$1.1X10^{3}$
Rh-102		$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$4.5X10^{1}$	$1.2X10^{3}$
Rh-102m		2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$2.3X10^{2}$	$6.2X10^{3}$
Rh-103m		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$1.2X10^{6}$	$3.3X10^{7}$
Rh-105		$1.0X10^{1}$	$2.7X10^{2}$	$8.0X10^{-1}$	$2.2X10^{1}$	$3.1X10^{4}$	$8.4X10^{5}$
Rn-222 (a)	Radon (86)	$3.0X10^{-1}$	8.1	$4.0X10^{-3}$	$1.1X10^{-1}$	$5.7X10^{3}$	$1.5X10^{5}$
Ru-97	Ruthenium (44)	5.0	$1.4X10^{2}$	5.0	$1.4X10^{2}$	$1.7X10^{4}$	$4.6X10^{5}$
Ru-103 (a)		2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$1.2X10^{3}$	$3.2X10^{4}$
Ru-105		1.0	$2.7X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$2.5X10^{5}$	$6.7X10^{6}$
Ru-106 (a)		$2.0X10^{-1}$	5.4	$2.0X10^{-1}$	5.4	$1.2X10^{2}$	$3.3X10^{3}$
S-35	Sulphur (16)	$4.0X10^{1}$	$1.1X10^{3}$	3.0	$8.1X10^{1}$	$1.6X10^{3}$	$4.3X10^{4}$
Sb-122	Antimony (51)	$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$1.5X10^{4}$	$4.0X10^{5}$
Sb-124		$6.0X10^{-1}$	$1.6X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$6.5X10^{2}$	$1.7X10^{4}$
Sb-125		2.0	$5.4X10^{1}$	1.0	$2.7X10^{1}$	$3.9X10^{1}$	$1.0X10^{3}$
Sb-126		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$3.1X10^{3}$	$8.4X10^{4}$
Sc-44	Scandium (21)	$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$6.7X10^{5}$	$1.8X10^{7}$
Sc-46		$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$1.3X10^{3}$	$3.4X10^{4}$
Sc-47		$1.0X10^{1}$	$2.7X10^{2}$	$7.0X10^{-1}$	$1.9X10^{1}$	$3.1X10^{4}$	$8.3X10^{5}$
Sc-48		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$5.5X10^{4}$	$1.5X10^{6}$
Se-75	Selenium (34)	3.0	$8.1X10^{1}$	3.0	$8.1X10^{1}$	$5.4X10^{2}$	$1.5X10^{4}$
Se-79		$4.0X10^{1}$	$1.1X10^{3}$	2.0	$5.4X10^{1}$	$2.6X10^{-3}$	$7.0X10^{-2}$

Symbol of radionuclide	Element and atomic number	A1 (TBq)	A1 (Ci)[b]	A2 (TBq)	A2 (Ci)[b]	Specific activity	
						(TBq/g)	(Ci/g)
Si-31	Silicon (14)	$6.0X10^{-1}$	$1.6X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$1.4X10^{6}$	$3.9X10^{7}$
Si-32		$4.0X10^{1}$	$1.1X10^{3}$	$5.0X10^{-1}$	$1.4X10^{1}$	3.9	$1.1X10^{2}$
Sm-145	Samarium (62)	$1.0X10^{1}$	$2.7X10^{2}$	$1.0X10^{1}$	$2.7X10^{2}$	$9.8X10^{1}$	$2.6X10^{3}$
Sm-147		Unlimited	Unlimited	Unlimited	Unlimited	((~~$8.5X10^{-1}$~~)) $8.5X10^{-10}$	$2.3X10^{-8}$
Sm-151		$4.0X10^{1}$	$1.1X10^{3}$	$1.0X10^{1}$	$2.7X10^{2}$	$9.7X10^{-1}$	$2.6X10^{1}$
Sm-153		9.0	$2.4X10^{2}$	$6.0X10^{-1}$	$1.6X10^{1}$	$1.6X10^{4}$	$4.4X10^{5}$
Sn-113 (a)	Tin (50)	4.0	$1.1X10^{2}$	2.0	$5.4X10^{1}$	$3.7X10^{2}$	$1.0X10^{4}$
Sn-117m		7.0	$1.9X10^{2}$	$4.0X10^{-1}$	$1.1X10^{1}$	$3.0X10^{3}$	$8.2X10^{4}$
Sn-119m		$4.0X10^{1}$	$1.1X10^{3}$	$3.0X10^{1}$	$8.1X10^{2}$	$1.4X10^{2}$	$3.7X10^{3}$
Sn-121m (a)		$4.0X10^{1}$	$1.1X10^{3}$	$9.0X10^{-1}$	$2.4X10^{1}$	2.0	$5.4X10^{1}$
Sn-123		$8.0X10^{-1}$	$2.2X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$3.0X10^{2}$	$8.2X10^{3}$
Sn-125		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{3}$	$1.1X10^{5}$
Sn-126 (a)		$6.0X10^{-1}$	$1.6X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$1.0X10^{-3}$	$2.8X10^{-2}$
Sr-82 (a)	Strontium (38)	$2.0X10^{-1}$	5.4	$2.0X10^{-1}$	5.4	$2.3X10^{3}$	$6.2X10^{4}$
Sr-85		2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$8.8X10^{2}$	$2.4X10^{4}$
Sr-85m		5.0	$1.4X10^{2}$	5.0	$1.4X10^{2}$	$1.2X10^{6}$	$3.3X10^{7}$
Sr-87m		3.0	$8.1X10^{1}$	3.0	$8.1X10^{1}$	$4.8X10^{5}$	$1.3X10^{7}$
Sr-89		$6.0X10^{-1}$	$1.6X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$1.1X10^{3}$	$2.9X10^{4}$
Sr-90 (a)		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	5.1	$1.4X10^{2}$
Sr-91 (a)		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$1.3X10^{5}$	$3.6X10^{6}$
Sr-92 (a)		1.0	$2.7X10^{1}$	$3.0X10^{-1}$	8.1	$4.7X10^{5}$	$1.3X10^{7}$
T(H-3)	Tritium (1)	$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$3.6X10^{2}$	$9.7X10^{3}$
Ta-178 (long-lived)	Tantalum (73)	1.0	$2.7X10^{1}$	$8.0X10^{-1}$	$2.2X10^{1}$	$4.2X10^{6}$	$1.1X10^{8}$
Ta-179		$3.0X10^{1}$	$8.1X10^{2}$	$3.0X10^{1}$	$8.1X10^{2}$	$4.1X10^{1}$	$1.1X10^{3}$
Ta-182		$9.0X10^{-1}$	$2.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$2.3X10^{2}$	$6.2X10^{3}$
Tb-157	Terbium (65)	$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$5.6X10^{-1}$	$1.5X10^{1}$
Tb-158		1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$5.6X10^{-1}$	$1.5X10^{1}$
Tb-160		1.0	$2.7X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$4.2X10^{2}$	$1.1X10^{4}$
Tc-95m (a)	Technetium (43)	2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$8.3X10^{2}$	$2.2X10^{4}$
Tc-96		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$1.2X10^{4}$	$3.2X10^{5}$
Tc-96m (a)		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$1.4X10^{6}$	$3.8X10^{7}$
Tc-97		Unlimited	Unlimited	Unlimited	Unlimited	$5.2X10^{-5}$	$1.4X10^{-3}$
Tc-97m		$4.0X10^{1}$	$1.1X10^{3}$	1.0	$2.7X10^{1}$	$5.6X10^{2}$	$1.5X10^{4}$
Tc-98		$8.0X10^{-1}$	$2.2X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$3.2X10^{-5}$	$8.7X10^{-4}$
Tc-99		$4.0X10^{1}$	$1.1X10^{3}$	$9.0X10^{-1}$	$2.4X10^{1}$	$6.3X10^{-4}$	$1.7X10^{-2}$
Tc-99m		$1.0X10^{1}$	$2.7X10^{2}$	4.0	$1.1X10^{2}$	$1.9X10^{5}$	$5.3X10^{6}$
Te-121	Tellurium (52)	2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$2.4X10^{3}$	$6.4X10^{4}$
Te-121m		5.0	$1.4X10^{2}$	3.0	$8.1X10^{1}$	$2.6X10^{2}$	$7.0X10^{3}$
Te-123m		8.0	$2.2X10^{2}$	1.0	$2.7X10^{1}$	$3.3X10^{2}$	$8.9X10^{3}$
Te-125m		$2.0X10^{1}$	$5.4X10^{2}$	$9.0X10^{-1}$	$2.4X10^{1}$	$6.7X10^{2}$	$1.8X10^{4}$
Te-127		$2.0X10^{1}$	$5.4X10^{2}$	$7.0X10^{-1}$	$1.9X10^{1}$	$9.8X10^{4}$	$2.6X10^{6}$
Te-127m (a)		$2.0X10^{1}$	$5.4X10^{2}$	$5.0X10^{-1}$	$1.4X10^{1}$	$3.5X10^{2}$	$9.4X10^{3}$
Te-129		$7.0X10^{-1}$	$1.9X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$7.7X10^{5}$	$2.1X10^{7}$
Te-129m (a)		$8.0X10^{-1}$	$2.2X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$1.1X10^{3}$	$3.0X10^{4}$
Te-131m (a)		$7.0X10^{-1}$	$1.9X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$3.0X10^{4}$	$8.0X10^{5}$
Te-132 (a)		$5.0X10^{-1}$	$1.4X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$1.1X10^{4}$	$3.0X10^{5}$

Symbol of radionuclide	Element and atomic number	A1 (TBq)	A1 (Ci)[b]	A2 (TBq)	A2 (Ci)[b]	Specific activity	
						(TBq/g)	(Ci/g)
Th-227	Thorium (90)	$1.0X10^{1}$	$2.7X10^{2}$	$5.0X10^{-3}$	$1.4X10^{-1}$	$1.1X10^{3}$	$3.1X10^{4}$
Th-228 (a)		$5.0X10^{-1}$	$1.4X10^{1}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$3.0X10^{1}$	$8.2X10^{2}$
Th-229		5.0	$1.4X10^{2}$	$5.0X10^{-4}$	$1.4X10^{-2}$	$7.9X10^{-3}$	$2.1X10^{-1}$
Th-230		$1.0X10^{1}$	$2.7X10^{2}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$7.6X10^{-4}$	$2.1X10^{-2}$
Th-231		$4.0X10^{1}$	$1.1X10^{3}$	$2.0X10^{-2}$	$5.4X10^{-1}$	$2.0X10^{4}$	$5.3X10^{5}$
Th-232		Unlimited	Unlimited	Unlimited	Unlimited	$4.0X10^{-9}$	$1.1X10^{-7}$
Th-234 (a)		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$8.6X10^{2}$	$2.3X10^{4}$
Th(nat)		Unlimited	Unlimited	Unlimited	Unlimited	$8.1X10^{-9}$	$2.2X10^{-7}$
Ti-44 (a)	Titanium (22)	$5.0X10^{-1}$	$1.4X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	6.4	$1.7X10^{2}$
Tl-200	Thallium (81)	$9.0X10^{-1}$	$2.4X10^{1}$	$9.0X10^{-1}$	$2.4X10^{1}$	$2.2X10^{4}$	$6.0X10^{5}$
Tl-201		$1.0X10^{1}$	$2.7X10^{2}$	4.0	$1.1X10^{2}$	$7.9X10^{3}$	$2.1X10^{5}$
Tl-202		2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$2.0X10^{3}$	$5.3X10^{4}$
Tl-204		$1.0X10^{1}$	$2.7X10^{2}$	$7.0X10^{-1}$	$1.9X10^{1}$	$1.7X10^{1}$	$4.6X10^{2}$
Tm-167	Thulium (69)	7.0	$1.9X10^{2}$	$8.0X10^{-1}$	$2.2X10^{1}$	$3.1X10^{3}$	$8.5X10^{4}$
Tm-170		3.0	$8.1X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$2.2X10^{2}$	$6.0X10^{3}$
Tm-171		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$
U-230 (fast lung absorption) (a)(d)	Uranium (92)	$4.0X10^{1}$	$1.1X10^{3}$	$1.0X10^{-1}$	2.7	$1.0X10^{3}$	$2.7X10^{4}$
U-230 (medium lung absorption) (a)(e)		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{-3}$	$1.1X10^{-1}$	$1.0X10^{3}$	$2.7X10^{4}$
U-230 (slow lung absorption) (a)(f)		$3.0X10^{1}$	$8.1X10^{2}$	$3.0X10^{-3}$	$8.1X10^{-2}$	$1.0X10^{3}$	$2.7X10^{4}$
U-232 (fast lung absorption) (d)		$4.0X10^{1}$	$1.1X10^{3}$	$1.0X10^{-2}$	$2.7X10^{-1}$	$8.3X10^{-1}$	$2.2X10^{1}$
U-232 (medium lung absorption) (e)		$4.0X10^{1}$	$1.1X10^{3}$	$7.0X10^{-3}$	$1.9X10^{-1}$	$8.3X10^{-1}$	$2.2X10^{1}$
U-232 (slow lung absorption) (f)		$1.0X10^{1}$	$2.7X10^{2}$	$1.0X10^{-3}$	$2.7X10^{-2}$	$8.3X10^{-1}$	$2.2X10^{1}$
U-233 (fast lung absorption) (d)		$4.0X10^{1}$	$1.1X10^{3}$	$9.0X10^{-2}$	2.4	$3.6X10^{-4}$	$9.7X10^{-3}$
U-233 (medium lung absorption) (e)		$4.0X10^{1}$	$1.1X10^{3}$	$2.0X10^{-2}$	$5.4X10^{-1}$	$3.6X10^{-4}$	$9.7X10^{-3}$
U-233 (slow lung absorption) (f)		$4.0X10^{1}$	$1.1X10^{3}$	$6.0X10^{-3}$	$1.6X10^{-1}$	$3.6X10^{-4}$	$9.7X10^{-3}$
U-234 (fast lung absorption) (d)		$4.0X10^{1}$	$1.1X10^{3}$	$9.0X10^{-2}$	2.4	$2.3X10^{-4}$	$6.2X10^{-3}$
U-234 (medium lung absorption) (e)		$4.0X10^{1}$	$1.1X10^{3}$	$2.0X10^{-2}$	$5.4X10^{-1}$	$2.3X10^{-4}$	$6.2X10^{-3}$
U-234 (slow lung absorption) (f)		$4.0X10^{1}$	$1.1X10^{3}$	$6.0X10^{-3}$	$1.6X10^{-1}$	$2.3X10^{-4}$	$6.2X10^{-3}$
U-235 (all lung absorption types) (a), (d), (e), (f)		Unlimited	Unlimited	Unlimited	Unlimited	$8.0X10^{-8}$	$2.2X10^{-6}$
U-236 (fast lung absorption) (d)		Unlimited	Unlimited	Unlimited	Unlimited	$2.4X10^{-6}$	$6.5X10^{-5}$
U-236 (medium lung absorption) (e)		$4.0X10^{1}$	$1.1X10^{3}$	$2.0X10^{-2}$	$5.4X10^{-1}$	$2.4X10^{-6}$	$6.5X10^{-5}$
U-236 (slow lung absorption) (f)		$4.0X10^{1}$	$1.1X10^{3}$	$6.0X10^{-3}$	$1.6X10^{-1}$	$2.4X10^{-6}$	$6.5X10^{-5}$
U-238 (all lung absorption types) (d), (e), (f)		Unlimited	Unlimited	Unlimited	Unlimited	$1.2X10^{-8}$	$3.4X10^{-7}$
U (nat)		Unlimited	Unlimited	Unlimited	Unlimited	$2.6X10^{-8}$	$7.1X10^{-7}$
U (enriched to 20% or less) (g)		Unlimited	Unlimited	Unlimited	Unlimited	See Table A-4	See Table A-4
U (dep)		Unlimited	Unlimited	Unlimited	Unlimited	See Table A-4	See Table A-3
V-48	Vanadium (23)	$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$6.3X10^{3}$	$1.7X10^{5}$
V-49		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$3.0X10^{2}$	$8.1X10^{3}$

Symbol of radionuclide	Element and atomic number	A1 (TBq)	A1 (Ci)[b]	A2 (TBq)	A2 (Ci)[b]	Specific activity (TBq/g)	Specific activity (Ci/g)
W-178 (a)	Tungsten (74)	9.0	$2.4X10^{2}$	5.0	$1.4X10^{2}$	$1.3X10^{3}$	$3.4X10^{4}$
W-181		$3.0X10^{1}$	$8.1X10^{2}$	$3.0X10^{1}$	$8.1X10^{2}$	$2.2X10^{2}$	$6.0X10^{3}$
W-185		$4.0X10^{1}$	$1.1X10^{3}$	$8.0X10^{-1}$	$2.2X10^{1}$	$3.5X10^{2}$	$9.4X10^{3}$
W-187		2.0	$5.4X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$2.6X10^{4}$	$7.0X10^{5}$
W-188 (a)		$4.0X10^{-1}$	$1.1X10^{1}$	$3.0X10^{-1}$	8.1	$3.7X10^{2}$	$1.0X10^{4}$
Xe-122 (a)	Xenon (54)	$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$4.8X10^{4}$	$1.3X10^{6}$
Xe-123		2.0	$5.4X10^{1}$	$7.0X10^{-1}$	$1.9X10^{1}$	$4.4X10^{5}$	$1.2X10^{7}$
Xe-127		4.0	$1.1X10^{2}$	2.0	$5.4X10^{1}$	$1.0X10^{3}$	$2.8X10^{4}$
Xe-131m		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$3.1X10^{3}$	$8.4X10^{4}$
Xe-133		$2.0X10^{1}$	$5.4X10^{2}$	$1.0X10^{1}$	$2.7X10^{2}$	$6.9X10^{3}$	$1.9X10^{5}$
Xe-135		3.0	$8.1X10^{1}$	2.0	$5.4X10^{1}$	$9.5X10^{4}$	$2.6X10^{6}$
Y-87 (a)	Yttrium (39)	1.0	$2.7X10^{1}$	1.0	$2.7X10^{1}$	$1.7X10^{4}$	$4.5X10^{5}$
Y-88		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$5.2X10^{2}$	$1.4X10^{4}$
Y-90		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$2.0X10^{4}$	$5.4X10^{5}$
Y-91		$6.0X10^{-1}$	$1.6X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$9.1X10^{2}$	$2.5X10^{4}$
Y-91m		2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$1.5X10^{6}$	$4.2X10^{7}$
Y-92		$2.0X10^{-1}$	5.4	$2.0X10^{-1}$	5.4	$3.6X10^{5}$	$9.6X10^{6}$
Y-93		$3.0X10^{-1}$	8.1	$3.0X10^{-1}$	8.1	$1.2X10^{5}$	$3.3X10^{6}$
Yb-169	Ytterbium (70)	4.0	$1.1X10^{2}$	1.0	$2.7X10^{1}$	$8.9X10^{2}$	$2.4X10^{4}$
Yb-175		$3.0X10^{1}$	$8.1X10^{2}$	$9.0X10^{-1}$	$2.4X10^{1}$	$6.6X10^{3}$	$1.8X10^{5}$
Zn-65	Zinc (30)	2.0	$5.4X10^{1}$	2.0	$5.4X10^{1}$	$3.0X10^{2}$	$8.2X10^{3}$
Zn-69		3.0	$8.1X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$1.8X10^{6}$	$4.9X10^{7}$
Zn-69m (a)		3.0	$8.1X10^{1}$	$6.0X10^{-1}$	$1.6X10^{1}$	$1.2X10^{5}$	$3.3X10^{6}$
Zr-88	Zirconium (40)	3.0	$8.1X10^{1}$	3.0	$8.1X10^{1}$	$6.6X10^{2}$	$1.8X10^{4}$
Zr-93		Unlimited	Unlimited	Unlimited	Unlimited	$9.3X10^{-5}$	$2.5X10^{-3}$
Zr-95 (a)		2.0	$5.4X10^{1}$	$8.0X10^{-1}$	$2.2X10^{1}$	$7.9X10^{2}$	$2.1X10^{4}$
Zr-97 (a)		$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$7.1X10^{4}$	$1.9X10^{6}$

(a)	A_1or A_2values include contributions from daughter nuclides with half-lives less than ten days, as listed in the following:	
	Mg-28	Al-28
	Ca-47	Sc-47
	Ti-44	Sc-44
	Fe-52	Mn-52m
	Fe-60	Co-60m
	Zn-69m	Zn-69
	Ge-68	Ga-68
	Rb-83	Kr-83m
	Sr-82	Rb-82
	Sr-90	Y-90
	Sr-91	Y-91m
	Sr-92	Y-92
	Y-87	Sr-87m
	Zr-95	Nb-95m
	Zr-97	Nb-97m, Nb-97
	Mo-99	Tc-99m
	Tc-95m	Tc-95
	Tc-96m	Tc-96
	Ru-103	Rh-103m
	Ru-106	Rh-106
	Pd-103	Rh-103m
	Ag-108m	Ag-108
	Ag-110m	Ag-110
	Cd-115	In-115m
	In-114m	In-114
	Sn-113	In-113m
	Sn-121m	Sn-121
	Sn-126	Sb-126m
	Te-127m	Te-127
	Te-129m	Te-129
	Te-131m	Te-131

	Te-132	I-132
	I-135	Xe-135m
	Xe-122	I-122
	Cs-137	Ba-137m
	Ba-131	Cs-131
	Ba-140	La-140
	Ce-144	Pr-144m, Pr-144
	Pm-148m	Pm-148
	Gd-146	Eu-146
	Dy-166	Ho-166
	Hf-172	Lu-172
	W-178	Ta-178
	W-188	Re-188
	Re-189	Os-189m
	Os-194	Ir-194
	Ir-189	Os-189m
	Pt-188	Ir-188
	Hg-194	Au-194
	Hg-195m	Hg-195
	Pb-210	Bi-210
	Pb-212	Bi-212, Tl-208, Po-212
	Bi-210m	Tl-206
	Bi-212	Tl-208, Po-212
	At-211	Po-211
	Rn-222	Po-218, Pb-214, At-218, Bi-214, Po-214
	Ra-223	Rn-219, Po-215, Pb-211, Bi-211, Po-211, Tl-207
	Ra-224	Rn-220, Po-216, Pb-212, Bi-212, Tl-208, Po-212
	Ra-225	Ac-225, Fr-221, At-217, Bi-213, Tl-209, Po-213, Pb-209
	Ra-226	Rn-222, Po-218, Pb-214, At-218, Bi-214, Po-214
	Ra-228	Ac-228
	Ac-225	Fr-221, At-217, Bi-213, Tl-209, Po-213, Pb-209
	Ac-227	Fr-223
	Th-228	Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tl-208, Po-212
	Th-234	Pa-234m, Pa-234
	Pa-230	Ac-226, Th-226, Fr-222, Ra-222, Rn-218, Po-214
	U-230	Th-226, Ra-222, Rn-218, Po-214
	U-235	Th-231
	Pu-241	U-237
	Pu-244	U-240, Np-240m
	Am-242m	Am-242, Np-238
	Am-243	Np-239
	Cm-247	Pu-243
	Bk-249	Am-245
	Cf-253	Cm-249
	Am-243	Np-239
	Cm-247	Pu-243
	Bk-249	Am-245
	Cf-253	Cm-249
(b)	The values of A_1 and A_2 in Curies (Ci) are approximate and for information only the regulatory standard units are terabecquerels (TBq).	
(c)	The activity of IR-192 in special form may be determined from a measurement of the rate of decay or a measurement of the radiation level at a prescribed distance from the source.	
(d)	These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.	
(e)	These values apply only to compounds of uranium that take the chemical form of UO_3, UF_4, UCI_4 and hexavalent compounds in both normal and accident conditions of transport.	
(f)	These values apply to all compounds of uranium other than those specified in notes (d) and (e) of this table.	
(g)	These values apply to unirradiated uranium only.	
(h)	A_2 = 0.74 TBq (20 Ci) for Mo-99 for domestic use.	

Table A-2.—Exempt Material Activity Concentrations and Exempt Consignment Activity Limits for Radionuclides

Symbol of radionuclide	Element and atomic number	Activity concentration for exempt material (Bq/g)	Activity concentration for exempt material (Ci/g)	Activity limit for exempt consignment (Bq)	Activity limit for exempt consignment (Ci)
Ac-225	Actinium (89)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Ac-227	-	$1.0X10^{-1}$	$2.7X10^{-12}$	$1.0X10^{3}$	$2.7X10^{-8}$
Ac-228	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ag-105	Silver (47)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ag-108m (b)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ag-110m	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ag-111	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Al-26	Aluminum (13)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$

Symbol of radionuclide	Element and atomic number	Activity concentration for exempt material (Bq/g)	Activity concentration for exempt material (Ci/g)	Activity limit for exempt consignment (Bq)	Activity limit for exempt consignment (Ci)
Am-241	Americium (95)	1.0	$2.7X10^{-11}$	$1.0X10^{4}$	$2.7X10^{-7}$
Am-242m (b)	-	1.0	$2.7X10^{-11}$	$1.0X10^{4}$	$2.7X10^{-7}$
Am-243 (b)	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
Ar-37	Argon (18)	$1.0X10^{6}$	$2.7X10^{-5}$	$1.0X10^{8}$	$2.7X10^{-3}$
Ar-39	-	$1.0X10^{7}$	$2.7X10^{-4}$	$1.0X10^{4}$	$2.7X10^{-7}$
Ar-41	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{9}$	$2.7X10^{-2}$
As-72	Arsenic (33)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
As-73	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
As-74	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
As-76	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
As-77	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
At-211	Astatine (85)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Au-193	Gold (79)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Au-194	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Au-195	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Au-198	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Au-199	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ba-131	Barium (56)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ba-133	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ba-133m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ba-140 (b)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Be-7	Beryllium (4)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Be-10	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{6}$	$2.7X10^{-5}$
Bi-205	Bismuth (83)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Bi-206	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Bi-207	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Bi-210	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Bi-210m	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Bi-212 (b)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Bk-247	Berkelium (97)	1.0	$2.7X10^{-11}$	$1.0X10^{4}$	$2.7X10^{-7}$
Bk-249	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Br-76	Bromine (35)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Br-77	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Br-82	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
C-11	Carbon (6)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
C-14	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Ca-41	Calcium (20)	$1.0X10^{5}$	$2.7X10^{-6}$	$1.0X10^{7}$	$2.7X10^{-4}$
Ca-45	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Ca-47	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Cd-109	Cadmium (48)	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{6}$	$2.7X10^{-5}$
Cd-113m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Cd-115	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Cd-115m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ce-139	Cerium (58)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ce-141	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Ce-143	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$

Symbol of radionuclide	Element and atomic number	Activity concentration for exempt material (Bq/g)	Activity concentration for exempt material (Ci/g)	Activity limit for exempt consignment (Bq)	Activity limit for exempt consignment (Ci)
Ce-144 (b)	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Cf-248	Californium (98)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Cf-249	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
Cf-250	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Cf-251	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
Cf-252	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Cf-253	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Cf-254	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
Cl-36	Chlorine (17)	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{6}$	$2.7X10^{-5}$
Cl-38	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Cm-240	Curium (96)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Cm-241	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Cm-242	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Cm-243	-	1.0	$2.7X10^{-11}$	$1.0X10^{4}$	$2.7X10^{-7}$
Cm-244	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Cm-245	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
Cm-246	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
Cm-247	-	1.0	$2.7X10^{-11}$	$1.0X10^{4}$	$2.7X10^{-7}$
Cm-248	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
Co-55	Cobalt (27)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Co-56	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Co-57	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Co-58	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Co-58m	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Co-60	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Cr-51	Chromium (24)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Cs-129	Cesium (55)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Cs-131	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Cs-132	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Cs-134	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Cs-134m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{5}$	$2.7X10^{-6}$
Cs-135	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Cs-136	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Cs-137 (b)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Cu-64	Copper (29)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Cu-67	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Dy-159	Dysprosium (66)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Dy-165	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Dy-166	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Er-169	Erbium (68)	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Er-171	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Eu-147	Europium (63)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Eu-148	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Eu-149	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Eu-150 (short lived)	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Eu-150 (long lived)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$

Symbol of radionuclide	Element and atomic number	Activity concentration for exempt material (Bq/g)	Activity concentration for exempt material (Ci/g)	Activity limit for exempt consignment (Bq)	Activity limit for exempt consignment (Ci)
Eu-152	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Eu-152m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Eu-154	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Eu-155	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Eu-156	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
F-18	Fluorine (9)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Fe-52	Iron (26)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Fe-55	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{6}$	$2.7X10^{-5}$
Fe-59	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Fe-60	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Ga-67	Gallium (31)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ga-68	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Ga-72	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Gd-146	Gadolinium (64)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Gd-148	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Gd-153	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Gd-159	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ge-68	Germanium (32)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Ge-71	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{8}$	$2.7X10^{-3}$
Ge-77	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Hf-172	Hafnium (72)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Hf-175	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Hf-181	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Hf-182	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Hg-194	Mercury (80)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Hg-195m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Hg-197	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Hg-197m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Hg-203	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Ho-166	Holmium (67)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{5}$	$2.7X10^{-6}$
Ho-166m	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
I-123	Iodine (53)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
I-124	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
I-125	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
I-126	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
I-129	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
I-131	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
I-132	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
I-133	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
I-134	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
I-135	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
In-111	Indium (49)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
In-113m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
In-114m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
In-115m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ir-189	Iridium (77)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$

Symbol of radionuclide	Element and atomic number	Activity concentration for exempt material (Bq/g)	Activity concentration for exempt material (Ci/g)	Activity limit for exempt consignment (Bq)	Activity limit for exempt consignment (Ci)
Ir-190	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ir-192	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Ir-194	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
K-40	Potassium (19)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
K-42	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
K-43	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Kr-79	Krypton (36)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{5}$	$2.7X10^{-6}$
Kr-81		$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Kr-85	-	$1.0X10^{5}$	$2.7X10^{-6}$	$1.0X10^{4}$	$2.7X10^{-7}$
Kr-85m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{10}$	$2.7X10^{-1}$
Kr-87	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{9}$	$2.7X10^{-2}$
La-137	Lanthanum (57)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
La-140	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Lu-172	Lutetium (71)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Lu-173	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Lu-174	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Lu-174m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Lu-177	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Mg-28	Magnesium (12)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Mn-52	Manganese (25)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Mn-53	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{9}$	$2.7X10^{-2}$
Mn-54	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Mn-56	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Mo-93	Molybdenum (42)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{8}$	$2.7X10^{-3}$
Mo-99	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
N-13	Nitrogen (7)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{9}$	$2.7X10^{-2}$
Na-22	Sodium (11)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Na-24	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Nb-93m	Niobium (41)	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Nb-94	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Nb-95	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Nb-97	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Nd-147	Neodymium (60)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Nd-149	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ni-59	Nickel (28)	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{8}$	$2.7X10^{-3}$
Ni-63	-	$1.0X10^{5}$	$2.7X10^{-6}$	$1.0X10^{8}$	$2.7X10^{-3}$
Ni-65	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Np-235	Neptunium (93)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Np-236 (short-lived)	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Np-236 (long-lived)	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Np-237 (b)	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
Np-239	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Os-185	Osmium (76)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Os-191	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Os-191m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Os-193	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$

Symbol of radionuclide	Element and atomic number	Activity concentration for exempt material (Bq/g)	Activity concentration for exempt material (Ci/g)	Activity limit for exempt consignment (Bq)	Activity limit for exempt consignment (Ci)
Os-194	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
P-32	Phosphorus (15)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{5}$	$2.7X10^{-6}$
P-33	-	$1.0X10^{5}$	$2.7X10^{-6}$	$1.0X10^{8}$	$2.7X10^{-3}$
Pa-230	Protactinium (91)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pa-231	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
Pa-233	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Pb-201	Lead (82)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pb-202	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pb-203	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pb-205	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Pb-210 (b)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Pb-212 (b)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Pd-103	Palladium (46)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{8}$	$2.7X10^{-3}$
Pd-107	-	$1.0X10^{5}$	$2.7X10^{-6}$	$1.0X10^{8}$	$2.7X10^{-3}$
Pd-109	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pm-143	Promethium (61)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pm-144	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pm-145	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Pm-147	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Pm-148m	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pm-149	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pm-151	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Po-210	Polonium (84)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Pr-142	Praseodymium (59)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Pr-143	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pt-188	Platinum (78)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pt-191	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pt-193	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Pt-193m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Pt-195m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pt-197	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pt-197m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Pu-236	Plutonium (94)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Pu-237	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Pu-238	-	1.0	$2.7X10^{-11}$	$1.0X10^{4}$	$2.7X10^{-7}$
Pu-239	-	1.0	$2.7X10^{-11}$	$1.0X10^{4}$	$2.7X10^{-7}$
Pu-240	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
Pu-241	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Pu-242	-	1.0	$2.7X10^{-11}$	$1.0X10^{4}$	$2.7X10^{-7}$
Pu-244	-	1.0	$2.7X10^{-11}$	$1.0X10^{4}$	$2.7X10^{-7}$
Ra-223 (b)	Radium (88)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Ra-224 (b)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Ra-225	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Ra-226 (b)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Ra-228 (b)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Rb-81	Rubidium (37)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$

Symbol of radionuclide	Element and atomic number	Activity concentration for exempt material (Bq/g)	Activity concentration for exempt material (Ci/g)	Activity limit for exempt consignment (Bq)	Activity limit for exempt consignment (Ci)
Rb-83	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Rb-84	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Rb-86	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Rb-87	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Rb (nat)	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Re-184	Rhenium (75)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Re-184m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Re-186	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Re-187	-	$1.0X10^{6}$	$2.7X10^{-5}$	$1.0X10^{9}$	$2.7X10^{-2}$
Re-188	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Re-189	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Re (nat)	-	$1.0X10^{6}$	$2.7X10^{-5}$	$1.0X10^{9}$	$2.7X10^{-2}$
Rh-99	Rhodium (45)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Rh-101	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Rh-102	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Rh-102m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Rh-103m	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{8}$	$2.7X10^{-3}$
Rh-105	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Rn-222 (b)	Radon (86)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{8}$	$2.7X10^{-3}$
Ru-97	Ruthenium (44)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Ru-103	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ru-105	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ru-106 (b)	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
S-35	Sulphur (16)	$1.0X10^{5}$	$2.7X10^{-6}$	$1.0X10^{8}$	$2.7X10^{-3}$
Sb-122	Antimony (51)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{4}$	$2.7X10^{-7}$
Sb-124	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Sb-125	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Sb-126	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Sc-44	Scandium (21)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Sc-46	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Sc-47	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Sc-48	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Se-75	Selenium (34)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Se-79	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Si-31	Silicon (14)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Si-32	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Sm-145	Samarium (62)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Sm-147	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Sm-151	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{8}$	$2.7X10^{-3}$
Sm-153	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Sn-113	Tin (50)	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Sn-117m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Sn-119m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Sn-121m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Sn-123	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Sn-125	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$

Symbol of radionuclide	Element and atomic number	Activity concentration for exempt material (Bq/g)	Activity concentration for exempt material (Ci/g)	Activity limit for exempt consignment (Bq)	Activity limit for exempt consignment (Ci)
Sn-126	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Sr-82	Strontium (38)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Sr-85	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Sr-85m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Sr-87m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Sr-89	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Sr-90 (b)	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{4}$	$2.7X10^{-7}$
Sr-91	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Sr-92	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
T(H-3)	Tritium (1)	$1.0X10^{6}$	$2.7X10^{-5}$	$1.0X10^{9}$	$2.7X10^{-2}$
Ta-178 (long-lived)	Tantalum (73)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Ta-179	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Ta-182	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Tb-157	Terbium (65)	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Tb-158	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Tb-160	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Tc-95m	Technetium (43)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Tc-96	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Tc-96m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Tc-97	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{8}$	$2.7X10^{-3}$
Tc-97m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Tc-98	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Tc-99	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
Tc-99m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Te-121	Tellurium (52)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Te-121m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Te-123m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Te-125m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Te-127	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Te-127m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Te-129	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Te-129m	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Te-131m	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Te-132	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
Th-227	Thorium (90)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Th-228 (b)	-	1.0	$2.7X10^{-11}$	$1.0X10^{4}$	$2.7X10^{-7}$
Th-229 (b)	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
Th-230	-	1.0	$2.7X10^{-11}$	$1.0X10^{4}$	$2.7X10^{-7}$
Th-231	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Th-232	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
Th-234 (b)	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{5}$	$2.7X10^{-6}$
Th (nat) (b)	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
Ti-44	Titanium (22)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
Tl-200	Thallium (81)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Tl-201	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Tl-202	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$

Symbol of radionuclide	Element and atomic number	Activity concentration for exempt material (Bq/g)	Activity concentration for exempt material (Ci/g)	Activity limit for exempt consignment (Bq)	Activity limit for exempt consignment (Ci)
Tl-204	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{4}$	$2.7X10^{-7}$
Tm-167	Thulium (69)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Tm-170	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Tm-171	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{8}$	$2.7X10^{-3}$
U-230 (fast lung absorption) (b), (d)	Uranium (92)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
U-230 (medium lung absorption) (e)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
U-230 (slow lung absorption) (f)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
U-232 (fast lung absorption) (b), (d)	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
U-232 (medium lung absorption) (e)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
U-232 (slow lung absorption) (f)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
U-233 (fast lung absorption) (d)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
U-233 (medium lung absorption) (e)	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
U-233 (slow lung absorption) (f)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
U-234 (fast lung absorption) (d)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
U-234 (medium lung absorption) (e)	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
U-234 (slow lung absorption) (f)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
U-235 (all lung absorption types) (b), (d), (e), (f)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
U-236 (fast lung absorption) (d)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
U-236 (medium lung absorption) (e)	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
U-236 (slow lung absorption) (f)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
U-238 (all lung absorption types) (b), (d), (e), (f)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{4}$	$2.7X10^{-7}$
U (nat) (b)	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
U (enriched to 20% or less) (g)	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
U (dep)	-	1.0	$2.7X10^{-11}$	$1.0X10^{3}$	$2.7X10^{-8}$
V-48	Vanadium (23)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
V-49	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
W-178	Tungsten (74)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
W-181	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
W-185	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
W-187	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
W-188	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Xe-122	Xenon (54)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{9}$	$2.7X10^{-2}$
Xe-123	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{9}$	$2.7X10^{-2}$
Xe-127	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{5}$	$2.7X10^{-6}$
Xe-131m	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{4}$	$2.7X10^{-7}$
Xe-133	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{4}$	$2.7X10^{-7}$
Xe-135	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{10}$	$2.7X10^{-1}$
Y-87	Yttrium (39)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Y-88	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Y-90	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{5}$	$2.7X10^{-6}$
Y-91	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{6}$	$2.7X10^{-5}$
Y-91m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Y-92	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Y-93	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
Yb-169	Ytterbium (70)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$

Symbol of radionuclide	Element and atomic number	Activity concentration for exempt material (Bq/g)	Activity concentration for exempt material (Ci/g)	Activity limit for exempt consignment (Bq)	Activity limit for exempt consignment (Ci)
Yb-175	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Zn-65	Zinc (30)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Zn-69	-	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{6}$	$2.7X10^{-5}$
Zn-69m	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Zr-88	Zirconium (40)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
Zr-93 (b)	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$
Zr-95	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
Zr-97 (b)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$

(a) (Reserved)
(b) Parent nuclides and their progeny included in secular equilibrium are listed as follows:

Sr-90	Y-90
Zr-93	Nb-93m
Zr-97	Nb-97
Ru-106	Rh-106
Ag-108m	Ag-108
Cs-137	Ba-137m
Ce-144	Pr-144
Ba-140	La-140
Bi-212	Tl-208 (0.36), Po-212 (0.64)
Pb-210	Bi-210, Po-210
Pb-212	Bi-212, Tl-208 (0.36), Po-212 (0.64)
Rn-222	Po-218, Pb-214, Bi-214, Po-214
Ra-223	Rn-219, Po-215, Pb-211, Bi-211, Tl-207
Ra-224	Rn-220, Po-216, Pb-212, Bi-212, Tl-208 (0.36), Po-212 (0.64)
Ra-226	Rn-222, Po-218, Pb-214, Bi-214, Po-214, Pb-210, Bi-210, Po-210
Ra-228	Ac-228
Th-228	Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tl-208 (0.36), Po-212 (0.64)
Th-229	Ra-225, Ac-225, Fr-221, At-217, Bi-213, Po-213, Pb-209
Th-nat	Ra-228, Ac-228, Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tl-208 (0.36), Po-212 (0.64)
Th-234	Pa-234m
U-230	Th-226, Ra-222, Rn-218, Po-214
U-232	Th-228, Ra-224, Rn-220, Po-216, Pb-212, Bi-212, Tl-208 (0.36), Po-212 (0.64)
U-235	Th-231
U-238	Th-234, Pa-234m
U-nat	Th-234, Pa-234m, U-234, Th-230, Ra-226, Rn-222, Po-218, Pb-214, Bi-214, Po-214, Pb-210, Bi-210, Po-210
Np-237	Pa-233
Am-242m	Am-242
Am-243	Np-239

(c) (Reserved)
(d) These values apply only to compounds of uranium that take the chemical form of UF_6, UO_2F_2 and $UO_2(NO_3)_2$ in both normal and accident conditions of transport.
(e) These values apply only to compounds of uranium that take the chemical form of UO_3, UF_4, UCl_4 and hexavalent compounds in both normal and accident conditions of transport.
(f) These values apply to all compounds of uranium other than those specified in notes (d) and (e) of this table.
(g) These values apply to unirradiated uranium only.

Table A-3. General Values for A1 and A2

Contents	A_1		A_2		Activity concentration for exempt material (Bq/g)	Activity concentration for exempt material (Ci/g)	Activity limits for exempt consignments (Bq)	Activity limits for exempt consignments (Ci)
	(TBq)	(Ci)	(TBq)	(Ci)				
Only beta or gamma emitting radionuclides are known to be present	1×10^{-1}	2.7×10^{0}	2×10^{-2}	5.4×10^{-1}	1×10^{1}	2.7×10^{-10}	1×10^{4}	2.7×10^{-7}
Alpha emitting nuclides, but no neutron emitters, are known to be present (a)	2×10^{-1}	5.4×10^{0}	9×10^{-5}	2.4×10^{-3}	1×10^{-1}	2.7×10^{-12}	1×10^{3}	2.7×10^{-8}
Neutron emitting nuclides are known to be present or no relevant data are available	1×10^{-3}	2.7×10^{-2}	9×10^{-5}	2.4×10^{-3}	1×10^{-1}	2.7×10^{-12}	1×10^{3}	2.7×10^{-8}

(a) If beta or gamma emitting nuclides are known to be present, the A_1 value of 0.1 TBq (2.7 Ci) should be used.

Table A-4.
Activity-Mass Relationships for Uranium

Uranium Enrichment[1] wt % U-235 present	Specific Activity	
	TBq/g	Ci/g
0.45	1.8×10^{-8}	5.0×10^{-7}
0.72	2.6×10^{-8}	7.1×10^{-7}
1	2.8×10^{-8}	7.6×10^{-7}
1.5	3.7×10^{-8}	1.0×10^{-6}
5	1.0×10^{-7}	2.7×10^{-6}
10	1.8×10^{-7}	4.8×10^{-6}
20	3.7×10^{-7}	1.0×10^{-5}
35	7.4×10^{-7}	2.0×10^{-5}
50	9.3×10^{-7}	2.5×10^{-5}
90	2.2×10^{-6}	5.8×10^{-5}
93	2.6×10^{-6}	7.0×10^{-5}
95	3.4×10^{-6}	9.1×10^{-5}

1 The figures for uranium include representative values for the activity of the uranium-234 that is concentrated during the enrichment process.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 17-01-034, § 246-231-200, filed 12/12/16, effective 1/12/17; WSR 16-13-054, § 246-231-200, filed 6/10/16, effective 7/11/16. Statutory Authority: RCW 70.98.050. WSR 14-09-017, § 246-231-200, filed 4/7/14, effective 5/8/14; WSR 11-03-068, § 246-231-200, filed 1/18/11, effective 2/18/11; WSR 08-09-093, § 246-231-200, filed 4/18/08, effective 5/19/08; WSR 99-15-105, § 246-231-200, filed 7/21/99, effective 8/21/99.]

OTS-4713.1

AMENDATORY SECTION (Amending WSR 22-11-063, filed 5/16/22, effective 6/16/22)

WAC 246-237-010 Definitions, abbreviations, and acronyms. The definitions, abbreviations, and acronyms in this section and in WAC 246-220-010 apply throughout this chapter unless the context clearly indicates otherwise:

(1) "Access control" means a system for allowing only approved individuals to have unescorted access to the security zone and for ensuring that all other individuals are subject to escorted access.

(2) "Act" means the Atomic Energy Act of 1954, including any amendments thereto.

(3) "Aggregated" means accessible by the breach of a single physical barrier that would allow access to radioactive material in any form, including any devices that contain the radioactive material, when the total activity equals or exceeds a Category 2 quantity of radioactive material.

(4) "Agreement state" means any state with which the Atomic Energy Commission or the NRC has entered into an effective agreement under subsection 274b of the act. Nonagreement state means any other state.

(5) "Approved individual" means an individual whom the licensee has determined to be trustworthy and reliable for unescorted access in accordance with WAC 246-237-021 through 246-237-033 and who has completed the training required by WAC 246-237-043(3).

(6) "Background investigation" means the investigation conducted by a licensee or applicant to support the determination of trustworthiness and reliability.

(7) "Becquerel (Bq)" means the SI unit of activity. One becquerel is equal to ((~~1~~)) one disintegration or transformation per second (s^{-1}).

(8) "By-product material" means:

(a) Any radioactive material (except special nuclear material) yielded in, or made radioactive by, exposure to the radiation incident to the process of producing or using special nuclear material;

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

(c)(i) Any discrete source of radium-226 that is produced, extracted, or converted after extraction, before, on, or after August 8, 2005, for use for a commercial, medical, or research activity; or

(ii) Any material that:

(A) Has been made radioactive by use of a particle accelerator; and

(B) Is produced, extracted, or converted after extraction, before, on, or after August 8, 2005, for use for a commercial, medical, or research activity; and

(d) Any discrete source of naturally occurring radioactive material, other than source material, that:

(i) The NRC, in consultation with the Administrator of the Environmental Protection Agency, the Secretary of Energy, the Secretary of Homeland Security, and the head of any other appropriate federal agency, determines would pose a threat similar to the threat posed by a discrete source of radium-226 to the public health and safety or the common defense and security; and

(ii) Before, on, or after August 8, 2005, is extracted or converted after extraction for use in a commercial, medical, or research activity.

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

(10) "Category 1 quantity of radioactive material" means a quantity of radioactive material meeting or exceeding the Category 1 threshold in Table 1 of WAC 246-237-900 Appendix A: Table 1—Category 1 and Category 2. This is determined by calculating the ratio of the total activity of each radionuclide to the Category 1 threshold for that radionuclide and adding the ratios together. If the sum equals or exceeds ((~~1~~)) one, the quantity would be considered a Category 1 quantity. Category 1 quantities of radioactive material do not include the radioactive material contained in any fuel assembly, subassembly, fuel rod, or fuel pellet.

(11) "Category 2 quantity of radioactive material" means a quantity of radioactive material meeting or exceeding the Category 2 threshold but less than the Category 1 threshold in Table 1 of WAC 246-237-900 Appendix A: Table 1—Category 1 and Category 2. This is determined by calculating the ratio of the total activity of each radionuclide to the Category 2 threshold for that radionuclide and adding the ratios together. If the sum equals or exceeds one, the quantity would be considered a Category 2 quantity. Category 2 quantities of radioactive material do not include the radioactive material contained in any fuel assembly, subassembly, fuel rod, or fuel pellet.

(12) "Curie" means a unit of quantity of radioactivity. One curie (Ci) is that quantity of radioactive material which decays at the rate of 3.7×10^{10} transformations per second (tps).

(13) "Diversion" means the unauthorized movement of radioactive material subject to this chapter to a location different from the material's authorized destination inside or outside of the site at which the material is used or stored.

(14) "Escorted access" means accompaniment while in a security zone by an approved individual who maintains continuous direct visual surveillance at all times over an individual who is not approved for unescorted access.

(15) "FBI" means the federal bureau of investigation.

(16) "Fingerprint orders" means the orders issued by the NRC or the legally binding requirements issued by agreement states that require fingerprints and criminal history records checks for individuals with unescorted access to Category 1 and Category 2 quantities of radioactive material or safeguards information-modified handling.

(17) "Government agency" means any executive department, commission, independent establishment, corporation, wholly or partly owned by the United States of America which is an instrumentality of the United States, or any board, bureau, division, service, office, officer, authority, administration, or other establishment in the executive branch of the government.

(18) "License" means, except where otherwise specified, a license for radioactive material issued pursuant to the regulations in chapters 246-232, 246-233, 246-235, 246-240, 246-243, or 246-244 WAC.

(19) "License issuing authority" means the licensing agency (the department, NRC, or an agreement state) that issued the license.

(20) "LLEA (local law enforcement agency)" means a public or private organization that has been approved by a federal, state, or local government to carry firearms and make arrests, and is authorized and has the capability to provide an armed response in the jurisdiction where the licensed Category 1 or Category 2 quantity of radioactive material is used, stored, or transported.

(21) "Lost or missing licensed material" means licensed material whose location is unknown. It includes material that has been shipped but has not reached its destination and whose location cannot be readily traced in the transportation system.

(22) "Mobile device" means a piece of equipment containing licensed radioactive material that is either mounted on wheels or casters, or otherwise equipped for moving without a need for disassembly or dismounting; or designed to be hand carried. Mobile devices do not include stationary equipment installed in a fixed location.

(23) "Movement control center" means an operations center that is remote from transport activity and that maintains position information on the movement of radioactive material, receives reports of attempted

attacks or thefts, provides a means for reporting these and other problems to appropriate agencies, and can request and coordinate appropriate aid.

(24) "No-later-than arrival time" means the date and time that the shipping licensee and receiving licensee have established as the time at which an investigation will be initiated if the shipment has not arrived at the receiving facility. The no-later-than arrival time may not be more than six hours after the estimated arrival time for shipments of Category 2 quantities of radioactive material.

(25) "NRC" or "commission" means the U.S. Nuclear Regulatory Commission.

(26) "Person" means any individual, corporation, partnership, firm, association, trust, estate, public or private institution, group, government agency other than NRC or the Department of Energy, any state or any political subdivision of, or any political entity within, a state, any foreign government or nation, or any political subdivision of any such government or nation, or other entity, and any legal successor, representative, agent or agency of the foregoing.

(27) "Reviewing official" means the individual who makes the trustworthiness and reliability determination of an individual to determine whether the individual may have, or continue to have, unescorted access to the Category 1 or Category 2 quantities of radioactive materials that are possessed by the licensee.

(28) "Sabotage" means deliberate damage, with malevolent intent, to a Category 1 or Category 2 quantity of radioactive material, a device that contains a Category 1 or Category 2 quantity of radioactive material, or the components of the security system.

(29) "Safe haven" means a readily recognizable and readily accessible site at which security is present or from which, in the event of an emergency, the transport crew can notify and wait for the local law enforcement authorities.

(30) "Security zone" means any temporary or permanent area determined and established by the licensee for the physical protection of Category 1 or Category 2 quantities of radioactive material.

(31) "State" means a state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands.

(32) "Telemetric position monitoring system" means a data transfer system that captures information by instrumentation or measuring devices about the location and status of a transport vehicle or package between the departure and destination locations.

(33) "Trustworthiness and reliability" are characteristics of an individual considered dependable in judgment, character, and performance, such that unescorted access to Category 1 or Category 2 quantities of radioactive material by that individual does not constitute an unreasonable risk to the public health and safety or security. A determination of trustworthiness and reliability for this purpose is based upon the results from a background investigation.

(34) "Unescorted access" means solitary access to an aggregated Category 1 or Category 2 quantity of radioactive material or the devices that contain the material.

(35) "United States" means when used in a geographical sense includes Puerto Rico and all territories and possessions of the United States.

[Statutory Authority: RCW 70A.388.040 and 70A.388.110. WSR 22-11-063, § 246-237-010, filed 5/16/22, effective 6/16/22. Statutory Authority:

RCW 70.98.050 and 70.98.110. WSR 16-13-079, § 246-237-010, filed 6/14/16, effective 7/15/16.]

AMENDATORY SECTION (Amending WSR 16-13-079, filed 6/14/16, effective 7/15/16)

WAC 246-237-011 Specific exemptions. (1) The department may, upon application of any interested person or upon its own initiative, grant such exemptions from the requirements of the rules in this chapter as it determines are authorized by law and will not endanger life or property or the common defense and security, and are otherwise in the public interest.

(2) Any licensee's activities are exempt from the requirements of WAC 246-237-021 through 246-237-057 to the extent that its activities are included in a security plan required by 10 C.F.R. Part 73.

(3) A licensee who possesses radioactive waste that contains Category 1 or Category 2 quantities of radioactive material is exempt from the requirements of WAC 246-237-021 through 246-237-081, except that any radioactive waste that contains discrete sources, ion-exchange resins, or activated material that weighs less than ((~~two thousand~~)) 2,000 kg (((~~four thousand four hundred nine~~)) 4,409 pounds) is not exempt from the requirements of this chapter. The licensee shall implement the following requirements to secure the radioactive waste:

(a) Use continuous physical barriers which allow access to the radioactive waste only through established access control points;

(b) Use a locked door or gate with monitored alarm at the access control point;

(c) Assess and respond to each actual or attempted unauthorized access to determine whether an actual or attempted theft, sabotage, or diversion occurred; and

(d) Immediately notify the LLEA and request an armed response from the LLEA upon determination that there was an actual or attempted theft, sabotage, or diversion of the radioactive waste that contains Category 1 or Category 2 quantities of radioactive material.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 16-13-079, § 246-237-011, filed 6/14/16, effective 7/15/16.]

AMENDATORY SECTION (Amending WSR 17-01-034, filed 12/12/16, effective 1/12/17)

WAC 246-237-025 Background investigations. (1) Initial investigation. Before allowing an individual unescorted access to Category 1 or Category 2 quantities of radioactive material or to the devices that contain the material, licensees shall complete a background investigation of the individual seeking unescorted access authorization. The scope of the investigation must encompass at least the seven years preceding the date of the background investigation or since the individual's ((~~eighteenth~~)) 18th birthday, whichever is shorter. The background investigation must include at a minimum:

(a) Fingerprinting and an FBI identification and criminal history records check in accordance with WAC 246-237-027;

(b) Verification of true identity. Licensees shall verify the true identity of the individual who is applying for unescorted access authorization to ensure that the applicant is who they claim to be. A licensee shall review official identification documents (driver's license; passport; government identification; certificate of birth issued by the state, province, or country of birth) and compare the documents to personal information data provided by the individual to identify any discrepancy in the information. Licensees shall document the type, expiration, and identification number of the identification document, or maintain a photocopy of identifying documents on file in accordance with WAC 246-237-031. Licensees shall certify in writing that the identification was properly reviewed, and shall maintain the certification and all related documents for review upon inspection;

(c) Employment history verification. Licensees shall complete an employment history verification, including military history. Licensees shall verify the individual's employment with each previous employer for the most recent seven years before the date of application;

(d) Verification of education. Licensees shall verify that the individual participated in the education process during the claimed period;

(e) Character and reputation determination. Licensees shall complete reference checks to determine the character and reputation of the individual who has applied for unescorted access authorization. Unless other references are not available, reference checks may not be conducted with any person who is known to be a close member of the individual's family including, but not limited to, the individual's spouse, parents, siblings, or children, or any individual who resides in the individual's permanent household. Reference checks under this chapter must be limited to whether the individual has been and continues to be trustworthy and reliable;

(f) The licensee shall also, to the extent possible, obtain independent information to corroborate that provided by the individual (for example, seek references not supplied by the individual); and

(g) If a previous employer, educational institution, or any other entity with which the individual claims to have been engaged fails to provide information or indicates an inability or unwillingness to provide information within a time frame deemed appropriate by the licensee but at least after ((~~ten~~)) 10 business days of the request or if the licensee is unable to reach the entity, the licensee shall document the refusal, unwillingness, or inability in the record of investigation; and attempt to obtain the information from an alternate source.

(2) Grandfathering.

(a) Individuals who have been determined to be trustworthy and reliable for unescorted access to Category 1 or Category 2 quantities of radioactive material under the fingerprint orders may continue to have unescorted access to Category 1 and Category 2 quantities of radioactive material without further investigation. These individuals shall be subject to the reinvestigation requirement.

(b) Individuals who have been determined to be trustworthy and reliable under the provisions of 10 C.F.R. Part 73 or the security orders for access to safeguards information, safeguards information-modified handling, or risk-significant material may have unescorted access to Category 1 and Category 2 quantities of radioactive material without further investigation. The licensee shall document that the individual was determined to be trustworthy and reliable under the provisions of 10 C.F.R. Part 73 or a security order. Security order,

in this context, refers to any order that was issued by the NRC that required fingerprints and an FBI criminal history records check for access to safeguards information, safeguards information-modified handling, or risk-significant material such as special nuclear material or large quantities of uranium hexafluoride. These individuals shall be subject to the reinvestigation requirement.

(3) Reinvestigations. Licensees shall conduct a reinvestigation every ((~~ten~~)) 10 years for any individual with unescorted access to Category 1 or Category 2 quantities of radioactive material. The reinvestigation shall consist of fingerprinting and an FBI identification and criminal history records check in accordance with WAC 246-237-027. The reinvestigations must be completed within ((~~ten~~)) 10 years of the date on which these elements were last completed.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 17-01-034, § 246-237-025, filed 12/12/16, effective 1/12/17; WSR 16-13-079, § 246-237-025, filed 6/14/16, effective 7/15/16.]

AMENDATORY SECTION (Amending WSR 16-13-079, filed 6/14/16, effective 7/15/16)

WAC 246-237-041 Security program. (1) Applicability.

(a) Each licensee who possesses an aggregated Category 1 or Category 2 quantity of radioactive material shall establish, implement, and maintain a security program in accordance with the requirements of this chapter.

(b) An applicant for a new license, and each licensee who would become newly subject to the requirements of this chapter, upon application for modification of its license, shall implement the requirements of this chapter, as appropriate, before taking possession of an aggregated Category 1 or Category 2 quantity of radioactive material.

(c) Any licensee who has not previously implemented the security orders or been subject to the provisions of WAC 246-237-041 through 246-237-057 shall provide written notification to the department at least ((~~ninety~~)) 90 days before aggregating radioactive material to a quantity that equals or exceeds the Category 2 threshold.

(2) General performance objective. Each licensee shall establish, implement, and maintain a security program designed to monitor and, without delay, detect, assess, and respond to an actual or attempted unauthorized access to Category 1 or Category 2 quantities of radioactive material.

(3) Program features. Each licensee's security program must include the program features, as appropriate, described in WAC 246-237-043 through 246-237-055.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 16-13-079, § 246-237-041, filed 6/14/16, effective 7/15/16.]

AMENDATORY SECTION (Amending WSR 16-13-079, filed 6/14/16, effective 7/15/16)

WAC 246-237-045 LLEA coordination. (1) A licensee subject to this chapter shall coordinate, to the extent practicable, with a LLEA

for responding to threats to the licensee's facility, including any necessary armed response. The information provided to the LLEA must include:

(a) A description of the facilities and the Category 1 and Category 2 quantities of radioactive materials along with a description of the licensee's security measures which have been implemented to comply with this chapter; and

(b) A notification that the licensee will request a timely armed response by the LLEA to any actual or attempted theft, sabotage, or diversion of Category 1 or Category 2 quantities of material.

(2) The licensee shall notify the department within three business days if:

(a) The LLEA has not responded to the request for coordination within ((~~sixty~~)) 60 days of the coordination request; or

(b) The LLEA notifies the licensee that the LLEA does not plan to participate in coordination activities.

(3) The licensee shall document its efforts to coordinate with the LLEA. The documentation must be kept for three years.

(4) The licensee shall coordinate with the LLEA at least every ((~~twelve~~)) 12 months, or when changes to the facility design or operation adversely affect the potential vulnerability of the licensee's material to theft, sabotage, or diversion.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 16-13-079, § 246-237-045, filed 6/14/16, effective 7/15/16.]

AMENDATORY SECTION (Amending WSR 16-13-079, filed 6/14/16, effective 7/15/16)

WAC 246-237-051 Maintenance and testing. (1) Each licensee subject to this chapter shall implement a maintenance and testing program to ensure that intrusion alarms, associated communication systems, and other physical components of the systems used to secure or detect unauthorized access to radioactive material are maintained in operable condition and are capable of performing their intended function when needed. The equipment relied on to meet the security requirements of this part must be inspected and tested for operability and performance at the manufacturer's suggested frequency. If there is no suggested manufacturer's suggested frequency, the testing must be performed at least annually, not to exceed ((~~twelve~~)) 12 months.

(2) The licensee shall maintain records of the maintenance and testing activities for three years.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 16-13-079, § 246-237-051, filed 6/14/16, effective 7/15/16.]

AMENDATORY SECTION (Amending WSR 16-13-079, filed 6/14/16, effective 7/15/16)

WAC 246-237-057 Reporting of events. (1) The licensee shall immediately notify the LLEA after determining that an unauthorized entry resulted in an actual or attempted theft, sabotage, or diversion of a Category 1 or Category 2 quantity of radioactive material. As soon as

possible after initiating a response, but not at the expense of causing delay or interfering with the LLEA response to the event, the licensee shall notify the department. In no case shall the notification to the department be later than four hours after the discovery of any attempted or actual theft, sabotage, or diversion.

(2) The licensee shall assess any suspicious activity related to possible theft, sabotage, or diversion of Category 1 or Category 2 quantities of radioactive material and notify the LLEA as appropriate. As soon as possible but not later than four hours after notifying the LLEA, the licensee shall notify the department.

(3) The initial telephonic notification required by subsection (1) of this section must be followed within a period of ((~~thirty~~)) 30 days by a written report submitted to the department. The report must include sufficient information for department analysis and evaluation, including identification of any necessary corrective actions to prevent future instances.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 16-13-079, § 246-237-057, filed 6/14/16, effective 7/15/16.]

AMENDATORY SECTION (Amending WSR 16-13-079, filed 6/14/16, effective 7/15/16)

WAC 246-237-079 Requirements for physical protection of Category 1 and Category 2 quantities of radioactive material during shipment. (1) Shipments by road.

(a) Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a Category 1 quantity of radioactive material shall:

(i) Ensure that movement control centers are established that maintain position information from a remote location. These control centers must monitor shipments ((~~twenty-four~~)) 24 hours a day, seven days a week, and have the ability to communicate immediately, in an emergency, with the appropriate law enforcement agencies.

(ii) Ensure that redundant communications are established that allow the transport to contact the escort vehicle (when used) and movement control center at all times. Redundant communications may not be subject to the same interference factors as the primary communication.

(iii) Ensure that shipments are continuously and actively monitored by a telemetric position monitoring system or an alternative tracking system reporting to a movement control center. A movement control center must provide positive confirmation of the location, status, and control over the shipment. The movement control center must be prepared to promptly implement preplanned procedures in response to deviations from the authorized route or a notification of actual, attempted, or suspicious activities related to the theft, loss, or diversion of a shipment. These procedures will include, but not be limited to, the identification of and contact information for the appropriate LLEA along the shipment route.

(iv) Provide an individual to accompany the driver for those highway shipments with a driving time period greater than the maximum number of allowable hours of service in a ((~~twenty-four~~)) 24 hour duty day as established by the Department of Transportation Federal Motor

Carrier Safety Administration. The accompanying individual may be another driver.

(v) Develop written normal and contingency procedures to address:

(A) Notifications to the communication center and law enforcement agencies;

(B) Communication protocols. Communication protocols must include a strategy for the use of authentication codes and duress codes and provisions for refueling or other stops, detours, and locations where communication is expected to be temporarily lost;

(C) Loss of communications; and

(D) Responses to an actual or attempted theft or diversion of a shipment.

(vi) Each licensee who makes arrangements for the shipment of Category 1 quantities of radioactive material shall ensure that drivers, accompanying personnel, and movement control center personnel have access to the normal and contingency procedures.

(b) Each licensee who transports Category 2 quantities of radioactive material shall maintain constant control or surveillance during transit and have the capability for immediate communication to summon appropriate response or assistance.

(c) Each licensee who delivers to a carrier for transport, in a single shipment, a Category 2 quantity of radioactive material shall:

(i) Use carriers who have established package tracking systems. An established package tracking system is a documented, proven, and reliable system routinely used to transport objects of value. In order for a package tracking system to maintain constant control or surveillance, the package tracking system must allow the shipper or transporter to identify when and where the package was last and when it should arrive at the next point of control.

(ii) Use carriers who maintain constant control or surveillance during transit and have the capability for immediate communication to summon appropriate response or assistance; and

(iii) Use carriers who have established tracking systems that require an authorized signature prior to releasing the package for delivery or return.

(2) Shipments by rail.

(a) Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a Category 1 quantity of radioactive material shall:

(i) Ensure that rail shipments are monitored by a telemetric position monitoring system or an alternative tracking system reporting to the licensee, third-party, or railroad communications center. The communications center shall provide positive confirmation of the location of the shipment and its status. The communications center shall implement preplanned procedures in response to deviations from the authorized route or to a notification of actual, attempted, or suspicious activities related to the theft or diversion of a shipment. These procedures will include, but not be limited to, the identification of and contact information for the appropriate LLEA along the shipment route.

(ii) Ensure that periodic reports to the communications center are made at preset intervals.

(b) Each licensee who transports, or delivers to a carrier for transport, in a single shipment, a Category 2 quantity of radioactive material shall:

(i) Use carriers who have established package tracking systems. An established package tracking system is a documented, proven, and

reliable system routinely used to transport objects of value. In order for a package tracking system to maintain constant control or surveillance, the package tracking system must allow the shipper or transporter to identify when and where the package was last and when it should arrive at the next point of control.

(ii) Use carriers who maintain constant control or surveillance during transit and have the capability for immediate communication to summon appropriate response or assistance; and

(iii) Use carriers who have established tracking systems that require an authorized signature prior to releasing the package for delivery or return.

(3) Investigations. Each licensee who makes arrangements for the shipment of Category 1 quantities of radioactive material shall immediately conduct an investigation upon discovery that a Category 1 shipment is lost or missing. Each licensee who makes arrangements for the shipment of Category 2 quantities of radioactive material shall immediately conduct an investigation, in coordination with the receiving licensee, of any shipment that has not arrived by the designated no-later-than arrival time.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 16-13-079, § 246-237-079, filed 6/14/16, effective 7/15/16.]

AMENDATORY SECTION (Amending WSR 16-13-079, filed 6/14/16, effective 7/15/16)

WAC 246-237-081 Reporting requirements. (1) The shipping licensee shall notify the appropriate LLEA and the department within one hour of its determination that a shipment of Category 1 quantities of radioactive material is lost or missing. The appropriate LLEA would be the law enforcement agency in the area of the shipment's last confirmed location. During the investigation required by WAC 246-237-079(3), the shipping licensee will provide agreed upon updates to the department on the status of the investigation.

(2) The shipping licensee shall notify the department within four hours of its determination that a shipment of Category 2 quantities of radioactive material is lost or missing. If, after ((~~twenty-four~~)) 24 hours of the determination that the shipment is lost or missing, the radioactive material has not been located and secured, the licensee shall immediately notify the department.

(3) The shipping licensee shall notify the designated LLEA along the shipment route as soon as possible upon discovery of any actual or attempted theft or diversion of a shipment or suspicious activities related to the theft or diversion of a shipment of a Category 1 quantity of radioactive material. As soon as possible after notifying the LLEA, the licensee shall notify the department upon discovery of any actual or attempted theft or diversion of a shipment, or any suspicious activity related to the shipment of Category 1 radioactive material.

(4) The shipping licensee shall notify the department as soon as possible upon discovery of any actual or attempted theft or diversion of a shipment, or any suspicious activity related to the shipment, of a Category 2 quantity of radioactive material.

(5) The shipping licensee shall notify the department and the LLEA as soon as possible upon recovery of any lost or missing Category 1 quantities of radioactive material.

(6) The shipping licensee shall notify the department as soon as possible upon recovery of any lost or missing Category 2 quantities of radioactive material.

(7) The initial telephonic notification required by subsections (1) through (4) of this section must be followed within a period of ((~~thirty~~)) 30 days by a written report submitted to the department by an appropriate method. A written report is not required for notifications of suspicious activities required by subsections (3) and (4) of this section. In addition, the licensee shall provide a copy of the written report to the department. The report must set forth the following information:

(a) A description of the licensed material involved, including kind, quantity, chemical and physical form;

(b) A description of the circumstances under which the loss or theft occurred;

(c) A statement of disposition, or probable disposition, of the licensed material involved;

(d) Actions that have been taken, or will be taken, to recover the material; and

(e) Procedures or measures that have been, or will be, adopted to ensure against a recurrence of the loss or theft of licensed material.

(8) Subsequent to filing the written report, the licensee shall also report any additional substantive information about the loss or theft to the department within ((~~thirty~~)) 30 days after the licensee learns of such information.

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 16-13-079, § 246-237-081, filed 6/14/16, effective 7/15/16.]

AMENDATORY SECTION (Amending WSR 16-13-079, filed 6/14/16, effective 7/15/16)

WAC 246-237-900 Appendix A: Table 1—Category 1 and Category 2 thresholds. Terabecquerel (TBq) values are the regulatory standard. The curie (Ci) values specified are obtained by converting from the TBq value. The curie values provided for practical usefulness only.

Radioactive material	Category 1 (TBq)	Category 1 (Ci)	Category 2 (TBq)	Category 2 (Ci)
Americium-241	60	1,620	0.6	16.2
Americium-241/Be	60	1,620	0.6	16.2
Californium-252	20	540	0.2	5.40
Cobalt-60	30	810	0.3	8.10
Curium-244	50	1,350	0.5	13.5
Cesium-137	100	2,700	1	27.0
Gadolinium-153	1,000	27,000	10	270
Iridium-192	80	2,160	0.8	21.6
Plutonium-238	60	1,620	0.6	16.2
Plutonium-239/Be	60	1,620	0.6	16.2
Promethium-147	40,000	1,080,000	400	10,800

Radioactive material	Category 1 (TBq)	Category 1 (Ci)	Category 2 (TBq)	Category 2 (Ci)
Radium-226	40	1,080	0.4	10.8
Selenium-75	200	5,400	2	54.0
Strontium-90	1,000	27,000	10	270
Thulium-170	20,000	540,000	200	5,400
Ytterbium-169	300	8,100	3	81.0

Note: Calculations Concerning Multiple Sources or Multiple Radionuclides

The "sum of fractions" methodology for evaluating combinations of multiple sources or multiple radionuclides is to be used in determining whether a location meets or exceeds the threshold and is thus subject to the requirements of this chapter.

I. If multiple sources of the same radionuclide or multiple radionuclides are aggregated at a location, the sum of the ratios of the total activity of each of the radionuclides must be determined to verify whether the activity at the location is less than the Category 1 or Category 2 thresholds of Table 1, as appropriate. If the calculated sum of the ratios, using the equation below, is greater than or equal to 1.0, then the applicable requirements of this chapter apply.

II. First determine the total activity for each radionuclide from Table 1. This is done by adding the activity of each individual source, material in any device, and any loose or bulk material that contains the radionuclide. Then use the equation below to calculate the sum of the ratios by inserting the total activity of the applicable radionuclides from Table 1 in the numerator of the equation and the corresponding threshold activity from Table 1 in the denominator of the equation. Calculations must be performed in metric values (TBq) and the numerator and denominator values must be in the same units.

R_1= total activity for radionuclide 1
R_2= total activity for radionuclide 2
R_N= total activity for radionuclide n
AR_1= activity threshold for radionuclide 1
AR_2= activity threshold for radionuclide 2
AR_N= activity threshold for radionuclide n

(($\sum_{1}^{n}\left[\frac{R_1}{AR_1}+\frac{R_2}{AR_2}+\frac{R_n}{AR_n}\right] \geq 1.0$))

$$\frac{R_1}{AR_1}+\frac{R_2}{AR_2}+\cdots+\frac{R_n}{AR_n} \geq 1.0$$

[Statutory Authority: RCW 70.98.050 and 70.98.110. WSR 16-13-079, § 246-237-900, filed 6/14/16, effective 7/15/16.]

OTS-4714.1

AMENDATORY SECTION (Amending WSR 22-19-084, filed 9/20/22, effective 10/21/22)

WAC 246-240-010 Definitions, abbreviations, and acronyms. The definitions, abbreviations, and acronyms in this section and in WAC 246-220-010 apply throughout this chapter unless the context clearly indicates otherwise.

(1) "Address of use" means the building or buildings that are identified on the license and where radioactive material may be received, prepared, used, or stored.

(2) "Area of use" means a portion of an address of use that has been set aside for the purpose of receiving, preparing, using, or storing radioactive material.

(3) "Associate radiation safety officer" means an individual who:

(a) Meets the requirements in WAC 246-240-069 and 246-240-081; and

(b) Is currently identified as an associate radiation safety officer for the types of use of radioactive material for which the individual has been assigned duties and tasks by the radiation safety officer on:

(i) A specific medical use license issued by the department, NRC, or an agreement state; or

(ii) A medical use permit issued by an NRC master material licensee.

(4) "Attestation" means written certification under oath.

(5) "Authorized medical physicist" means an individual who:

(a) Meets the requirements in WAC 246-240-072 and 246-240-081; or

(b) Is identified as an authorized medical physicist or teletherapy physicist on:

(i) A specific medical use license issued by the department, NRC, or an agreement state;

(ii) A medical use permit issued by an NRC master material licensee;

(iii) A permit issued by an NRC or agreement state broad scope medical use licensee; or

(iv) A permit issued by an NRC master material license broad scope medical use permittee.

(6) "Authorized nuclear pharmacist" means a pharmacist who:

(a) Meets the requirements in WAC 246-240-075 and 246-240-081; or

(b) Is identified as an authorized nuclear pharmacist on:

(i) A specific license issued by the department, NRC, or an agreement state, that authorizes medical use or the practice of nuclear pharmacy;

(ii) A permit issued by an NRC master material licensee that authorizes medical use or the practice of nuclear pharmacy;

(iii) A permit issued by an NRC or agreement state broad scope medical use licensee that authorizes medical use or the practice of nuclear pharmacy; or

(iv) A permit issued by an NRC master material license broad scope medical use permittee that authorizes medical use or the practice of nuclear pharmacy; or

(c) Is identified as an authorized nuclear pharmacist by a commercial nuclear pharmacy that has been authorized to identify authorized nuclear pharmacists; or

(d) Is designated as an authorized nuclear pharmacist in accordance with WAC 246-235-100(2).

(7) "Authorized user" means a physician, dentist, or podiatrist who:

(a) Meets the requirements in WAC 246-240-081 and 246-240-154, 246-240-163, 246-240-210, 246-240-213, 246-240-216, 246-240-278, 246-240-301, or 246-240-399; or

(b) Is identified as an authorized user on:

(i) A department, NRC, or agreement state license that authorizes the medical use of radioactive material; or

(ii) A permit issued by an NRC master material licensee that is authorized to permit the medical use of radioactive material; or

(iii) A permit issued by a department, NRC, or agreement state specific licensee of broad scope that is authorized to permit the medical use of radioactive material; or

(iv) A permit issued by an NRC master material license broad scope permittee that is authorized to permit the medical use of radioactive material.

(8) "Brachytherapy" means a method of radiation therapy in which sources are used to deliver a radiation dose at a distance of up to a few centimeters by surface, intracavitary, intraluminal, or interstitial application.

(9) "Brachytherapy source" means a radioactive source or a manufacturer-assembled source train or a combination of these sources that is designed to deliver a therapeutic dose within a distance of a few centimeters.

(10) "Client's address" means the area of use or a temporary job site for the purpose of providing mobile medical service in accordance with WAC 246-240-125.

(11) "Cyclotron" means a particle accelerator in which the charged particles travel in an outward spiral or circular path. A cyclotron accelerates charged particles at energies usually in excess of 10 mega-electron volts and is commonly used for production of short half-life radionuclides for medical use.

(12) "Dedicated check source" means a radioactive source that is used to assure the constant operation of a radiation detection or measurement device over several months or years.

(13) "Dentist" means an individual licensed by a state or territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice dentistry.

(14) "FDA" means the U.S. Food and Drug Administration.

(15) "High dose-rate remote afterloader" means a brachytherapy device that remotely delivers a dose rate in excess of 12 gray (1200 rads) per hour at the point or surface where the dose is prescribed.

(16) "Low dose-rate remote afterloader" means a brachytherapy device that remotely delivers a dose rate of less than or equal to two gray (200 rads) per hour at the point or surface where the dose is prescribed.

(17) "Management" means the chief executive officer or other individual having the authority to manage, direct, or administer the licensee's activities, or that person's delegate or delegates.

(18) "Manual brachytherapy" means a type of brachytherapy in which the brachytherapy sources (e.g., seeds, ribbons) are manually placed topically on or inserted either into the body cavities that are in close proximity to a treatment site or directly into the tissue volume.

(19) "Medical event" means an event that meets the criteria in WAC 246-240-651.

(20) "Medical institution" means an organization in which more than one medical discipline is practiced.

(21) "Medical use" means the intentional internal or external administration of radioactive material or the radiation from radioactive material to patients or human research subjects under the supervision of an authorized user.

(22) "Medium dose-rate remote afterloader" means a brachytherapy device that remotely delivers a dose rate of greater than two gray (200 rads), but less than or equal to 12 grays (1200 rads) per hour at the point or surface where the dose is prescribed.

(23) "Mobile medical service" means the transportation of radioactive material to and its medical use at the client's address.

(24) "Ophthalmic physicist" means an individual who:

(a) Meets the requirements in WAC 246-240-272 (1)(b) and 246-240-081; and

(b) Is identified as an ophthalmic physicist on a:

(i) Specific medical use license issued by the NRC or an agreement state;

(ii) Permit issued by an NRC or agreement state broad scope medical use licensee;

(iii) Medical use permit issued by an NRC master material licensee; or

(iv) Permit issued by an NRC master material licensee broad scope medical use permittee.

(25) "Output" means the exposure rate, dose rate, or a quantity related in a known manner to these rates from a brachytherapy source or a teletherapy, remote afterloader, or gamma stereotactic radiosurgery unit for a specified set of exposure conditions.

(26) "Patient intervention" means actions by the patient or human research subject, whether intentional or unintentional, such as dislodging or removing treatment devices or prematurely terminating the administration.

(27) "Podiatrist" means an individual licensed by a state or territory of the United States, the District of Columbia, or the Commonwealth of Puerto Rico to practice podiatry.

(28) "Positron emission tomography (PET) radionuclide production facility" means a facility operating an accelerator for the purpose of producing positron emission tomography radionuclides.

(29) "Preceptor" means an individual who provides, directs, or verifies training and experience required for an individual to become an authorized user, an authorized medical physicist, an authorized nuclear pharmacist, an authorized radiation safety officer, or an associate radiation safety officer.

(30) "Prescribed dosage" means the specified activity or range of activity of unsealed radioactive material as documented:

(a) In a written directive; or

(b) In accordance with the directions of the authorized user for procedures performed under WAC 246-240-151 and 246-240-157.

(31) "Prescribed dose" means:

(a) For gamma stereotactic radiosurgery, the total dose as documented in the written directive;

(b) For teletherapy, the total dose and dose per fraction as documented in the written directive;

(c) For manual brachytherapy, either the total source strength and exposure time or the total dose, as documented in the written directive; or

(d) For remote brachytherapy afterloaders, the total dose and dose per fraction as documented in the written directive.

(32) "Pulsed dose-rate remote afterloader" means a special type of remote afterloading brachytherapy device that uses a single source capable of delivering dose rates in the "high dose-rate" range, but:

(a) Is approximately ((~~one-tenth~~)) 1/10th of the activity of typical high dose-rate remote afterloader sources; and

(b) Is used to simulate the radiobiology of a low dose-rate treatment by inserting the source for a given fraction of each hour.

(33) "Sealed source and device registry" means the national registry that contains all the registration certificates, generated by NRC and the agreement states, that summarize the radiation safety information for the sealed sources and devices and describe the licensing and use conditions approved for the product.

(34) "Stereotactic radiosurgery" means the use of external radiation in conjunction with a stereotactic guidance device to very precisely deliver a therapeutic dose to a tissue volume.

(35) "Structured educational program" means an educational program designed to impart particular knowledge and practical education through interrelated studies and supervised training.

(36) "Teletherapy" means a method of radiation therapy in which collimated gamma rays are delivered at a distance from the patient or human research subject.

(37) "Temporary job site" means a location where mobile medical services are conducted at other than those fixed locations of use authorized by the license.

(38) "Therapeutic dosage" means a dosage of unsealed radioactive material that is intended to deliver a radiation dose to a patient or human research subject for palliative or curative treatment.

(39) "Therapeutic dose" means a radiation dose delivered from a source containing radioactive material to a patient or human research subject for palliative or curative treatment.

(40) "Treatment site" means the anatomical description of the tissue intended to receive a radiation dose, as described in a written directive.

(41) "Type of use" means use of radioactive material under WAC 246-240-151, 246-240-157, 246-240-201, 246-240-251, 246-240-301, 246-240-351, or 246-240-501.

(42) "Unit dosage" means a dosage prepared for medical use for administration as a single dosage to a patient or human research subject without any further manipulation of the dosage after it is initially prepared.

(43) "Written directive" means an authorized user's written order for the administration of radioactive material or radiation from radioactive material to a specific patient or human research subject, as specified in WAC 246-240-060.

[Statutory Authority: RCW 70A.388.040 and 70A.388.110. WSR 22-19-084, § 246-240-010, filed 9/20/22, effective 10/21/22. Statutory Authority: RCW 70.98.050. WSR 13-11-021, § 246-240-010, filed 5/7/13, effective 6/7/13; WSR 11-03-068, § 246-240-010, filed 1/18/11, effective 2/18/11. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR 09-06-003, § 246-240-010, filed 2/18/09, effective 3/21/09. Statutory Authority: RCW 70.98.050. WSR 07-14-131, § 246-240-010, filed 7/3/07, effective 8/3/07; WSR 06-05-019, § 246-240-010, filed 2/6/06, effective 3/9/06; WSR 98-13-037, § 246-240-010, filed 6/8/98, effective 7/9/98. Statutory Authority: RCW 70.98.050 and 70.98.080. WSR

92-06-008 (Order 245), § 246-240-010, filed 2/21/92, effective 3/23/92.]

AMENDATORY SECTION (Amending WSR 22-19-084, filed 9/20/22, effective 10/21/22)

WAC 246-240-075 Training for an authorized nuclear pharmacist. Except as provided in WAC 246-240-078, the licensee shall require the authorized nuclear pharmacist to be a pharmacist who:

(1) Is certified by a specialty board whose certification process has been recognized by the department, NRC, or an agreement state. The names of board certifications that have been recognized by the department, NRC, or an agreement state are posted on the NRC's medical uses licensee toolkit web page. To have its certification process recognized, a specialty board shall require all candidates for certification to:

(a) Have graduated from a pharmacy program accredited by the ((~~American~~)) Accreditation Council ((~~on Pharmaceutical~~)) for Pharmacy Education (ACPE) or have passed the Foreign Pharmacy Graduate Examination Committee (FPGEC) examination;

(b) Hold a current, active license to practice pharmacy;

(c) Provide evidence of having acquired at least 4,000 hours of training/experience in nuclear pharmacy practice. Academic training may be substituted for no more than 2,000 hours of the required training and experience; and

(d) Pass an examination in nuclear pharmacy administered by diplomates of the specialty board, which assesses knowledge and competency in procurement, compounding, quality assurance, dispensing, distribution, health and safety, radiation safety, provision of information and consultation, monitoring patient outcomes, research and development; or

(2)(a) Has completed 700 hours in a structured educational program consisting of both:

(i) Two hundred hours of classroom and laboratory training in the following areas:

(A) Radiation physics and instrumentation;

(B) Radiation protection;

(C) Mathematics pertaining to the use and measurement of radioactivity;

(D) Chemistry of radioactive material for medical use; and

(E) Radiation biology; and

(ii) Supervised practical experience in a nuclear pharmacy involving:

(A) Shipping, receiving, and performing related radiation surveys;

(B) Using and performing checks for proper operation of instruments used to determine the activity of dosages, survey meters, and, if appropriate, instruments used to measure alpha-or beta-emitting radionuclides;

(C) Calculating, assaying, and safely preparing dosages for patients or human research subjects;

(D) Using administrative controls to avoid medical events in the administration of radioactive material; and

(E) Using procedures to prevent or minimize radioactive contamination and using proper decontamination procedures; and

(b) Has obtained written attestation, signed by a preceptor authorized nuclear pharmacist, that the individual has satisfactorily completed the requirements in (a) of this subsection and is able to independently fulfill the radiation safety-related duties as an authorized nuclear pharmacist.

[Statutory Authority: RCW 70A.388.040 and 70A.388.110. WSR 22-19-084, § 246-240-075, filed 9/20/22, effective 10/21/22. Statutory Authority: RCW 70.98.050. WSR 13-11-021, § 246-240-075, filed 5/7/13, effective 6/7/13; WSR 11-03-068, § 246-240-075, filed 1/18/11, effective 2/18/11; WSR 06-05-019, § 246-240-075, filed 2/6/06, effective 3/9/06.]

AMENDATORY SECTION (Amending WSR 22-19-084, filed 9/20/22, effective 10/21/22)

WAC 246-240-078 Training for experienced radiation safety officer, teletherapy or medical physicist, authorized medical physicist, authorized user, nuclear pharmacist, and authorized nuclear pharmacist. (1)(a) An individual identified on a department, NRC, or an agreement state license; or a permit issued by a department, NRC, or an agreement state broad scope licensee or master material license permit; or by a master material license permittee of broad scope as a radiation safety officer, a teletherapy or medical physicist, an authorized medical physicist, a nuclear pharmacist or authorized nuclear pharmacist on or before January 14, 2019, need not comply with the training requirements of WAC 246-240-069, 246-240-072, or 246-240-075, respectively except the radiation safety officers and authorized medical physicists identified in this subsection must meet the training requirements in WAC 246-240-069(4) or 246-240-072(3), as appropriate, for any material or uses for which they were not authorized prior to this date.

(b) Any individual certified by the American Board of Health Physics in Comprehensive Health Physics; American Board of Radiology; American Board of Nuclear Medicine; American Board of Science in Nuclear Medicine; Board of Pharmaceutical Specialties in Nuclear Pharmacy; American Board of Medical Physics in radiation oncology physics; Royal College of Physicians and Surgeons of Canada in nuclear medicine; American Osteopathic Board of Radiology; or American Osteopathic Board of Nuclear Medicine on or before October 24, 2005, need not comply with the training requirements of WAC 246-240-069 to be identified as a radiation safety officer or as an associate radiation safety officer on a department, NRC, or an agreement state license or NRC master material license permit for those materials and uses that these individuals performed on or before October 24, 2005.

(c) Any individual certified by the American Board of Radiology in therapeutic radiological physics, Roentgen ray and gamma ray physics, X-ray and radium physics, or radiological physics, or certified by the American Board of Medical Physics in radiation oncology physics, on or before October 24, 2005, need not comply with the training requirements for an authorized medical physicist described in WAC 246-240-072, for those materials and uses that these individuals performed on or before October 24, 2005.

(d) A radiation safety officer, a medical physicist, or a nuclear pharmacist, who used only accelerator-produced radioactive materials,

discrete sources of radium-226, or both, for medical uses or in the practice of nuclear pharmacy at a government agency or federally recognized Indian tribe before November 30, 2007, or at all other locations of use before August 8, 2009, or an earlier date as noticed by the NRC, need not comply with the training requirements of WAC 246-240-069, 246-240-072 or 246-240-075, respectively, when performing the same uses. A nuclear pharmacist, who prepared only radioactive drugs containing accelerator-produced radioactive materials, or a medical physicist, who used only accelerator-produced radioactive materials, at the locations and during the time period identified in this subsection, qualifies as an authorized nuclear pharmacist or an authorized medical physicist, respectively, for those materials and uses performed before these dates, for the purposes of this chapter.

(2)(a) Physicians, dentists, or podiatrists identified as authorized users for the medical use of radioactive material on a license issued by the department, NRC, or an agreement state, a permit issued by an NRC master material license, a permit issued by a department, NRC, or an agreement state broad scope licensee, or permit issued by an NRC master material license broad scope permittee on or before January 14, 2019, who perform only those medical uses for which they were authorized on or before that date need not comply with the training requirements of WAC 246-240-151 through 246-240-399.

(b) Physicians, dentists, or podiatrists not identified as authorized users for the medical use of radioactive material on a license issued by the department, NRC, or an agreement state, a permit issued by an NRC master material licensee, a permit issued by the department, NRC, or an agreement state broad scope licensee, or a permit issued in accordance with ((~~an NRC~~)) a commission master material broad scope license on or before October 24, 2005, need not comply with the training requirements of WAC 246-240-151 through 246-240-399 for those materials and uses that these individuals performed on or before October 24, 2005, as follows:

(i) For uses authorized under WAC 246-240-151 or 246-240-157, or oral administration of sodium iodide I-131 requiring a written directive for imaging and localization purposes, a physician who was certified on or before October 24, 2005, in nuclear medicine by the American Board of Nuclear Medicine; diagnostic radiology by the American Board of Radiology; diagnostic radiology or radiology by the American Osteopathic Board of Radiology; nuclear medicine by the Royal College of Physicians and Surgeons of Canada; or American Osteopathic Board of Nuclear Medicine in nuclear medicine;

(ii) For uses authorized under WAC 246-240-201, a physician who was certified on or before October 24, 2005, by the American Board of Nuclear Medicine; the American Board of Radiology in radiology, therapeutic radiology, or radiation oncology; nuclear medicine by the Royal College of Physicians and Surgeons of Canada; or the American Osteopathic Board of Radiology after 1984;

(iii) For uses authorized under WAC 246-240-251 or 246-240-351, a physician who was certified on or before October 24, 2005, in radiology, therapeutic radiology or radiation oncology by the American Board of Radiology; radiation oncology by the American Osteopathic Board of Radiology; radiology, with specialization in radiotherapy, as a British "Fellow of the Faculty of Radiology" or "Fellow of the Royal College of Radiology"; or therapeutic radiology by the Canadian Royal College of Physicians and Surgeons; and

(iv) For uses authorized under WAC 246-240-301, a physician who was certified on or before October 24, 2005, in radiology, diagnostic

radiology, therapeutic radiology, or radiation oncology by the American Board of Radiology; nuclear medicine by the American Board of Nuclear Medicine; diagnostic radiology or radiology by the American Osteopathic Board of Radiology; or nuclear medicine by the Royal College of Physicians and Surgeons of Canada.

(c) Physicians, dentists, or podiatrists who used only accelerator-produced radioactive materials, discrete sources of radium-226, or both, for medical uses performed at a government agency or federally recognized Indian tribe before November 30, 2007, or at all other locations of use before August 8, 2009, or an earlier date as noticed by the NRC, need not comply with the training requirements of WAC 246-240-151 through 246-240-399 of this chapter when performing the same medical uses. A physician, dentist, or podiatrist, who used only accelerator-produced radioactive materials, discrete sources of radium-226, or both, for medical uses at the locations and time period identified in this subsection, qualifies as an authorized user for those materials and uses performed before these dates, for the purposes of this chapter.

(3) Individuals who need not comply with training requirements as described in this section may serve as preceptors for, and supervisors of, applicants seeking authorization on state of Washington radioactive materials licenses for the same uses for which these individuals are authorized.

[Statutory Authority: RCW 70A.388.040 and 70A.388.110. WSR 22-19-084, § 246-240-078, filed 9/20/22, effective 10/21/22. Statutory Authority: RCW 70.98.050. WSR 13-11-021, § 246-240-078, filed 5/7/13, effective 6/7/13; WSR 11-03-068, § 246-240-078, filed 1/18/11, effective 2/18/11; WSR 06-05-019, § 246-240-078, filed 2/6/06, effective 3/9/06.]

AMENDATORY SECTION (Amending WSR 22-19-084, filed 9/20/22, effective 10/21/22)

WAC 246-240-210 Training for use of unsealed radioactive material for which a written directive is required. Except as provided in WAC 246-240-078, the licensee shall require an authorized user of unsealed radioactive material for the uses authorized under WAC 246-240-201 to be a physician who:

(1) Is certified by a medical specialty board whose certification process has been recognized by the department, NRC, or an agreement state and who meets the requirements in subsection (2)(a)(ii)(G) of this section. The names of board certifications that have been recognized by the department, NRC, or an agreement state are posted on the NRC's medical uses licensee toolkit web page. To have its certification process recognized, a specialty board shall require all candidates for certification to:

(a) Successfully complete a residency training in a radiation therapy or nuclear medicine training program or a program in a related medical specialty that includes 700 hours of training and experience as described in subsection (2)(a)(i) through (ii)(E) of this section. Eligible training programs must be approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education or Royal College of Physicians and Surgeons of Canada or the ((~~Commit-~~

~~tee on Postgraduate~~)) Council on Postdoctoral Training of the American Osteopathic Association; and

(b) Pass an examination, administered by diplomates of the specialty board, which tests knowledge and competence in radiation safety, radionuclide handling, quality assurance, and clinical use of unsealed radioactive material for which a written directive is required; or

(2)(a) Has completed 700 hours of training and experience, including a minimum of 200 hours of classroom and laboratory training, in basic radionuclide handling techniques applicable to the medical use of unsealed radioactive material requiring a written directive. The training and experience must include:

(i) Classroom and laboratory training in the following areas:

(A) Radiation physics and instrumentation;

(B) Radiation protection;

(C) Mathematics pertaining to the use and measurement of radioactivity;

(D) Chemistry of radioactive material for medical use; and

(E) Radiation biology; and

(ii) Work experience, under the supervision of an authorized user who meets the requirements in WAC 246-240-078, or this section, or equivalent NRC or agreement state requirements. A supervising authorized user, who meets the requirements in this subsection, must also have experience in administering dosages in the same dosage category or categories (as in (a)(ii)(G) of this subsection) as the individual requesting authorized user status. The work experience must involve:

(A) Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;

(B) Performing quality control procedures on instruments used to determine the activity of dosages and performing checks for proper operation of survey meters;

(C) Calculating, measuring, and safely preparing patient or human research subject dosages;

(D) Using administrative controls to prevent a medical event involving the use of unsealed radioactive material;

(E) Using procedures to contain spilled radioactive material safely and using proper decontamination procedures;

(F) (Reserved);

(G) Administering dosages of radioactive drugs to patients or human research subjects from the three categories in this subsection. Radioactive drugs containing radionuclides in categories not included in this subsection are regulated under WAC 246-240-501. This work experience must involve a minimum of three cases in each of the following categories for which the individual is requesting authorized user status:

(I) Oral administration of less than or equal to 1.22 gigabecquerels (33 millicuries) of sodium iodide I-131 for which a written directive is required;

(II) Oral administration of greater than 1.22 gigabecquerels (33 millicuries) of sodium iodide I-131. Experience with at least three cases in this also satisfies the requirement in (a)(ii)(G)(I) of this subsection;

(III) Parenteral administration of any radioactive drug that contains a radionuclide that is primarily used for its electron emission, beta radiation characteristics, alpha radiation characteristics, or photon energy less than 150 keV for which a written directive is required; and

(b) Has obtained written attestation that the individual has satisfactorily completed the requirements in (a) of this subsection, and is able to independently fulfill at radiation safety-related duties as an authorized user for the medical uses authorized under WAC 246-240-201 for which the individual is requesting authorized user status. The written attestation must be obtained from either:

(i) A preceptor authorized user who meets the requirements in this section, WAC 246-240-078, 246-240-210, or equivalent NRC or agreement state requirements, and has experience in administering dosages in the same dosage category or categories (as in (a)(ii)(G) of this subsection) as the individual requesting authorized user status; or

(ii) A residency program director who affirms in writing that the attestation represents the consensus of the residency program faculty where at least one faculty member is an authorized user who meets the requirements in WAC 246-240-078, 246-240-210, or equivalent NRC or agreement state requirements, has experience in administering dosages in the same dosage category or categories as the individual requesting authorized user status, and concurs with the attestation provided by the residency program director. The residency training program must be approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education or the Royal College of Physicians and Surgeons of Canada or the Council on Postdoctoral Training of the American Osteopathic Association and must include training and experience specified in (a) of this subsection.

[Statutory Authority: RCW 70A.388.040 and 70A.388.110. WSR 22-19-084, § 246-240-210, filed 9/20/22, effective 10/21/22. Statutory Authority: RCW 70.98.050. WSR 14-09-017, § 246-240-210, filed 4/7/14, effective 5/8/14; WSR 13-11-021, § 246-240-210, filed 5/7/13, effective 6/7/13; WSR 11-03-068, § 246-240-210, filed 1/18/11, effective 2/18/11; WSR 07-14-131, § 246-240-210, filed 7/3/07, effective 8/3/07; WSR 06-05-019, § 246-240-210, filed 2/6/06, effective 3/9/06.]

AMENDATORY SECTION (Amending WSR 22-19-084, filed 9/20/22, effective 10/21/22)

WAC 246-240-278 Training for use of manual brachytherapy sources. Except as provided in WAC 246-240-078, the licensee shall require an authorized user of a manual brachytherapy source for the uses authorized under WAC 246-240-251 to be a physician who:

(1) Is certified by a medical specialty board whose certification process has been recognized by the department, NRC, or an agreement state. The names of board certifications that have been recognized by the department, NRC, or an agreement state are posted on the NRC's medical uses licensee toolkit web page. To have its certification process recognized, a specialty board shall require all candidates for certification to:

(a) Successfully complete a minimum of three years of residency training in a radiation oncology program approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education or Royal College of Physicians and Surgeons of Canada or the ((~~Committee on Postgraduate~~)) Council on Postdoctoral Training of the American Osteopathic Association; and

(b) Pass an examination, administered by diplomates of the specialty board, which tests knowledge and competence in radiation safety, radionuclide handling, treatment planning, quality assurance, and clinical use of manual brachytherapy; or

(2)(a) Has completed a structured educational program in basic radionuclide handling techniques applicable to the use of manual brachytherapy sources that includes:

(i) Two hundred hours of classroom and laboratory training in the following areas:

(A) Radiation physics and instrumentation;

(B) Radiation protection;

(C) Mathematics pertaining to the use and measurement of radioactivity; and

(D) Radiation biology; and

(ii) Five hundred hours of work experience, under the supervision of an authorized user who meets the requirements in WAC 246-240-078, 246-240-278 or equivalent agreement state or NRC requirements at a medical institution authorized to use radioactive materials under WAC 246-240-251, involving:

(A) Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys;

(B) Checking survey meters for proper operation;

(C) Preparing, implanting, and removing brachytherapy sources;

(D) Maintaining running inventories of material on hand;

(E) Using administrative controls to prevent a medical event involving the use of radioactive material;

(F) Using emergency procedures to control radioactive material; and

(b) Has completed three years of supervised clinical experience in radiation oncology, under an authorized user who meets the requirements in WAC 246-240-078, 246-240-278, or equivalent NRC or agreement state requirements, as part of a formal training program approved by the Residency Review Committee for Radiation Oncology of the Accreditation Council for Graduate Medical Education or the Royal College of Physicians and Surgeons of Canada or the ((~~Committee~~)) Council on Postdoctoral Training of the American Osteopathic Association. This experience may be obtained concurrently with the supervised work experience required by (a)(ii) of this subsection; and

(c) Has obtained written attestation that the individual has satisfactorily completed the requirements in (a) and (b) of this subsection and is able to independently fulfill the radiation safety-related duties as an authorized user of manual brachytherapy sources for the medical uses authorized under WAC 246-240-251. The attestation must be obtained from either:

(i) A preceptor authorized user who meets the requirements in WAC 246-240-078, 246-240-278, or equivalent agreement state or NRC requirements; or

(ii) A residency program director who affirms in writing that the attestation represents the consensus of the residency program faculty where at least one faculty member is an authorized user who meets the requirements in WAC 246-240-078, 246-240-278, or equivalent NRC or agreement state requirements, and concurs with the attestation provided by the residency program director. The residency training program must be approved by the Residency Review Committee of the Accreditation Council for Graduate Medical Education or the Royal College of Physicians and Surgeons of Canada or the Council on Postdoctoral

Training of the American Osteopathic Association and must include training and experience specified in (a) and (b) of this subsection.

[Statutory Authority: RCW 70A.388.040 and 70A.388.110. WSR 22-19-084, § 246-240-278, filed 9/20/22, effective 10/21/22. Statutory Authority: RCW 70.98.050. WSR 13-11-021, § 246-240-278, filed 5/7/13, effective 6/7/13; WSR 11-03-068, § 246-240-278, filed 1/18/11, effective 2/18/11; WSR 07-14-131, § 246-240-278, filed 7/3/07, effective 8/3/07; WSR 06-05-019, § 246-240-278, filed 2/6/06, effective 3/9/06.]

AMENDATORY SECTION (Amending WSR 22-19-084, filed 9/20/22, effective 10/21/22)

WAC 246-240-651 Report and notification of a medical event. (1) A licensee shall report any event as a medical event, except for an event that results from patient intervention, in which:

(a) The administration of radioactive material or radiation from radioactive material, except permanent implant brachytherapy, results in:

(i) A dose that differs from the prescribed dose or dose that would have resulted from the prescribed dosage by more than 0.05 Sv (five rem) effective dose equivalent, 0.5 Sv (50 rem) to an organ or tissue, or 0.5 Sv (50 rem) shallow dose equivalent to the skin; and

(A) The total dose delivered differs from the prescribed dose by 20 percent or more;

(B) The total dosage delivered differs from the prescribed dosage by 20 percent or more or falls outside the prescribed dosage range; or

(C) The fractionated dose delivered differs from the prescribed dose, for a single fraction, by 50 percent or more.

(ii) A dose that exceeds 0.05 Sv (five rem) effective dose equivalent, 0.5 Sv (50 rem) to an organ or tissue, or 0.5 Sv (50 rem) shallow dose equivalent to the skin from any of the following:

(A) An administration of a wrong radioactive drug containing radioactive material or the wrong radionuclide for a brachytherapy procedure;

(B) An administration of a radioactive drug containing radioactive material by the wrong route of administration;

(C) An administration of a dose or dosage to the wrong individual or human research subject;

(D) An administration of a dose or dosage delivered by the wrong mode of treatment; or

(E) A leaking sealed source.

(iii) A dose to the skin or an organ or tissue other than the treatment site that exceeds by:

(A) 0.5 Sv (50 rem) or more the expected dose to that site from the procedure if the administration had been given in accordance with the written directive prepared or revised before administration; and

(B) Fifty percent or more the expected dose to that site from the procedure if the administration had been given in accordance with the written directive prepared or revised before administration.

(b) For permanent implant brachytherapy, the administration of radioactive material or radiation from radioactive material (excluding sources that were implanted in the correct site but migrated outside the treatment site) that results in:

(i) The total source strength administered differing by 20 percent or more from the total source strength documented in the post-implantation portion of the written directive;

(ii) The total source strength administered outside of the treatment site exceeding 20 percent of the total source strength documented in the post-implantation portion of the written directive; or

(iii) An administration that includes any of the following:

(A) The wrong radionuclide;

(B) The wrong individual or human research subject;

(C) Sealed sources implanted directly into a location discontiguous from the treatment site, as documented in the post-implantation portion of the written directive; or

(D) A leaking sealed source resulting in a dose that exceeds 0.5 Sv (50 rem) to an organ or tissue.

(2) A licensee shall report any event resulting from intervention of a patient or human research subject in which the administration of radioactive material or radiation from radioactive material results or will result in unintended permanent functional damage to an organ or a physiological system, as determined by a physician.

(3) The licensee shall notify by telephone (360-236-3300) the department no later than the next calendar day after discovery of the medical event.

(4) By an appropriate method listed in WAC 246-221-250, the licensee shall submit a written report to the department at P.O. Box 47827, Olympia WA 98504-7827 within 15 days after discovery of the medical event.

(a) The written report must include:

(i) The licensee's name;

(ii) The name of the prescribing physician;

(iii) A brief description of the event;

(iv) Why the event occurred;

(v) The effect, if any, on the individuals who received the administration;

(vi) What actions, if any, have been taken or are planned to prevent recurrence; and

(vii) Certification that the licensee notified the individual (or the individual's responsible relative or guardian), and if not, why not.

(b) The report may not contain the individual's name or any other information that could lead to identification of the individual.

(5) The licensee shall provide notification of the event to the referring physician and also notify the individual who is the subject of the medical event no later than 24 hours after its discovery, unless the referring physician personally informs the licensee either that they will inform the individual or that, based on medical judgment, telling the individual would be harmful. The licensee is not required to notify the individual without first consulting the referring physician. If the referring physician or the affected individual cannot be reached within 24 hours, the licensee shall notify the individual as soon as possible thereafter. The licensee may not delay any appropriate medical care for the individual, including any necessary remedial care as a result of the medical event, because of any delay in notification. To meet the requirements of this subsection, the notification of the individual who is the subject of the medical event may be made instead to that individual's responsible relative or guardian. If a verbal notification is made, the licensee shall inform the individual, or appropriate responsible relative or guardian, that a writ-

ten description of the event can be obtained from the licensee upon request. The licensee shall provide a written description if requested.

(6) Aside from the notification requirement, nothing in this section affects any rights or duties of licensees and physicians in relation to each other, to individuals affected by the medical event, or to that individual's responsible relatives or guardians.

(7) A licensee shall:

(a) Annotate a copy of the report provided to the department with the:

(i) Name of the individual who is the subject of the event; and

(ii) Identification number or if no other identification number is available, the Social Security number ((~~or other identification number, if one has been assigned,~~)) of the individual who is the subject of the event; and

(b) Provide a copy of the annotated report to the referring physician, if other than the licensee, no later than 15 days after the discovery of the event.

[Statutory Authority: RCW 70A.388.040 and 70A.388.110. WSR 22-19-084, § 246-240-651, filed 9/20/22, effective 10/21/22. Statutory Authority: RCW 70.98.050. WSR 06-05-019, § 246-240-651, filed 2/6/06, effective 3/9/06.]

AMENDATORY SECTION (Amending WSR 22-19-084, filed 9/20/22, effective 10/21/22)

WAC 246-240-654 Report and notification of a dose to an embryo/fetus or a nursing child. (1) A licensee shall report to the department at P.O. Box 47827, Olympia WA 98504-7827, (phone 360-236-3300), any dose to an embryo/fetus that is greater than 50 mSv (five rem) dose equivalent that is a result of an administration of radioactive material or radiation from radioactive material to a pregnant individual unless the dose to the embryo/fetus was specifically approved, in advance, by the authorized user.

(2) A licensee shall report any dose to a nursing child that is a result of an administration of radioactive material to a breast-feeding individual that:

(a) Is greater than 50 mSv (five rem) total effective dose equivalent; or

(b) Has resulted in unintended permanent functional damage to an organ or a physiological system of the child, as determined by a physician.

(3) The licensee shall notify by telephone the department no later than the next calendar day after discovery of a dose to the embryo/fetus or nursing child that requires a report in subsection (1) or (2) of this section.

(4) By an appropriate method listed in WAC 246-221-250, the licensee shall submit a written report to the department within 15 days after discovery of a dose to the embryo/fetus or nursing child that requires a report in subsection (1) or (2) of this section.

(a) The written report must include:

(i) The licensee's name;

(ii) The name of the prescribing physician;

(iii) A brief description of the event;

(iv) Why the event occurred;

(v) The effect, if any, on the embryo/fetus or the nursing child;

(vi) What actions, if any, have been taken or are planned to prevent recurrence; and

(vii) Certification that the licensee notified the pregnant individual or mother (or the mother's or child's responsible relative or guardian), and if not, why not.

(b) The report must not contain the individual's or child's name or any other information that could lead to identification of the individual or child.

(5) The licensee shall provide notification of the event to the referring physician and also notify the pregnant individual or mother, both hereafter referred to as the mother, no later than 24 hours after discovery of an event that would require reporting under subsection (1) or (2) of this section, unless the referring physician personally informs the licensee either that they will inform the mother or that, based on medical judgment, telling the mother would be harmful. The licensee is not required to notify the mother without first consulting with the referring physician. If the referring physician or mother cannot be reached within 24 hours, the licensee shall make the appropriate notifications as soon as possible thereafter. The licensee may not delay any appropriate medical care for the embryo/fetus or for the nursing child, including any necessary remedial care as a result of the event, because of any delay in notification. To meet the requirements of this subsection, the notification may be made to the mother's or child's responsible relative or guardian instead of the mother. If a verbal notification is made, the licensee shall inform the mother, or the mother's or child's responsible relative or guardian, that a written description of the event can be obtained from the licensee upon request. The licensee shall provide a written description if requested.

(6) A licensee shall:

(a) Annotate a copy of the report provided to the department with the:

(i) Name of the pregnant individual or the nursing child who is the subject of the event; and

(ii) Identification number or if no other identification number is available, the Social Security number ((~~or other identification number, if one has been assigned, of the pregnant individual or the nursing child~~)) of the individual who is the subject of the event; and

(b) Provide a copy of the annotated report to the referring physician, if other than the licensee, no later than 15 days after the discovery of the event.

[Statutory Authority: RCW 70A.388.040 and 70A.388.110. WSR 22-19-084, § 246-240-654, filed 9/20/22, effective 10/21/22. Statutory Authority: RCW 70.98.050. WSR 06-05-019, § 246-240-654, filed 2/6/06, effective 3/9/06.]

WSR 23-21-061
PERMANENT RULES
HEALTH CARE AUTHORITY
[Filed October 12, 2023, 1:38 p.m., effective November 12, 2023]

Effective Date of Rule: Thirty-one days after filing.
Purpose: **WAC 182-502-0030:**

- Removed the term "agreement" from the WAC title and replaced it with "enrollment."
- Removed the term "core provider agreement" (CPA) and replaced it with "enrollment" to provide clarity that all providers (not just those with a CPA) are subject to the rules.
- Updated the WAC reference in subsection (1)(a)(ii) from WAC 246-934-100 to chapter 246-16 WAC to align with the correct department of health (DOH) definition of sexual misconduct.
- Added new subsection (4) to address effective date of termination.
- Added new subsection (5) to address administrative hearings/appeals.
- Added language clarification and housekeeping fixes in WAC 182-502-0030.

WAC 182-500-0075 and 182-500-0085:

- Removed the definition of nonbilling provider and referenced updated provider definition in WAC 182-500-0085.
- Amended the definition of provider to include servicing providers, nonbilling providers, providers with a CPA, and providers with other contracts with the medicaid agency.

WAC 182-502-0005, 182-530-1000, and 182-531-0250:

- Updated the term "performing provider" to "servicing provider" to align with consistent agency language.

WAC 182-526-0195:

- Added new subsection (7)(e) to reflect that an appeal by a provider of their termination under this rule requires a mandatory prehearing conference with a reference to WAC 182-502-0030.

Citation of Rules Affected by this Order: Amending WAC 182-502-0030, 182-500-0075, 182-500-0085, 182-502-0005, 182-526-0195, 182-530-1000, and 182-531-0250.

Statutory Authority for Adoption: RCW 41.05.021, 41.05.160.

Adopted under notice filed as WSR 23-18-088 on September 6, 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 7, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 7, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 7, Repealed 0.

Date Adopted: October 12, 2023.

Wendy Barcus
Rules Coordinator

OTS-4796.1

AMENDATORY SECTION (Amending WSR 18-24-023, filed 11/27/18, effective 1/1/19)

WAC 182-500-0075 Medical assistance definitions—N. "National correct coding initiative (NCCI)" is a national standard for the accurate and consistent description of medical goods and services using procedural codes. The standard is based on coding conventions defined in the American Medical Association's Current Procedural Terminology (CPT®) manual, current standards of medical and surgical coding practice, input from ((~~specialty~~)) professional societies, and analysis of current coding practices. The Centers for Medicare and Medicaid Services (CMS) maintain NCCI policy. Information can be found at: http://www.cms.hhs.gov/NationalCorrectCodInitEd/.

"National provider indicator (NPI)" is a ((~~federal system for uniquely identifying all providers of health care services, supplies, and equipment~~)) unique identification number for covered health care providers.

"NCCI edit" is a software step used to determine if a claim is billing for a service that is not in accordance with federal and state statutes, federal and state regulations, agency or the agency's designee's fee schedules, billing instructions, and other publications. The agency or the agency's designee has the final decision whether the NCCI edits allow automated payment for services that were not billed in accordance with governing law, NCCI standards or agency or agency's designee policy.

"Nonapplying spouse" see "spouse" in WAC 182-500-0100.

"Nonbilling provider" ((~~is a health care professional enrolled with the agency only as an ordering, referring, prescribing provider for the Washington medicaid program and who is not otherwise enrolled as a medicaid provider with the agency~~)) see definition for provider in WAC 182-500-0085.

"Noncovered service" see "covered service" in WAC 182-500-0020.

"Nonphysician practitioner" means the following professionals who work in collaboration with an ordering physician: Nurse practitioner, clinical nurse specialist, certified nurse midwife, or physician assistant.

"Nursing facility" see "institution" in WAC 182-500-0050.

"Nursing facility long-term care services" are services in a nursing facility when a person does not meet the criteria for rehabilitation. Most long-term care assists people with support services. (Also called custodial care.)

"Nursing facility rehabilitative services" are the planned interventions and procedures which constitute a continuing and comprehensive effort to restore a person to the person's former functional and environmental status, or alternatively, to maintain or maximize remaining function.

[Statutory Authority: RCW 41.05.021, 41.05.160 and 42 C.F.R. Section 440.70. WSR 18-24-023, § 182-500-0075, filed 11/27/18, effective 1/1/19. Statutory Authority: 42 C.F.R. 455.410, RCW 41.05.021. WSR 13-19-037, § 182-500-0075, filed 9/11/13, effective 10/12/13. WSR 11-14-075, recodified as § 182-500-0075, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.08.090 and 2011 1st sp.s. c 15. WSR 11-14-053, § 388-500-0075, filed 6/29/11, effective 7/30/11.]

AMENDATORY SECTION (Amending WSR 15-21-063, filed 10/19/15, effective 11/19/15)

WAC 182-500-0085 Medical assistance definitions—P. "Patient transportation" means client transportation to or from covered health care services under federal and state health care programs.

"Physician" means a doctor of medicine, osteopathy, naturopathy, or podiatry who is legally authorized to perform the functions of the profession by the state in which the services are performed.

"Prescribing provider" means a health care professional authorized by law or rule to prescribe drugs to Washington apple health ((~~(WAH)~~)) clients.

"Prior authorization" ((~~is~~)) means the requirement that a provider must request, on behalf of a client and when required by rule or agency billing instructions, the agency or the agency's designee's approval to provide a health care service before the client receives the health care service, prescribed drug, device, or drug-related supply. The agency or the agency's designee's approval is based on medical necessity. Receipt of prior authorization does not guarantee payment. Expedited prior authorization and limitation extension are types of prior authorization.

"Prosthetic device" means a preventive, replacement, corrective, or supportive device prescribed by a ((~~physician or other~~)) licensed ((~~practitioner,~~)) provider within ((~~the~~)) their scope of ((~~his or her~~)) practice under state law.

"Provider" means an institution, agency, or person that is licensed, certified, accredited, credentialed, or registered according to ((~~Washington~~)) state law, is an eligible provider type according to WAC 182-502-0002, authorized to provide services to Washington apple health clients, and has((~~:~~

~~(a) A signed core provider agreement or contract with the agency or the agency's designee, and is authorized to provide health care, goods, and services to WAH clients; or~~

~~(b) Authorization from a managed care organization (MCO) that contracts with the agency or the agency's designee to provide health care, goods, and services to eligible WAH clients enrolled in the MCO plan.~~)) a signed core provider agreement, a nonbilling provider agreement, or other contract with the agency or is a servicing provider.

(a) **"Servicing provider"** means a health care professional screened and enrolled with the agency under a group, facility, or organization that has a signed core provider agreement (CPA).

(b) **"Nonbilling provider"** means a health care professional enrolled with the agency only as an ordering, referring, prescribing provider for the Washington medicaid program and who is not otherwise enrolled as a medicaid provider with the agency.

"Provider guide" means an agency publication that describes a specific benefit covered under ((~~WAH~~)) Washington apple health, which includes client eligibility verification instructions, provider responsibilities, authorization requirements, coverage, billing, and how to complete and submit claims.

"Public institution" see "institution" in WAC 182-500-0050.

[Statutory Authority: RCW 41.05.021 and 41.05.160. WSR 15-21-063, § 182-500-0085, filed 10/19/15, effective 11/19/15. Statutory Authority: RCW 41.05.021, 2013 2nd sp.s. c 4, and Patient Protection and Affordable Care Act (P.L. 111-148). WSR 14-06-045, § 182-500-0085, filed 2/26/14, effective 3/29/14. Statutory Authority: 42 C.F.R. 455.410, RCW 41.05.021. WSR 13-19-037, § 182-500-0085, filed 9/11/13, effective 10/12/13. WSR 11-14-075, recodified as § 182-500-0085, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.08.090 and 2011 1st sp.s. c 15. WSR 11-14-053, § 388-500-0085, filed 6/29/11, effective 7/30/11.]

OTS-4797.2

AMENDATORY SECTION (Amending WSR 13-19-037, filed 9/11/13, effective 10/12/13)

WAC 182-502-0005 Core provider agreement (CPA). (1) The agency only pays claims submitted for services provided by or on behalf of:

(a) A health care professional, health care entity, supplier or contractor of service that has an approved core provider agreement (CPA) with the agency((~~, is a performing~~));

(b) A servicing provider ((~~on~~)) enrolled under an approved CPA with the agency((~~,~~));; or

(c) A provider who has an approved agreement with the agency as a nonbilling provider in accordance with WAC 182-502-0006.

(2) ((~~Performing~~)) Servicing providers ((~~of~~)) performing services ((~~to~~)) for a ((~~medical assistance~~)) client must be enrolled under the billing providers' CPA.

(3) Any ordering, prescribing, or referring providers must be enrolled in the agency's claims payment system in order for any services or supplies ordered, prescribed, or referred by them to be paid. The national provider identifier (NPI) of any referring, prescribing, or ordering provider must be included on the claim form. Refer to WAC 182-502-0006 for enrollment as a nonbilling provider.

(4) For services provided out-of-state, refer to WAC 182-501-0180, 182-501-0182, and 182-501-0184.

(5) The agency does not pay for services provided to clients during the CPA application process or application for nonbilling provider process, regardless of whether the agency later approves or denies the application, except as provided in subsection (6) of this section or WAC 182-502-0006(5).

(6) Enrollment of a provider applicant is effective on the date the agency approves the provider application.

(a) A provider applicant may ask for an effective date earlier than the agency's approval of the provider application by submitting a written request to the agency's chief medical officer. The request

must specify the requested effective date and include an explanation justifying the earlier effective date. The chief medical officer will not authorize an effective date that is:

(i) Earlier than the effective date of any required license or certification; or

(ii) More than ((~~three hundred sixty-five~~)) 365 days prior to the agency's approval of the provider application.

(b) The chief medical officer or designee may approve exceptions as follows:

(i) Emergency services;

(ii) Agency-approved out-of-state services;

(iii) Medicaid provider entities that are subject to survey and certification by CMS or the state survey agency;

(iv) Retroactive client eligibility; or

(v) Other critical agency need as determined by the agency's chief medical officer or designee.

(c) For federally qualified health centers (FQHCs), see WAC 182-548-1200. For rural health clinics (RHCs), see WAC 182-549-1200.

(d) Exceptions granted under this subsection (6) do not supersede or otherwise change the agency's timely billing requirements under WAC 182-502-0150.

[Statutory Authority: 42 C.F.R. 455.410, RCW 41.05.021. WSR 13-19-037, § 182-502-0005, filed 9/11/13, effective 10/12/13. Statutory Authority: RCW 41.05.021 and 42 C.F.R. 455 subpart E Provider Screening and Enrollment requirements. WSR 12-12-032, § 182-502-0005, filed 5/29/12, effective 7/1/12. WSR 11-14-075, recodified as § 182-502-0005, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.08.090, 74.09.080, and 74.09.290. WSR 11-11-017, § 388-502-0005, filed 5/9/11, effective 6/9/11.]

AMENDATORY SECTION (Amending WSR 15-14-039, filed 6/24/15, effective 7/25/15)

WAC 182-502-0030 Termination of ((a)) provider ((~~agreement~~)) enrollment—For cause. (1) The medicaid agency may immediately terminate a provider's ((~~core provider agreement (CPA)~~)) enrollment for any one or more of the following reasons, each of which constitutes cause:

(a) Provider exhibits significant risk factors that endanger client health or safety. These factors include, but are not limited to:

(i) Moral turpitude;

(ii) Sexual misconduct ((~~as defined in WAC 246-934-100~~)) according to chapter 246-16 WAC or in profession specific rules of the department of health (DOH);

(iii) A statement of allegations or statement of charges by DOH or equivalent from other state licensing boards;

(iv) Restrictions or limitations placed by ((~~DOH~~)) any state licensing, credentialing, or certification agency on the provider's current credentials or practice ((~~such as chaperone required for rendering treatment, preceptor required to review practice, or prescriptive limitations~~));

(v) Limitations, restrictions, or loss of hospital privileges or participation in any health care plan or failure to disclose the reasons to the agency;

(vi) Negligence, incompetence, inadequate or inappropriate treatment, or lack of appropriate follow-up treatment;

(vii) Patient drug mismanagement, failure to identify substance ((~~abuse or addiction~~)) use disorder, or failure to refer the patient for substance ((~~abuse~~)) use disorder treatment once ((~~abuse or addiction is~~)) identified;

(viii) Use of health care providers or health care staff who are unlicensed to practice or who provide health care services that are outside their recognized scope of practice or the standard of practice in the state of Washington;

(ix) Failure of the health care provider to comply with the requirements of WAC 182-502-0016;

(x) Failure of the health care ((~~practitioner~~)) provider with ((~~an alcohol or chemical dependency~~)) a substance use disorder(s) to furnish documentation or other assurances as determined by the agency to adequately safeguard the health and safety of Washington apple health clients that the provider:

(A) Is complying with all conditions, limitations, or restrictions to the provider's practice both public and private; and

(B) Is receiving treatment adequate to ensure that the ((~~dependency problem~~)) disorder will not affect the quality of the provider's practice.

(xi) Infection control deficiencies;

(xii) Failure to maintain adequate professional malpractice coverage;

(xiii) Medical malpractice claims or professional liability claims that constitute a pattern of questionable or inadequate treatment, or contain any gross or flagrant incident of malpractice; or

(xiv) Any other act that the agency determines is contrary to the health and safety of its clients.

(b) Provider exhibits significant risk factors that affect the provider's credibility or honesty. These factors include, but are not limited to:

(i) Failure to meet the requirements in WAC 182-502-0010 and 182-502-0020;

(ii) Dishonesty or other unprofessional conduct;

(iii) ((~~Investigatory (e.g., audit), civil,~~)) Civil or criminal findings of fraudulent or abusive billing practices through an investigation or other review (e.g., audit or record review);

(iv) Exclusion from participation in medicare, medicaid, or any other federally funded health care program;

(v) Any conviction, no contest plea, or guilty plea relating to fraud, theft, embezzlement, breach of fiduciary responsibility, or other financial misconduct;

(vi) Any conviction, no contest plea, or guilty plea of a criminal offense;

(vii) Failure to comply with a DOH request for information or an ongoing DOH investigation;

(viii) Noncompliance with a DOH or other state health care agency's stipulation to disposition, agreed order, final order, or other similar licensure restriction;

(ix) Misrepresentation or failure to disclose information ((~~on the~~)) to the agency during or after enrollment including on the application for a core provider agreement (CPA), ((~~failure to supply requested information, or failure to update CPA as required~~)) a nonbilling provider agreement, or servicing providers enrolled under a core provider agreement;

(x) Failure to comply with an agency request for information;

(xi) Failure to cooperate with an agency investigation, audit, or review;

(xii) Providing health care services that are outside the provider's recognized scope of practice or the standard of practice in the state of Washington;

(xiii) Unnecessary medical, dental, or other health care procedures;

(xiv) Discriminating in the furnishing of health care services, supplies, or equipment as prohibited by 42 U.S.C. § 2000d; and

(xv) Any other dishonest or discreditable act that the agency determines is contrary to the interest of the agency or its clients.

(2) If a ((~~provider~~)) provider's enrollment is terminated for cause, the agency pays only for authorized services provided up to the date of termination ((~~only~~)) of enrollment if other program requirements are met including, but not limited to, the requirements in WAC 182-502-0016.

(3) ((~~If~~)) When the agency terminates enrollment of a servicing provider who is also a full or partial owner of ((~~a~~)) an enrolled group practice, the agency ((~~also~~)) terminates the enrolled group practice and all enrolled servicing providers who are not linked to ((~~the~~)) another enrolled group practice contracted with the agency. The remaining practitioners in the group practice may reapply for participation with the agency subject to WAC 182-502-0010((~~(2)~~)).

(4) ((~~A provider who is terminated for cause may dispute an agency decision under the process in WAC 182-502-0050.~~)) Effective date. The effective date of the termination of a provider's enrollment is the date stated in the notice. The filing of an appeal as provided in subsection (5) of this section does not stay the effective date of termination.

(5) Administrative hearing.

(a) The provider may appeal the agency decision to terminate the provider's enrollment for cause by submitting a written request to the address contained in the decision notice within 28 calendar days of the date on the notice and in a manner that provides proof of receipt by the agency. The agency does not allow good cause exception related to this subsection.

(b) If the agency receives a timely appeal, the presiding officer will schedule a prehearing conference in accordance with WAC 182-526-0195.

(c) The administrative hearing process is governed by the Administrative Procedure Act, chapter 34.05 RCW, and chapter 182-526 WAC.

(d) Burden of proof.

(i) The provider has the burden of proof.

(ii) The standard of proof in a provider termination hearing is "clear and convincing evidence" meaning the evidence is highly and substantially more likely to be true than untrue. This is a higher standard of proof than proof by a preponderance of the evidence, but it does not require proof beyond a reasonable doubt.

[Statutory Authority: RCW 41.05.021 and 41.05.160. WSR 15-14-039, § 182-502-0030, filed 6/24/15, effective 7/25/15. WSR 11-14-075, recodified as § 182-502-0030, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.08.090, 74.09.080, and 74.09.290. WSR 11-11-017, § 388-502-0030, filed 5/9/11, effective 6/9/11. Statutory Authority: RCW 74.08.090, 74.09.500, 74.09.530. WSR 00-15-050, § 388-502-0030, filed 7/17/00, effective 8/17/00.]

OTS-4798.1

AMENDATORY SECTION (Amending WSR 21-18-077, filed 8/27/21, effective 9/27/21)

WAC 182-526-0195 Prehearing conferences. (1) ((~~Unlike a prehearing meeting,~~)) A prehearing conference is a formal proceeding conducted on the record by an administrative law judge (ALJ) to address issues and prepare for a hearing.

(a) The ALJ must make an audio record of the prehearing conference.

(b) An ALJ may conduct the prehearing conference in person, by telephone, or in any other manner acceptable to the parties.

(2) All parties must attend the prehearing conference. If the party who requested the hearing does not attend the prehearing conference, the ALJ may enter an order of default and an order dismissing the hearing.

(3) The ALJ may require a prehearing conference. Any party may request a prehearing conference.

(4) The ALJ must grant the appellant's, and may grant the managed care organization's or the agency representative's, first request for a prehearing conference if it is filed with the office of administrative hearings (OAH) at least seven business days before the scheduled hearing date.

(5) When the ALJ grants a party's request for a prehearing conference, the ALJ must continue the previously scheduled hearing when necessary to comply with notice requirements in this section.

(6) The ALJ may grant additional requests for prehearing conferences.

(7) The office of administrative hearings (OAH) must schedule prehearing conferences for all cases which concern:

(a) Provider and vendor overpayment hearings.

(b) Estate recovery and predeath liens.

(c) Notice of violation disputes under chapter 182-51 WAC.

(d) Notice of violation disputes under chapter 182-70 WAC.

(e) Provider termination disputes under WAC 182-502-0030.

(8) During a prehearing conference the parties and the ALJ may:

(a) Simplify or clarify the issues to be decided during the hearing;

(b) Agree to the date, time, and place of the hearing;

(c) Identify any accommodation or safety issues;

(d) Agree to postpone the hearing;

(e) Allow the parties to make changes in their own documents, including the notice or the hearing request;

(f) Agree to facts and documents to be entered during the hearing;

(g) Set a deadline to exchange names and phone numbers of witnesses and documents before the hearing;

(h) Schedule additional prehearing conferences;

(i) Resolve the dispute;

(j) Consider granting a stay if authorized by law or program rule; or

(k) Rule on any procedural issues and substantive motions raised by any party.

(9) After the prehearing conference, the ALJ must enter a written order describing:

(a) The actions taken at the prehearing conference;
(b) Any changes to the documents;
(c) A statement of the issue or issues identified for the hearing;
(d) Any agreements reached; and
(e) Any ruling of the ALJ.

(10) OAH must serve the prehearing order on the parties at least ((~~fourteen~~)) 14 calendar days before the scheduled hearing.

(11) A party may object to the prehearing order by notifying OAH in writing within ((~~ten~~)) 10 calendar days after the mailing date of the order. The ALJ must issue a ruling on the objection within five days from the date a party files an objection.

(12) If no objection is made to the prehearing order, the order determines how the hearing is conducted, including whether the hearing will be in person or held by telephone conference or other means, unless the ALJ changes the order for good cause.

(13) The ALJ may take further appropriate actions to address other concerns raised by the parties.

[Statutory Authority: RCW 41.05.021 and 41.05.160. WSR 21-18-077, § 182-526-0195, filed 8/27/21, effective 9/27/21. Statutory Authority: RCW 41.05.021, 41.05.160, 43.71C.110, and 2019 c 334. WSR 21-11-039, § 182-526-0195, filed 5/12/21, effective 6/12/21. Statutory Authority: RCW 41.05.021 and 41.05.160. WSR 17-05-066, § 182-526-0195, filed 2/13/17, effective 3/16/17. Statutory Authority: 2011 1st sp.s. c 15 § 53, chapters 74.09, 34.05 RCW, and 10-08 WAC. WSR 13-02-007, § 182-526-0195, filed 12/19/12, effective 2/1/13.]

OTS-4799.1

AMENDATORY SECTION (Amending WSR 13-19-037, filed 9/11/13, effective 10/12/13)

WAC 182-530-1000 Outpatient drug program—General. (1) The purpose of the outpatient drug program is to reimburse providers for outpatient drugs, vitamins, minerals, devices, and drug-related supplies according to medicaid agency rules and subject to the limitations and requirements in this chapter.

(2) The agency reimburses for outpatient drugs, vitamins, minerals, devices, and pharmaceutical supplies that are:

(a) Covered. Refer to WAC 182-530-2000 for covered drugs, vitamins, minerals, devices, and drug-related supplies and to WAC 182-530-2100 for noncovered drugs and drug-related supplies;

(b) Prescribed by a provider with prescriptive authority (see exceptions for family planning and emergency contraception for women ((~~eighteen~~)) 18 years of age and older in WAC 182-530-2000 (1)(b), and over-the-counter (OTC) drugs to promote smoking cessation in WAC 182-530-2000 (1)(g));

(c) Prescribed by:

(i) A provider with an approved core provider agreement;

(ii) A provider who is enrolled as a ((~~performing~~)) servicing provider on an approved core provider agreement; or

(iii) A provider who is enrolled as a nonbilling provider.

(d) Within the scope of an eligible client's medical assistance program;

(e) Medically necessary as defined in WAC 182-500-0070 and determined according to the process found in WAC 182-501-0165;

(f) Authorized, as required within this chapter;

(g) Billed according to WAC 182-502-0150 and 182-502-0160; and

(h) Billed according to the requirements of this chapter.

(3) Coverage determinations for the agency are made by the agency's pharmacists or medical consultants in accordance with applicable federal law. The agency's determination may include consultation with the drug use review (DUR) board.

[Statutory Authority: 42 C.F.R. 455.410, RCW 41.05.021. WSR 13-19-037, § 182-530-1000, filed 9/11/13, effective 10/12/13. Statutory Authority: RCW 41.05.021 and 42 C.F.R. 455.410. WSR 13-04-095, § 182-530-1000, filed 2/6/13, effective 3/9/13. WSR 11-14-075, recodified as § 182-530-1000, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.04.050, 74.08.090, 74.09.530, and 74.09.700. WSR 09-05-007, § 388-530-1000, filed 2/5/09, effective 3/8/09. Statutory Authority: RCW 74.04.050, 74.08.090, 74.09.700, 2008 c 245. WSR 08-21-107, § 388-530-1000, filed 10/16/08, effective 11/16/08. Statutory Authority: RCW 74.04.050, 74.08.090, 74.09.530, and 74.09.700. WSR 07-20-049, § 388-530-1000, filed 9/26/07, effective 11/1/07; WSR 06-24-036, § 388-530-1000, filed 11/30/06, effective 1/1/07. Statutory Authority: RCW 74.09.080, 74.04.050 and 42 C.F.R. Subpart K, subsection 162.1102. WSR 02-17-023, § 388-530-1000, filed 8/9/02, effective 9/9/02. Statutory Authority: RCW 74.08.090, 74.04.050. WSR 01-01-028, § 388-530-1000, filed 12/7/00, effective 1/7/01. Statutory Authority: RCW 74.08.090. WSR 96-21-031, § 388-530-1000, filed 10/9/96, effective 11/9/96.]

OTS-4800.1

AMENDATORY SECTION (Amending WSR 15-17-066, filed 8/14/15, effective 9/14/15)

WAC 182-531-0250 Who can provide and bill for physician-related and health care professional services. (1) The health care professionals and health care entities listed in WAC 182-502-0002 and enrolled with the medicaid agency can bill for physician-related and health care professional services that are within their scope of practice.

(2) The agency pays for services provided by, or in conjunction with, a resident physician when:

(a) The services are billed under the teaching hospital's national provider identifier (NPI) or the supervising physician's NPI;

(b) The ((~~performing~~)) servicing provider is identified on the claim under the teaching or resident physician's NPI; and

(c) The services are provided and billed according to this chapter and chapters 182-501 and 182-502 WAC.

(3) The agency does not pay for services performed by any of the health care professionals listed in WAC 182-502-0003.

(4) The agency pays eligible providers for physician-related services and health care professional services if those services are mandated by, and provided to clients who are eligible for, one of the following:

(a) The early and periodic screening, diagnosis, and treatment (EPSDT) program;

(b) A Washington apple health program for qualified medicare beneficiaries (QMB); or

(c) A waiver program.

[Statutory Authority: RCW 41.05.021 and 41.05.160. WSR 15-17-066, § 182-531-0250, filed 8/14/15, effective 9/14/15; WSR 15-03-041, § 182-531-0250, filed 1/12/15, effective 2/12/15. WSR 11-14-075, recodified as § 182-531-0250, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.08.090. WSR 11-14-055, § 388-531-0250, filed 6/29/11, effective 7/30/11. Statutory Authority: RCW 74.09.521. WSR 08-12-030, § 388-531-0250, filed 5/29/08, effective 7/1/08. Statutory Authority: RCW 74.08.090, 74.09.520. WSR 05-12-022, § 388-531-0250, filed 5/20/05, effective 6/20/05; WSR 01-01-012, § 388-531-0250, filed 12/6/00, effective 1/6/01.]

WSR 23-21-063
PERMANENT RULES
HEALTH CARE AUTHORITY
[Filed October 12, 2023, 2:17 p.m., effective January 1, 2024]

Effective Date of Rule: January 1, 2024.

Purpose: The health care authority (agency) is revising these rules to align with RCW 74.09.520(13). This statute requires the agency to provide a hospital payment for apple health clients who meet the criteria for discharge from a hospital stay to one of several types of facilities but who cannot be discharged because placement is unavailable. The rules provide for the payment of medically necessary services to be billed by and paid to the hospital separately.

Citation of Rules Affected by this Order: Amending WAC 182-550-2590, 182-550-3381, and 182-550-4550.

Statutory Authority for Adoption: RCW 41.05.021, 41.05.160.

Other Authority: RCW 74.09.520(13), as revised under 2SSB 5103, 68th legislature, 2023 regular session.

Adopted under notice filed as WSR 23-18-065 on September 1, 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 3, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 3, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 3, Repealed 0.

Date Adopted: October 12, 2023.

Wendy Barcus
Rules Coordinator

OTS-4769.2

AMENDATORY SECTION (Amending WSR 19-18-026, filed 8/28/19, effective 9/28/19)

WAC 182-550-2590 Agency prior authorization requirements for Level 1 and Level 2 LTAC services. (1) The medicaid agency requires prior authorization for Level 1 and Level 2 long term acute care (LTAC) inpatient stays. The prior authorization process includes all the following:

(a) For an initial ((~~thirty~~)) 30-day stay:

(i) The client must:

(A) Be eligible under one of the programs listed in WAC 182-550-2575; and

(B) Require Level 1 or Level 2 LTAC services as defined in WAC 182-550-1050.

(ii) The LTAC provider of services must:

(A) Before admitting the client to the LTAC hospital, submit a request for prior authorization to the agency by fax, electronic mail, or telephone, as published in the agency's LTAC billing instructions;

(B) Include sufficient medical information to justify the requested initial stay;

(C) Obtain prior authorization from the agency's medical director or designee, when accepting the client from the transferring hospital; and

(D) Meet all the requirements in WAC 182-550-2580.

(b) For any extension of stay, the criteria in (a) of this subsection must be met, and the LTAC provider of services must submit a request for the extension of stay to the agency with sufficient medical justification.

(2) The agency authorizes Level 1 or Level 2 LTAC services for initial stays or extensions of stay based on the client's circumstances and the medical justification received.

(3) A client who does not agree with a decision regarding a length of stay has a right to a fair hearing under chapter 182-526 WAC. After receiving a request for a fair hearing, the agency may request additional information from the client and the facility, or both. After the agency reviews the available information, the result may be:

(a) A reversal of the initial agency decision;

(b) Resolution of the client's issue(s); or

(c) A fair hearing conducted according to chapter 182-526 WAC.

(4) The agency may authorize an administrative day rate payment, as well as payment for medically necessary ancillary services as determined by the agency, pharmacy services, and pharmaceuticals, for a client who meets one or more of the following. The client:

(a) Does not meet the requirements for Level 1 or Level 2 LTAC services;

(b) Is waiting for placement in another hospital or other facility; or

(c) If appropriate, is waiting to be discharged to the client's residence.

[Statutory Authority: RCW 41.05.021 and 41.05.160. WSR 19-18-026, § 182-550-2590, filed 8/28/19, effective 9/28/19; WSR 15-18-065, § 182-550-2590, filed 8/27/15, effective 9/27/15. WSR 11-14-075, recodified as § 182-550-2590, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.08.090 and 74.09.500. WSR 08-21-039, § 388-550-2590, filed 10/8/08, effective 11/8/08; WSR 07-11-129, § 388-550-2590, filed 5/22/07, effective 8/1/07. Statutory Authority: RCW 74.08.090. WSR 02-14-162, § 388-550-2590, filed 7/3/02, effective 8/3/02.]

AMENDATORY SECTION (Amending WSR 14-12-047, filed 5/29/14, effective 7/1/14)

WAC 182-550-3381 Payment method for acute PM&R services and administrative day services. This section describes the agency's payment method for acute physical medicine and rehabilitation (PM&R) services provided by acute PM&R hospitals.

(1) The agency pays an acute PM&R hospital for acute PM&R services based on a rehabilitation per diem rate. See chapter 182-550 WAC and WAC 182-550-3000.

(2) Acute PM&R room and board includes, but is not limited to:
(a) Facility use;
(b) Social services (e.g., discharge planning);
(c) Bed and standard room furnishings; and
(d) Dietary and nursing services.
(3) When the agency authorizes administrative day(s) for a client as described in WAC 182-550-2561(8), the agency pays the facility:
(a) The administrative day rate; ((~~and~~))
(b) For pharmaceuticals prescribed for the client's use during the administrative portion of the client's stay; and
(c) Medically necessary ancillary services as determined by the agency.
(4) The agency pays for transportation services provided to a client receiving acute PM&R services in an acute PM&R hospital according to chapter 182-546 WAC.

[Statutory Authority: RCW 41.05.021 and chapter 74.60 RCW. WSR 14-12-047, § 182-550-3381, filed 5/29/14, effective 7/1/14. WSR 11-14-075, recodified as § 182-550-3381, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.08.090 and 74.09.500. WSR 07-14-055, § 388-550-3381, filed 6/28/07, effective 8/1/07. Statutory Authority: RCW 74.08.090, 74.09.520 and 42 C.F.R. 482.56. WSR 03-06-047, § 388-550-3381, filed 2/28/03, effective 3/31/03. Statutory Authority: RCW 74.08.090 and 74.09.520. WSR 99-17-111, § 388-550-3381, filed 8/18/99, effective 9/18/99.]

AMENDATORY SECTION (Amending WSR 22-13-044, filed 6/7/22, effective 10/1/22)

WAC 182-550-4550 Administrative day rate and swing bed day rate.
(1) **Administrative day rate.**
(a) The medicaid agency allows hospitals an administrative day rate for those days of hospital stay in which a client does not meet criteria for acute inpatient level of care, but is not discharged because:
(i) An appropriate placement outside the hospital is not available (no placement administrative day); or
(ii) The postpartum parent's newborn remains on an inpatient claim for monitoring post-in utero exposure to substances that may lead to physiologic dependence and continuous care by the postpartum parent is the appropriate first-line treatment (newborn administrative day). "Postpartum parent" means the client who delivered the baby(ies).
(b) The agency uses the annual statewide weighted average nursing facility medicaid payment rate to update the all-inclusive administrative day rate on November 1st of each year.
(c) The agency ((~~does not~~)) pays for ((~~ancillary services, except for~~)) pharmacy services ((~~and~~)), pharmaceuticals((~~,~~)) and medically necessary ancillary services, as determined by the agency, when these services are provided during administrative days.
(d) The agency identifies administrative days during the length of stay review process after the client's discharge from the hospital.
(e) The agency pays for up to five newborn administrative days. The agency pays for additional days with expedited prior authorization (EPA). For EPA, a hospital must establish that the clinically appro-

priate EPA criteria outlined in the agency's published billing guides have been met. The hospital must use the appropriate EPA number when billing the agency.

(f) The agency pays the hospital the administrative day rate starting with the date of hospital admission if the admission is solely for a no placement administrative day stay.

(g) The agency pays the hospital the newborn administrative day rate only if:

(i) The postpartum parent rooms in with their newborn and provides parental support/care; and

(ii) The hospital provides all prescribed medications to the postpartum parent for the duration of the stay, including medications prescribed to treat substance use disorder.

(2) **Swing bed day rate.** The agency allows hospitals a swing bed day rate for those days when a client is receiving agency-approved nursing service level of care in a swing bed. The agency's aging and disability services administration (ADSA) determines the swing bed day rate.

(a) The agency does not pay a hospital the rate applicable to the acute inpatient level of care for those days of a hospital stay when a client is receiving agency-approved nursing service level of care in a swing bed.

(b) The agency's allowed amount for those ancillary services not covered under the swing bed day rate is based on the payment methods provided in WAC 182-550-6000 and 182-550-7200. These ancillary services may be billed by the hospital on an outpatient hospital claim, except for pharmacy services and pharmaceuticals.

(c) The agency allows pharmacy services and pharmaceuticals not covered under the swing bed day rate, that are provided to a client receiving agency-approved nursing service level of care, to be billed directly by a pharmacy through the point of sale system. The agency does not allow those pharmacy services and pharmaceuticals to be paid to the hospital through submission of a hospital outpatient claim.

[Statutory Authority: RCW 41.05.021 and 41.05.160. WSR 22-13-044, § 182-550-4550, filed 6/7/22, effective 10/1/22; WSR 19-18-026, § 182-550-4550, filed 8/28/19, effective 9/28/19; WSR 15-18-065, § 182-550-4550, filed 8/27/15, effective 9/27/15. WSR 11-14-075, recodified as § 182-550-4550, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.04.050, 74.04.057, 74.08.090, 74.09.500, and 2009-11 Omnibus Operating Budget (ESHB 1244). WSR 09-12-062, § 388-550-4550, filed 5/28/09, effective 7/1/09.]

WSR 23-21-064
PERMANENT RULES
HEALTH CARE AUTHORITY
[Filed October 12, 2023, 3:21 p.m., effective January 1, 2024]

Effective Date of Rule: January 1, 2024.

Purpose: The health care authority is amending this rule to align with Sec. 1902 (a)(25)(I) of the Consolidated Appropriations Act of 2022 (CAA, 2022; P.L. 117-103). The amendments require third parties to respond to certain payment claims and also describe circumstances that prevent responsible third parties from failing to pay claims.

Citation of Rules Affected by this Order: WAC 182-501-0200.

Statutory Authority for Adoption: RCW 41.05.021, 41.05.160.

Other Authority: Sec. 1902 (a)(25)(I) of CAA, 2022 (P.L. 117-103).

Adopted under notice filed as WSR 23-18-085 on September 5, 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 1, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 1, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 1, Repealed 0.

Date Adopted: October 12, 2023.

Wendy Barcus
Rules Coordinator

OTS-4826.1

AMENDATORY SECTION (Amending WSR 20-15-015, filed 7/6/20, effective 8/6/20)

WAC 182-501-0200 Third-party resources. (1) The medicaid agency requires a provider to seek timely reimbursement from a responsible third party when a client has available third-party resources, except as described under subsections (2) and (3) of this section. Responsible third parties include health insurers and other third parties legally liable for health care items and services received by clients.

(2) The agency pays for medical services and seeks reimbursement from a ((~~liable~~)) responsible third party when the claim is for preventive pediatric services as covered under the early and periodic screening, diagnosis and treatment (EPSDT) program.

(3) The agency pays for medical services and seeks reimbursement from any ((~~liable~~)) responsible third party when both of the following apply:

(a) The provider submits to the agency documentation of billing the third party and the provider has not received payment after ((~~one hundred~~)) 100 days from the date of services; and

(b) The claim is for a covered service provided to a client on whose behalf the office of support enforcement is enforcing a noncustodial parent to pay support. For the purpose of this section, "is enforcing" means the noncustodial parent either:

(i) Is not complying with an existing court order; or

(ii) Received payment directly from the third party and did not pay for the medical services.

(4) Responsible third parties, except those identified in subsection (5) of this section, must:

(a) Respond within 60 days to any agency inquiry regarding a claim for payment for any health care item or service submitted within three years after the date the item or service was provided; and

(b) Not deny a claim submitted by the agency solely based on:

(i) The submission date of the claim;

(ii) The type or format of the claim form;

(iii) Lack of prior authorization under the responsible third-party's rules; or

(iv) Any other requirement as described in RCW 74.09A.030.

(5) The following programs found in Title XVIII of the federal Social Security Act are exempt from subsection (4) of this section:

(a) The original medicare fee-for-service program under parts A and B;

(b) A medicare advantage plan offered by a medicare advantage organization under part C;

(c) A reasonable cost reimbursement plan under section 1876 of the federal Social Security Act;

(d) A health care prepayment plan under section 1833 of the federal Social Security Act; or

(e) A prescription drug plan offered under part D that requires prior authorization for an item or service furnished to a person eligible to receive medical assistance under Title XIX of the federal Social Security Act.

(6) The provider may not bill the agency or the client for a covered service when a third party pays a provider the same amount as or more than the agency rate.

((~~(5)~~)) (7) When the provider receives payment from a third party after receiving reimbursement from the agency, the provider must refund to the agency the amount of the:

(a) Third-party payment when the payment is less than the agency's maximum allowable rate; or

(b) Agency payment when the third-party payment is equal to or more than the agency's maximum allowable rate.

((~~(6)~~)) (8) The agency does not pay for medical services if third-party benefits are available to pay for the client's medical services when the provider bills the agency, except under subsections (2) and (3) of this section.

((~~(7)~~)) (9) The client is liable for charges for covered medical services that would be paid by the third-party payment when the client either:

(a) Receives direct third-party reimbursement for the services; or

(b) Fails to execute legal signatures on insurance forms, billing documents, or other forms necessary to receive insurance payments for services rendered. See WAC 182-503-0540 for assignment of rights.

((~~(8)~~)) (10) The agency considers an adoptive family to be a third-party resource for the medical expenses of the birth ((~~mother~~)) parent and child only when there is a written contract between the adopting family and either the birth ((~~mother~~)) parent, the attorney, the provider, or the adoption service. The contract must specify that the adopting family will pay for the medical care associated with the pregnancy.

((~~(9)~~)) (11) A provider cannot refuse to furnish covered services to a client because of a third-party's potential liability for the services.

((~~(10)~~)) (12) For third-party liability on personal injury litigation claims, the agency or managed care organization (MCO) is responsible for providing medical services under WAC 182-501-0100.

[Statutory Authority: RCW 41.05.021, 41.05.160, 42 U.S.C. Sec. 1902 (a)(25)(E), section 53102 (a)(1) of the Bipartisan Budget Act of 2018 and 42 U.S.C. Sec. 1305 (7)(a). WSR 20-15-015, § 182-501-0200, filed 7/6/20, effective 8/6/20. Statutory Authority: RCW 41.05.021, 41.05.160 and 42 U.S.C. 1396a (a)(25)(E). WSR 19-23-008, § 182-501-0200, filed 11/6/19, effective 12/7/19. Statutory Authority: RCW 41.05.021 and 41.05.160. WSR 16-23-021, § 182-501-0200, filed 11/4/16, effective 1/1/17; WSR 15-15-053, § 182-501-0200, filed 7/9/15, effective 8/9/15. WSR 11-14-075, recodified as § 182-501-0200, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.08.090. WSR 10-19-057, § 388-501-0200, filed 9/14/10, effective 10/15/10. Statutory Authority: RCW 74.04.050, 74.08.090. WSR 00-11-141, § 388-501-0200, filed 5/23/00, effective 6/23/00; WSR 00-01-088, § 388-501-0200, filed 12/14/99, effective 1/14/00.]

WSR 23-21-069
PERMANENT RULES
HEALTH CARE AUTHORITY
[Filed October 12, 2023, 4:15 p.m., effective November 12, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: The health care authority amended this rule to include criteria to allow agency-approved online classes with a one-on-one check-in with the client and qualified childbirth education provider during or after the online classes have been completed by the client.

Citation of Rules Affected by this Order: Amending WAC 182-533-0390.

Statutory Authority for Adoption: RCW 41.05.021, 41.05.160.

Adopted under notice filed as WSR 23-18-078 on September 5, 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 1, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 1, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 1, Repealed 0.

Date Adopted: October 12, 2023.

Wendy Barcus
Rules Coordinator

OTS-4863.1

AMENDATORY SECTION (Amending WSR 19-06-026, filed 2/28/19, effective 4/1/19)

WAC 182-533-0390 Childbirth education (CBE) classes. (1) Purpose. The purpose of childbirth education (CBE) classes is to help prepare the client and the client's support person(s):

(a) For the physiological, emotional, and psychological changes experienced during and after pregnancy;

(b) To develop self-advocacy skills;

(c) To increase knowledge about and access to local community resources;

(d) To improve parenting skills; and

(e) To improve the likelihood of positive birth outcomes.

(2) Definitions. The definitions in chapter 182-500 WAC, medical assistance definitions, and WAC 182-533-0315, maternity support services definitions, also apply to this section.

(3) Client eligibility. To be eligible for CBE classes, a client must be:

(a) Pregnant; and

(b) Covered under one of the medical assistance programs described in WAC 182-533-0320 (1)(a)(i) and (iv).

(4) Provider requirements. To be paid for providing CBE classes to eligible clients, an approved instructor must:

(a) Have a core provider agreement on file with the ((~~health care authority (the~~)) agency((~~)~~));

(b) Ensure that individuals providing CBE classes or following up during or after the completion of online classes have credentials and/or certification as outlined in the agency's current published billing instructions;

(c) Deliver CBE classes:

(i) In a series of group sessions; ((~~and~~)) or

(ii) Through online classes approved by the agency; and

(d) Provide curriculum containing topics outlined in the agency's CBE curriculum checklist found in the agency's current published billing instructions. Topics include, but are not limited to:

(i) Pregnancy;

(ii) Labor and birth;

(iii) Newborns; and

(iv) Family adjustment.

(5) Documentation. Providers must:

(a) Follow the health care record requirements found in WAC 182-502-0020; and

(b) Maintain the following additional documentation:

(i) An original or electronically signed copy of each client's Freedom of ((~~Choice/Consent~~)) Choice form and Consent for Services form;

(ii) A client sign-in sheet or log-in verification for each class; and

(iii) Names and ProviderOne Client ID numbers of eligible clients attending CBE classes and the date(s) they participated in each CBE class.

(6) Coverage.

(a) The agency covers one CBE class series per client, per pregnancy. In order for the provider to be reimbursed:

(i) The client must attend at least one CBE session ((~~for the provider to be paid~~)) or agency-approved online CBE class; and

(ii) The provider must follow up with clients participating in online classes through a telemedicine, including audio-only, visit or an in-person visit. If the client does not appear for the follow up visit, the provider must attempt to connect with the client one more time before billing the agency.

(b) CBE classes must include a minimum of six hours of instruction and are subject to the restrictions and limitations in this section and other applicable WAC.

(7) Payment. The agency pays for the CBE classes described in subsection (6) of this section on a fee-for-service basis subject to the following:

(a) CBE must:

(i) Include all classes, core materials, publications, and educational materials provided throughout the class series. Clients must receive the same materials as are offered to other attendees; and

(ii) Be billed according to the agency's current published billing instructions.

(b) The provider must accept the agency's fee as payment in full for classes provided to a client in accordance with 42 C.F.R. § 447.15.

[Statutory Authority: RCW 41.05.021 and 41.05.160. WSR 19-06-026, § 182-533-0390, filed 2/28/19, effective 4/1/19. Statutory Authority: RCW 41.05.021 and 2011 c 5. WSR 12-01-097, § 182-533-0390, filed 12/20/11, effective 1/20/12. WSR 11-14-075, recodified as § 182-533-0390, filed 6/30/11, effective 7/1/11. Statutory Authority: RCW 74.08.090, 74.09.760 through 74.09.910. WSR 04-13-049, § 388-533-0390, filed 6/10/04, effective 7/11/04.]

WSR 23-21-075
PERMANENT RULES
DEPARTMENT OF HEALTH
(Board of Physical Therapy)
[Filed October 13, 2023, 4:27 p.m., effective November 13, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: Health equity continuing education (CE) rules for the physical therapy and physical therapy assistant professions, WAC 246-915-085. The board of physical therapy (board) is adopting an amendment to WAC 246-915-085 to implement ESSB 5229 (chapter 276, Laws of 2021). The board is adopting and exceeding the health equity model rule minimum standards, WAC 246-12-800 through 246-12-830, for the physical therapy and physical therapy assistant profession to comply with RCW 43.70.613.

RCW 43.70.613 (3)(b) directs the rule-making authority for each health profession licensed under Title 18 RCW that is subject to CE to adopt rules requiring a licensee to complete health equity CE training at least once every four years. The statute also directs the department of health (department) to create model rules establishing the minimum standards for health equity CE programs. The department filed model rules for health equity CE minimum standards on November 23, 2022, under WSR 22-23-167. Any rules developed for the board must meet or exceed the minimum standards in the model rules in WAC 246-12-800 through 246-12-830.

The board's adopted rule adds two hours of health equity education to be completed as part of the current CE requirements every two years. This exceeds the two hours of health equity education to be completed every four years required in the model rules. The proposed rule requires two hours in health equity CE every two years which can be counted under existing CE requirements for the profession. No additional topics are being added to the model rules requirements.

Citation of Rules Affected by this Order: Amending WAC 246-915-085.

Statutory Authority for Adoption: RCW 18.74.023 and 43.70.613.

Adopted under notice filed as WSR 23-13-113 on June 21, 2023.

A final cost-benefit analysis is available by contacting Allyson McIver, P.O. Box 47877, Olympia, WA 98504-7877, phone 360-236-2878, fax 360-236-2901, TTY 711, email physical.therapy@doh.wa.gov, website doh.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 1, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 1, Repealed 0.

Date Adopted: October 12, 2023.

Kathryn Dale, PT, DSc, Chairperson
Board of Physical Therapy

OTS-4534.1

AMENDATORY SECTION (Amending WSR 21-20-009, filed 9/23/21, effective 10/24/21)

WAC 246-915-085 Continuing competency. (1) Every two years, a physical therapist shall complete ((~~thirty-two~~)) 32 hours of continuing education (CE) through any of the following means:

	CE Type	Maximum Hours Allowed	Documentation Requirements
a.	Participation in a course, live or online, including recorded.	No limit	Keep certificates of completion for each course, and, if not contained in the certificate of completion, information describing the course sponsors, the goals and objectives of the course, the credentials of the presenter as a recognized authority on the subject presented, dates of attendance, and total hours for all continuing education courses being reported.
b.	Live or recorded instructional electronic media relating to the practice of physical therapy that does not include specific goals and objectives.	Four hours	Instead of course goals, objectives and certificate of completion, the PT shall write and submit to the department a minimum of two takeaways for each hour of running time.
c.	Books or articles reviewed.	Eight hours (reading time only)	The PT shall write and submit to the department a one-page synopsis in twelve-point font for each hour of reading time. The time spent writing a synopsis is not reportable.
d.	Preparation and presentation of professional physical therapy courses or lectures.	Sixteen hours	The PT shall submit to the department a description and objectives of the presentation, date, and location of presentation.
e.	Written preparation and publication of original scholarly research or work published in a peer-review journal.	Ten hours	The PT shall submit to the department proof of publication which may include poster presentations.
f.	Clinical instruction of physical therapy students enrolled in a physical therapy educational program accredited by the American Physical Therapy Association's Commission on Accreditation in Physical Therapy Education (CAPTE) or clinical instruction in a postgraduate residency or fellowship through the American Board of Physical Therapy Residency and Fellowship Education (ABPTRFE).	Ten hours	The PT shall obtain and submit to the department a letter or certificate from the student's academic institution verifying that the student has completed the course of clinical instruction. Each thirty-two hours of student mentorship equals one hour for purposes of CE credit.
g.	Courses required for professional certification such as to work in public schools.	Fifteen hours	The PT shall submit a copy of the completion certificate to the department.
h.	Courses provided by an accredited institution of higher education which may include, but are not limited to, courses leading to an advanced degree in physical therapy or other courses that advance the PT's competence.	No limit	The PT shall submit a transcript to the department verifying courses taken. One quarter credit is equal to ten hours; one trimester is equal to twelve hours; and one semester credit is equal to fifteen hours.
i.	Attendance at science-based conferences.	No limit	Certificate of attendance.
j.	Preparing for and successfully taking and passing board certification exams through the American Board of Physical Therapy Specialties.	No limit	Certificate of certification.

(2) Every two years a physical therapist who holds a spinal manipulation endorsement shall complete at least ((~~ten~~)) 10 hours of continuing education directly related to spinal manipulation with at least five hours related to procedural techniques and application of spinal manipulation. For documentation, refer to the documentation re-

quired for the particular type of continuing education chosen. The hours spent completing spinal manipulation continuing education count toward meeting any applicable continuing competency requirements.

(3) Every two years, a physical therapist assistant shall complete ((~~twenty-four~~)) 24 hours of continuing education through any of the following means:

	CE Type	Hours Allowed	Documentation Requirements
a.	Participation in a course, live or online, including recorded.	No limit	Keep certificates of completion for each course, and, if not contained in the certificate of completion, information describing the course sponsors, the goals and objectives of the course, the credentials of the presenter as a recognized authority on the subject presented, dates of attendance, and total hours for all continuing education courses being reported.
b.	Live or recorded instructional electronic media relating to the practice of physical therapy that does not include specific goals and objectives.	Four hours	Instead of course goals, objectives and certificate of completion, the PTA shall submit to the department a minimum of two takeaways for each hour of running time.
c.	Books or articles reviewed.	Eight hours (reading time only)	The PTA shall write and submit a one-page synopsis in twelve-point font for each hour of reading time. The time spent writing a synopsis is not reportable.
d.	Preparation and presentation of professional physical therapy courses or lectures.	Sixteen hours	The PTA shall submit to the department a description and objectives of the presentation, date, and location of presentation.
e.	Written preparation and publication of original scholarly research or work published in a peer-review journal.	Ten hours	The PTA shall submit proof of publication which may include poster presentations.
f.	Clinical instruction of physical therapist assistant students enrolled in a physical therapy assistant program accredited by the American Physical Therapy Association's Commission on Accreditation in Physical Therapy Education (CAPTE) or clinical instruction in a postgraduate residency or fellowship through the American Board of Physical Therapy Residency and Fellowship Education (ABPTRFE).	Ten hours	The PTA shall obtain and submit to the department a letter or certificate from the student's academic institution verifying that the student has completed the course of clinical instruction. Each thirty-two hours of student mentorship equals one hour for purposes of CE credit.
g.	Courses required for professional certification such as to work in public schools.	Fifteen hours	The PTA shall submit a copy of the completion certificate.
h.	Courses provided by an accredited institution of higher education which may include, but are not limited to, courses leading to an advanced degree in physical therapy or other courses that advance the PTA's competence.	No limit	The PTA shall submit a transcript verifying courses taken. One quarter credit is equal to ten hours; one trimester credit is equal to twelve hours; and one semester credit is equal to fifteen hours.
i.	Attendance at science-based conferences.	No limit	Certificate of attendance.
j.	Preparing for and successfully taking and passing board certification exams through the American Board of Physical Therapy Specialties.	No limit	Certificate of certification.

(4) Every two years, each physical therapist and physical therapist assistant shall complete two hours of health equity continuing competency training as described in WAC 246-12-800 through 246-12-830. For documentation, refer to the documentation required for the particular type of continuing education chosen. The hours spent completing health equity training continuing education count toward meeting any applicable continuing competency requirements.

(5) Each physical therapist and physical therapist assistant shall complete a one-time, three hour suicide assessment training described in WAC 246-915-086.

((~~(5)~~)) (6) Every two years, each physical therapist and physical therapist assistant shall complete ((~~two hundred~~)) 200 hours involving the application of physical therapy knowledge and skills which may be obtained in the clinical practice of physical therapy or in the nonclinical activities which include, but are not limited to, the following:

	Clinical Activities	Hours Allowed	Documentation
a.	Physical therapy clinical practice.	No limit	Documentation of physical therapy employment, the PT or PTA shall provide copies of employment records or other proof acceptable to the board of employment for the hours being reported.

	Nonclinical Activities	Hours Allowed (within the two hundred hours required)	Documentation
b.	Physical therapy teaching of: • Patient/client management, prevention and wellness. • Physical therapy ethics and standards of practice. • Professional advocacy/involvement.	No limit	The PT or PTA shall provide documentation of such activities as acceptable to the board.
c.	Active service on boards or participation in professional or government organizations, or attendance at professional or government organizations meetings specifically related to the practice of physical therapy.	No limit	The PT or PTA shall provide documentation of such activities as acceptable to the board.
d.	Developing course work in physical therapy schools or education programs or physical therapy continuing education courses.	No limit	The PT or PTA shall provide documentation of such activities as acceptable to the board.
e.	Physical therapy research as a principal or associate researcher.	No limit	The PT or PTA shall provide documentation of such activities as acceptable to the board.
f.	Physical therapy consulting.	No limit	The PT or PTA shall provide documentation of such activities as acceptable to the board.
g.	Management of physical therapy services.	No limit	The PT or PTA shall provide documentation of such activities as acceptable to the board.
h.	Physical therapy volunteer hours or observation in physical therapy practice.	No limit	The PT or PTA shall provide documentation verifying volunteer or observation hours.

[Statutory Authority: RCW 18.74.023. WSR 21-20-009, § 246-915-085, filed 9/23/21, effective 10/24/21. Statutory Authority: RCW 18.74.023, chapter 18.74 RCW and 2018 c 222. WSR 20-06-029, § 246-915-085, filed 2/26/20, effective 3/28/20. Statutory Authority: RCW 18.74.023 and chapter 18.74 RCW, RCW 18.340.020. WSR 18-15-067, § 246-915-085, filed 7/17/18, effective 8/17/18. Statutory Authority: RCW 18.74.023 and 43.70.442. WSR 15-14-093, § 246-915-085, filed 6/29/15, effective 7/1/15. Statutory Authority: RCW 18.74.023. WSR 08-17-026, § 246-915-085, filed 8/13/08, effective 8/13/08. Statutory Authority: RCW 18.74.023(4). WSR 04-08-101, § 246-915-085, filed 4/6/04, effective 5/7/04. Statutory Authority: RCW 43.70.280. WSR 98-05-060, § 246-915-085, filed 2/13/98, effective 3/16/98. Statutory Authority:

RCW 18.74.023. WSR 94-05-014 (Order 403B), § 246-915-085, filed 2/4/94, effective 3/7/94.]

WSR 23-21-076
PERMANENT RULES
DEPARTMENT OF HEALTH
[Filed October 13, 2023, 4:33 p.m., effective January 1, 2024]

Effective Date of Rule: January 1, 2024.

Purpose: Health equity continuing education (CE) for respiratory care practitioners under chapter 246-928 WAC, Respiratory care practitioners.

The department of health (department) adopts amendments to WAC 246-928-442 and the creation of new WAC 246-928-445 to establish health equity CE requirements to implement ESSB 5229 (chapter 276, Laws of 2021). The adopted rule does not change the total CE hours. It requires two hours in health equity CE every two years, which is absorbed into the existing number of CE hours required. The health equity CE requirement is counted under existing, unspecified CE requirements for the profession. Additionally, the department adopts minor amendments to update and clarify rule language in WAC 246-928-442.

RCW 43.70.613 (3)(b) directed the rule-making authority for each health profession licensed under Title 18 RCW that is subject to CE to adopt rules requiring a licensee to complete health equity CE training at least once every four years. The statute also directed the department to create model rules establishing the minimum standards for health equity CE programs. The department filed model rules for health equity CE minimum standards on November 23, 2022, under WSR 22-23-167.

Citation of Rules Affected by this Order: New WAC 246-928-445; and amending WAC 246-928-442.

Statutory Authority for Adoption: RCW 18.89.050, 18.89.140; and ESSB 5229 (chapter 276, Laws of 2021).

Adopted under notice filed as WSR 23-16-147 on August 2, 2023.

A final cost-benefit analysis is available by contacting Kathy Weed, P.O. Box 47852, Olympia, WA 98504-7852, phone 360-236-4883, 360-236-2901, TTY 711, email kathy.weed@doh.wa.gov, website www.doh.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 1, Amended 1, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 1, Amended 1, Repealed 0.

Date Adopted: October 13, 2023.

Kristin Peterson, JD
Chief of Policy
for Umair A. Shah, MD, MPH
Secretary

OTS-4756.1

AMENDATORY SECTION (Amending WSR 22-11-013, filed 5/9/22, effective 7/1/22)

WAC 246-928-442 Continuing education. To renew a respiratory care practitioner license, the licensee shall acquire 30 credit hours of ((~~continuing~~)) respiratory care continuing education every two years as required in RCW 18.89.140. Licensees shall meet the continuing education requirements outlined in this section and report ((~~such~~)) completed continuing education as required in WAC 246-12-170 through 246-12-240.

(1) The following are categories of ((~~accepted~~)) required continuing education activities for licensed respiratory care practitioners:

(a) A minimum of 10 credit hours of continuing education during each two-year reporting cycle must be earned in courses approved by the American Association for Respiratory Care (AARC).

(b) Beginning January 1, 2024, a respiratory care practitioner must complete two hours of health equity training each reporting cycle, as specified in WAC 246-928-445.

(c) The remaining ((~~20~~)) 18 hours of continuing education during each two-year reporting cycle may be in any of the following areas:

(i) Sponsored courses. Continuing education courses sponsored or approved by entities listed in subsection (2) of this section;

(ii) Certifications and examinations. Completing professional certifications or examinations listed in subsection (3) of this section;

(iii) Education and instruction. Completing or instructing coursework as described in subsection (4) of this section; and

(iv) Related studies. Completing up to 10 hours per reporting cycle of activities listed in subsection (5) of this section.

(2) Sponsored courses. ((~~Courses~~)) Eligible courses are sponsored or approved by the:

((~~(A)~~)) (a) American Academy of Pediatrics;
((~~(B)~~)) (b) American Academy of Physician Assistants;
((~~(C)~~)) (c) American Association of Critical Care Nurses;
((~~(D)~~)) (d) American Association ((~~of~~)) for Respiratory Care;
((~~(E)~~)) (e) American College of Chest Physicians;
((~~(F)~~)) (f) American College of Emergency Physicians;
((~~(G)~~)) (g) American College of Physicians;
((~~(H)~~)) (h) American Medical Association;
((~~(I)~~)) (i) American Nurses Association;
((~~(J)~~)) (j) American Osteopathic Association;
((~~(K)~~)) (k) American Thoracic Society;
((~~(L)~~)) (l) Society of Critical Care Medicine;
((~~(M)~~)) (m) Washington academy of physician assistants;
((~~(N)~~)) (n) Washington osteopathic medicine association;
((~~(O)~~)) (o) Washington state medical association;
((~~(P)~~)) (p) Washington state nurses association;
((~~(Q)~~)) (q) Extracorporeal life support organization; or
((~~(R)~~)) (r) American Society of Extracorporeal Technology.

((~~(ii)~~)) (3) Certifications((~~/~~)) and examinations. The following certifications and examinations are valid for continuing education credit((~~.~~)):

((~~(A)~~)) (a) Ten credit hours each may be claimed for the following initial or renewal certifications:

((~~(I)~~)) (i) Advanced cardiac life support (also known as ACLS);

((~~(II)~~)) (ii) Neonatal advanced life support (also known as NALS, or neonatal resuscitation program or NRP); and

((~~(III)~~)) (iii) Pediatric advanced life support (also known as PALS).

((~~(B)~~)) (b) Five credit hours may be claimed for initial or renewal certification in basic life support (also known as BLS).

((~~(C)~~)) (c) Ten credit hours each may be claimed for passing either of the following National Board of Respiratory Care (NBRC) advanced practitioner examinations:

((~~(I)~~)) (i) The NBRC therapist multiple-choice examination combined with the clinical simulation examination that awards NBRC registration; or

((~~(II)~~)) (ii) Registered pulmonary function technologist.

((~~(D)~~)) (d) Five credit hours each may be claimed for passing any of the following:

((~~(I)~~)) (i) The NBRC therapist multiple-choice examination that awards NBRC certification;

((~~(II)~~)) (ii) Any NBRC specialty examination;

((~~(III)~~)) (iii) The NBRC self-assessment competency examination with a minimum score of 75; or

((~~(IV)~~)) (iv) National Asthma Educator Certification Board certified asthma educator examination.

((~~(iii) Educational settings.~~

~~(A) A licensee may claim~~)) (4) Education and instruction. A licensee may claim continuing education credit for:

(a) Courses completed at a regionally accredited college, university, or institute of higher education. Such courses must focus on the clinical practice of respiratory care or education related to the cardiopulmonary system. Credit hours for such courses may be claimed as either:

((~~(I)~~)) (i) Actual semester contact hours (such as 15 semester contact hours shall be equal to 15 continuing education credits); or

((~~(II)~~)) (ii) An academic credit formula that multiplies the academic credits by a factor of three (such as four academic credits shall be equal to 12 continuing education credits).

((~~(B) A licensee may claim~~)) (b) Respiratory care educational offerings provided by hospitals or health organizations.

((~~(C) A licensee may claim continuing education credit hours for~~)) (c) Serving as an instructor of educational offerings in respiratory care provided by hospitals or health organizations; or at a regionally accredited college, university, or institute of higher education. Such educational offerings must include learning objectives. The number of credit hours claimed for serving as an instructor shall be the same number as those earned by attendees. The credit hours for presenting a specific topic, lecture, or education course may only be used for continuing education once during each reporting cycle.

((~~(c) No more than~~)) (5) Related studies. Up to 10 credit hours of continuing education during a two-year reporting cycle may be in any of the following areas:

((~~(i)~~)) (a) Self-study. Journal reading of publications related to respiratory care;

((~~(ii)~~)) (b) Practice related topics. Formal, internet-based, or video-format courses offered by organizations not listed in (b) of this subsection including, but not limited to, the American Association of Cardiovascular and Pulmonary Rehabilitation, the Association for the Treatment of Tobacco Use and Dependence, or the Council for Tobacco Treatment Training Programs; or

((~~(iii)~~)) (c) Nonclinical practice topics. Courses or activities including, but not limited to, health promotion, health care cost management, mandatory reporting, professional ethics, and regulatory affairs.

((~~(2)~~)) (6) Documentation requirements. A licensee is responsible for acquiring and maintaining all acceptable documentation of their continuing education activities, as required in WAC 246-12-170 through 246-12-240. Acceptable documentation must include transcripts, letters from course instructors, or certificates of completion or other formal certifications provided by hospitals, course instructors, and health organizations. In all cases other than transcripts, the documentation must show the participant's name, activity title, number of continuing education credit hours, date(s) of activity, instructor's name(s) and degree and the signature of the verifying individual program sponsor.

[Statutory Authority: RCW 18.89.050 and 2021 c 114. WSR 22-11-013, § 246-928-442, filed 5/9/22, effective 7/1/22. Statutory Authority: RCW 18.89.050 and 19.89.140 [18.89.140]. WSR 15-24-095, § 246-928-442, filed 11/30/15, effective 12/31/15. Statutory Authority: RCW 18.89.050(1) and 18.89.140. WSR 01-21-136, § 246-928-442, filed 10/24/01, effective 11/24/01.]

NEW SECTION

WAC 246-928-445 Health equity training standards. (1) Beginning on January 1, 2024, a respiratory care practitioner must complete training in health equity as a part of their continuing education requirements. The respiratory care practitioner must complete at least two hours of health equity training every two-year renewal cycle. The training must meet the minimum standards under RCW 43.70.613 and comply with course requirements in WAC 246-12-800 through 246-12-830.

(2) Health equity continuing education counts toward the 30 total hours of continuing education required under WAC 246-928-442.

[]

WSR 23-21-077
PERMANENT RULES
DEPARTMENT OF HEALTH
[Filed October 13, 2023, 4:38 p.m., effective November 13, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: Health equity continuing education (CE) for dispensing opticians. The department of health (department) amended WAC 246-824-075 to require dispensing opticians to complete two hours of health equity CE every four years. Health equity CE programs must meet the standards created in the department's model rules in WAC 246-12-800 through 246-12-830. The adopted rule does not add to the total CE hours required to renew the license.

The adopted rule implements the requirements of ESSB 5229 (chapter 276, Laws of 2021). Codified in RCW 43.70.613, the statute directed the rule-making authority for each health profession licensed under Title 18 RCW and subject to CE to adopt rules requiring a minimum of two hours of health equity CE every four years. The statute also directed the department to create the model rules establishing minimum standards for health equity CE programs, which were filed on November 23, 2022, under WSR 22-23-167.

Citation of Rules Affected by this Order: Amending WAC 246-824-075.

Statutory Authority for Adoption: RCW 18.34.120, 18.130.040, 43.70.040, and 43.70.613.

Adopted under notice filed as WSR 23-12-063 on June 2, 2023.

A final cost-benefit analysis is available by contacting Kristina Bell, P.O. Box 47852, Olympia, WA 98504-7852, phone 360-236-4841, fax 360-236-2901, TTY 711, email kristina.bell@doh.wa.gov, website www.doh.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 1, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 1, Repealed 0.

Date Adopted: October 13, 2023.

Kristin Peterson, JD
Chief of Policy
for Umair A. Shah, MD, MPH
Secretary

OTS-4393.2

AMENDATORY SECTION (Amending WSR 15-07-006, filed 3/6/15, effective 4/6/15)

WAC 246-824-075 Continuing education requirements for dispensing opticians. Purpose and scope. The purpose of continuing education is to ensure the continued high quality of services provided by licensed dispensing opticians. Continuing education consists of programs of learning which contribute directly to the advancement or enhancement of skills in the field of opticianry, designed to keep the licensed dispensing opticians informed of current and forecasted developments in a rapidly changing field.

(1) Basic requirements. Licensed dispensing opticians whose three-year continuing education reporting cycle begins on or after June 1, 2015, must complete ((~~thirty~~)) 30 hours of continuing education every three years ((~~as required in chapter 246-12 WAC, Part 7~~)) according to the requirements in WAC 246-12-170 through 246-12-240. Of the ((~~thirty~~)) 30 hours every three years:

(a) A minimum of five hours must be completed in each of the three years;

(b) At least ((~~fifteen~~)) 15 of the credit hours must relate to contact lenses.

(2) Approved continuing education courses may be completed through the following methods or activities:

(a) Attendance at a local state or national program;

(b) Self-study through distance learning;

(c) Electronically through webinar or video presentations.

(3) Courses offered by the following organizations are presumed to qualify as continuing education courses. The secretary reserves the right to refuse to accept credits in any course if the secretary determines that the course did not provide information sufficient in amount or relevancy to opticianry:

(a) American Board of Opticianry;

(b) National Academy of Opticianry;

(c) Optical Laboratories Association;

(d) National Contact Lens Examiners;

(e) Contact Lens Society of America;

(f) Opticians Association of Washington;

(g) Joint Commission of Allied Health Personnel in Ophthalmology;

(h) Council on Optometric Practitioner Education;

(i) Opticianry colleges or universities approved by the secretary;

(j) Speakers sponsored by any of the above organizations;

(k) Any state or national opticianry association; and

(l) Additional qualifying organizations or associations as approved by the secretary.

(4) Dispensing opticians must complete a minimum of two hours in health equity continuing education training every four years by complying with WAC 246-12-800 through 246-12-830.

(a) This training must be completed by the end of the second full continuing education reporting period after January 1, 2024, or the second full continuing education reporting period after initial licensure, whichever is later.

(b) The hours spent completing health equity continuing education under this section count toward meeting applicable continuing education requirements in this section.

[Statutory Authority: RCW 18.34.120. WSR 15-07-006, § 246-824-075, filed 3/6/15, effective 4/6/15; WSR 09-07-023, § 246-824-075, filed 3/6/09, effective 4/6/09. Statutory Authority: RCW 43.70.280. WSR 98-05-060, § 246-824-075, filed 2/13/98, effective 3/16/98. Statutory Authority: RCW 43.17.060 and 18.130.070. WSR 91-09-024 (Order 155), § 246-824-075, filed 4/10/91, effective 5/11/91.]

WSR 23-21-083
PERMANENT RULES
DEPARTMENT OF
LABOR AND INDUSTRIES

[Filed October 17, 2023, 8:30 a.m., effective January 1, 2024]

Effective Date of Rule: January 1, 2024.

Purpose: The department of labor and industries (L&I) adopted amendments to the elevator rules to correct fees under chapter 296-96 WAC. Adopted amendments to this chapter: Correct the fee effective dates from July 1, 2024, to January 1, 2024; remove obsolete fees; correct the fee amount for inspecting and testing of elevators used for construction; and modify rules for clarity and general housekeeping, such as renumbering, formatting, etc.

On October 18, 2022, L&I adopted two 8.5 percent increases to all elevator fees effective January 1, 2023, and January 1, 2024 (WSR 22-21-118). The fee increase supports funding for a new conveyance management system. As a result of an inadvertent error, some of the fee effective dates were incorrect. The fees affected include permits, inspections, and other services for conveyances. This rule making adopts the corrections, along with other housekeeping amendments.

Citation of Rules Affected by this Order: Amending WAC 296-96-00922, 296-96-01005, 296-96-01010, 296-96-01025, 296-96-01027, 296-96-01030, 296-96-01035, 296-96-01040, 296-96-01045, 296-96-01055, 296-96-01057, 296-96-01060, and 296-96-01065.

Statutory Authority for Adoption: RCW 70.87.030.

Adopted under notice filed as WSR 23-15-088 on July 18, 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 13, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: October 17, 2023.

Joel Sacks
Director

OTS-4682.1

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-00922 Licensing fees. The following are the department's elevator license fees ((~~for FY23, effective January 1, 2023, and FY24, effective January 1, 2024~~)):

Type of Fee	Period Covered by Fee	((~~Dollar Amount of FY23 Fee~~))	Dollar Amount of ((~~FY24~~)) Fee
Elevator contractor/mechanic application fee (not required for renewal of valid license)	Per application	((~~$80.40~~))	$86.70
Elevator contractor/ mechanic examination fee	Per application	((~~$242.70 ***~~))	$261.70***
Reciprocity application fee	Per application*	((~~$80.40~~))	$86.70
Elevator mechanic license	2 years	((~~$161.65~~))	$174.30
Elevator contractor license	2 years	((~~$161.65~~))	$174.30
Temporary elevator mechanic license application fee (not required for renewal)	Per application	((~~$80.40~~))	$86.70
Temporary elevator mechanic license	1 year	((~~$161.65~~))	$174.30
Emergency elevator mechanic license	30 days	((~~$39.90~~))	$43.00
Elevator mechanic/contractor timely renewal fee	2 years	((~~$161.65~~))	$174.30
Elevator mechanic/contractor late renewal fee	2 years	((~~$323.85~~))	$349.20
Temporary elevator mechanic timely renewal fee	1 year	((~~$161.65~~))	$174.30
Temporary elevator mechanic late renewal fee	1 year	((~~$323.85~~))	$349.20
Training provider application/renewal fee	2 years	((~~$161.65~~))	$174.30
Continuing education course fee by approved training provider	1 year**	((~~Not applicable~~))	Not applicable
Replacement of any licenses		((~~$23.95~~))	$25.80
Refund processing fee		((~~$48.15~~))	$51.90

* Reciprocity application is only allowed for applicants who are applying for licensing based upon possession of a valid license that was obtained in state(s) with which the department has a reciprocity.
** This fee is paid directly to the continuing education training course provider approved by the department.
*** This fee may be collected by an outside vendor for some exams and may differ from the fee shown above.

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-00922, filed 10/18/22, effective 1/1/23; WSR 22-05-076, § 296-96-00922, filed 2/15/22, effective 3/18/22; WSR 21-18-096, § 296-96-00922, filed 8/31/21, effective 10/1/21; WSR 19-24-086, § 296-96-00922, filed 12/3/19, effective 12/3/19. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-00922, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 70.87 RCW. WSR 18-18-068, § 296-96-00922, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd sp.s. c 4. WSR 14-06-041, § 296-96-00922, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW and 2011 1st sp.s. c 50. WSR 12-06-065, § 296-96-00922, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-96-00922, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-96-00922, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-96-00922, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. WSR 04-12-047, § 296-96-00922, filed 5/28/04, effective 6/30/04.]

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-01005 Obtaining permits. (1) See WAC 296-96-01000 for the permit process.

(2) Construction and alteration permits are valid for one year from the date of issue. However, permits may be renewed if:

(a) Application for a renewal permit is submitted before the current permit expires;

(b) The department approves the request for a renewal permit; and

(c) A renewal fee of $78.60 is paid to the department for each permit renewed ((~~as follows:~~

~~(i) For FY23, effective January 1, 2023: $72.90.~~

~~(ii) For FY24, effective January 1, 2024: $78.60~~)).

(3) If the permit has expired the applicant shall reapply for a new permit.

(4) See WAC 296-96-01006 for work requiring a permit.

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-01005, filed 10/18/22, effective 1/1/23; WSR 22-05-076, § 296-96-01005, filed 2/15/22, effective 3/18/22; WSR 21-18-096, § 296-96-01005, filed 8/31/21, effective 10/1/21. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-01005, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 70.87 RCW. WSR 18-18-070, § 296-96-01005, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd sp.s. c 4. WSR 14-06-041, § 296-96-01005, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW. WSR 07-24-041, § 296-96-01005, filed 11/30/07, effective 1/1/08. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-96-01005, filed 5/22/07, effective 6/30/07. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. WSR 04-12-047, § 296-96-01005, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 70.87.030, 18.106.070, 18.106.125, 2001 c 7, and chapters 18.106, 43.22, and 70.87 RCW. WSR 03-12-045, § 296-96-01005, filed 5/30/03, effective 6/30/03. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. WSR 01-02-026, § 296-96-01005, filed 12/22/00, effective 1/22/01.]

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-01010 Installation and alteration permit fees. Permit fees are based on the total cost of the conveyance or alteration and the labor to install or alter the conveyance. The following permit fees apply to the construction, alteration, or relocation of all conveyances except personnel and material hoists (see WAC 296-96-01025) ((~~. The fees for FY23, effective January 1, 2023, and FY24, effective January 1, 2024, are as follows~~)):

TOTAL COST OF INSTALLATION OR ALTERATION	((~~FY 23 FEE~~	~~FY 24~~)) FEE
$0 to and including $1,000	((~~$80.40~~))	$86.70
$1,001 to and including $5,000	((~~$120.95~~))	$130.40
$5,001 to and including $7,000	((~~$202.00~~))	$217.80
$7,001 to and including $10,000	((~~$242.70~~))	$261.70
$10,001 to and including $15,000	((~~$323.85~~))	$349.20

OVER $15,000 for installation only*.	((~~$453.40 plus~~))	$488.90 plus
OVER $15,000 for alteration only*.	((~~$323.85~~))	$349.20
*Each additional $1,000 or fraction thereof	((~~$10.95~~))	$11.80

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-01010, filed 10/18/22, effective 1/1/23; WSR 22-05-076, § 296-96-01010, filed 2/15/22, effective 3/18/22; WSR 21-18-096, § 296-96-01010, filed 8/31/21, effective 10/1/21. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-01010, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 70.87 RCW. WSR 18-18-070, § 296-96-01010, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd sp.s. c 4. WSR 14-06-041, § 296-96-01010, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW and 2011 1st sp.s. c 50. WSR 12-06-065, § 296-96-01010, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapter 70.87 RCW. WSR 07-24-041, § 296-96-01010, filed 11/30/07, effective 1/1/08. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-96-01010, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-96-01010, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-96-01010, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. WSR 04-12-047, § 296-96-01010, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-96-01010, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-96-01010, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. WSR 01-02-026, § 296-96-01010, filed 12/22/00, effective 1/22/01.]

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-01025 Permit fees for personnel and material hoists. The fee for each personnel hoist or material hoist installation is ((~~as follows:~~

~~(1) For FY23, effective January 1, 2023: $323.85.~~

~~(2) For FY24, effective January 1, 2024:~~)) $349.20.

See WAC 296-96-01035(2) for requirements for jumps.

Note: An operating certificate is also required for these types of conveyances.

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-01025, filed 10/18/22, effective 1/1/23; WSR 22-05-076, § 296-96-01025, filed 2/15/22, effective 3/18/22; WSR 21-18-096, §

296-96-01025, filed 8/31/21, effective 10/1/21. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-01025, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 70.87 RCW. WSR 18-18-070, § 296-96-01025, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd sp.s. c 4. WSR 14-06-041, § 296-96-01025, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW and 2011 1st sp.s. c 50. WSR 12-06-065, § 296-96-01025, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapter 70.87 RCW. WSR 07-24-041, § 296-96-01025, filed 11/30/07, effective 1/1/08. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-96-01025, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. WSR 01-02-026, § 296-96-01025, filed 12/22/00, effective 1/22/01.]

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-01027 Permit fee refunds. The initial installation permit fees are refundable minus a processing fee if the installation work has not been performed. No refunds will be issued for expired permits. All requests for refunds shall be submitted in writing to the elevator section and shall identify the specific permits and the reasons for which the refunds are requested.

The processing fee for each refund is ((~~as follows:~~
~~(1) For FY23, effective January 1, 2023: $48.15.~~
~~(2) For FY24, effective January 1, 2024:~~)) $51.90.

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-01027, filed 10/18/22, effective 1/1/23; WSR 22-05-076, § 296-96-01027, filed 2/15/22, effective 3/18/22; WSR 21-18-096, § 296-96-01027, filed 8/31/21, effective 10/1/21. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-01027, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 70.87 RCW. WSR 18-18-070, § 296-96-01027, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd sp.s. c 4. WSR 14-06-041, § 296-96-01027, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW and 2011 1st sp.s. c 50. WSR 12-06-065, § 296-96-01027, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapter 70.87 RCW. WSR 07-24-041, § 296-96-01027, filed 11/30/07, effective 1/1/08. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-96-01027, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-96-01027, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-96-01027, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. WSR 04-12-047, § 296-96-01027, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101,

19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-96-01027, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-96-01027, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. WSR 01-02-026, § 296-96-01027, filed 12/22/00, effective 1/22/01.]

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-01030 Plan approval. Prior to the start of construction and the issuance of a permit, the applicant shall submit to the department for approval a permit application and plans for new installations or major alterations. To be approved, the plan shall comply with the latest adopted applicable standard and applicable Washington Administrative Code (WAC). In addition, the plans shall include all information necessary to determine whether each installation/alteration complies with all applicable codes. The permit holder shall keep a copy of the approved plan on the job site until the department has witnessed all acceptance tests. Any alterations to the approved plan shall be submitted to the department for approval before a final inspection will be conducted. The nonrefundable fees for processing the applications are $43.00 for each installation/major alteration ((~~are as follows:~~

~~(1) For FY23, effective January 1, 2023: $39.90.~~

~~(2) For FY24, effective January 1, 2024: $43.00~~)).

Exception: Residential incline chair lifts will not require plan review. Equipment shall be listed and labeled by a product testing laboratory which is accredited by the department and plans supplied by the manufacturer shall be on-site. If the equipment is not listed and labeled as per RCW 19.28.010 it shall be field evaluated or replaced with equipment that is listed and labeled by a product testing laboratory which is accredited by the department. The department may request additional information as deemed necessary to determine if lifts comply with current codes and testing standards. Governor overspeed safety testing shall be verified by manufacturer's documentation (see A18.1 Requirement 9.9.3). The test results certified by, a nationally recognized testing laboratory (NRTL). Certification shall be provided at time of application.

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-01030, filed 10/18/22, effective 1/1/23; WSR 22-05-076, § 296-96-01030, filed 2/15/22, effective 3/18/22; WSR 21-18-096, § 296-96-01030, filed 8/31/21, effective 10/1/21. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-01030, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 70.87 RCW. WSR 18-18-070, § 296-96-01030, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd sp.s. c 4. WSR 14-06-041, § 296-96-01030, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW and 2011 1st sp.s. c 50. WSR 12-06-065, § 296-96-01030, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapter 70.87 RCW. WSR 07-24-041, § 296-96-01030, filed 11/30/07, effective 1/1/08. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-96-01030, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-96-01030, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-96-01030, filed 5/24/05, effective 6/30/05.

Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 70.87.030, 18.106.070, 18.106.125, 2001 c 7, and chapters 18.106, 43.22, and 70.87 RCW. WSR 03-12-045, § 296-96-01030, filed 5/30/03, effective 6/30/03. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-96-01030, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-96-01030, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. WSR 01-02-026, § 296-96-01030, filed 12/22/00, effective 1/22/01.]

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-01035 Inspection fees. The initial inspection of construction, alteration or relocation of a conveyance is included with the permit fee. Once the department has approved the initial installation of the conveyance, a temporary 30-day operating certificate will be issued. Prior to the expiration of the 30-day temporary operating certificate, the application for an annual operating certificate and the appropriate fees shall be paid to the department. Once the department has received the appropriate fees and application the owner will be issued the first annual operating certificate. The owner or owner's representative will receive an invoice from the department for renewal. The owner is required to renew the annual operating certificate yearly.

The following inspections require an additional inspection fee:

(1) **Reinspection.** If a conveyance does not pass an initial inspection and an additional inspection is required, the fee for each reinspection of a conveyance is ((~~as follows:~~

~~(a) For FY23, effective January 1, 2023: $161.65 per conveyance plus $78.45 per hour for each hour in addition to the first hour.~~

~~(b) For FY24, effective January 1, 2024:~~)) $174.30 per conveyance plus $84.50 per hour for each hour in addition to the first hour.

The department may waive reinspection fees.

(2) **Inspecting increases in the height (jumping) of personnel and material hoists.**

(a) The fee for inspecting an increase in the height (jumping) of each personnel hoist or material hoist is ((~~as follows:~~

~~(a) For FY23, effective July 1, 2023: $161.65 plus $80.40 per hour for each hour in addition to two hours.~~

~~(b) For FY24, effective July 1, 2024:~~)) $174.30 plus $86.70 per hour for each hour in addition to two hours.

This fee is for inspections occurring during regular working hours.

((~~(c)~~)) (b) The permit holder may be allowed to operate a hoist prior to the jump inspection if:

(i) The electrical limits will not allow the lift to operate above the previously inspected landing; and

(ii) The state elevator inspector is contacted, agrees and can schedule an inspection within three days.

(3) **Variance inspections.**

(a) The fee for an on-site variance inspection is ((~~as follows:~~

~~(i) For FY23, effective July 1, 2023: $242.70 per conveyance plus $80.40 per hour for each hour in addition to two hours.~~

~~(ii) For FY24, effective July 1, 2024:~~)) $261.70 per conveyance plus $86.70 per hour for each hour in addition to two hours.

This fee is for inspections occurring during regular working hours.

(b) The fee for a variance that does not require an on-site inspection is ((~~as follows:~~

~~(i) For FY23, effective July 1, 2023: $80.40 per conveyance.~~

~~(ii) For FY24, effective July 1, 2024:~~)) $86.70 per conveyance.

The individual requesting the variance shall provide the department with pictures, documentation, or other information necessary for the department to review the variance. The department may conduct an on-site variance inspection to verify the information provided or if it determines that an inspection is necessary. If an on-site variance inspection is performed, the fees in (a) of this subsection will apply.

(4) **"Red tag" status fee.** The annual fee for a conveyance in "Red tag" status is ((~~as follows:~~

~~(a) For FY23, effective July 1, 2023: $39.90.~~

~~(b) For FY24, effective July 1, 2024:~~)) $43.00.

Note: The department shall be provided with written approval from the building official, indicating that the conveyance is not required for building occupancy, when applying to have the conveyance placed in voluntary red tag status.

(5) **Decommission inspection.** The fee for performing a decommission inspection is ((~~as follows:~~

~~(a) For FY23, effective July 1, 2023: $80.40.~~

~~(b) For FY24, effective July 1, 2024:~~)) $86.70.

Once the decommission inspection has been performed and approved, the conveyance will no longer require annual inspections until such time that the conveyance is brought back into service. Prior to operating the conveyance, a new inspection and annual operating permit shall be obtained.

(6) **Voluntary inspections by request.** The owner or potential purchaser of a building within the department's jurisdiction may request a voluntary inspection of a conveyance. The fee for this inspection ((~~is as follows:~~

~~(a) For FY23, effective July 1, 2023: $161.65 per conveyance and $80.40 per hour for each hour in addition to two hours plus the standard per diem and mileage allowance granted to department inspectors.~~

~~(b) For FY24, effective July 1, 2024:~~)) <u>will be</u> $174.30 per conveyance and $86.70 per hour for each hour in addition to two hours plus the standard per diem and mileage allowance granted to department inspectors.

The owner/potential purchaser requesting the voluntary inspection will not be subject to any penalties based on the inspector's findings.

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-01035, filed 10/18/22, effective 1/1/23; WSR 22-05-076, § 296-96-01035, filed 2/15/22, effective 3/18/22; WSR 21-18-096, § 296-96-01035, filed 8/31/21, effective 10/1/21. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-01035, filed 12/4/18, effective 1/4/19. Statutory Authority:

Chapter 70.87 RCW. WSR 18-18-070, § 296-96-01035, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd sp.s. c 4. WSR 14-06-041, § 296-96-01035, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW and 2011 1st sp.s. c 50. WSR 12-06-065, § 296-96-01035, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapter 70.87 RCW. WSR 07-24-041, § 296-96-01035, filed 11/30/07, effective 1/1/08. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-96-01035, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-96-01035, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-96-01035, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185, 70.87.190, 2002 c 98, 2003 c 143 and 2004 c 66. WSR 04-12-047, § 296-96-01035, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-96-01035, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-96-01035, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. WSR 01-02-026, § 296-96-01035, filed 12/22/00, effective 1/22/01.]

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-01040 Construction-use inspection fee. (1) The fee for the inspecting and testing of elevators used for construction is $139.30, in addition to any other fees required in this chapter((~~, is as follows:~~

~~(a) For FY23, effective July 1, 2023: $129.20.~~

~~(b) For FY24, effective July 1, 2024: $139.90~~)).

This fee purchases a 30-day temporary use permit that may be renewed at the department's discretion.

(2) When this temporary use permit is purchased, a notice declaring that the equipment has not received final approval from the department shall be conspicuously posted in the elevator.

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-01040, filed 10/18/22, effective 1/1/23; WSR 22-05-076, § 296-96-01040, filed 2/15/22, effective 3/18/22; WSR 21-18-096, § 296-96-01040, filed 8/31/21, effective 10/1/21. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-01040, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 70.87 RCW. WSR 18-18-070, § 296-96-01040, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd sp.s. c 4. WSR 14-06-041, § 296-96-01040, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW and 2011 1st sp.s. c 50. WSR 12-06-065, § 296-96-01040, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR

07-11-128, § 296-96-01040, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-96-01040, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-96-01040, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-96-01040, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-96-01040, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. WSR 01-02-026, § 296-96-01040, filed 12/22/00, effective 1/22/01.]

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-01045 Residential elevator inspection and fees. (1) Chapter 70.87 RCW requires the department to inspect all new, altered or relocated conveyances operated exclusively for single-family use in private residences. Prior to installation, a licensed elevator contractor shall complete a permit application as described in WAC 296-96-01005 and pay the appropriate fee listed in WAC 296-96-01010.

(2) Chapter 70.87 RCW allows the department to inspect conveyances operated exclusively for single-family use in private residences when the department is investigating an accident or an alleged or apparent violation of the statute or these rules.

(3) No annual inspection and operating certificate is required for a private residence conveyance operated exclusively for single-family use unless the owner requests it. When an owner requests an inspection and an annual operating certificate, the following fee shall be paid prior to an inspection((~~. The fees for FY23, effective January 1, 2023, and FY24, effective January 1, 2024, are as follows~~)):

TYPE OF CONVEYANCE	((~~FY23 FEE~~ ~~FY24~~)) FEE
Each inclined stairway chair lift in private residence	((~~$37.40~~)) $40.30
Each inclined wheel chair lift in a private residence	((~~$37.40~~)) $40.30
Each vertical wheel chair lift in a private residence	((~~$47.30~~)) $51.00
Each dumbwaiter in a private residence	((~~$37.40~~)) $40.30
Each inclined elevator at a private residence	((~~$134.30~~)) $144.80
Each private residence elevator . . .	((~~$86.45~~)) $93.20
Duplication of a lost, damaged or stolen operating permit	((~~$15.60~~)) $16.80

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-01045, filed 10/18/22, effective 1/1/23; WSR 22-05-076, §

296-96-01045, filed 2/15/22, effective 3/18/22; WSR 21-18-096, § 296-96-01045, filed 8/31/21, effective 10/1/21. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-01045, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 70.87 RCW. WSR 18-18-070, § 296-96-01045, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd sp.s. c 4. WSR 14-06-041, § 296-96-01045, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW and 2011 1st sp.s. c 50. WSR 12-06-065, § 296-96-01045, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapter 70.87 RCW. WSR 07-24-041, § 296-96-01045, filed 11/30/07, effective 1/1/08. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-96-01045, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-96-01045, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-96-01045, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-96-01045, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-96-01045, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. WSR 01-02-026, § 296-96-01045, filed 12/22/00, effective 1/22/01.]

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-01055 Technical services and consultations. A person, firm, corporation, or governmental agency may request elevator field technical services from the department by paying a fee ((~~as follows:~~

~~(1) For FY23, effective July 1, 2023: $96.65 per hour or any portion thereof (including travel time) plus the standard per diem and mileage allowance granted to department inspectors.~~

~~(2) For FY24, effective July 1, 2024:~~)) of $104.20 per hour or any portion thereof (including travel time) plus the standard per diem and mileage allowance granted to department inspectors.

These field technical services may include code evaluation, code consultation, plan examination, code interpretation, and clarification of technical data relating to the application of the department's conveyance rules. Field technical services do not include inspections.

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-01055, filed 10/18/22, effective 1/1/23; WSR 22-05-076, § 296-96-01055, filed 2/15/22, effective 3/18/22; WSR 21-18-096, § 296-96-01055, filed 8/31/21, effective 10/1/21. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-01055, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 70.87 RCW. WSR 18-18-070, § 296-96-01055, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd

sp.s. c 4. WSR 14-06-041, § 296-96-01055, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW and 2011 1st sp.s. c 50. WSR 12-06-065, § 296-96-01055, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-96-01055, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-96-01055, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-96-01055, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 70.87.030, 18.106.070, 18.106.125, 2001 c 7, and chapters 18.106, 43.22, and 70.87 RCW. WSR 03-12-045, § 296-96-01055, filed 5/30/03, effective 6/30/03. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-96-01055, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-96-01055, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. WSR 01-02-026, § 296-96-01055, filed 12/22/00, effective 1/22/01.]

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-01057 Accident investigations. The department shall investigate an injury-related accident reported by the owner or owner's duly authorized agent. The department may charge a rate ((~~as follows:~~

~~(1) For FY23, effective July 1, 2023: $96.65 per hour or portion thereof (including travel time) plus the standard per diem and mileage allowance granted to department inspectors.~~

~~(2) For FY24, effective July 1, 2024:~~)) of $104.20 per hour or portion thereof (including travel time) plus the standard per diem and mileage allowance granted to department inspectors.

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-01057, filed 10/18/22, effective 1/1/23; WSR 22-05-076, § 296-96-01057, filed 2/15/22, effective 3/18/22; WSR 21-18-096, § 296-96-01057, filed 8/31/21, effective 10/1/21. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-01057, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 70.87 RCW. WSR 18-18-070, § 296-96-01057, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd sp.s. c 4. WSR 14-06-041, § 296-96-01057, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW and 2011 1st sp.s. c 50. WSR 12-06-065, § 296-96-01057, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapter 70.87 RCW. WSR 07-24-041, § 296-96-01057, filed 11/30/07, effective 1/1/08.]

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-01060 Inspections after normal business hours. An inspection outside of normal business hours and business days (i.e., Monday through Friday excluding holidays; 7:00 a.m. to 5:00 p.m.) may be requested under the following conditions:

(1) An inspector is available; and

(2) The inspection is authorized by the department.

(3) The minimum fee for an after-hours inspection is ((~~as follows:~~

~~(a) For FY23, effective July 1, 2023: $120.95 and $120.95 per hour for each hour in addition to the first hour plus the standard per diem and mileage allowance granted to department inspectors.~~

~~(b) For FY24, effective July 1, 2024:~~)) $130.40 and $130.40 per hour for each hour in addition to the first hour plus the standard per diem and mileage allowance granted to department inspectors.

(4) This fee is in addition to any other fees required for the project.

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-01060, filed 10/18/22, effective 1/1/23; WSR 22-05-076, § 296-96-01060, filed 2/15/22, effective 3/18/22; WSR 21-18-096, § 296-96-01060, filed 8/31/21, effective 10/1/21. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-01060, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 70.87 RCW. WSR 18-18-070, § 296-96-01060, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd sp.s. c 4. WSR 14-06-041, § 296-96-01060, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW and 2011 1st sp.s. c 50. WSR 12-06-065, § 296-96-01060, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-96-01060, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-96-01060, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-96-01060, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-96-01060, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-96-01060, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. WSR 01-02-026, § 296-96-01060, filed 12/22/00, effective 1/22/01.]

AMENDATORY SECTION (Amending WSR 22-21-118, filed 10/18/22, effective 1/1/23)

WAC 296-96-01065 Annual operating permit fees. An annual operating certificate will be issued to the building owner upon payment of

the appropriate fee. The owner of record shall be invoiced by the department. If a change of ownership has occurred, it is the new owner's responsibility to ensure the department has the corrected information. ((~~The fees for FY23, effective July 1, 2023, and FY24, effective July 1, 2024, are as follows:~~)) Below is the fee structure table:

TYPE OF CONVEYANCE	((~~FY23 FEE~~	~~FY24~~)) FEE
Each hydraulic elevator	((~~$161.65~~))	$174.30
Each roped-hydraulic elevator .	((~~$202.00~~))	$217.80
plus for each hoistway opening in excess of two	((~~$15.60~~))	$16.80
Each cable elevator	((~~$202.00~~))	$217.80
plus for each hoistway opening in excess of two	((~~$15.60~~))	$16.80
Each cable elevator traveling more than 25 feet without an opening—for each 25 foot traveled	((~~$15.60~~))	$16.80
Each limited-use/limited-application (—LULA) elevator	((~~$161.65~~))	$174.30
Each escalator	((~~$134.20~~))	$144.70
Each dumbwaiter in other than a private residence	((~~$86.45~~))	$93.20
Each material lift.	((~~$161.65~~))	$174.30
Each incline elevator in other than a private residence	((~~$173.80~~))	$187.40
Each belt manlift	((~~$161.65~~))	$174.30
Each stair lift in other than a private residence	((~~$86.45~~))	$93.20
Each wheel chair lift in other than a private residence	((~~$86.45~~))	$93.20
Each personnel hoist	((~~$161.65~~))	$174.30
Each grain elevator personnel lift	((~~$134.20~~))	$144.70
Each material hoist	((~~$161.65~~))	$174.30
Each special purpose elevator . .	((~~$161.65~~))	$174.30
Each private residence elevator installed in other than a private residence	((~~$161.65~~))	$174.30
((~~Each casket lift	$134.20	$144.70~~))
Each sidewalk freight elevator .	((~~$134.20~~))	$144.70
Each hand-powered manlift or freight elevator	((~~$90.90~~))	$98.00
((~~Each boat launching elevator	$134.20	$144.70~~
~~Each auto parking elevator . . . .~~	~~$134.20~~	~~$144.70~~))
Each moving walk	((~~$134.20~~))	$144.70
Duplication of a damaged, lost or stolen operating permit	((~~$15.60~~))	$16.80

[Statutory Authority: Chapter 70.87 RCW. WSR 22-21-118, § 296-96-01065, filed 10/18/22, effective 1/1/23; WSR 22-05-076, § 296-96-01065, filed 2/15/22, effective 3/18/22; WSR 21-18-096, § 296-96-01065, filed 8/31/21, effective 10/1/21. Statutory Authority:

Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-96-01065, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 70.87 RCW. WSR 18-18-070, § 296-96-01065, filed 8/31/18, effective 10/1/18. Statutory Authority: Chapter 70.87 RCW and 2013 2nd sp.s. c 4. WSR 14-06-041, § 296-96-01065, filed 2/26/14, effective 4/1/14. Statutory Authority: Chapter 70.87 RCW and 2011 1st sp.s. c 50. WSR 12-06-065, § 296-96-01065, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapter 70.87 RCW. WSR 07-24-041, § 296-96-01065, filed 11/30/07, effective 1/1/08. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-96-01065, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-96-01065, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-96-01065, filed 5/24/05, effective 6/30/05. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-96-01065, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-96-01065, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 70.87.020, 70.87.030, 70.87.034, 70.87.120, 70.87.185 and chapter 70.87 RCW. WSR 01-02-026, § 296-96-01065, filed 12/22/00, effective 1/22/01.]

WSR 23-21-084
PERMANENT RULES
DEPARTMENT OF
LABOR AND INDUSTRIES

[Filed October 17, 2023, 8:34 a.m., effective December 1, 2023]

Effective Date of Rule: December 1, 2023.

Purpose: This rule making adopts amendments to the factory assembled structures (FAS) rules to increase fees by the fiscal growth factor rate of 6.22 percent. The fee increase is the maximum allowed by the state office of financial management for fiscal year 2024. The FAS program's current fee levels are insufficient to cover current expenses. A fee increase is needed to cover the operating expenses of the FAS program, including funding for new technology to improve service. The increase will ensure that revenues match expenditures.

Citation of Rules Affected by this Order: Amending WAC 296-150C-3000, 296-150F-3000, 296-150I-3000, 296-150M-3000, 296-150P-3000, 296-150R-3000, 296-150T-3000, and 296-150V-3000.

Statutory Authority for Adoption: Chapters 43.22 and 43.22A RCW.

Adopted under notice filed as WSR 23-16-117 on August 1, 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 8, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: October 17, 2023.

Joel Sacks
Director

OTS-4683.1

AMENDATORY SECTION (Amending WSR 23-09-024, filed 4/11/23, effective 4/11/23)

WAC 296-150C-3000 Commercial coach fees.

GENERAL INFORMATION	
Manufacture:	Manufacturer #
1. Building use:	2. Building occupancy:
3. Type of construction: VB	4. Square footage of building:
5. Valuation of the building shall be based on the following: • Square footage of the building multiplied by the amount in the BVD valuation table . . . . . $	
6. **Total** valuation: . . . . . $	

PERMIT FEE			
7.	Calculate from building permit fee table using the total valuation	$	. . . . .
STRUCTURAL PLAN REVIEW FEE*			
8.	One year design review: (Valid for one year) multiply the total on line 7 by ((~~0.428~~)) 0.454. . .	$	. . . . .
9.	Master plan review: (Valid for the code cycle) multiply the total on line 7 by ((~~0.611~~)) 0.649.	$	. . . . .
	* Minimum plan review fee is 2 1/2 hours x ((~~$93.00~~)) $98.70 per hour		
FIRE AND LIFE-SAFETY PLAN REVIEW FEE (if required)			
10.	Fire and life-safety plan review:		
a.	One year design—Multiply the total on line 7 by ((~~0.183~~)) 0.194.	$	. . . . .
b.	Master plan design—Multiply the total on line 7 by ((~~0.305~~)) 0.323.	$	. . . . .
	• Required for all structures that are more than 4,000 square feet and for all A and I occupancy		
PLUMBING PLAN-REVIEW FEE			
11.	Plumbing ((~~$21.90 + $7.10~~)) $23.20 + $7.50 per fixture	$	. . . . .
12.	Medical gas ((~~$21.90 + $7.10~~)) $23.20 + $7.50 per gas outlet	$	. . . . .
DESIGN RENEWAL OR ADDENDUM			
13.	((~~12.23%~~)) 12.99% of building permit + ((~~$93.00~~)) $98.70	$	. . . . .
RESUBMITTAL			
14.	((~~12.23%~~)) 12.99% of building permit + ((~~$93.00~~)) $98.70	$	. . . . .
ELECTRICAL PLAN-REVIEW FEE			
15.	See WAC 296-46B-906(9) for electrical review fees		
INSIGNIA FEES			
16.	FIRST SECTION	$	((~~27.80~~)) 29.50
17.	EACH ADDITIONAL SECTION	$	((~~17.10~~)) 18.10
TOTAL FEES			
18.	**Total** plan review fees: Add lines 8 or 9 and 10 through 15	$	. . . . .
19.	**Total fees due:** Includes plan fees and insignia fees	$	. . . . .
20.	**Total amount paid**	$	. . . . .

Square Foot Construction Costs (BVD Table)[a, b, c, and d]

Group (2009 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A-1 Assembly, theaters, with stage	211.15	203.98	198.73	190.05	178.25	173.30	183.31	162.97	156.05
A-1 Assembly, theaters, without stage	193.16	185.99	180.74	172.06	160.31	155.36	165.32	145.04	138.12
A-2 Assembly, nightclubs	163.22	158.56	154.17	148.00	138.96	135.24	142.52	126.06	121.36
A-2 Assembly, restaurants, bars, banquet halls	162.22	157.56	152.17	147.00	136.96	134.24	141.52	124.06	120.36
A-3 Assembly, churches	195.10	187.93	182.68	174.00	162.21	157.26	167.26	146.94	140.02
A-3 Assembly, general, community halls, libraries, museums	163.81	156.64	150.39	142.71	129.91	125.96	135.97	114.63	108.71
A-4 Assembly, arenas	192.16	184.99	178.74	171.06	158.31	154.36	164.32	143.04	137.12
B Business	164.76	158.78	153.49	145.97	132.45	127.63	139.92	116.43	110.93
E Educational	176.97	170.85	165.64	158.05	146.37	138.98	152.61	127.91	123.09
F-1 Factory and industrial, moderate hazard	97.87	93.28	87.66	84.46	75.44	72.26	80.79	62.17	58.48

Group (2009 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
F-2 Factory and industrial, low hazard	96.87	92.28	87.66	83.46	75.44	71.26	79.79	62.17	57.48
H-1 High hazard, explosives	91.74	87.15	82.53	78.33	70.49	66.31	74.66	57.22	N.P.
H-2, 3, 4 High hazard	91.74	87.15	82.53	78.33	70.49	66.31	74.66	57.22	52.53
H-5 HPM	164.76	158.78	153.49	145.97	132.45	127.63	139.92	116.43	110.93
I-1 Institutional, supervised environment	164.82	159.04	154.60	147.90	135.84	132.25	144.15	121.88	117.55
I-2 Institutional, hospitals	277.07	271.09	265.80	258.28	243.90	N.P.	252.23	227.88	N.P.
I-2 Institutional, nursing homes	193.00	187.02	181.74	174.22	160.98	N.P.	168.16	144.96	N.P.
I-3 Institutional, restrained	187.72	181.73	176.45	168.93	156.64	150.82	162.87	140.63	133.13
I-4 Institutional, day care facilities	164.82	159.04	154.60	147.90	135.84	132.25	144.15	121.88	117.55
M Mercantile	121.57	116.92	111.53	106.36	96.96	94.25	100.88	84.07	80.36
R-1 Residential, hotels	166.21	160.43	155.99	149.29	137.39	133.80	145.70	123.43	119.10
R-2 Residential, multiple family	139.39	133.61	129.17	122.47	111.23	107.64	119.54	97.27	92.94
R-3 Residential, one and two family	131.18	127.60	124.36	121.27	116.43	113.53	117.42	108.79	101.90
R-4 Residential, care/ assisted living facilities	164.82	159.04	154.60	147.90	135.84	132.25	144.15	121.88	117.55
S-1 Storage, moderate hazard	90.74	86.15	80.53	77.33	68.49	65.31	73.66	55.22	51.53
S-2 Storage, low hazard	89.74	85.15	80.53	76.33	68.49	64.31	72.66	55.22	50.53
U Utility, miscellaneous	71.03	67.02	62.71	59.30	52.86	49.43	56.33	41.00	39.06

[a] Private garages use utility, miscellaneous
[b] Unfinished basements (all use group) = $15.00 per sq. ft.
[c] For shell only buildings deduct 20 percent
[d] N.P. = not permitted

Building Permit Fees

Total Valuation	Fee
$1.00 to $500.00	$23.50
$501.00 to $2,000.00	$23.50 for the first $500.00 plus $3.05 for each additional $100.00, or fraction thereof, to and including $2,000.00
$2,001.00 to $25,000.00	$69.25 for the first $2,000.00 plus $14.00 for each additional $1,000.00, or fraction thereof, to and including $25,000.00
$25,001.00 to $50,000.00	$391.25 for the first $25,000.00 plus $10.10 for each additional $1,000.00, or fraction thereof, to and including $50,000.00
$50,001.00 to $100,000.00	$643.75 for the first $50,000.00 plus $7.00 for each additional $1,000.00, or fraction thereof, to and including $100,000.00
$100,001.00 to $500,000.00	$993.75 for the first $100,000.00 plus $5.60 for each additional $1,000.00, or fraction thereof, to and including $500,000.00
$500,001.00 to $1,000,000.00	$3,233.75 for the first $500,000.00 plus $4.75 for each additional $1,000.00, or fraction thereof, to and including $1,000,000.00
$1,000,001.00 and up	$5,608.75 for the first $1,000,000.00 plus $3.65 for each additional $1,000.00, or fraction thereof

INITIAL FILING FEE (first time applicants)	((~~$45.90~~)) $48.70
DESIGN PLAN FEES:	
INITIAL FEE - MASTER DESIGN (code cycle), 50% of permit fee × ((~~1.223~~)) 1.299*	

INITIAL FEE - ONE YEAR DESIGN, 35% of permit fee × ((~~1.223~~)) 1.299*	
RENEWAL FEE - 10% of permit fee × ((~~1.223~~)) 1.299 +	((~~$93.00~~)) $98.70
RESUBMIT FEE - 10% of permit fee × ((~~1.223~~)) 1.299 +	((~~$93.00~~)) $98.70
ADDENDUM (approval expires on same date as original plan) - 10% of permit fee × ((~~1.223~~)) 1.299 +	((~~$93.00~~)) $98.70
PLUMBING PLAN FEE, ((~~$21.90~~)) $23.20 + PER FIXTURE FEE of	((~~$7.10~~)) $7.50
MEDICAL GAS PLAN FEE, ((~~$21.90~~)) $23.20 + PER OUTLET FEE of	((~~$7.10~~)) $7.50
Note: Mechanical systems are included in the primary plan fee	
FIRE SAFETY PLAN REVIEW AS REQUIRED (Required for all structures that are more than 4,000 square feet and for all A, I, and H occupancy)	
MASTER DESIGN - 25% of permit fee × ((~~1.223~~)) 1.299	
One year design 15% of the permit fee × ((~~1.223~~)) 1.299	
ELECTRICAL PLAN REVIEW - Find fee @ http://apps.leg.wa.gov/wac/default.aspx?cite=296-46B-906	
RECIPROCAL PLAN REVIEW:	
INITIAL FEE - MASTER DESIGN (minimum 3 hours)	((~~$93.00~~)) $98.70 per hour
INITIAL FEE - ONE YEAR DESIGN (minimum 2 hours)	((~~$93.00~~)) $98.70 per hour
RENEWAL FEE (minimum 1 hour)	((~~$93.00~~)) $98.70 per hour
ADDENDUM (minimum 1 hour)	((~~$93.00~~)) $98.70 per hour
PLANS APPROVED BY LICENSED PROFESSIONALS - 10% of permit fee × ((~~1.223~~)) 1.299 +	((~~$93.00~~)) $98.70
FEES FOR RESUBMITTAL OF DESIGN PLANS APPROVED BY A PROFESSIONAL OR FIRM	((~~$93.00~~)) $98.70 per hour
APPROVAL OF EACH SET OF DESIGN PLANS BEYOND FIRST TWO SETS - 5% of permit fee × ((~~1.223~~)) 1.299 +	((~~$93.00~~)) $98.70
DEPARTMENT INSPECTION FEES	
INSPECTION/REINSPECTION (Per hour** plus travel time* and mileage***)	((~~$93.00~~)) $98.70
TRAVEL (Per hour)	((~~$93.00~~)) $98.70
PER DIEM***	
HOTEL****	
MILEAGE***	
RENTAL CAR****	
PARKING****	
AIRFARE****	
DEPARTMENT AUDIT FEES:	
AUDIT (Per hour*)	((~~$93.00~~)) $98.70
TRAVEL (Per hour**)	((~~$93.00~~)) $98.70
PER DIEM***	
HOTEL****	
MILEAGE***	
RENTAL CAR****	
PARKING****	
AIRFARE****	
ALTERATION INSPECTION (one hour minimum + alteration insignia fee)	((~~$120.80~~)) $128.30
INSIGNIA FEES:	
FIRST SECTION (NEW or ALTERATION)	((~~$27.80~~)) $29.50
EACH ADDITIONAL SECTION (NEW or ALTERATION)	((~~$17.10~~)) $18.10

REISSUED-LOST/DAMAGED	((~~$17.10~~)) $18.10
OTHER FEES:	
FIELD TECHNICAL SERVICE (Per hour** plus travel time** and mileage***)	((~~$93.00~~)) $98.70
PUBLICATION PRINTING AND DISTRIBUTION OF RCWs AND WACs (One free copy per year upon request)	((~~$17.10~~)) $18.10
REFUND FEE	((~~$30.50~~)) $32.30

*Minimum plan review fee is 2 1/2 hours at the field technical service rate
**Minimum charge of 1 hour; time spent greater than 1 hour is charged in 1/2 hour increments
***Per state guidelines
****Actual charges incurred

[Statutory Authority: Chapter 43.22 RCW. WSR 23-09-024, § 296-150C-3000, filed 4/11/23, effective 4/11/23. Statutory Authority: Chapters 43.22 and 43.22A RCW. WSR 22-19-074, § 296-150C-3000, filed 9/20/22, effective 11/1/22; WSR 21-07-126, § 296-150C-3000, filed 3/23/21, effective 4/23/21; WSR 20-04-081, § 296-150C-3000, filed 2/4/20, effective 3/6/20. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-150C-3000, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 43.22 RCW and 2011 1st sp.s. c 50. WSR 12-06-069, § 296-150C-3000, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapters 18.106, 43.22 RCW, 2008 c 285 and c 329. WSR 08-12-042, § 296-150C-3000, filed 5/30/08, effective 6/30/08. Statutory Authority: Chapter 43.22 RCW. WSR 07-19-086, § 296-150C-3000, filed 9/18/07, effective 10/19/07. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-150C-3000, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-150C-3000, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapter 43.22 RCW. WSR 05-23-002, § 296-150C-3000, filed 11/3/05, effective 12/4/05. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-150C-3000, filed 5/24/05, effective 6/30/05. Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150C-3000, filed 12/14/04, effective 2/1/05. Statutory Authority: Chapters 18.27 and 43.22 RCW. WSR 04-12-048, § 296-150C-3000, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 70.87.030, 18.106.070, 18.106.125, 2001 c 7, and chapters 18.106, 43.22, and 70.87 RCW. WSR 03-12-045, § 296-150C-3000, filed 5/30/03, effective 6/30/03. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-150C-3000, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-150C-3000, filed 5/29/01, effective 6/29/01. Statutory Authority: Chapters 43.22, 18.27, 70.87 and 19.28 RCW. WSR 99-12-080, § 296-150C-3000, filed 5/28/99, effective 6/28/99. Statutory Authority: Chapters 18.106, 18.27 and 43.22 RCW. WSR 98-12-041, § 296-150C-3000, filed 5/29/98, effective 6/30/98. Statutory Authority: RCW 70.87.030, 18.27.070, [18.27.]075, 43.22.350, [43.22.]355, [43.22.]434 and [43.22.]480(2). WSR 97-11-053, § 296-150C-3000, filed 5/20/97, effective 6/30/97. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360,

[43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150C-3000, filed 10/23/96, effective 11/25/96.]

OTS-4684.1

AMENDATORY SECTION (Amending WSR 23-09-024, filed 4/11/23, effective 4/11/23)

WAC 296-150F-3000 Factory-built housing and commercial structure fees.

GENERAL INFORMATION		
Manufacture:	Manufacturer #	
1. Building use:	2. Building occupancy:	
3. Type of construction:	4. Square footage of building:	
5. Valuation of the building shall be based on the following: • Square footage of the building multiplied by the amount in the BVD valuation table		$ . . . . .
6. **Total** valuation:		$ . . . . .
PERMIT FEE		
7. Calculate from building permit fee table using the total valuation		$ . . . .
STRUCTURAL PLAN REVIEW FEE*		
8. One year design review:	(Valid for one year) multiply the total on line 7 by ((~~0.428~~)) 0.454	$ . . . . .
9. Master plan review:	(Valid for the code cycle) multiply the total on line 7 by ((~~0.611~~)) 0.649	$ . . . . .
* Minimum plan review fee is 2 1/2 hours x ((~~$104.60~~)) $111.10 per hour		
FIRE AND LIFE-SAFETY PLAN REVIEW FEE (if required)		
10. Fire and life-safety plan review:		
a. One year design—Multiply the total on line 7 by ((~~0.183~~)) 0.194		$ . . . . .
b. Master plan design—Multiply the total on line 7 by ((~~0.305~~)) 0.323		$ . . . . .
• Required for all structures that are more than 4,000 square feet and for all A, I, and H occupancy		
PLUMBING PLAN-REVIEW FEE		
11. Plumbing ((~~$21.90 + $7.10~~)) $23.20 + $7.50 per fixture		$ . . . . .
12. Medical gas ((~~$21.90 + $7.10~~)) $23.20 + $7.50 per gas outlet		$ . . . . .
DESIGN RENEWAL OR ADDENDUM		
13. ((~~12.23%~~)) 12.99% of building permit + ((~~$104.60~~)) $111.10		$ . . . . .
RESUBMITTAL		
14. ((~~12.23%~~)) 12.99% of building permit + ((~~$104.60~~)) $111.10		$ . . . . .
ELECTRICAL PLAN-REVIEW FEE		
15. See WAC 296-46B-906(9) for electrical review fees		
NOTIFICATION TO LOCAL ENFORCEMENT AGENCY (NLEA)		
16. Notification to local enforcement agency fee:		$ ((~~45.00~~)) 47.70
INSIGNIA FEES		
17. FIRST SECTION		$ ((~~334.80~~)) 355.60

18.	EACH ADDITIONAL SECTION	$	((~~29.80~~)) 31.60

TOTAL FEES				
19.	**Total** plan review fees:	Add lines 8 or 9 and 10 through 15	$	. . . . .
20.	**Total fees due:**	Includes plan fees, insignia fees, and NLEA fees	$	. . . . .
21.	**Total amount paid**		$	. . . . .

Square Foot Construction Costs (BVD Table)[a, b, c, and d]

Group (2009 International Building Code)	IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A-1 Assembly, theaters, with stage	211.15	203.98	198.73	190.05	178.25	173.30	183.31	162.97	156.05
A-1 Assembly, theaters, without stage	193.16	185.99	180.74	172.06	160.31	155.36	165.32	145.04	138.12
A-2 Assembly, nightclubs	163.22	158.56	154.17	148.00	138.96	135.24	142.52	126.06	121.36
A-2 Assembly, restaurants, bars, banquet halls	162.22	157.56	152.17	147.00	136.96	134.24	141.52	124.06	120.36
A-3 Assembly, churches	195.10	187.93	182.68	174.00	162.21	157.26	167.26	146.94	140.02
A-3 Assembly, general, community halls, libraries, museums	163.81	156.64	150.39	142.71	129.91	125.96	135.97	114.63	108.71
A-4 Assembly, arenas	192.16	184.99	178.74	171.06	158.31	154.36	164.32	143.04	137.12
B Business	164.76	158.78	153.49	145.97	132.45	127.63	139.92	116.43	110.93
E Educational	176.97	170.85	165.64	158.05	146.37	138.98	152.61	127.91	123.09
F-1 Factory and industrial, moderate hazard	97.87	93.28	87.66	84.46	75.44	72.26	80.79	62.17	58.48
F-2 Factory and industrial, low hazard	96.87	92.28	87.66	83.46	75.44	71.26	79.79	62.17	57.48
H-1 High hazard, explosives	91.74	87.15	82.53	78.33	70.49	66.31	74.66	57.22	N.P.
H-2, 3, 4 High hazard	91.74	87.15	82.53	78.33	70.49	66.31	74.66	57.22	52.53
H-5 HPM	164.76	158.78	153.49	145.97	132.45	127.63	139.92	116.43	110.93
I-1 Institutional, supervised environment	164.82	159.04	154.60	147.90	135.84	132.25	144.15	121.88	117.55
I-2 Institutional, hospitals	277.07	271.09	265.80	258.28	243.90	N.P.	252.23	227.88	N.P.
I-2 Institutional, nursing homes	193.00	187.02	181.74	174.22	160.98	N.P.	168.16	144.96	N.P.
I-3 Institutional, restrained	187.72	181.73	176.45	168.93	156.64	150.82	162.87	140.63	133.13
I-4 Institutional, day care facilities	164.82	159.04	154.60	147.90	135.84	132.25	144.15	121.88	117.55
M Mercantile	121.57	116.92	111.53	106.36	96.96	94.25	100.88	84.07	80.36
R-1 Residential, hotels	166.21	160.43	155.99	149.29	137.39	133.80	145.70	123.43	119.10
R-2 Residential, multiple family	139.39	133.61	129.17	122.47	111.23	107.64	119.54	97.27	92.94
R-3 Residential, one and two family	131.18	127.60	124.36	121.27	116.43	113.53	117.42	108.79	101.90
R-4 Residential, care/ assisted living facilities	164.82	159.04	154.60	147.90	135.84	132.25	144.15	121.88	117.55
S-1 Storage, moderate hazard	90.74	86.15	80.53	77.33	68.49	65.31	73.66	55.22	51.53
S-2 Storage, low hazard	89.74	85.15	80.53	76.33	68.49	64.31	72.66	55.22	50.53
U Utility, miscellaneous	71.03	67.02	62.71	59.30	52.86	49.43	56.33	41.00	39.06

[a] Private garages use utility, miscellaneous
[b] Unfinished basements (all use group) = $15.00 per sq. ft.
[c] For shell only buildings deduct 20 percent
[d] N.P. = not permitted

Table 1-A - Building Permit Fees

Total Valuation	Fee
$1.00 to $500.00	$23.50
$501.00 to $2,000.00	$23.50 for the first $500.00 plus $3.05 for each additional $100.00, or fraction thereof, to and including $2,000.00
$2,001.00 to $25,000.00	$69.25 for the first $2,000.00 plus $14.00 for each additional $1,000.00, or fraction thereof, to and including $25,000.00
$25,001.00 to $50,000.00	$391.25 for the first $25,000.00 plus $10.10 for each additional $1,000.00, or fraction thereof, to and including $50,000.00
$50,001.00 to $100,000.00	$643.75 for the first $50,000.00 plus $7.00 for each additional $1,000.00, or fraction thereof, to and including $100,000.00
$100,001.00 to $500,000.00	$993.75 for the first $100,000.00 plus $5.60 for each additional $1,000.00, or fraction thereof, to and including $500,000.00
$500,001.00 to $1,000,000.00	$3,233.75 for the first $500,000.00 plus $4.75 for each additional $1,000.00, or fraction thereof, to and including $1,000,000.00
$1,000,001.00 and up	$5,608.75 for the first $1,000,000.00 plus $3.65 for each additional $1,000.00, or fraction thereof

INITIAL FILING FEE (first time applicants)	((~~$81.70~~)) $86.70
DESIGN PLAN FEES:	
INITIAL FEE - MASTER DESIGN (code cycle), 50% of permit fee × ((~~1.223~~)) 1.299*	
INITIAL FEE - ONE YEAR DESIGN, 35% of permit fee × ((~~1.223~~)) 1.299*	
RENEWAL FEE - 10% of permit fee × ((~~1.223~~)) 1.299 +	((~~$104.60~~)) $111.10
RESUBMIT FEE - 10% of permit fee × ((~~1.223~~)) 1.299 +	((~~$104.60~~)) $111.10
ADDENDUM (approval expires on same date as original plan) - 10% of permit fee × ((~~1.223~~)) 1.299 +	((~~$104.60~~)) $111.10
PLUMBING PLAN FEE, ((~~$21.90~~)) $23.20 + PER FIXTURE FEE of	((~~$7.10~~)) $7.50
MEDICAL GAS PLAN FEE, ((~~$21.90~~)) $23.20 + PER OUTLET FEE of	((~~$7.10~~)) $7.50
Note: Mechanical systems are included in the primary plan fee	
FIRE SAFETY PLAN REVIEW AS REQUIRED (Required for all structures that are more than 4,000 square feet and for all A, I, and H occupancy)	
MASTER DESIGN - 25% of permit fee × ((~~1.223~~)) 1.299	
One year design - 15% of the permit fee × ((~~1.223~~)) 1.299	
ELECTRICAL PLAN REVIEW - Find fees @ http://apps.leg.wa.gov/wac/default.aspx?cite=296-46B-906	
RECIPROCAL PLAN REVIEW:	
INITIAL FEE-MASTER DESIGN (minimum 3 hours)	((~~$104.60~~)) $111.10 per hour
INITIAL FEE-ONE YEAR DESIGN (minimum 2 hours)	((~~$104.60~~)) $111.10 per hour
RENEWAL FEE (minimum 1 hour)	((~~$104.60~~)) $111.10
ADDENDUM (minimum 1 hour)	((~~$104.60~~)) $111.10 per hour
PLANS APPROVED BY LICENSED PROFESSIONALS - 10% of permit fee × ((~~1.223~~)) 1.299 +	((~~$104.60~~)) $111.10
FEES FOR RESUBMITTAL OF DESIGN PLANS APPROVED BY A PROFESSIONAL OR FIRM	((~~$104.60~~)) $111.10 per hour
APPROVAL OF EACH SET OF DESIGN PLANS BEYOND FIRST THREE SETS - 5% of permit fee × ((~~1.223~~)) 1.299 +	((~~$104.60~~)) $111.10
DEPARTMENT INSPECTION FEES	

INSPECTION/REINSPECTION (Per hour** plus travel time** and mileage***)	((~~$104.60~~)) $111.10
TRAVEL (Per hour**)	((~~$104.60~~)) $111.10
PER DIEM***	
HOTEL****	
MILEAGE***	
RENTAL CAR****	
PARKING****	
AIRFARE****	
DEPARTMENT AUDIT FEES:	
AUDIT (Per hour**)	((~~$104.60~~)) $111.10
TRAVEL (Per hour**)	((~~$104.60~~)) $111.10
PER DIEM***	
HOTEL****	
MILEAGE***	
RENTAL CAR****	
PARKING****	
AIRFARE****	
INSIGNIA FEES:	
FIRST SECTION	((~~$334.80~~)) $355.60
EACH ADDITIONAL SECTION	((~~$29.80~~)) $31.60
REISSUED-LOST/DAMAGED	((~~$81.70~~)) $86.70
OTHER FEES:	
FIELD TECHNICAL SERVICE (Per hour** plus travel time** and mileage***)	((~~$104.60~~)) $111.10
NOTIFICATION TO LOCAL ENFORCEMENT AGENCY (NLEA)	((~~$45.00~~)) $47.70
PUBLICATION PRINTING AND DISTRIBUTION OF RCWs AND WACs (One free copy per year upon request)	((~~$16.60~~)) $17.60
REFUND FEE	((~~$30.50~~)) $32.30

*Minimum plan review fee is 2 1/2 hours at the field technical service rate.
**Minimum charge of 1 hour; time spent greater than 1 hour is charged in 1/2 hour increments.
***Per state guidelines.
****Actual charges incurred.

[Statutory Authority: Chapter 43.22 RCW. WSR 23-09-024, § 296-150F-3000, filed 4/11/23, effective 4/11/23. Statutory Authority: Chapters 43.22 and 43.22A RCW. WSR 22-19-074, § 296-150F-3000, filed 9/20/22, effective 11/1/22; WSR 21-07-126, § 296-150F-3000, filed 3/23/21, effective 4/23/21; WSR 20-04-081, § 296-150F-3000, filed 2/4/20, effective 3/6/20. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-150F-3000, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 43.22 RCW and 2011 1st sp.s. c 50. WSR 12-06-069, § 296-150F-3000, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapters 18.106, 43.22 RCW, 2008 c 285 and c 329. WSR 08-12-042, § 296-150F-3000, filed 5/30/08, effective 6/30/08. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-150F-3000, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapter 43.22 RCW. WSR 07-05-063, § 296-150F-3000, filed 2/20/07, effective 4/1/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-150F-3000, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapter 43.22 RCW. WSR 05-23-002, § 296-150F-3000, filed 11/3/05, effective 12/4/05. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-150F-3000, filed 5/24/05, effective 6/30/05. Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, §

296-150F-3000, filed 12/14/04, effective 2/1/05. Statutory Authority: Chapters 18.27 and 43.22 RCW. WSR 04-12-048, § 296-150F-3000, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.340, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.480, and 43.22.485, 2002 c 268, and chapter 43.22 RCW. WSR 03-12-044, § 296-150F-3000, filed 5/30/03, effective 5/30/03. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-150F-3000, filed 5/29/01, effective 6/29/01. Statutory Authority: Chapters 43.22, 18.27, 70.87 and 19.28 RCW. WSR 99-12-080, § 296-150F-3000, filed 5/28/99, effective 6/28/99. Statutory Authority: Chapters 18.106, 18.27 and 43.22 RCW. WSR 98-12-041, § 296-150F-3000, filed 5/29/98, effective 6/30/98. Statutory Authority: RCW 70.87.030, 18.27.070, [18.27.]075, 43.22.350, [43.22.]355, [43.22.]434 and [43.22.]480(2). WSR 97-11-053, § 296-150F-3000, filed 5/20/97, effective 6/30/97. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150F-3000, filed 10/23/96, effective 11/25/96.]

OTS-4685.1

AMENDATORY SECTION (Amending WSR 22-19-074, filed 9/20/22, effective 11/1/22)

WAC 296-150I-3000 Penalties, fees, and refunds.

Penalties

(1) Monetary penalties for infractions listed in WAC 296-150I-0210 may be assessed for each violation of chapter 43.22A RCW in the following amount:

(a) **Failure to have a certified installer on the installation site whenever installation work is being performed:**

First Final Violation	$250.00
Each Additional Final Violation	$1,000.00

(b) **Failure to correct all nonconforming aspects of the installation identified by the local enforcement agency or by an authorized representative of the department within thirty days of issuance of notice of the same:**

First Final Violation	Warning
Second Final Violation	$250.00
Third Final Violation	$500.00
Each Additional Final Violation	$1,000.00

(c) **Failure by a certified installer to affix a certification tag to an installed manufactured or mobile home:**

First Final Violation	Warning
Second Final Violation	$250.00
Third Final Violation	$500.00

Each Additional Final Violation	$1,000.00

(d) **Transfer of certification tag(s) from a certified installer to another certified installer without prior written approval of the department:**

First Final Violation	Warning
Each Additional Final Violation	$250.00

(e) **Transfer of certification tag(s) from a certified installer to a noncertified installer:**

First Final Violation to Each Contractor in Violation	$250.00
Each Additional Final Violation to Each Contractor in Violation	$1,000.00

Fees and Refunds

The following fees are payable to the department in advance:

Installer test and certification	((~~$303.00~~)) $321.80
Homeowner test and approval	((~~$151.40~~)) $160.80
Manufactured home installation inspector test and certificate	((~~$151.40~~)) $160.80
Refund	((~~$30.10~~)) $31.90
Certification renewal	((~~$151.40~~)) $160.80
Continuing education class	((~~$60.40~~)) $64.10
Retake failed examination and training at scheduled class	((~~$45.30~~)) $48.10
Manufactured home installer training manual (on thumb drive)	((~~$15.00~~)) $15.90
Installer certification tag	((~~$10.40~~)) $11.00
L&I manufactured home installation inspection permit*	See WAC 296-150M-3000 for fee

* Only available when L&I has an interagency agreement with the local enforcement agency in accordance with WAC 296-150I-0370.

(2) The department shall refund fees paid for training and certification or certification renewal as a manufactured home installer if the application is denied for failure of the applicant to comply with the requirements of chapter 43.22A RCW or these rules.

(3) If an applicant has paid fees to attend training or to take an examination and is unable to attend the scheduled training or examination, the applicant may:

(a) Change to another scheduled training and examination; or

(b) Request a refund.

(4) An applicant who fails the examination shall not be entitled to a refund.

[Statutory Authority: Chapters 43.22 and 43.22A RCW. WSR 22-19-074, § 296-150I-3000, filed 9/20/22, effective 11/1/22; WSR 22-01-193, § 296-150I-3000, filed 12/21/21, effective 1/31/22; WSR 21-07-126, § 296-150I-3000, filed 3/23/21, effective 4/23/21. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, §

296-150I-3000, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 43.22A RCW. WSR 17-23-173, § 296-150I-3000, filed 11/21/17, effective 1/1/18. Statutory Authority: Chapter 43.22A RCW and 2009 c 464 [564]. WSR 10-06-043, § 296-150I-3000, filed 2/23/10, effective 4/1/10. Statutory Authority: Chapter 43.22A RCW and 2007 c 432. WSR 08-12-040, § 296-150I-3000, filed 5/30/08, effective 6/30/08.]

OTS-4686.1

AMENDATORY SECTION (Amending WSR 22-19-074, filed 9/20/22, effective 11/1/22)

WAC 296-150M-3000 Manufactured/mobile home fees.

DESIGN PLAN FEES:	
STRUCTURAL ALTERATION	((~~$203.40~~)) $216.00
RESUBMITTAL FEE	((~~$89.80~~)) $95.30
ADDENDUM (Approval expires on the same date as original plan.)	((~~$89.80~~)) $95.30
ELECTRONIC PLAN SUBMITTAL FEE ((~~$6.20~~)) $6.50 per page for the first set of plans and $1.00 per page for each additional set of plans. These fees are in addition to any applicable design plan fees required under this section.	
DEPARTMENT INSPECTION FEES:	
Combination permit - Mechanical and electrical inspections	((~~$222.30~~)) $236.10
Heat pump	((~~$222.30~~)) $236.10
Air conditioning	((~~$222.30~~)) $236.10
Air conditioning with replacement furnace	((~~$222.30~~)) $236.10
Gas furnace installation includes gas piping	((~~$222.30~~)) $236.10
Fire safety inspection	((~~$222.30~~)) $236.10
MECHANICAL	
Gas*** piping	((~~$98.70~~)) $104.80
Wood stove	((~~$98.70~~)) $104.80
Pellet stove	((~~$98.70~~)) $104.80
Gas*** Room heater	((~~$98.70~~)) $104.80
Gas*** Decorative appliance	((~~$98.70~~)) $104.80
Range: Changing from electric to gas***	((~~$98.70~~)) $104.80
Gas*** Water heater replacement	((~~$73.90~~)) $78.40
ELECTRICAL	
Electric water heater replacement	((~~$123.60~~)) $131.20
Electric water heater replacing gas*** water heater	((~~$123.60~~)) $131.20
Each added or modified 120 volt circuit (maximum charge is two circuits)	((~~$123.60~~)) $131.20
Each added 240 volt circuit (for other than heat pumps, air conditioners, furnaces, water heaters, ranges, hot tubs or spas)	((~~$123.60~~)) $131.20
Hot tub or spa (power from home electrical panel)	((~~$123.60~~)) $131.20
Replace main electrical panel/permanently installed transfer equipment	((~~$123.60~~)) $131.20
Low voltage fire/intrusion alarm	((~~$123.60~~)) $131.20
Any combination of furnace, range and water heater changing from electric to gas***	((~~$123.60~~)) $131.20
PLUMBING	
Fire sprinkler system	((~~$277.70~~)) $294.90
Each added fixture	((~~$73.90~~)) $78.40
Replacement of water piping system (this includes two inspections)	((~~$247.90~~)) $263.30
STRUCTURAL	
Inspection as part of a mechanical/fire safety installation (cut truss/floor joist, sheet rocking)	((~~$110.80~~)) $117.60
Reroofs (may require a plan review)	((~~$198.00~~)) $210.30
Changes to home when additions bear loads on home per the design of a professional (also requires a plan review)	((~~$198.00~~)) $210.30

Other structural changes (may require a plan review)	((~~$198.00~~)) $210.30
MISCELLANEOUS	
OTHER REQUIRED INSPECTIONS (per hour*)	((~~$81.00~~)) $86.00
ALL REINSPECTIONS (per hour*)	((~~$81.00~~)) $86.00
Manufactured home installation inspection permit (only available in cities and counties with L&I inspection contract)	((~~$567.60~~)) $602.90
Refund	((~~$24.40~~)) $25.90
INSIGNIA FEES:	
REISSUED - LOST/DAMAGED	((~~$24.40~~)) $25.90
IPIA	
DEPARTMENT AUDIT FEES	
REGULARLY SCHEDULED IPIA AUDIT:	
First inspection on each section (one time only)	((~~$40.60~~)) $43.10
Second and succeeding inspections of unlabeled sections (per hour*)	((~~$89.80~~)) $95.30
OTHER IPIA FEES:	
Red tag removal during a regularly scheduled IPIA audit (per hour* separate from other fees)	((~~$89.80~~)) $95.30
Red tag removal at a time other than a regularly scheduled IPIA audit (per hour* plus travel time* and mileage**)	((~~$89.80~~)) $95.30
Increased frequency surveillance (per hour* plus travel time* and mileage**)	((~~$89.80~~)) $95.30
Attendance at manufacturers training classes (per hour* only)	((~~$89.80~~)) $95.30
Subpart "I" investigations (per hour* plus travel time* and mileage**)	((~~$89.80~~)) $95.30
Alterations to a labeled unit (per hour* plus travel time* and mileage**)	((~~$89.80~~)) $95.30
IPIA Issues/Responses (per hour* plus travel time* and mileage**)	((~~$89.80~~)) $95.30
Monthly surveillance during a regularly scheduled IPIA audit (per hour* plus travel time* and mileage**)	((~~$89.80~~)) $95.30
Monthly surveillance at a time other than a regularly scheduled IPIA audit (per hour* plus travel time* and mileage**)	((~~$89.80~~)) $95.30
Plant certifications, recertifications and addenda updates (per hour* plus travel time* and mileage** per each inspector)	((~~$89.80~~)) $95.30
Response to HBT audit during a regularly scheduled IPIA audit (per hour*)	((~~$89.80~~)) $95.30
Response to HBT audit at a time other than a regularly scheduled IPIA audit (per hour* plus travel time* and mileage**)	((~~$89.80~~)) $95.30
Alternative construction (AC) letter inspections at placement site (per hour* plus travel time* and mileage**)	((~~$89.80~~)) $95.30
Replacement of HUD labels (per hour* plus travel time* and mileage**)	((~~$89.80~~)) $95.30
State administrative agency (SAA) inspection fee (per hour* plus travel time* and mileage**)	((~~$89.80~~)) $95.30
State administrative agency (SAA) dispute resolution filing fee	((~~$89.80~~)) $95.30
State administrative agency (SAA) dispute resolution (per hour*)	((~~$89.80~~)) $95.30
OTHER FEES:	
FIELD TECHNICAL SERVICE (per hour plus travel time* and mileage**)	((~~$83.50~~)) $88.60
PUBLICATION PRINTING AND DISTRIBUTION OF RCWs AND WACs (one free copy per year upon request)	((~~$16.30~~)) $17.30
VARIANCE INSPECTION FEE	((~~$198.00~~)) $210.30
HOMEOWNER REQUESTED INSPECTION	((~~$198.00~~)) $210.30
DECERTIFICATION OF A MOBILE/MANUFACTURED HOME	((~~$198.00~~)) $210.30
DEMOLITION OF A MOBILE/MANUFACTURED HOME	((~~$198.00~~)) $210.30
ENERGY CONSERVATION PERMIT	((~~$33.60~~)) $35.60

NOTE: Local jurisdictions may have other fees that apply.

*Minimum charge of 1 hour; time spent greater than 1 hour is charged in 1/2 hour increments.
**Per state guidelines.
***Gas means all gases; natural, propane, etc.

[Statutory Authority: Chapters 43.22 and 43.22A RCW. WSR 22-19-074, § 296-150M-3000, filed 9/20/22, effective 11/1/22; WSR 22-01-193, § 296-150M-3000, filed 12/21/21, effective 1/31/22; WSR 21-07-126, § 296-150M-3000, filed 3/23/21, effective 4/23/21; WSR 20-04-081, § 296-150M-3000, filed 2/4/20, effective 3/6/20. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-150M-3000, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 43.22 RCW and 2011 1st sp.s. c 50. WSR 12-06-069, § 296-150M-3000, filed 3/6/12, effective 4/30/12. Statutory Authority:

Chapters 18.106, 43.22 RCW, 2008 c 285 and c 329. WSR 08-12-042, § 296-150M-3000, filed 5/30/08, effective 6/30/08. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-150M-3000, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapter 43.22 RCW. WSR 07-05-063, § 296-150M-3000, filed 2/20/07, effective 4/1/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-150M-3000, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapter 43.22 RCW and 2005 c 399. WSR 05-24-020, § 296-150M-3000, filed 11/29/05, effective 1/1/06. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-150M-3000, filed 5/24/05, effective 6/30/05. Statutory Authority: Chapters 18.27 and 43.22 RCW. WSR 04-12-048, § 296-150M-3000, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.340, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.480, and 43.22.485, 2002 c 268, and chapter 43.22 RCW. WSR 03-12-044, § 296-150M-3000, filed 5/30/03, effective 5/30/03. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-150M-3000, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 43.22.340, 43.22.350, 43.22.355, 43.22.360, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.450, 43.22.480, and 43.22.485. WSR 00-17-148, § 296-150M-3000, filed 8/22/00, effective 9/30/00. Statutory Authority: Chapters 43.22, 18.27, 70.87 and 19.28 RCW. WSR 99-12-080, § 296-150M-3000, filed 5/28/99, effective 6/28/99. Statutory Authority: Chapters 18.106, 18.27 and 43.22 RCW. WSR 98-12-041, § 296-150M-3000, filed 5/29/98, effective 6/30/98. Statutory Authority: RCW 70.87.030, 18.27.070, [18.27.]075, 43.22.350, [43.22.]355, [43.22.]434 and [43.22.]480(2). WSR 97-11-053, § 296-150M-3000, filed 5/20/97, effective 6/30/97. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150M-3000, filed 10/23/96, effective 11/25/96.]

OTS-4687.1

AMENDATORY SECTION (Amending WSR 23-09-024, filed 4/11/23, effective 4/11/23)

WAC 296-150P-3000 Recreational park trailer fees.

INITIAL FILING FEE	((~~$42.30~~)) $44.90
DESIGN PLAN FEES:	
NEW PLAN REVIEW FEE WITHOUT STRUCTURAL REQUIREMENTS	((~~$120.10~~)) $127.50
NEW PLAN REVIEW FEE WITH STRUCTURAL REQUIREMENTS	((~~$158.80~~)) $168.60
RESUBMITTAL FEE	((~~$85.90~~)) $91.20
ADDENDUM (Approval expires on same date as original plan.)	((~~$85.90~~)) $91.20
PLANS APPROVED BY LICENSED PROFESSIONALS	((~~$30.00~~)) $31.80
FEES FOR RESUBMITTAL OF DESIGN PLANS APPROVED BY A PROFESSIONAL OR FIRM	((~~$85.90~~)) $91.20 per hour
DEPARTMENT AUDIT FEES:	
AUDIT (per hour)*	((~~$85.90~~)) $91.20
TRAVEL (per hour)*	((~~$85.90~~)) $91.20

PER DIEM**	
HOTEL***	
MILEAGE**	
RENTAL CAR***	
PARKING***	
AIRFARE***	
DEPARTMENT INSPECTION FEES:	
INSPECTION (per hour)*	((~~$85.90~~)) $91.20
TRAVEL (per hour)*	((~~$85.90~~)) $91.20
PER DIEM**	
HOTEL***	
MILEAGE**	
RENTAL CAR***	
PARKING***	
AIRFARE***	
ALTERATION INSPECTION (One hour plus insignia alteration fee)	((~~$128.30~~)) $136.20
INSIGNIA FEES:	
STATE CERTIFIED	((~~$30.50~~)) $32.30
ALTERATION	((~~$42.30~~)) $44.90
REISSUED-LOST/DAMAGED	((~~$15.60~~)) $16.50
OTHER FEES:	
FIELD TECHNICAL SERVICE (per hour* plus travel time* and mileage**)	((~~$85.90~~)) $91.20
PUBLICATION PRINTING AND DISTRIBUTION OF RCWs AND WACs (One free copy per year upon request)	((~~$15.80~~)) $16.70
REFUND FEE	((~~$30.50~~)) $32.30

*Minimum charge of 1 hour; time spent greater than 1 hour is charged in 1/2 hour increments.
**Per state guidelines.
***Actual charges incurred.

[Statutory Authority: Chapter 43.22 RCW. WSR 23-09-024, § 296-150P-3000, filed 4/11/23, effective 4/11/23. Statutory Authority: Chapters 43.22 and 43.22A RCW. WSR 22-19-074, § 296-150P-3000, filed 9/20/22, effective 11/1/22; WSR 21-07-126, § 296-150P-3000, filed 3/23/21, effective 4/23/21; WSR 20-04-081, § 296-150P-3000, filed 2/4/20, effective 3/6/20. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-150P-3000, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 43.22 RCW and 2011 1st sp.s. c 50. WSR 12-06-069, § 296-150P-3000, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-150P-3000, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-150P-3000, filed 5/24/05, effective 6/30/05. Statutory Authority: Chapters 18.27 and 43.22 RCW. WSR 04-12-048, § 296-150P-3000, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 70.87.030, 18.106.070, 18.106.125, 2001 c 7, and chapters 18.106, 43.22, and 70.87 RCW. WSR 03-12-045, § 296-150P-3000, filed 5/30/03, effective 6/30/03. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-150P-3000, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-150P-3000, filed 5/29/01, effective 6/29/01. Statutory Authority:

RCW 43.22.340, 43.22.350, 43.22.355, 43.22.360, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.450, 43.22.480, and 43.22.485. WSR 00-17-148, § 296-150P-3000, filed 8/22/00, effective 9/30/00. Statutory Authority: Chapters 43.22, 18.27, 70.87 and 19.28 RCW. WSR 99-12-080, § 296-150P-3000, filed 5/28/99, effective 6/28/99. Statutory Authority: Chapters 18.106, 18.27 and 43.22 RCW. WSR 98-12-041, § 296-150P-3000, filed 5/29/98, effective 6/30/98. Statutory Authority: RCW 43.22.340 and 43.22.420. WSR 97-16-043, § 296-150P-3000, filed 7/31/97, effective 12/1/97.]

OTS-4688.1

AMENDATORY SECTION (Amending WSR 23-09-024, filed 4/11/23, effective 4/11/23)

WAC 296-150R-3000 Recreational vehicle fees.

STATE PLAN	
INITIAL FILING FEE	((~~$36.70~~)) $38.90
DESIGN PLAN FEES:	
NEW PLAN REVIEW FEE	((~~$102.50~~)) $108.80
RESUBMITTAL FEE	((~~$74.00~~)) $78.60
ADDENDUM (Approval expires on same date as original plan.)	((~~$74.00~~)) $78.60
PLANS APPROVED BY LICENSED PROFESSIONALS	((~~$15.00~~)) $15.90
FEES FOR RESUBMITTAL OF DESIGN PLANS APPROVED BY A PROFESSIONAL OR FIRM	((~~$74.10~~)) $78.70 per hour
DEPARTMENT AUDIT FEES:	
AUDIT (per hour)*	((~~$74.10~~)) $78.70
TRAVEL (per hour)*	((~~$74.10~~)) $78.70
PER DIEM**	
HOTEL***	
MILEAGE**	
RENTAL CAR***	
PARKING	
AIRFARE***	
DEPARTMENT INSPECTION FEES:	
INSPECTION (per hour)*	((~~$74.10~~)) $78.70
TRAVEL (per hour)*	((~~$74.10~~)) $78.70
PER DIEM**	
HOTEL***	
MILEAGE**	
RENTAL CAR***	
PARKING***	
AIRFARE***	
ALTERATION INSPECTION (One hour plus insignia alteration fee)	((~~$110.90~~)) $117.70
INSIGNIA FEES:	
STATE CERTIFIED	((~~$27.30~~)) $28.90
ALTERATION	((~~$36.70~~)) $38.90
REISSUED-LOST/DAMAGED	((~~$13.10~~)) $13.90
OTHER FEES:	
FIELD TECHNICAL SERVICE (per hour* plus travel time* and mileage**)	((~~$74.10~~)) $78.70
PUBLICATION PRINTING AND DISTRIBUTION OF RCWs AND WACs (One free copy per year)	((~~$13.80~~)) $14.60

*Minimum charge of 1 hour; time spent greater than 1 hour is charged in 1/2 hour increments.
**Per state guidelines.
***Actual charges incurred.

SELF CERTIFICATION	
INITIAL FILING FEE	((~~$36.70~~)) $38.90
DESIGN PLAN FEES:	
NEW PLAN REVIEW FEE (one time fee)	((~~$103.90~~)) $110.30
RESUBMITTAL FEE	((~~$74.10~~)) $78.70
ADDENDUM (Approval expires on same date as original plan.)	((~~$74.10~~)) $78.70
ELECTRONIC PLAN SUBMITTAL FEE ((~~$5.50~~)) $5.80 per page for the first set of plans and $1.00 per page for each additional set of plans. These fees are in addition to any applicable design plan fees required under this section.	
DEPARTMENT AUDIT FEES:	
AUDIT (per hour)*	((~~$74.10~~)) $78.70
TRAVEL (per hour)*	((~~$74.10~~)) $78.70
PER DIEM**	
HOTEL***	
MILEAGE**	
RENTAL CAR***	
PARKING	
AIRFARE***	
DEPARTMENT INSPECTION FEES:	
INSPECTION (per hour)*	((~~$74.10~~)) $78.70
TRAVEL (per hour)*	((~~$74.10~~)) $78.70
PER DIEM**	
HOTEL***	
MILEAGE**	
RENTAL CAR***	
PARKING***	
AIRFARE***	
INSIGNIA FEES:	
SELF CERTIFIED	((~~$27.30~~)) $28.90
ALTERATION	((~~$36.70~~)) $38.90
REISSUED-LOST/DAMAGED	((~~$13.10~~)) $13.90
OTHER FEES:	
FIELD TECHNICAL SERVICE (per hour* plus travel time* and mileage**)	((~~$74.10~~)) $78.70
PUBLICATION PRINTING AND DISTRIBUTION OF RCWs AND WACs (One free copy per year)	((~~$13.80~~)) $14.60
REFUND FEE	((~~$27.30~~)) $28.90

*Minimum charge of 1 hour; time spent greater than 1 hour is charged in 1/2 hour increments.
**Per state guidelines.
***Actual charges incurred.

[Statutory Authority: Chapter 43.22 RCW. WSR 23-09-024, § 296-150R-3000, filed 4/11/23, effective 4/11/23. Statutory Authority: Chapters 43.22 and 43.22A RCW. WSR 20-04-081, § 296-150R-3000, filed 2/4/20, effective 3/6/20. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-150R-3000, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 43.22 RCW and 2011 1st sp.s. c 50. WSR 12-06-069, § 296-150R-3000, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-150R-3000, filed 5/24/05, effective 6/30/05. Statutory Authority: Chapters 18.27 and 43.22 RCW. WSR 04-12-048, § 296-150R-3000, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 70.87.030, 18.106.070, 18.106.125, 2001 c 7, and chapters 18.106, 43.22, and 70.87 RCW. WSR 03-12-045, § 296-150R-3000, filed 5/30/03, effective 6/30/03. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500,

18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-150R-3000, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-150R-3000, filed 5/29/01, effective 6/29/01. Statutory Authority: RCW 43.22.340, 43.22.350, 43.22.355, 43.22.360, 43.22.400, 43.22.432, 43.22.433, 43.22.434, 43.22.450, 43.22.480, and 43.22.485. WSR 00-17-148, § 296-150R-3000, filed 8/22/00, effective 9/30/00. Statutory Authority: Chapters 43.22, 18.27, 70.87 and 19.28 RCW. WSR 99-12-080, § 296-150R-3000, filed 5/28/99, effective 6/28/99. Statutory Authority: Chapters 18.106, 18.27 and 43.22 RCW. WSR 98-12-041, § 296-150R-3000, filed 5/29/98, effective 6/30/98. Statutory Authority: RCW 43.22.340 and 43.22.420. WSR 97-16-043, § 296-150R-3000, filed 7/31/97, effective 12/1/97. Statutory Authority: RCW 43.22.340, [43.22.]355, [43.22.]360, [43.22.]432, [43.22.]440 and [43.22.]480. WSR 96-21-146, § 296-150R-3000, filed 10/23/96, effective 11/25/96.]

OTS-4689.2

AMENDATORY SECTION (Amending WSR 22-19-074, filed 9/20/22, effective 11/1/22)

WAC 296-150T-3000 Factory-built temporary worker housing fees.

INITIAL FILING FEE	((~~$64.30~~)) $68.20
DESIGN PLAN FEES:	
INITIAL ONE YEAR DESIGN	((~~$186.90~~)) $198.50
RENEWAL FEE	((~~$64.30~~)) $68.20
RESUBMIT FEE	((~~$93.00~~)) $98.70
ADDENDUM (Approval expires on same date as original plan)	((~~$93.00~~)) $98.70
ELECTRONIC PLAN SUBMITTAL FEE ((~~$6.30~~)) $6.60 per page for the first set of plans and $1.00 per page for each additional set of plans. These fees are in addition to any applicable design plan fees required under this section.	
Supplemental submissions of plans (resubmittals, addendums, renewals, code updates, etc.) shall be charged per hour or fraction of an hour*	((~~$110.30~~)) $117.10
APPROVAL OF EACH SET OF DESIGN PLANS BEYOND FIRST TWO SETS	((~~$17.10~~)) $18.10
DEPARTMENT INSPECTION FEES:	
INSPECTION/REINSPECTION (Per hour* plus travel time* and mileage**)	((~~$93.00~~)) $98.70
TRAVEL (Per hour)*	((~~$93.00~~)) $98.70
PER DIEM**	
HOTEL***	
MILEAGE**	
RENTAL CAR***	
PARKING***	
AIRFARE***	
DEPARTMENT AUDIT FEES:	
AUDIT (Per hour*)	((~~$93.00~~)) $98.70
TRAVEL (Per hour*)	((~~$93.00~~)) $98.70
PER DIEM**	
HOTEL***	

MILEAGE**	
RENTAL CAR***	
PARKING***	
AIRFARE***	
INSIGNIA FEES:	
FIRST SECTION	((~~$262.30~~)) $278.60
EACH ADDITIONAL SECTION	((~~$25.10~~)) $26.60
REISSUED-LOST/DAMAGED	((~~$64.30~~)) $68.20
ELECTRICAL COMMERCIAL/INDUSTRIAL	
Electrical Service/feeders 200 Amperage plus	
Service/feeder	((~~$271.70~~)) $288.50
Additional Feeder	((~~$51.40~~)) $54.50
ELECTRICAL MULTIFAMILY RESIDENTIAL	
Electrical Service/feeders 200 Amperage plus	
Service/feeder	((~~$143.90~~)) $152.80
Additional Feeder	((~~$36.40~~)) $38.60
OTHER FEES:	
FIELD TECHNICAL SERVICE (Per hour* plus travel time* and mileage**)	((~~$93.00~~)) $98.70
PUBLICATION PRINTING AND DISTRIBUTION OF RCWs AND WACs (One free per year)	((~~$17.10~~)) $18.10
REFUND FEE	((~~$30.50~~)) $32.30

*Minimum charge of 1 hour; time spent greater than 1 hour is charged in 1/2 hour increments.
**Per state guidelines.
***Actual charges incurred.

[Statutory Authority: Chapters 43.22 and 43.22A RCW. WSR 22-19-074, § 296-150T-3000, filed 9/20/22, effective 11/1/22; WSR 21-07-126, § 296-150T-3000, filed 3/23/21, effective 4/23/21; WSR 20-04-081, § 296-150T-3000, filed 2/4/20, effective 3/6/20. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-150T-3000, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 43.22 RCW and 2011 1st sp.s. c 50. WSR 12-06-069, § 296-150T-3000, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapters 18.106, 43.22 RCW, 2008 c 285 and c 329. WSR 08-12-042, § 296-150T-3000, filed 5/30/08, effective 6/30/08. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-150T-3000, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-150T-3000, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-150T-3000, filed 5/24/05, effective 6/30/05. Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150T-3000, filed 12/14/04, effective 2/1/05. Statutory Authority: Chapters 18.27 and 43.22 RCW. WSR 04-12-048, § 296-150T-3000, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 70.87.030, 18.106.070, 18.106.125, 2001 c 7, and chapters 18.106, 43.22, and 70.87 RCW. WSR 03-12-045, § 296-150T-3000, filed 5/30/03, effective 6/30/03. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-150T-3000, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-150T-3000, filed 5/29/01, effective 6/29/01. Statutory Authority:

RCW 43.22.480. WSR 99-12-079, § 296-150T-3000, filed 5/28/99, effective 6/28/99.]

OTS-4690.1

AMENDATORY SECTION (Amending WSR 23-09-024, filed 4/11/23, effective 4/11/23)

WAC 296-150V-3000 Conversion vendor units and medical units—Fees.

INITIAL FILING FEE	((~~$45.90~~)) $48.70
DESIGN PLAN FEES:	
INITIAL FEE - MASTER DESIGN	((~~$319.00~~)) $338.80
INITIAL FEE - ONE YEAR DESIGN	((~~$130.30~~)) $138.40
RENEWAL FEE	((~~$55.20~~)) $58.60
RESUBMIT FEE	((~~$93.00~~)) $98.70
ADDENDUM (Approval expires on same date as original plan)	((~~$93.00~~)) $98.70
PLANS APPROVED BY LICENSED PROFESSIONALS	((~~$81.10~~)) $86.10
FEES FOR RESUBMITTAL OF DESIGN PLANS APPROVED BY A PROFESSIONAL OR FIRM	((~~$85.80~~)) $91.10 per hour
ELECTRICAL PLAN REVIEW - For medical units, find fees at http://apps.leg.wa.gov/wac/default.aspx?cite=296-46B-906	
RECIPROCAL PLAN REVIEW:	
INITIAL FEE - MASTER DESIGN	((~~$142.00~~)) $150.80
INITIAL FEE - ONE YEAR DESIGN	((~~$85.80~~)) $91.10
RENEWAL FEE	((~~$85.80~~)) $91.10
ADDENDUM	((~~$85.80~~)) $91.10
APPROVAL OF EACH SET OF DESIGN PLANS BEYOND FIRST TWO SETS	((~~$17.10~~)) $18.10
DEPARTMENT INSPECTION FEES:	
INSPECTION/REINSPECTION (Per hour* plus travel time* and mileage**)	((~~$93.00~~)) $98.70
TRAVEL (Per hour)*	((~~$93.00~~)) $98.70
PER DIEM**	
HOTEL***	
MILEAGE**	
RENTAL CAR***	
PARKING***	
AIRFARE***	
ALTERATION INSPECTION (One hour plus insignia alteration fee)	((~~$139.30~~)) $147.90
INSIGNIA FEES:	
FIRST SECTION/ALTERATION	((~~$26.60~~)) $28.20
REISSUED-LOST/DAMAGED	((~~$17.10~~)) $18.10
EXEMPT	((~~$45.90~~)) $48.70
OTHER FEES:	
FIELD TECHNICAL SERVICE (Per hour* plus travel time* and mileage**)	((~~$93.00~~)) $98.70
PUBLICATION PRINTING AND DISTRIBUTION OF RCWs AND WACs (One free copy per year upon request)	((~~$17.10~~)) $18.10
REFUND FEE	((~~$30.50~~)) $32.30

*Minimum charge of 1 hour; time spent greater than 1 hour is charged in 1/2 hour increments.
**Per state guidelines.
***Actual charges incurred.

[Statutory Authority: Chapter 43.22 RCW. WSR 23-09-024, § 296-150V-3000, filed 4/11/23, effective 4/11/23. Statutory Authority:

Chapters 43.22 and 43.22A RCW. WSR 22-19-074, § 296-150V-3000, filed 9/20/22, effective 11/1/22; WSR 21-07-126, § 296-150V-3000, filed 3/23/21, effective 4/23/21; WSR 20-04-081, § 296-150V-3000, filed 2/4/20, effective 3/6/20. Statutory Authority: Chapters 18.27, 70.87, 43.22, and 43.22A RCW. WSR 18-24-102, § 296-150V-3000, filed 12/4/18, effective 1/4/19. Statutory Authority: Chapter 43.22 RCW and 2011 1st sp.s. c 50. WSR 12-06-069, § 296-150V-3000, filed 3/6/12, effective 4/30/12. Statutory Authority: Chapters 18.106, 43.22 RCW, 2008 c 285 and c 329. WSR 08-12-042, § 296-150V-3000, filed 5/30/08, effective 6/30/08. Statutory Authority: Chapters 18.27, 18.106, 43.22, and 70.87 RCW. WSR 07-11-128, § 296-150V-3000, filed 5/22/07, effective 6/30/07. Statutory Authority: Chapters 18.106, 43.22, and 70.87 RCW. WSR 06-10-066, § 296-150V-3000, filed 5/2/06, effective 6/30/06. Statutory Authority: Chapter 43.22 RCW. WSR 05-23-002, § 296-150V-3000, filed 11/3/05, effective 12/4/05. Statutory Authority: Chapters 18.27, 43.22, and 70.87 RCW. WSR 05-12-032, § 296-150V-3000, filed 5/24/05, effective 6/30/05. Statutory Authority: Chapter 43.22 RCW and 2003 c 291. WSR 05-01-102, § 296-150V-3000, filed 12/14/04, effective 2/1/05. Statutory Authority: Chapters 18.27 and 43.22 RCW. WSR 04-12-048, § 296-150V-3000, filed 5/28/04, effective 6/30/04. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 70.87.030, 18.106.070, 18.106.125, 2001 c 7, and chapters 18.106, 43.22, and 70.87 RCW. WSR 03-12-045, § 296-150V-3000, filed 5/30/03, effective 6/30/03. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.040, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 7, 2002 c 249, and chapters 19.28, 43.22, 18.27, and 70.87 RCW. WSR 02-12-022, § 296-150V-3000, filed 5/28/02, effective 6/28/02. Statutory Authority: RCW 43.22.350, 43.22.434, 43.22.480, 43.22.500, 18.27.070, 18.27.075, 70.87.030, 19.28.041, 19.28.051, 19.28.101, 19.28.121, 19.28.161, 19.28.201, 19.28.211, 19.28.341, 2001 c 159, and chapters 43.22, 19.28, 18.27, and 70.87 RCW. WSR 01-12-035, § 296-150V-3000, filed 5/29/01, effective 6/29/01. Statutory Authority: Chapter 43.22 RCW. WSR 99-18-069, § 296-150V-3000, filed 8/31/99, effective 10/1/99.]

WSR 23-21-095
PERMANENT RULES
DEPARTMENT OF HEALTH
[Filed October 18, 2023, 7:42 a.m., effective November 18, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: Health equity continuing education (CE) for genetic counselors. The department of health (department) amended WAC 246-825-110 to require two hours of health equity CE every three years. Health equity CE programs must meet or exceed the standards created in the department's model rules in WAC 246-12-800 through 246-12-830. The adopted rule exceeds standards in the department's model rules by requiring the two hours every three years instead of every four years. The new health equity CE requirement does not add to the total CE hours required to renew the license. Allowing genetic counselors to take health equity training as part of their existing CE requirements and aligning it with the existing three year CE interval makes it less burdensome on the profession.

The adopted rule implements the requirements of ESSB 5229 (chapter 276, Laws of 2021). Codified in RCW 43.70.613, the statute directed the rule-making authority for each health profession licensed under Title 18 RCW and subject to CE to adopt rules requiring a minimum of two hours of health equity CE every four years. The statute also directed the department to create the model rules establishing minimum standards for health equity CE programs, which were filed on December 16, 2022, under WSR 23-01-097.

Citation of Rules Affected by this Order: Amending WAC 246-825-110.

Statutory Authority for Adoption: RCW 18.290.020, 43.70.613, 43.70.040, 18.130.040.

Adopted under notice filed as WSR 23-12-091 on June 6, 2023.

A final cost-benefit analysis is available by contacting Kim-Boi Shadduck, Program Manager, Genetic Counselors, Department of Health, P.O. Box 47852, Olympia, WA 98504-7852, phone 360-236-2912, fax 360-236-2901, TTY 711, email kimboi.shadduck@doh.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 1, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 1, Repealed 0.

Date Adopted: October 18, 2023.

Kristin Peterson, JD
Chief of Policy
for Umair A. Shah, MD, MPH
Secretary

OTS-4357.2

AMENDATORY SECTION (Amending WSR 10-22-090, filed 11/1/10, effective 11/1/10)

WAC 246-825-110 Continuing education. (1) Licensed genetic counselors must complete a minimum total of ((~~seventy-five~~)) 75 continuing education hours or 7.5 continuing education units (CEUs) every three years following the first license renewal. One contact hour equals 0.1 CEU. Of the total hours required for each reporting cycle:

(a) Each licensee must complete at least two hours or 0.2 CEUs of health equity training in compliance with WAC 246-12-800 through 246-12-830. This requirement shall begin at the end of a licensee's second full continuing education reporting period after January 1, 2024, or the second full continuing education reporting period after initial licensure, whichever is later;

(b) No more than ((~~fifteen~~)) 15 continuing education hours or 1.5 CEUs may be earned for professional development activity credits ((~~within a reporting cycle~~)) in subsection (2) of this section.

(2) Professional development activities include, but are not limited to:

(a) Teaching or providing clinical supervision; authoring or co-authoring an article or chapter in peer-review journal; genetics education outreach; leadership activities.

(b) Lecturing or instructing professional groups.

(c) Teaching genetics related courses for undergraduate, graduate, or other health provider groups.

Multiple credits shall not be given to presenters for multiple presentations of the same program.

(3) Practice-based competency courses or programs may consist of postgraduate studies, seminars, lectures, workshops (including distance learning), and professional conferences. Practice-based competencies include, but are not limited to:

(a) Communication - convey detailed genetic information to diverse audiences clearly and concisely while bridging cultural, socioeconomic and educational difference.

(b) Critical thinking - perform complicated risk calculations; evaluate medical, family and psychosocial histories; distill genetic and psychosocial information; participate in diagnostic evaluations; and develop effective case management plan.

(c) Interpersonal counseling, and psychosocial assessment - use an empathetic approach to identify a patient's concerns, clarify beliefs and values, promote preventative health measures and facilitate informed decision making.

(d) Professional ethics and values.

(4) Courses and programs accredited or approved by the following organizations qualify for continuing education credit for licensed genetic counselors.

(a) ABGC;

(b) ABMG;

(c) NSGC; or

(d) Other courses or programs as approved by the secretary.

(5) Continuing education contact hours or CEUs may not be carried over from one reporting cycle to another.

(6) A genetic counselor may request an extension or to be excused from meeting the continuing education requirements due to illness or other extenuating circumstances.

[Statutory Authority: RCW 18.290.020. WSR 10-22-090, § 246-825-110, filed 11/1/10, effective 11/1/10.]

WSR 23-21-099
PERMANENT RULES
DEPARTMENT OF TRANSPORTATION
[Filed October 18, 2023, 8:43 a.m., effective November 18, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: This new rule will give the Washington state department of transportation (WSDOT) the ability to exclude the federal share of economic rent when regional transit authorities lease highway right-of-way for the construction and operation of high capacity transportation systems, subject to the approval of the Federal Highway Administration. The anticipated effect will be improved financial feasibility of transit system expansion programs.

Citation of Rules Affected by this Order: Amending [WAC 468-30-110].

Statutory Authority for Adoption: RCW 47.01.101(5) and 47.12.120 are statutes that allow WSDOT to adjust WAC 468-30-110.

Adopted under notice filed as WSR 23-17-152 on August 22, 2023.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 1, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: October 18, 2023.

Sam Wilson, Director
Business Support Services

OTS-4885.1

AMENDATORY SECTION (Amending WSR 81-19-052, filed 9/11/81)

WAC 468-30-110 Nonhighway use of airspace on state highways.

(1) Definitions:

(a) "Airspace" is that space located above, at or below the highway's established gradeline lying within the approved right of way limits.

(b) "Department" is the Washington state department of transportation.

(2) Any use of such space shall be subject to approval of the Federal Highway Administration.

(3) Any use of such space shall be subject to compliance with all applicable city, town or county zoning requirements.

(4) Any application to the department for the lease of such space shall describe in detail the use to be made of such space and the

physical facilities to be installed and maintained on state right of way.

(5) The lessee shall be solely responsible and shall hold the state harmless for liability for any and all damage to persons or to public or private property that may result from or be caused by the use of such space or from the erection or maintenance of any structure or facility upon the highway right of way. The lessee shall be liable to the department for any moneys expended by it for the protection or repair of any state facility required as a result of any such use.

(6) The lessee shall be required to carry liability and property damage insurance in amounts required by the department.

(7) No use of such space shall be allowed which subjects the highway facility or the public to undue risk or impairs the use of the facility for highway purposes.

(8) Use of such space shall be covered by a properly executed airspace lease.

(9) Consideration for occupancy:

(a) Where the airspace can be developed and used as an entity the consideration shall be economic rent.

(b) Where the proposed use of the airspace is in conjunction with an abutting tract, rent shall be based on its contribution value to the abutting property but not less than economic rent.

(c) When the use of the property constitutes a highway purpose the rent may be offset in part or in whole with other valuable considerations as determined by the department.

(d) Where the airspace shall be used by a regional transit authority under chapter 81.112 RCW, the consideration shall be economic rent, or if so agreed to by the department, the economic rent shall be adjusted to reflect only that portion of the value equal to the percentage of the state share of motor vehicle funds originally expended to acquire the property.

(10) The granting of any use of such space shall be subject to the discretion of the department and upon such terms and conditions in addition to those stated herein as it shall deem proper.

(11) No assignment of any lease by the lessee shall be of any force and effect unless prior written approval of such assignment has been given by the department.

[Statutory Authority: RCW 47.01.101(5) and 47.12.120. WSR 81-19-052 (Order 65), § 468-30-110, filed 9/11/81.]

WSR 23-21-103
PERMANENT RULES
OFFICE OF THE
INSURANCE COMMISSIONER

[Insurance Commissioner Matter R 2023-04—Filed October 18, 2023, 9:15 a.m., effective November 18, 2023]

Effective Date of Rule: Thirty-one days after filing.

Purpose: The commissioner is adopting rules to amend sections of chapter 284-17 WAC following passage of HB 1061. HB 1061 changed the law by eliminating the requirement that an applicant for a resident insurance producer license complete a prelicensure course of study for the lines of authority for which the person applied. This rule making will remove language referencing prelicensing education from existing rules to align with statute. For purposes of clarification, a definition from repealed WAC 284-17-505 was preserved and listed under WAC 284-17-001.

Citation of Rules Affected by this Order: New WAC 284-17-126; repealing WAC 284-17-505, 284-17-510, 284-17-515, 284-17-516, 284-17-517, 284-17-520, 284-17-530, 284-17-535, 284-17-537, 284-17-539, 284-17-540, 284-17-545, 284-17-547, 284-17-550, 284-17-560, 284-17-565, 284-17-572, 284-17-574, 284-17-576, 284-17-578 and 284-17-580; amending WAC 284-17-001, 284-17-175 and 284-17-551; and recodifying WAC 284-17-551 (as WAC 284-17-126).

Statutory Authority for Adoption: RCW 48.02.060 and 48.17.005.

Adopted under notice filed as WSR 23-18-089 on September 6, 2023.

A final cost-benefit analysis is available by contacting Rules Coordinator, P.O. Box 40255, Olympia, WA 98504-0255, phone 360-725-7171, fax 360-586-3109, TTY 360-586-0241, email Rules.Coordinator@oic.wa.gov, website www.insurance.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 1, Amended 3, Repealed 21.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: October 18, 2023.

Mike Kreidler
Insurance Commissioner

OTS-4748.3

AMENDATORY SECTION (Amending WSR 13-14-099, filed 7/2/13, effective 8/2/13)

WAC 284-17-001 Definitions. For purposes of this chapter, unless the context requires otherwise:

(1) "Affiliation" is a type of appointment whereby a business entity authorizes an individual insurance producer or surplus line broker to represent it when conducting insurance business.

(2) "Business entity" has the meaning set forth in RCW 48.17.010(2) and includes a sole proprietorship having associated licensees authorized to act on its behalf in the business or trade name of the sole proprietorship.

(3) "Days" means calendar days including Saturday and Sunday and holidays, unless otherwise specified.

(4) "Electronic submission" or "submitted electronically" means submission of a licensing process by an applicant, licensee, insurer, or education provider by means of the commissioner's website or a third-party licensing provider or other state agency.

(5) "File" means a record in any retrievable format, and unless otherwise specified, includes paper and electronic formats.

(6) "Home state" has the meaning set forth in RCW 48.17.010(4).

(7) "Independent testing service" means the entity having a contract with the commissioner to develop, administer, and score insurance examinations.

(8) "Insurer" has the meaning set forth in RCW 48.17.010(7).

((~~(8)~~)) (9) "Licensee" means a person licensed by the commissioner under Title 48 RCW to sell, solicit or negotiate insurance and includes adjusters and surplus line brokers.

((~~(9)~~)) (10) "Line of authority" means a license issued in one or more lines of insurance listed in RCW 48.17.170.

((~~(10)~~)) (11) "NAIC" means the National Association of Insurance Commissioners.

((~~(11)~~)) (12) "Third-party licensing provider" is designated on the commissioner's website at: www.insurance.wa.gov.

((~~(12)~~)) (13) "Reinstatement" means the reissuance by the commissioner of a license that was not renewed more than ((~~sixty~~)) 60 days but fewer than ((~~twelve~~)) 12 months after its expiration date.

((~~(13)~~)) (14) "Resident" means a person who has elected to make Washington his or her home state, or, in the case of a business entity, has a place of business in this state.

((~~(14)~~)) (15) "Sending written notice" or "sending a copy of the written notice" means transmitting the required information in writing and, where required, on forms designated by the commissioner for that purpose, via first class mail, commercial parcel delivery company, telefacsimile, or electronic transmission, unless a specific method of transmission is specified.

((~~(15)~~)) (16) "Specialty producer license—Portable electronics" means a license issued under RCW 48.120.010 that authorizes a vendor to offer or sell insurance as provided in RCW 48.120.015.

((~~(16)~~)) (17) "Surety" means that limited line of authority of insurance or bond that covers obligations to pay the debts of, or answer for the default of another, including faithlessness in a position of public or private trust.

((~~(17)~~)) (18) "Travel insurance" means insurance coverage for personal risks incident to planned travel including, but not limited to:

(a) Interruption or cancellation of trip or event;

(b) Loss of baggage or personal effects;

(c) Damages to accommodations or rental vehicles; or

(d) Sickness, accident, disability, or death occurring during limited duration travel.

Travel insurance does not include major medical plans, which provide comprehensive medical protection for travelers with trips lasting six months or longer, including those working overseas as an expatriate or military personnel being deployed.

((~~(18)~~)) (19) "Travel insurance producer" means a licensed limited lines producer of travel insurance.

((~~(19)~~)) (20) "Travel retailer" means a business entity that offers and disseminates travel insurance on behalf of and under the direction and supervision of a licensed travel insurance producer.

((~~(20)~~)) (21) "Written" or "in writing" means any retrievable method of recording an agreement or document, and, unless otherwise specified, includes paper and electronic formats.

[Statutory Authority: RCW 48.02.060 and 48.120.050. WSR 13-14-099 (Matter No. R 2013-07), § 284-17-001, filed 7/2/13, effective 8/2/13. Statutory Authority: RCW 48.17.005. WSR 13-06-023 (Matter No. R 2012-26), § 284-17-001, filed 2/27/13, effective 7/1/13. Statutory Authority: RCW 48.02.060 and 48.17.005. WSR 12-22-020 (Matter No. R 2012-23), § 284-17-001, filed 10/29/12, effective 11/29/12. Statutory Authority: RCW 48.02.060 (3)(a) and 48.17.005. WSR 11-19-040 (Matter No. R 2011-12), § 284-17-001, filed 9/13/11, effective 10/14/11. Statutory Authority: RCW 48.15.015 and 48.17.005. WSR 11-04-067 (Matter No. R 2010-07), § 284-17-001, filed 1/28/11, effective 2/28/11. Statutory Authority: RCW 48.02.060, 48.17.005. WSR 09-02-073 (Matter No. R 2008-06), § 284-17-001, filed 1/6/09, effective 7/1/09.]

AMENDATORY SECTION (Amending WSR 09-02-073, filed 1/6/09, effective 7/1/09)

WAC 284-17-175 Education referrals. No person may accept any rebate, refund, fee, commission, or discount in connection with referrals of students to ((~~an insurance education prelicense or~~)) a continuing insurance education provider without making a full disclosure to each student so referred.

[Statutory Authority: RCW 48.02.060, 48.17.005. WSR 09-02-073 (Matter No. R 2008-06), § 284-17-175, filed 1/6/09, effective 7/1/09. Statutory Authority: RCW 48.02.060 and 48.17.070. WSR 89-01-055 (Order R 88-14), § 284-17-175, filed 12/16/88.]

AMENDATORY SECTION (Amending WSR 17-01-142, filed 12/20/16, effective 1/20/17)

WAC 284-17-551 ((~~Prelicensing insurance education~~))Candidate information bulletin. The ((~~prelicensing insurance education curriculum is~~)) exam content outlines are described in the candidate information bulletin. The candidate information bulletin is incorporated by reference and its entire contents will be enforced by the commissioner. A copy of the current candidate information bulletin is available through the commissioner's website at www.insurance.wa.gov.

((~~(1) Information in the current version of the candidate information bulletin must be provided to each license candidate at the time of enrollment.~~

~~(2) If changes are implemented in the prescribed prelicensing education curriculum, the prelicensing insurance education provider must submit a revised course outline at least fifteen calendar days before the implementation date.~~))

[Statutory Authority: RCW 48.02.060 and 48.17.005. WSR 17-01-142 (Matter No. R 2016-25), § 284-17-551, filed 12/20/16, effective 1/20/17; WSR 09-02-073 (Matter No. R 2008-06), § 284-17-551, filed 1/6/09, effective 7/1/09. Statutory Authority: RCW 48.02.060 and 48.17.150. WSR 91-12-033 (Order R 91-3), § 284-17-551, filed 6/3/91, effective 7/4/91. Statutory Authority: RCW 48.02.060 and 48.17.070. WSR 89-01-055 (Order R 88-14), § 284-17-551, filed 12/16/88.]

NEW SECTION

The following section of the Washington Administrative Code is decodified and recodified as follows:

Old WAC Number	New WAC Number
284-17-551	284-17-126

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 284-17-505	Definitions.
WAC 284-17-510	Prelicensing insurance education requirement.
WAC 284-17-515	Waiver of the prelicensing insurance education requirement—Equivalent education.
WAC 284-17-516	Home self-study—Candidate, course materials and approved providers.
WAC 284-17-517	Home self-study—Materials, course standards.
WAC 284-17-520	Certificates of completion required for admittance to licensing exam—Passing score report must be provided to the commissioner.
WAC 284-17-530	Requirements applicable to all prelicensing insurance education providers.
WAC 284-17-535	Program director's qualifications and responsibilities.

WAC 284-17-537	Prelicensing insurance education instructor qualifications and responsibilities.
WAC 284-17-539	Certificates of completion of a prelicensing insurance education course.
WAC 284-17-540	Requirements applicable to independent prelicensing insurance education providers.
WAC 284-17-545	Requirements applicable to insurer-based prelicensing education providers.
WAC 284-17-547	Renewal—Prelicensing insurance education provider.
WAC 284-17-550	Prelicensing insurance education course standards.
WAC 284-17-560	Providers denied approval.
WAC 284-17-565	Suspension or revocation of approved prelicensing insurance education providers.
WAC 284-17-572	Fee.
WAC 284-17-574	Prelicensing insurance education provider numbers.
WAC 284-17-576	Actions by a prelicensing insurance education provider that may result in a fine.
WAC 284-17-578	Reinstatement of approval of a prelicensing insurance education provider.
WAC 284-17-580	Grounds for revocation or suspension of approval of a prelicensing insurance education course.