ERRATUM

Due to an inadvertent error the published version of WSR 16-24-059 incorrectly stated the statutory authority as RCW 34.215.020 (2)(f). The statutory authority was filed as RCW 43.215.020 (2)(f). The corrected form is shown below.

WSR 16-24-059
PERMANENT RULES
DEPARTMENT OF
EARLY LEARNING

[Filed December 2, 2016, 3:44 p.m., effective January 2, 2017]

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

Purpose: Early support for infants and toddlers (ESIT) is the state of Washington's response to Part C of the federal Individuals with Disabilities Education Act (IDEA). The department of early learning administers the ESIT program and has adopted these rules to clarify for funding sources, administrators, providers and families the allowable allocations and expenditures for transition into Part B of IDEA. The adopted rules also support quality service provision under Part C of IDEA.

Statutory Authority for Adoption: RCW 43.215.020 (2)(f).

Adopted under notice filed as WSR 16-21-100 on October 19, 2016.

Changes Other than Editing from Proposed to Adopted Version: Based on comments received during the public comment period, the department of early learning revised WAC 170-400-0140 to clarify that only public moneys are subject to the allocation threshold.

Number of Sections Adopted in Order to Comply with Federal Statute: New 12, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 12, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 0, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.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: December 2, 2016.

Ross Hunter
Director

WSR 17-01-002
PERMANENT RULES
DEPARTMENT OF
SOCIAL AND HEALTH SERVICES
(Aging and Long-Term Support Administration)

[Filed December 7, 2016, 4:34 p.m., effective January 7, 2017]

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

Purpose: The department is amending WAC 388-76-10135 Qualifications—Caregiver and 388-76-10660 Chemical restraints, as a result of comments received at the public hearing for WSR 16-14-037 on August 23, 2016. The amendment to WAC 388-76-10660 is needed to be consistent with statute. The amendments to both sections improve clarity, are beneficial to regulated entities, and were intended to be included with the permanent rules filed as WSR 16-20-095.

Citation of Existing Rules Affected by this Order: Amending WAC 388-76-10135 and 388-76-10660.

Statutory Authority for Adoption: Chapter 70.128 RCW.

Adopted under notice filed as WSR 16-21-060 on October 14, 2016.

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 2, Repealed 0.

Number of Sections Adopted at 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 2, Repealed 0.

Date Adopted: December 7, 2016.

Katherine I. Vasquez
Rules Coordinator

AMENDATORY SECTION (Amending WSR 14-14-028, filed 6/24/14, effective 7/25/14)

WAC 388-76-10135 Qualifications—Caregiver. The adult family home must ensure each caregiver has the following minimum qualifications:

(1) Be eighteen years of age or older;

(2) ((~~Have~~)) Has a clear understanding of the caregiver job responsibilities and knowledge of each resident's negotiated care plan to provide care specific to the needs of each resident;

(3) ((~~Have~~)) Has basic communication skills to:

(a) Be able to communicate or make provisions to communicate with the resident in his or her primary language; and

(b) Understand and speak English well enough to:

(i) Respond appropriately to emergency situations; and

(ii) Read, understand, and implement resident negotiated care plans((~~.~~));

(4) ((~~Completion of~~)) Has completed the training requirements ((~~that were~~)) in effect on the date ((~~they were~~)) the caregiver was hired, including the requirements ((~~described in~~)) applicable to the caregiver under chapter 388-112 WAC;

(5) ((~~Have~~)) Has no disqualifying criminal convictions or pending criminal charges under chapter 388-113 WAC;

(6) ((~~Have~~)) Has none of the negative actions listed in WAC 388-76-10180;

(7) ((~~Have~~)) Has a current valid first((-))aid ((~~and~~)) card or certificate as required in chapter 388-112 WAC, except nurses, who are exempt from this requirement;

(8) Has a valid cardiopulmonary resuscitation (CPR) card or certificate as required in chapter 388-112 WAC; and

(((~~(8) Have~~)) (9) Meets the tuberculosis screening ((~~to establish tuberculosis status per~~)) requirements of this chapter.

AMENDATORY SECTION (Amending WSR 16-06-004, filed 2/17/16, effective 4/1/16)

WAC 388-76-10660 Chemical restraints. (1) ((~~For the purposes of this section "chemical restraint" means a drug that is given~~)) "Chemical restraint(s)" cannot be used for discipline or convenience ((~~and not required to treat the resident's medical symptoms~~)).

(2) ((~~The adult family home must ensure that each resident is free from chemical restraints~~)) Must only be used within the guidelines as "chemical restraint" is defined.

WSR 17-01-013
PERMANENT RULES
HEALTH CARE AUTHORITY
(Washington Apple Health)

[Filed December 9, 2016, 2:14 p.m., effective January 9, 2017]

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

Purpose: The agency is amending this rule so coverage is consistent for new and renewing enrollees in TAKE CHARGE. Coverage is for the duration of the waiver.

Citation of Existing Rules Affected by this Order: Amending WAC 182-532-720 TAKE CHARGE program—Eligibility.

Statutory Authority for Adoption: RCW 41.05.021, 41.05.160.

Adopted under notice filed as WSR 16-17-097 on August 18, 2016.

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 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: December 9, 2016.

Wendy Barcus
Rules Coordinator

AMENDATORY SECTION (Amending WSR 15-02-056, filed 1/5/15, effective 2/5/15)

WAC 182-532-720 TAKE CHARGE program—Eligibility. (1) The TAKE CHARGE program is for men and women. To be eligible for the TAKE CHARGE program, an applicant must:

(a) Be a United States citizen, U.S. National, or "qualified alien" as described in WAC 182-503-0530, and give proof of citizenship or qualified alien status and identity upon request from the medicaid agency;

(b) Provide a valid Social Security number (SSN);

(c) Be a resident of the state of Washington as described in WAC 182-503-0520;

(d) Have an income at or below two hundred sixty percent of the federal poverty level as described in WAC 182-505-0100;

(e) Need family planning services;

(f) Have applied for categorically needy coverage, unless the applicant:

(i) Is a domestic violence victim who is covered under the alleged perpetrator's health insurance;

(ii) Is under eighteen years of age and is seeking confidential services; or

(iii) Has an income between one hundred fifty percent and two hundred sixty percent (inclusive) of the federal poverty level.

(g) Apply voluntarily for family planning services with a TAKE CHARGE provider; and

(h) Not be covered currently through another Washington apple health program for family planning. If categorically needy coverage is approved for a TAKE CHARGE recipient, the individual will be enrolled in the categorically needy program.

(2) An applicant who is pregnant or sterilized is not eligible for TAKE CHARGE.

(3) An applicant who has concurrent coverage under a creditable health insurance policy as defined in WAC 182-12-109 is not eligible for TAKE CHARGE unless the applicant is seeking confidential services and is either under nineteen years old or is a domestic violence victim who is covered under the perpetrator's insurance.

(4) A client is authorized for TAKE CHARGE coverage for one year from the date the medicaid agency determines eligibility, or for the duration of the waiver, whichever is shorter. Upon reapplication for TAKE CHARGE by the client, the medicaid agency may renew the coverage for an additional period of up to one year, or for the duration of the waiver, whichever is shorter.

WSR 17-01-020
PERMANENT RULES
SUPERINTENDENT OF PUBLIC INSTRUCTION

[Filed December 12, 2016, 10:46 a.m., effective December 24, 2016]

Effective Date of Rule: December 24, 2016.

Purpose: Under the prior versions of WAC 392-121-571 and 392-121-578, school district and charter school career and technical education (CTE) programs were allowed to carry over CTE program funds from one school year to the ensuing school year in an amount up to the CTE enhancement. The purpose of the amended rules, when combined with the current enhancement level provided under law, is to allow school districts or charter schools to access a carryover amount equal to ten percent of the minimum expenditure amount.

On August 26, 2016, an identical emergency rule (WSR 16-18-025) went into effect allowing school districts and charter schools to access the ten percent carryover before the end of the prior fiscal year (August 31). The emergency rule expires on December 24, 2016. The effective date of this rule is therefore December 24, 2016, less than thirty-one days after filing. The earlier effective date is necessary in order to ensure that there is no gap in school districts' or charter schools' authority to access the ten percent carryover for the current fiscal year.

Citation of Existing Rules Affected by this Order: Amending WAC 392-121-571 and 392-121-578.

Statutory Authority for Adoption: RCW 28A.150.290.

Other Authority: RCW 84.52.0531.

Adopted under notice filed as WSR 16-22-039 on October 27, 2016.

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 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: December 9, 2016.

Randy Dorn
State Superintendent
of Public Instruction

AMENDATORY SECTION (Amending WSR 15-18-078, filed 8/28/15, effective 9/28/15)

WAC 392-121-571 Vocational indirect cost limit—Definitions. As used in WAC 392-121-570 through 392-121-578:

(1) "Program 31" means the high school vocational-basic-state program as defined in the *Accounting Manual for Public School Districts in the State of Washington.*

(2) "Program 34" means the middle school vocational-basic-state program as defined in the *Accounting Manual for Public School Districts in the State of Washington*.

(3) "Basic allocation for vocational students" means the amount of money generated by a school district's or charter school's vocational full-time equivalent enrollment in the general apportionment formula using the state funding formula factors including the grade 4-12 staffing ratios without enhancement, and using the district's or charter school's average certificated instructional staff mix factor for program 31 staff from the district's S-275 personnel report.

((~~(3)~~)) (4) "Enhancement allocation for vocational students" means the additional money above the basic allocation for vocational students generated by a school district's or charter school's vocational full-time equivalent enrollment as a result of the enhanced state vocational staffing ratio and enhanced nonemployee related cost allocation for vocational students. This enhancement shall be calculated using the district's or charter school's average certificated instructional staff mix factor for program 31.

((~~(4)~~)) (5) "Vocational running start allocation" means the amount generated in the general apportionment formula by a school district's or charter school's running start students enrolled in vocational courses in a community or technical college pursuant to chapter 392-169 WAC.

AMENDATORY SECTION (Amending WSR 15-18-078, filed 8/28/15, effective 9/28/15)

WAC 392-121-578 Vocational indirect cost limit—Recovery of state allocations. (1) At the time of the January apportionment calculations after the close of the school year, the superintendent of public instruction shall recalculate each school district's or charter school's minimum direct expenditures.

(2) If the district's or charter school's program 31 expenditures are below the minimum program 31 expenditure amount, the district or charter school shall be allowed to carry over into the ensuing school year an amount equal to up to ten percent of the minimum expenditure amount excluding any carryover from the prior school year((~~. The actual amount carried over to the ensuing year shall be no more than the vocational enhancement~~)), less ((~~the~~)) recovery.

(3) The superintendent of public instruction shall recover from the district's or charter school's general apportionment allocation as a prior year adjustment an amount equal to the lesser of the district's or charter school's enhancement allocation for vocational students or the following amount:

(a) The district's or charter school's minimum program 31 expenditures; minus

(b) The district's or charter school's program 31 expenditures plus any allowable carryover.

(4) Recoveries made pursuant to this section shall be adjusted after the January apportionment calculation if revised enrollment, staff mix, or expenditure data submitted by the district or charter school and accepted by the superin-

tendent of public instruction materially affects the district's or charter school's recovery amount.

WSR 17-01-034
PERMANENT RULES
DEPARTMENT OF HEALTH

[Filed December 12, 2016, 4:05 p.m., effective January 12, 2017]

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

Purpose: Chapter 246-231 WAC, Packaging and transportation of radioactive material; chapter 246-232 WAC, Licensing applicability; chapter 246-233 WAC, Radioactive materials—General licenses; chapter 246-235 WAC, Radioactive materials—Specific licenses; chapter 246-237 WAC, Physical protection of category 1 and category 2 quantities of radioactive material; WAC 246-249-020 Site use permit; and chapter 246-252 WAC, Uranium or thorium milling. The department of health is adopting rules to be consistent with NRC's rules.

Citation of Existing Rules Affected by this Order: Repealing WAC 246-233-015; and amending WAC 246-231-010, 246-231-040, 246-231-060, 246-231-090, 246-231-106, 246-231-136, 246-231-140, 246-231-150, 246-231-160, 246-231-178, 246-231-180, 246-231-182, 246-231-184, 246-231-186, 246-231-188, 246-231-200, 246-252-030, 246-237-023, 246-237-025, 246-237-077, 246-235-010, 246-235-083, 246-235-095, 246-235-108, 246-233-010, 246-232-006, 246-232-007, 246-232-009, 246-232-011, 246-232-012, 246-232-015, and 246-249-020.

Statutory Authority for Adoption: RCW 70.98.050.

Other Authority: RCW 70.98.110.

Adopted under notice filed as WSR 16-22-023 on October 24, 2016.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 1, Amended 31, Repealed 1; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at 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 1, Amended 32, Repealed 1.

Date Adopted: December 16 [9], 2016.

Clark Halvorson
Assistant Secretary

AMENDATORY SECTION (Amending WSR 14-09-017, filed 4/7/14, effective 5/8/14)

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 ($1x10^{-5}$ $\mu Ci/cm^2$) for beta and gamma emitters and low toxicity alpha emitters, or 0.04 Bq/cm^2 ($1x10^{-6}$ $\mu Ci/cm^2$) 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.

((~~(10)~~)) (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 pack-

age, 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. ((~~71.59~~)) 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.

(((~~11~~))) (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.

(((~~12~~))) (13) "DOT" means the United States Department of Transportation. DOT regulations are found in Code of Federal Regulations Title 49 Transportation.

(((~~13~~))) (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.

(((~~14~~))) (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.

(((~~15~~))) (16) "Graphite" means graphite with a boron equivalent content less than 5 parts per million and density greater than 1.5 grams per cubic centimeter.

(((~~16~~))) (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.

(((~~17~~))) (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 ((~~not~~)) intended to be processed for the use of these radionuclides; ((~~or~~))

(ii) ((~~Solid unirradiated~~)) Natural uranium ((~~or~~)), depleted uranium ((~~or~~)), natural thorium, or their compounds or mixtures, provided they are unirradiated and in solid or liquid ((~~compounds or mixtures~~)) 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 ((~~1E-4~~)) $1x10^{-4}$ A2/g for solids and gases, and ((~~1E-5~~)) $1x10^{-5}$ 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 ((~~2E-3~~)) $2x10^{-3}$ A2/g.

(((~~18~~))) (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 days.

(((~~19~~))) (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.

(((~~20~~))) (21) "Natural thorium" means thorium with the naturally occurring distribution of thorium isotopes (essentially 100 weight percent thorium-232).

(((~~21~~))) (22) "Normal form radioactive material" means radioactive material that has not been demonstrated to qualify as "special form radioactive material."

(((~~22~~))) (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.

(((~~(23)~~))) (24) "Optimum interspersed hydrogenous moderation" means the presence of hydrogenous material between packages to such an extent that the maximum nuclear reactivity results.

(((~~(24)~~))) (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.

(((~~(25)~~))) (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.

(((~~(26)~~))) (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 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 ((~~NRC~~)) 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((~~, and~~)); a special form encapsulation designed in accordance with the requirements of ((~~NRC requirements in~~)) 10 C.F.R. 71.4 in effect on March 31, 1996 (see 10 C.F.R. 71, revised as of January 1, ((~~1983~~)) 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.

(((~~(27)~~))) (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.

(((~~(28)~~))) (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.

(((~~(29)~~))) (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.

(((~~(30)~~))) (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 Bq/cm^2 (((~~1E-4~~)) $1x10^{-4}$ microcurie/cm^2) for beta and gamma and low toxicity alpha emitters, or 0.4 Bq/cm^2 (((~~1E-5~~)) $1x10^{-5}$ 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 ((~~4E+4~~)) $4x10^{4}$ Bq/cm^2 (1.0 microcurie/cm^2) for beta and gamma and low toxicity alpha emitters, or ((~~4E+3~~)) $4x10^{3}$ 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 ((~~4E+4~~)) $4x10^{4}$ Bq/cm^2 (1 microcurie/cm^2) for beta and gamma and low toxicity alpha emitters, or ((~~4E+3~~)) $4x10^{3}$ 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 (((~~1E-2~~)) $1x10^{-2}$ microcurie/cm^2) for beta and gamma and low toxicity alpha emitters or 40 Bq/cm^2 (((~~1E-3~~)) $1x10^{-3}$ 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 ((~~8E+5~~)) $8x10^{5}$ Bq/cm^2 (20 microcuries/cm^2) for beta and gamma and low toxicity alpha emitters, or ((~~8E+4~~)) $8x10^{4}$ Bq/cm^2 (2 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 ((~~8E+5~~)) $8x10^5$ Bq/cm^2 (20 microcuries/cm^2) for beta and gamma and low toxicity alpha emitters, or ((~~8E+4~~)) $8x10^4$ Bq/cm^2 (2 microcuries/cm^2) for all other alpha emitters.

(((~~31~~))) (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 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 meter (3.3 ft)).

(((~~32~~))) (33) "Tribal official" means the highest ranking individual who represents Tribal leadership, such as the chief, president, or Tribal council leadership.

(((~~33~~))) (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.

(((~~34~~))) (35) "Type B quantity" means a quantity of radioactive material greater than a Type A quantity.

(((~~35~~))) (36) "Unirradiated uranium" means uranium containing not more than ((~~2E+3~~)) $2x10^3$ Bq of plutonium per gram of uranium-235, not more than ((~~9E+6~~)) $9x10^6$ Bq of fission products per gram of uranium-235, and not more than ((~~5E-3~~)) $5x10^{-3}$ g of uranium-236 per gram of uranium-235.

(((~~36~~))) (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.

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

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. ((~~Common and contract carriers who are not subject to the rules and regulations of the DOT or United States Postal Service are subject to WAC 246-231-005 and other applicable sections of these regulations.~~))

(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 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.

(((~~5~~))) (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 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 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 mate-

rial 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 percent by weight, and with total plutonium and uranium-233 content of up to 1 percent of the mass of uranium-235, provided that the mass of any beryllium, graphite, and hydrogenous material enriched in deuterium constitutes less than 5 percent of the uranium mass, and that the fissile material is distributed homogeneously and does not form a lattice arrangement within the package.

(e) Liquid solutions of uranyl nitrate enriched in uranium-235 to a maximum of 2 percent by mass, with a total plutonium and uranium-233 content not exceeding 0.002 percent of the mass of uranium, and with a minimum nitrogen to uranium atomic ratio (N/U) of 2. The material must be contained in at least a DOT Type A package.

(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.

AMENDATORY SECTION (Amending WSR 14-09-017, filed 4/7/14, effective 5/8/14)

WAC 246-231-060 General license—NRC-approved package. (1) A general license is hereby issued to any licensee of the department, NRC, or an agreement state, to transport, or to deliver to a carrier for transport, licensed material in a package for which a license, certificate of compliance, or other approval has been issued by the NRC.

(2) This 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) ((~~This~~)) Each licensee issued a general license ((~~applies only to a licensee who~~)) under this chapter shall:

(a) ((~~Has~~)) Maintain a copy of the certificate of compliance, or other approval of the package, and ((~~has~~)) the drawings and other documents referenced in the approval relating to the use and maintenance of the packaging and to the actions to be taken before shipment;

(b) ((~~Complies~~)) Comply with the terms and conditions of the license, certificate, or other approval, as applicable, and the applicable requirements of 10 C.F.R. 71 Subparts A, G, and H; and

(c) Before the licensee's first use of the package, submits in writing to: ATTN: Document Control Desk, Director, Division of Spent Fuel ((~~Project Office~~)) Storage and Transportation, Office of Nuclear Material Safety and Safeguards, using an appropriate method listed in 10 C.F.R. 71.1(a), the licensee's name and license number and the package identification number specified in the package approval.

(4) This general license applies only when the package approval authorizes use of the package under this general license.

(5) For a Type B or fissile material package, the design of which was approved by NRC before April 1, 1996, the general license is subject to the additional restrictions of 10 C.F.R. 71.19.

AMENDATORY SECTION (Amending WSR 14-09-017, filed 4/7/14, effective 5/8/14)

WAC 246-231-090 General license—Use of foreign approved package. (1) A general license is issued to any licensee of the department, NRC, or an agreement state, to transport, or to deliver to a carrier for transport, licensed material in a package the design of which has been approved in a foreign national competent authority certificate that has been revalidated by DOT as meeting the applicable requirements of 49 C.F.R. ((~~171.12~~)) 171.23.

(2) Except as otherwise provided in this ((~~section~~)) chapter, the general license applies only to a licensee who has a quality assurance program approved by NRC as satisfying the applicable provisions of 10 C.F.R. 71 Subpart H.

(3) This general license applies only to shipments made to or from locations outside the United States.

(4) ((~~This~~)) Each licensee issued a general license ((~~applies only to a licensee who~~)) under this section shall:

(a) ((~~Has~~)) Maintain a copy of the applicable certificate, the revalidation, and the drawings and other documents referenced in the certificate, relating to the use and maintenance of the packaging and to the actions to be taken before shipment; and

(b) ((~~Complies~~)) Comply with the terms and conditions of the certificate and revalidation, and with the applicable requirements of 10 C.F.R. 71 Subparts A, G, and H. ((~~With respect to the quality assurance provisions of Subpart H of 10 C.F.R. 71, the licensee is exempt from design, construction, and fabrication considerations.~~))

AMENDATORY SECTION (Amending WSR 14-09-017, filed 4/7/14, effective 5/8/14)

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 lbs/in^2) gauge, the licensee shall test the containment system at an internal pressure at least fifty percent higher than the maximum normal operating pressure, to verify the capability of that system to maintain its structural integrity at that pressure; ((~~and~~))

(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.

AMENDATORY SECTION (Amending WSR 14-09-017, filed 4/7/14, effective 5/8/14)

WAC 246-231-136 Records. (1) Each licensee shall maintain, for a period of three years after shipment, a record of each shipment of licensed material not exempt under WAC 246-231-040(4), showing where applicable:

(a) Identification of the packaging by model number and serial number;

(b) Verification that there are no significant defects in the packaging, as shipped;

(c) Volume and identification of coolant;

(d) Type and quantity of licensed material in each package, and the total quantity of each shipment;

(e) For each item of irradiated fissile material:

(i) Identification by model number and serial number;

(ii) Irradiation and decay history to the extent appropriate to demonstrate that its nuclear and thermal characteristics comply with license conditions; and

(iii) Any abnormal or unusual condition relevant to radiation safety;

(f) Date of the shipment;

(g) For fissile packages and for Type B packages, any special controls exercised;

(h) Name and address of the transferee;

(i) Address to which the shipment was made; and

(j) Results of the determinations required by WAC 246-231-110 and by the conditions of the package approval.

(2) ((~~Each certificate holder shall maintain, for a period of three years after the life of the packaging to which they apply, records identifying the packaging by model number, serial number, and date of manufacture.~~

~~(3)~~)) The licensee, certificate holder, and an applicant for a certificate of compliance, shall make available to the department and NRC for inspection, upon reasonable notice, all records required by 10 C.F.R. 71.91. Records are only valid if stamped, initialed, or signed and dated by authorized personnel, or otherwise authenticated.

(((~~(4)~~))) (3) The licensee, certificate holder, and an applicant for a certificate of compliance shall maintain sufficient written records to furnish evidence of the quality of packaging. The records to be maintained include results of the determinations required by WAC 246-231-106; design, fabrication, and assembly records; results of reviews, inspections, tests, and audits; results of monitoring work performance and materials analyses; and results of maintenance, modification, and repair activities. Inspection, test, and audit records must identify the inspector or data recorder, the type of observation, the results, the acceptability, and the action taken in connection with any deficiencies noted. These records must be retained for three years after the life of the packaging to which they apply.

AMENDATORY SECTION (Amending WSR 14-09-017, filed 4/7/14, effective 5/8/14)

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 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) 3000 times the A1 value of the radionuclides as specified in WAC 246-231-200, Table A-1 for special form radioactive material;

(ii) 3000 times the A2 value of the radionuclides as specified in WAC 246-231-200, Table A-1 for normal form radioactive material; or

(iii) 1000 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, Division of Security Policy, 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 transpor-

tation of nuclear waste was published in the *Federal Register* on June 30, 1995, (60 FR 34306).

(ii) ((~~The list of~~)) Contact information for each state, including telephone and mailing addresses of governors and governors' designees, and ((~~tribal officials' designees of~~)) participating ((~~tribes will be published annually in the *Federal Register* on or about June 30 to reflect any changes in information~~)) Tribes, including telephone and mailing addresses of Tribal officials and Tribal official's designees, is available on the NRC web site 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 Intergovernmental Liaison and Rulemaking, Office of Federal and State Materials and Environmental Management Programs, NRC, 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, Division of Security Policy, 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.

AMENDATORY SECTION (Amending WSR 14-09-017, filed 4/7/14, effective 5/8/14)

WAC 246-231-150 Quality assurance requirements. (1) Purpose. This section describes quality assurance requirements that apply to design, purchase, fabrication, handling, shipping, storing, cleaning, assembly, inspection, testing, operation, maintenance, repair, and modification of components of packaging that are important to safety. As used in this chapter, "quality assurance" comprises all those planned and systematic actions necessary to provide adequate confidence that a system or component will perform satisfactorily in service. Quality assurance includes quality control, which comprises those quality assurance actions related to control of the physical characteristics and quality of the material or component to predetermined requirements. ((~~The~~)) Each licensee((~~, certificate holder,~~)) and applicant for a ((~~certificate of compliance are responsible for~~)) package approval is responsible for satisfying the quality assurance requirements ((~~as they~~)) that apply to design, fabrication, testing, and modification of packaging subject to this chapter. Each licensee is responsible for satisfying the quality assurance ((~~provision which applies~~)) requirements that apply to its use of packaging for the shipment of licensed material subject to this chapter.

(2) Establishment of program. Each licensee, certificate holder, and applicant for a certificate of compliance shall establish, maintain, and execute a quality assurance program satisfying each of the applicable criteria in 10 C.F.R. 71.101 through 71.137 and satisfying any specific provisions that are applicable to the licensee's activities including procurement of packaging. The licensee, certificate holder, and applicant for a certificate of compliance shall execute the applicable criteria in a graded approach to an extent that is commensurate with the quality assurance requirement's importance to safety.

(3) Approval of program. Before the use of any package for the shipment of licensed material subject to this chapter, each licensee shall obtain NRC approval of its quality assurance program. Using an appropriate method listed in 10 C.F.R. 71.1(a), each licensee shall file a description of its quality assurance program, including a discussion of which requirements of 10 C.F.R. 71 Subpart H are applicable and how they will be satisfied, by submitting the description to: ATTN: Document Control Desk, Director, Division of Spent Fuel ((~~Project Office~~)) Management, Office of Nuclear Material Safety and Safeguards.

(4) Radiography containers. A program for transport container inspection and maintenance limited to radiographic exposure devices, source changers, or packages transporting these devices and meeting the requirements of WAC 246-243-120(2), 10 C.F.R. 34.31(b), or equivalent agreement state requirements, is deemed to satisfy the requirements of WAC 246-231-060(2) and 246-231-150(2).

AMENDATORY SECTION (Amending WSR 08-09-093, filed 4/18/08, effective 5/19/08)

WAC 246-231-160 Quality assurance organization. (1) The licensee,((~~[2]~~)) certificate holder, and applicant for a ((~~CoC~~)) certificate of compliance shall be responsible for the establishment and execution of the quality assurance program. The licensee, certificate holder, and applicant for a ((~~CoC~~)) certificate of compliance may delegate to others, such as contractors, agents, or consultants, the work of establishing and executing the quality assurance program, or any part of the quality assurance program, but shall retain responsibility for the program. These activities include performing the functions associated with attaining quality objectives and the quality assurance functions.

((~~[2]~~)) While the term "licensee" is used in these criteria, the requirements are applicable to whatever design, fabrication, assembly, and testing of the package is accomplished with respect to a package before the time a package approval is issued.

(2) The quality assurance functions are:

(a) Assuring that an appropriate quality assurance program is established and effectively executed; and

(b) Verifying, by procedures such as checking, auditing, and inspection, that activities affecting the functions that are important to safety have been correctly performed.

(3) The persons and organizations performing quality assurance functions must have sufficient authority and organizational freedom to:

(a) Identify quality problems;

(b) Initiate, recommend, or provide solutions; and

(c) Verify implementation of solutions.

(4) The persons and organizations performing quality assurance functions shall report to a management level that assures that the required authority and organizational freedom, including sufficient independence from cost and schedule, when opposed to safety considerations, are provided.

(5) Because of the many variables involved, such as the number of personnel, the type of activity being performed, and the location or locations where activities are performed, the organizational structure for executing the quality assurance program may take various forms, provided that the persons and organizations assigned the quality assurance functions have the required authority and organizational freedom.

(6) Irrespective of the organizational structure, the individual(s) assigned the responsibility for assuring effective execution of any portion of the quality assurance program, at any location where activities subject to this chapter are being performed, must have direct access to the levels of management necessary to perform this function.

NEW SECTION

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 incorporating 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 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.

AMENDATORY SECTION (Amending WSR 08-09-093, filed 4/18/08, effective 5/19/08)

WAC 246-231-178 Handling, storage, and shipping control. The licensee, certificate holder, and applicant for a ((~~CoC~~)) certificate of compliance shall establish measures to control, in accordance with instructions, the handling, storage, shipping, cleaning, and preservation of materials and equipment to be used in packaging to prevent damage or deterioration. When necessary for particular products, special protective environments, such as inert gas atmosphere, and specific moisture content and temperature levels must be specified and provided.

AMENDATORY SECTION (Amending WSR 08-09-093, filed 4/18/08, effective 5/19/08)

WAC 246-231-180 Inspection, test, and operating status. (1) The licensee, certificate holder, and applicant for a ((~~CoC~~)) certificate of compliance shall establish measures to indicate, by the use of markings such as stamps, tags, labels, routing cards, or other suitable means, the status of inspections and tests performed upon individual items of the packaging. These measures must provide for the identification of items that have satisfactorily passed required inspections and tests, where necessary to preclude inadvertent bypassing of the inspections and tests.

(2) The licensee shall establish measures to identify the operating status of components of the packaging, such as tagging valves and switches, to prevent inadvertent operation.

AMENDATORY SECTION (Amending WSR 08-09-093, filed 4/18/08, effective 5/19/08)

WAC 246-231-182 Nonconforming materials, parts, or components. The licensee, certificate holder, and applicant for a ((~~CoC~~)) certificate of compliance shall establish measures to control materials, parts, or components that do not conform to the licensee's requirements to prevent their inadvertent use or installation. These measures must include, as appropriate, procedures for identification, documentation, segregation, disposition, and notification to affected organizations. Nonconforming items must be reviewed and accepted, rejected, repaired, or reworked in accordance with documented procedures.

AMENDATORY SECTION (Amending WSR 08-09-093, filed 4/18/08, effective 5/19/08)

WAC 246-231-184 Corrective action. The licensee, certificate holder, and applicant for a ((~~CoC~~)) certificate of compliance shall establish measures to assure that conditions adverse to quality, such as deficiencies, deviations, defective material and equipment, and nonconformance, are promptly identified and corrected. In the case of a significant condition adverse to quality, the measures must assure that the cause of the condition is determined and corrective action taken to preclude repetition. The identification of the significant condition adverse to quality, the cause of the condition, and the corrective action taken must be documented and reported to appropriate levels of management.

AMENDATORY SECTION (Amending WSR 14-09-017, filed 4/7/14, effective 5/8/14)

WAC 246-231-186 Quality assurance records. The licensee, certificate holder, and applicant for a certificate of compliance shall maintain sufficient written records to describe the activities affecting quality. ((~~The~~)) These records must include changes to the quality assurance program as required by 10 C.F.R. 71.106, the instructions, procedures, and drawings required by 10 C.F.R. 71.111 to prescribe quality assurance activities, and ((~~must include~~)) closely related specifications such as required qualifications of personnel, procedures, and equipment. The records must include the instructions or procedures ((~~which~~)) that establish a records retention program that is consistent with applicable regulations and designates factors such as duration, location, and assigned responsibility. The licensee, certificate holder, and applicant for a certificate of compliance shall retain these records for three years beyond the date when the licensee, certificate holder, and applicant for a certificate of compliance last engaged in the activity for which the quality assurance program was developed. If any portion of the quality assurance program, written procedures or instructions is superseded, the licensee, certificate holder, and applicant for a certificate of compliance shall retain the superseded material for three years after it is superseded.

AMENDATORY SECTION (Amending WSR 08-09-093, filed 4/18/08, effective 5/19/08)

WAC 246-231-188 Audits. The licensee, certificate holder, and applicant for a ((~~CoC~~)) certificate of compliance shall carry out a comprehensive system of planned and periodic audits to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program. The audits must be performed in accordance with written procedures or checklists by appropriately trained personnel not having direct responsibilities in the areas being audited. Audited results must be documented and reviewed by management having responsibility in the area audited. Follow-up action, including ((~~reaudit~~)) re-audit of deficient areas, must be taken where indicated.

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

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 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 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:

((

$$\sum_{I} \frac{B(i)}{A1(i)} \text{ less than or equal to } 1$$

))

$$\sum_{i} \frac{B(i)}{A_1(i)} \leq 1$$

Where B(i) is the activity of radionuclide ((~~I, and A1(i) is the A1~~)) i in special form, and $A_1(i)$ is the A_1 value for radionuclide ((~~I~~)) i.

(b) For normal form radioactive material, the maximum quantity transported in a Type A package:

((

$$\sum_{I} \frac{B(i)}{A2(i)} \text{ less than or equal to } 1$$

))

$$\sum_{i} \frac{B(i)}{A_2(i)} \leq 1$$

Where B(i) is the activity of radionuclide ((~~I and A2(i) is the A2~~)) i in normal form, and $A_2(i)$ is the A_2 value for radionuclide ((~~I~~)) 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:

((

$$A1 \text{ for mixture} = \frac{1}{\sum_{I} \frac{f(i)}{A1(i)}}$$

))

$$A_1 \text{ for mixture} = \frac{1}{\sum_{i} \frac{f(i)}{A_1(i)}}$$

Where f(i) is the fraction of activity for radionuclide ((~~I~~)) i in the mixture and A1(i) is the appropriate A1 value for radionuclide ((~~I~~)) i.

(((~~d~~))) (e) Alternatively, the A2 value for mixtures of normal form material may be determined as follows:

((

$$A2 \text{ for mixture} = \frac{1}{\sum_{I} \frac{f(i)}{A2(i)}}$$

))

$$A_2 \text{ for mixture} = \frac{1}{\sum_i \frac{f(i)}{A_2(i)}}$$

Where f(i) is the fraction of activity for radionuclide ((~~I~~)) i in the mixture and A2(i) is the appropriate A2 value for radionuclide ((~~I~~)) i.

(((~~e~~))) (f) The exempt activity concentration for mixtures of nuclides may be determined as follows:

((

$$\text{Exempt activity concentration for mixture} = \frac{1}{\sum_i \frac{f(i)}{[A](i)}}$$

))

$$\text{Exempt activity concentration for mixture} = \frac{1}{\sum_i \frac{f(i)}{[A](i)}}$$

Where f(i) is the fraction of activity concentration of radionuclide ((~~I~~)) i in the mixture, and ((~~A~~)) [A](i) is the activity concentration ((~~f~~)) for exempt material containing radionuclide ((~~I~~)) i.

(((~~f~~))) (g) The activity limit for an exempt consignment for mixtures of radionuclides may be determined as follows:

((

$$\text{Exempt consignment activity limit for mixture} = \frac{1}{\sum_i \frac{f(i)}{A(i)}}$$

))

$$\text{Exempt consignment activity limit for mixture} = \frac{1}{\sum_i \frac{f(i)}{A(i)}}$$

Where f(i) is the fraction of activity of radionuclide ((~~I~~)) i in the mixture((~~,~~)) and A(i) is the activity limit for exempt consignments for radionuclide ((~~I~~)) 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)	Specific activity (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		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$8.2X10^{2}$	$2.2X10^{4}$

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)
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)	$4.0X10^{-1}$	$1.1X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$9.4X10^{4}$	$2.5X10^{6}$
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 ((~~(h)~~))		((~~$5.0X10^{-2}$~~)) $1.0X10^{-1}$	((~~1.4~~)) 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)	$1.0X10^{1}$	$2.7X10^{2}$	$6.0X10^{-1}$	$1.6X10^{1}$	$1.2X10^{-3}$	$3.3X10^{-2}$

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)
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		$5.0X10^{-1}$	$1.4X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$2.7X10^{3}$	$7.3X10^{4}$
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	$7.4X10^{-4}$	$2.0X10^{-2}$

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)
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	$8.1X10^{1}$	$6.4X10^{2}$	$1.7X10^{4}$
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)~~)))		[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	((~~Krypton (36)~~))	$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$7.8X10^{-4}$	$2.1X10^{-2}$
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	$1.0X10^{6}$	$2.8X10^{7}$

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)
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) (((~~i~~))) (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		$6.0X10^{-1}$	$1.6X10^{1}$	$5.0X10^{-1}$	$1.4X10^{1}$	$4.5X10^{5}$	$1.2X10^{7}$
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)		(($~~9.0X10^{0}~~$)) 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	$5.1X10^{4}$	$1.4X10^{6}$

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)
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)	$3.0X10^{1}$	$8.1X10^{2}$	$3.0X10^{-3}$	$8.1X10^{-2}$	$2.0X10^{1}$	$5.3X10^{2}$
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	$5.4X10^{1}$	$3.0X10^{3}$	$8.2X10^{4}$

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)
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	$5.4X10^{1}$	$2.6X10^{-3}$	$7.0X10^{-2}$
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	$8.5X10^{-1}$	$2.3X10^{-8}$
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)	$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$5.6X10^{-1}$	$1.5X10^{1}$

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)
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)		$5.0X10^{-1}$	$1.4X10^{1}$	$4.0X10^{-1}$	$1.1X10^{1}$	$1.1X10^{4}$	$3.0X10^{5}$
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	$3.6X10^{-4}$	$9.7X10^{-3}$

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)
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		$4.0X10^{1}$	$1.1X10^{3}$	$4.0X10^{1}$	$1.1X10^{3}$	$3.0X10^{2}$	$8.1X10^{3}$
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	$5.4X10^{1}$	$8.0X10^{-1}$	$2.2X10^{1}$	$7.9X10^{2}$	$2.1X10^{4}$

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)
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)	(((~~Reserved.~~))) 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 ((~~quantity~~)) 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_1 = 0.1 TBq (2.7 Ci) and A_2 = 0.001 TBq (0.027 Ci) for Cf-252 for domestic use.~~	
~~(i)~~)))	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)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$
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	-	$1.0X10^{3}$	$2.7X10^{-8}$	$1.0X10^{7}$	$2.7X10^{-4}$

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)
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	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
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)	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{6}$	$2.7X10^{-5}$

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)
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)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
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	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$

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)
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)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
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	((~~Krypton (36)~~))	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$
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	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{9}$	$2.7X10^{-2}$

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)
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	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
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)	-	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{5}$	$2.7X10^{-6}$

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)
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)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$
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)	$1.0X10^{1}$	$2.7X10^{-10}$	$1.0X10^{6}$	$2.7X10^{-5}$

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)
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	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$
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)	$1.0X10^{4}$	$2.7X10^{-7}$	$1.0X10^{7}$	$2.7X10^{-4}$

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)
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	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{((5))\ 6}$	$2.7X10^{((-6))\ -5}$
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	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{6}$	$2.7X10^{-5}$
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)	-	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{5}$	$2.7X10^{-6}$

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)
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)	$1.0X10^{2}$	$2.7X10^{-9}$	$1.0X10^{7}$	$2.7X10^{-4}$
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 ((~~in the following~~)) 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-134~~	~~La-134~~))

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-220~~	~~Po-216~~))
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-226~~	~~Ra-222, Rn-218, Po-214~~))
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
((~~U-240~~	~~Np-240m~~))
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}
((~~Only~~)) Alpha emitting ((~~radionuclides~~)) 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.

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency and appear in the Register pursuant to the requirements of RCW 34.08.040.

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

WAC 246-232-006 Exemption of certain source material. (1) A person is exempt from the requirements for a license and from this chapter and chapters 246-233 and 246-235 WAC to the extent that the person receives, possesses, uses, transfers, or delivers, source material in any chemical mixture, compound, solution or alloy in which the source material is by weight less than 1/20 of one percent (0.05 percent) of the mixture, compound, solution, or alloy.

(2) A person is exempt from the requirements for a license and from this chapter and chapters 246-233 and 246-235 WAC to the extent that the person receives, possesses, uses or transfers unrefined and unprocessed ore containing source material, provided such person shall not refine or process such ore unless authorized to do so in a specific license.

(3) A person is exempt from the requirements for a license and from this chapter and chapters 246-221, 246-246, 246-222, 246-233, and 246-235 WAC to the extent that the person receives, possesses, uses or transfers:

(a) Any quantities of thorium contained in:

(i) Incandescent gas mantles;

(ii) Vacuum tubes;

(iii) Welding rods;

(iv) Electric lamps for illuminating purposes if each lamp contains fifty milligrams or less of thorium;

(v) Germicidal lamps, sunlamps and lamps for outdoor or industrial lighting if each lamp contains two grams or less of thorium;

(vi) Rare earth metals and compounds, mixtures, and products containing 0.25 percent or less by weight thorium, uranium, or any combination of these; or

(vii) Personnel neutron dosimeters if each dosimeter contains 1.85 gigabecquerels (50 milligrams) or less of thorium((;)).

(b) Source material contained in the following products:

(i) Glazed ceramic tableware manufactured before August 27, 2013, if the glaze contains twenty percent or less by weight source material;

(ii) Piezoelectric ceramic containing two percent or less by weight source material; and

(iii) Glassware containing not more than two percent by weight source material or, for glassware manufactured before August 27, 2013, ten percent by weight source material; but not including commercially manufactured glass brick, pane glass, ceramic tile, or other glass or ceramic used in construction((;)).

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

(d) Any finished product or part fabricated of, or containing, tungsten-thorium or magnesium-thorium alloys if the thorium content of the alloy is four percent or less by weight. The exemption contained in this subparagraph shall not be deemed to authorize the chemical, physical or metallurgical treatment or processing of any such product or part;

(e) Thorium or uranium contained in or on finished optical lenses and mirrors, provided that each lens or mirror does not contain more than ten percent by weight of thorium or uranium or, for lenses manufactured before August 27, 2013, thirty percent by weight of thorium. The exemption contained in this subparagraph shall not be deemed to authorize either:

(i) The shaping, grinding or polishing of such lens or mirror or manufacturing processes other than the assembly of such lens or mirror into optical systems and devices without alteration of the lens or mirror; or

(ii) The receipt, possession, use or transfer of thorium or uranium contained in contact lenses, or in spectacles, or in eyepieces in binoculars or other optical instruments((;)).

(f) Uranium contained in detector heads for use in fire detection units if each detector head contains 185 becquerels (0.005 microcuries) or less of uranium; or

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

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

(ii) The thorium content in the nickel-thoria alloy is four percent or less by weight.

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

(5) No person may initially transfer for sale or distribution a product containing source material to persons exempt under this section, or equivalent regulations of an agreement state or the NRC, unless authorized by a license issued under 10 C.F.R. 40.52((~~, chapter 246-235 WAC, or equivalent regulations of an agreement state~~)) to initially transfer such products for sale or distribution.

(a) Persons initially distributing source material in products covered by the exemptions in this section before August 27, 2013, without specific authorization may continue such distribution for one year beyond this date. Initial distribution may also be continued until NRC takes final action on a pending application for license or license amendment to specifically authorize distribution submitted no later than one year beyond this date.

(b) Persons authorized by an agreement state to manufacture, process, or produce these materials or products containing source material, and persons who import finished products or parts for sale or distribution must be authorized by a license issued under 10 C.F.R. 40.52 for distribution only and are exempt from the requirements of chapters 246-221 and 246-222 WAC, and WAC 246-235-020 (1) and (2).

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

WAC 246-232-007 Exemption of certain depleted uranium items. (1) A person is exempt from the requirements for a license and from this chapter and chapters 246-233 and 246-235 WAC to the extent that the person receives, possesses, uses or transfers:

(a) Depleted uranium contained in counterweights installed in aircraft, rockets, projectiles and missiles, or stored or handled in connection with installation or removal of such counterweights if:

(i) Each counterweight has been impressed with the following legend clearly legible through any plating or other covering: "DEPLETED URANIUM"*;

(ii) Each counterweight is durably and legibly labeled or marked with the identification of the manufacturer and the statement: "UNAUTHORIZED ALTERATIONS PROHIBITED"*; and

(iii) The exemption contained in this subparagraph shall not be deemed to authorize the chemical, physical or metallurgical treatment or processing of any such counterweight other than repair or restoration of any plating or other covering((;)).

*Note: The requirements specified in (1)(a)(i) and (ii) of this subsection need not be met by counterweights manufactured prior to December 31, 1969((: Provided, That)), provided that such counterweights are impressed with the legend, "CAUTION - RADIOACTIVE MATERIAL - URANIUM," as previously required by the rules((, provided that such counterweights)) and were manufactured under a specific license issued by the Atomic Energy Commission and were impressed with the legend required by WAC 246-232-007 (1)(a)(i) in effect on June 30, 1969.

(b) Natural or depleted uranium used as shielding constituting part of any shipping container which is conspicuously and legibly impressed with the legend "CAUTION - RADIOACTIVE SHIELDING - URANIUM" and the uranium metal is encased in mild steel or in an equally fire resistant metal of a minimum wall thickness of 3.2 millimeters.

(2) The exemptions in this subsection do not authorize the manufacture of any of the products described.

AMENDATORY SECTION (Amending WSR 13-24-025, filed 11/22/13, effective 12/23/13)

WAC 246-232-009 Exemption of certain items containing radioactive material. A person is exempt from the requirements for a license and from this chapter and chapters 246-233 and 246-235 WAC to the extent the person receives, possesses, uses, transfers, owns or acquires, and does not apply radioactive material to, or incorporate radioactive material into, the following products:*

*Note: No person may introduce radioactive material into a product or material, knowing or having reason to believe that it will be transferred to persons exempt under this section or other sections or equivalent regulations of the NRC or an agreement state, except in accordance with a specific license issued by the NRC, Washington, D.C. 20555.

(1) Static elimination devices which contain, as a sealed source or sources, by-product material consisting of a total of not more than 18.5 MBq (500 microcuries) of Po-210 per device.

(2)(a) Ion generating tubes designed for ionization of air that contain, as a sealed source or sources, by-product material consisting of a total of not more than 18.5 MBq (500 microcuries) of Po-210 per device or a total of not more than 1.85 GBq (50 millicuries) of hydrogen-3 (tritium) per device.

(b) Such devices authorized before October 23, 2012, for use under the general license then provided in this section and equivalent regulations of an agreement state or the NRC, and manufactured, tested, and labeled by the manufacturer in accordance with the specifications contained in a specific license issued by the department, an agreement state, or the NRC.

(3) Balances of precision containing not more than 37 megabecquerels (1 millicurie) of tritium per balance or 18.5 megabecquerels (0.5 millicurie) of tritium per balance part manufactured before December 17, 2007.

(((2))) (4) Marine compasses containing not more than 27.8 gigabecquerels (750 millicuries) of tritium gas and other marine navigational instruments containing not more than 9.25 gigabecquerels (250 millicuries) of tritium gas manufactured before December 17, 2007.

(((3))) (5) Ionization chamber smoke detectors containing not more than 37 kilobecquerels (1 microcurie) of americium-241 per detector in the form of a foil and designed to protect life and property from fires.

(((4))) (6) Electron tubes* provided that each tube contains no more than one of the following specified quantities of radioactive material and the levels of radiation from each electron tube do not exceed 10 micrograys (1 millirad) per hour at 1 centimeter from any surface when measured through 7 milligrams per square centimeter of absorber:

(a) 5.55 gigabecquerels (150 millicuries) of tritium per microwave receiver protector tube or 370 megabecquerels (10 millicuries) of tritium per any other electron tube;

(b) 37 kilobecquerels (1 microcurie) of cobalt-60;

(c) 185 kilobecquerels (5 microcuries) of nickel-63;

(d) 1.11 megabecquerels (30 microcuries) of krypton-85;

(e) 185 kilobecquerels (5 microcuries) of cesium-137;

(f) 1.11 megabecquerels (30 microcuries) of promethium-147.

*Note: For purposes of this subsection, "electron tubes" include spark gap tubes, power tubes, gas tubes including glow lamps, receiving tubes, microwave tubes, indicator tubes, pick-up tubes, radiation detection tubes, and any other completely sealed tube that is designed to conduct or control electrical currents.

(((~~(5)~~))) (7) Ionizing radiation measuring instruments containing, for purposes of internal calibration or standardization, one or more sources of radioactive material, provided that:

(a) Each source contains not more than one exempt quantity set forth in WAC 246-232-120, Schedule B, exempt quantities of radioactive materials; and

(b) Each instrument contains no more than 10 exempt quantities. For purposes of this subsection, an instrument's source(s) may contain either one type or different types of radionuclides and an individual exempt quantity may be composed of fractional parts of one or more of the exempt quantities in WAC 246-232-120, Schedule B, exempt quantities of radioactive materials, provided that the sum of such fractions must not exceed unity.

(c) For purposes of this subsection, 1.85 kilobecquerels (0.05 microcurie) of americium-241 is considered an exempt quantity.

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

WAC 246-232-011 Exemption of certain self-luminous products containing radioactive material(s). (1) Hydrogen-3 (tritium), krypton-85, or promethium-147.

(a) A person is exempt from the requirements for a license and from this chapter and chapters 246-233 and 246-235 WAC to the extent that the person receives, possesses, uses, transfers, owns or acquires, and does not manufacture, process, produce, apply radioactive material to, incorporate radioactive material into, or initially transfer for sale or distribution, self-luminous products containing hydrogen-3 (tritium), krypton-85, or promethium-147 in self-luminous products manufactured, processed, produced, imported or initially transferred in accordance with a specific license issued by the NRC. The exemption in this subsection does not apply to hydrogen-3, (tritium), krypton-85, or promethium-147 used in products primarily for frivolous purposes or in toys or adornments.

(b) Any person who desires to manufacture, process, produce, or initially transfer for sale or distribution self-luminous products containing tritium (H-3), krypton-85 (Kr-85), or promethium-147 (Pm-147) for use under (a) of this subsection ((~~shall~~)) should apply for a license under ((~~chapter 246-235 WAC~~)) 10 C.F.R. 32.22 and for a certificate of registration in accordance with WAC 246-235-108.

(2) No person may introduce radioactive material into a product or material knowing, or having reason to believe, that it will be transferred to persons exempt under this section or other sections or equivalent regulations of the NRC or an agreement state, except in accordance with a specific license issued by the NRC, Washington, D.C. 20555.

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

WAC 246-232-012 Exemption of certain gas and aerosol detectors containing radioactive material. (1)(a) Except for persons who manufacture, process, produce, or initially transfer for sale or distribution gas ((~~or~~)) and aerosol detectors containing radioactive material, any person is exempt from the requirements for a license and from this chapter and chapters 246-221, 246-222, 246-233 ((~~and~~)), 246-235, 246-240, 246-243, and 246-244 WAC to the extent that the person receives, possesses, uses, transfers, owns or acquires radioactive material in gas and aerosol detectors designed to protect health, safety, or property, and manufactured, processed, produced, or initially transferred in accordance with a specific license issued ((~~by the department, NRC, or an agreement state~~)) under 10 C.F.R. 32.26 which authorizes the initial transfer of the product for use under this chapter. This exemption also covers gas and aerosol detectors manufactured or distributed before November 30, 2007, in accordance with a specific license issued by a state under provisions comparable to 10 C.F.R. 32.26 authorizing distribution to persons exempt from regulatory requirements.

(b) Any person who desires to manufacture, process, or produce gas ((~~or~~)) and aerosol detectors containing radioactive material, or to initially transfer such products for use under this ((~~chapter shall apply for a license under chapter 246-235 WAC~~)) subsection should apply for a license under 10 C.F.R. 32.26 and for a certificate of registration in accordance with WAC 246-235-108.

(2) No person may introduce radioactive material into a product or material knowing, or having reason to believe, that it will be transferred to persons exempt under this section or other sections or equivalent regulations of the NRC or an agreement state, except in accordance with a specific license issued by the NRC, Washington, D.C. 20555.

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

WAC 246-232-015 Certain industrial devices. (1) Except for persons who manufacture, process, produce, or initially transfer for sale or distribution industrial devices containing radioactive material designed and manufactured for the purpose of detecting, measuring, gauging or controlling thickness, density, level, interface location, radiation, leakage, or qualitative or quantitative chemical composition, or for producing an ionized atmosphere, any person is exempt from the requirements for a license and from the regulations in chapters 246-222, 246-221, 246-232, 246-233, 246-235, 246-243, 246-240, and 246-244 WAC to the extent that such person receives, possesses, uses, transfers, owns, or acquires radioactive material, in these certain detecting, measuring, gauging, or controlling devices and certain devices for producing an ionized atmosphere, and manufactured, processed, produced, or initially transferred in accordance with a specific license issued under 10 C.F.R. 32.30 which authorizes the initial transfer of the device for use under this ((~~chapter~~)) section. This exemption does not cover sources not incorporated into a device, such as calibration and reference sources.

(2) Any person who desires to manufacture, process, produce, or initially transfer for sale or distribution industrial devices containing radioactive material for use under subsection (1) of this section, ((~~shall~~)) should apply for a license under ((~~chapter 246-235 WAC~~)) 10 C.F.R. 32.30 and for a certificate of registration in accordance with WAC 246-235-108.

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

WAC 246-233-010 General licenses—Source material. (1) A general license is hereby issued authorizing commercial and industrial firms; research, educational, and medical institutions; and federal, state, and local government agencies to receive, possess, use, and transfer uranium and thorium, in their natural isotopic concentrations, and in the form of depleted uranium, for research, development, educational, commercial, or operational purposes in the following forms and quantities:

(a) No more than 1.5 kg (3.3 lbs.) of uranium and thorium in dispersible forms, for example, gaseous, liquid, or powder at any one time. Any material processed by the general licensee that alters the chemical or physical form of the material containing source material must be accounted for as a dispersible form. A person authorized to possess, use, and transfer source material under this section may not receive more than a total of 7 kg (15.4 lbs.) of uranium and thorium in any one calendar year. Persons possessing source material in excess of these limits as of August 27, 2013, may continue to possess up to 7 kg (15.4 lbs.) of uranium and thorium at any one time for one year beyond this date, or until the department takes final action on a pending application submitted on or before August 27, 2014, for a specific license for such material; and receive up to 70 kg (154 lbs.) of uranium or thorium in any one calendar year until December 31, 2014, or until the department takes final action on a pending application submitted on or before August 27, 2014, for a specific license for such material; and

(b) No more than a total of 7 kg (15.4 lbs.) of uranium and thorium at any one time. A person authorized to possess, use, and transfer source material under this section may not receive more than a total of 70 kg (154 lbs.) of uranium and thorium in any one calendar year. A person may not alter the chemical or physical form of the source material possessed under this section unless it is accounted for under the limits of (a) of this subsection; or

(c) No more than 7 kg (15.4 lbs.) of uranium, removed during the treatment of drinking water, at any one time. A person may not remove more than 70 kg (154 lbs.) of uranium from drinking water during a calendar year under this section; or

(d) No more than 7 kg (15.4 lbs.) of uranium and thorium at laboratories for the purpose of determining the concentration of uranium and thorium contained within the material being analyzed at any one time. A person authorized to possess, use, and transfer source material under this section may not receive more than a total of 70 kg (154 lbs.) of source material in any one calendar year.

(2) Any person who receives, possesses, uses, or transfers source material pursuant to the general license issued in subsection (1) of this section:

(a) Is prohibited from administering source material, or the radiation therefrom, either externally or internally, to humans except as may be authorized by the department((~~, NRC, or an agreement state~~)) in a specific license.

(b) May not abandon such source material. Source material may be disposed as follows:

(i) A cumulative total of 0.5 kg (1.1 lbs.) of source material in a solid, nondispersible form may be transferred each calendar year, by a person authorized to receive, possess, use, and transfer source material under this general license, to persons receiving the material for permanent disposal. The recipient of source material transferred under the provisions of this section is exempt from the requirements to obtain a license under this chapter to the extent the source material is permanently disposed. This provision does not apply to any person who is in possession of source material under a specific license issued under chapter 246-235 WAC; or

(ii) In accordance with WAC 246-221-170.

(c) Is subject to the provisions of chapters 246-221, 246-232, 246-233, and 246-235 WAC.

(d) Shall respond to written requests from the department to provide information relating to the general license within thirty calendar days of the date of the request, or other time period specified in the request. If the person cannot provide the requested information within the allotted time, the person shall, within that same time period, request a longer period to supply the information by providing the director, office of radiation protection, using an appropriate method of communication, a written justification for the request;

(e) May not export such source material except in accordance with 10 C.F.R. 110.

(3) Any person who receives, possesses, uses, or transfers source material in accordance with subsection (1) of this section shall conduct activities so as to minimize contamination of the facility and the environment. When activities involving such source material are permanently ceased at any site, if evidence of significant contamination is identified, the general licensee shall notify the director, office of radiation protection, by an appropriate method of communication about such contamination, and may consult with the department regarding the appropriateness of sampling and restoration activities to ensure that any contamination or residual source material remaining at the site where source material was used under the general license is not likely to result in exposures that exceed the limits in WAC 246-246-020.

(4) Any person who receives, possesses, uses, or transfers source material in accordance with the general license granted in subsection (1) of this section is exempt from the provisions of chapters 246-221 and 246-222 WAC to the extent that such receipt, possession, use, and transfer are within the terms of this general license, except that such person shall comply with the provisions of WAC 246-246-020 and 246-221-170 to the extent necessary to meet the provisions of this section. However, this exemption does not apply to any person who also holds a specific license issued under chapter 246-235 WAC.

(5) No person may initially transfer or distribute source material to persons generally licensed under subsection (1)(a) or (b) of this section, or equivalent regulations of an agreement state or NRC, unless authorized by a specific license issued in accordance with chapter 246-235 WAC or equivalent provisions of an agreement state or NRC. This prohibition does not apply to analytical laboratories returning processed samples to the client who initially provided the sample. Initial distribution of source material to persons generally licensed by subsection (1) of this section before August 27, 2013, without specific authorization may continue for one year beyond this date. Distribution may also be continued until the department takes final action on a pending application for license or license amendment to specifically authorize distribution submitted on or before August 27, 2014.

(6) A general license is hereby issued authorizing the receipt of title to source material without regard to quantity. This general license does not authorize any person to receive, possess, use, or transfer source material.

(7) Depleted uranium in industrial products and devices.

(a) A general license is hereby issued to receive, acquire, possess, use, or transfer, in accordance with the provisions of (b), (c), (d), and (e) of this subsection, depleted uranium contained in industrial products or devices for the purpose of providing a concentrated mass in a small volume of the product or device.

(b) The general license in (a) of this subsection applies only to industrial products or devices which have been manufactured either in accordance with a specific license issued to the manufacturer of the products or devices pursuant to WAC 246-235-091 or in accordance with a specific license issued to the manufacturer by the department, NRC, or an agreement state which authorizes manufacture of the products or devices for distribution to persons generally licensed by the NRC or an agreement state.

(c)(i) Persons who receive, acquire, possess, or use depleted uranium pursuant to the general license established by (a) of this subsection shall file department form RHF-20 "Registration certificate - Use of depleted uranium under general license," with the department. The form shall be submitted within thirty days after the first receipt or acquisition of such depleted uranium. The registrant shall furnish on department form RHF-20 the following information and such other information as may be required by that form:

(A) Name and address of the registrant;

(B) A statement that the registrant has developed and will maintain procedures designed to establish physical control over the depleted uranium described in (a) of this subsection and designed to prevent transfer of such depleted uranium in any form, including metal scrap, to persons not authorized to receive the depleted uranium; and

(C) Name and title, address, and telephone number of the individual duly authorized to act for and on behalf of the registrant in supervising the procedures identified in (c)(i)(B) of this subsection.

(ii) The registrant possessing or using depleted uranium under the general license established by (a) of this subsection shall report in writing to the department any changes in information previously furnished on the "Registration certificate - Use of depleted uranium under general license." The report shall be submitted within thirty days after the effective date of such change.

(d) A person who receives, acquires, possesses, or uses depleted uranium pursuant to the general license established by (a) of this subsection:

(i) Shall not introduce such depleted uranium, in any form, into a chemical, physical, or metallurgical treatment or process, except a treatment or process for repair or restoration of any plating or other covering of the depleted uranium.

(ii) Shall not abandon such depleted uranium.

(iii) Shall transfer or dispose of such depleted uranium only by transfer in accordance with the provision of chapter 246-232 WAC. In the case where the transferee receives the depleted uranium pursuant to the general license established by (a) of this subsection the transferor shall furnish the transferee a copy of this regulation and a copy of department form RHF-20.

In the case where the transferee receives the depleted uranium pursuant to a general license contained in the NRC's or agreement state's regulation equivalent to (a) of this subsection the transferor shall furnish the transferee a copy of this regulation and a copy of department form RHF-20 accompanied by a note explaining that use of the product or device is regulated by the NRC or agreement state under requirements substantially the same as those in this regulation.

(iv) Shall maintain and make available to the department upon request the name and address of the person receiving the depleted uranium pursuant to such transfer.

(v) Shall not export such depleted uranium except in accordance with a license issued by the NRC pursuant to 10 C.F.R. Part 110.

(e) Any person receiving, acquiring, possessing, using, or transferring depleted uranium pursuant to the general license established by (a) of this subsection is exempt from the requirements of chapters 246-221 and 246-222 WAC of these regulations with respect to the depleted uranium covered by that general license.

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 246-233-015 Certain devices and equipment.

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

WAC 246-235-010 Filing application for specific licenses. (1) Applications for specific licenses must be filed on department form RHF-1.

(2) The department may at any time after the filing of the original application, and before the expiration of the license, require further statements in order to enable the department to determine whether the application should be granted or denied or whether a license should be modified or revoked.

(3) Each application must be signed by the applicant or licensee or a person duly authorized to act for and on the applicant's behalf.

(4) An application for a license may include a request for a license authorizing one or more activities.

(5) In the application, the applicant may incorporate by reference information contained in previous applications, statements, or reports filed with the department provided such references are clear and specific.

(6) Except as provided in (c), (d), and (e) of this subsection, an application for a specific license to use radioactive materials in the form of a sealed source or in a device that contains the sealed source must:

(a) Identify the source or device by manufacturer and model number as registered with the department under WAC 246-235-108, the NRC under 10 C.F.R. 32.210, an agreement state, or for a source or a device containing radium-226 or accelerator-produced radioactive material with a state under provisions comparable to 10 C.F.R. 32.210; or

(b) ((~~Be registered with the NRC under 10 C.F.R. 32.210~~)) Contain the information identified in WAC 246-235-108(3); or

(c) For sources or devices manufactured before October 23, 2012, that are not registered with the NRC or an agreement state, and for which the applicant is unable to provide all categories of information specified in WAC 246-235-108(3), the application must include:

(i) All available information identified in WAC 246-235-108(3) concerning the source, and, if applicable, the device;

(ii) Sufficient additional information to demonstrate that there is reasonable assurance that the radiation safety properties of the source or device are adequate to protect health and minimize danger to life and property. Such information must include a description of the source or device, a description of radiation safety features, the intended use and associated operating experience, and the results of the most recent leak test.

(d) For sealed sources and devices allowed to be distributed without registration of safety information in accordance with ((~~10 C.F.R. 32.210 or this section~~)) WAC 246-235-108(7)(a), the applicant may supply only the manufacturer, model number, and radionuclide and quantity.

(e) If it is not feasible to identify each sealed source and device individually, the applicant may propose constraints on the number and type of sealed sources and devices to be used, and the conditions under which they will be used, in lieu of identifying each sealed source and device.

(7) Applications and documents submitted to the department may be made available for public inspection except that the department may withhold any document or part thereof from public inspection if disclosure of its content is not required in the public interest and would adversely affect the interest of a person concerned.

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

WAC 246-235-083 Conditions of licenses to initially transfer source material for use under general license—Quality control, labeling, safety instructions, and reports and records. (1) Each person licensed under WAC 246-235-082 shall label the immediate container of each quantity of source material with the type and quantity of source material and the words "radioactive material."

(2) Each person licensed under WAC 246-235-082 shall ensure that the quantities and concentrations of source material are as labeled and indicated in any transfer records.

(3) Each person licensed under WAC 246-235-082 shall provide the information specified in this section to each person to whom source material is transferred for use under WAC 246-233-010, 10 C.F.R. 40.22, or equivalent provisions in agreement state regulations. This information must be transferred before the source material is transferred for the first time in each calendar year to the particular recipient. The required information includes:

(a) A copy of 10 C.F.R. 40.22 and 10 C.F.R. 40.51, or WAC 246-232-080 and 246-233-010, or equivalent agreement state regulations.

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

(4) Each person licensed under ((~~this section~~)) WAC 246-235-082 shall report transfers as follows:

(a) File a report with the director, Office of Radiation Protection, Radioactive Materials Section, P.O. Box 47827, Olympia, WA 98504. The report shall include the following information:

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

(ii) For each general licensee under these rules, 10 C.F.R. 40.22, or equivalent agreement state regulations, to whom greater than 50 grams (0.11 lbs.) of source material has been transferred in a single calendar quarter, the name and address of the general licensee to whom source material is distributed; a responsible agent, by name or position and phone number, of the general licensee to whom the material was sent; and the type, physical form, and quantity of source material transferred; and

(iii) The total quantity of each type and physical form of source material transferred in the reporting period to all such generally licensed recipients.

(b) File a report with each responsible ((~~agreement state~~)) agency, agreement state, or NRC, that identifies all persons, operating under provisions of 10 C.F.R. 40.22 or equivalent regulations of the department or an agreement state, to whom greater than 50 grams (0.11 lbs.) of source material has been transferred within a single calendar quarter. The report shall include the following information specific to those transfers made to the agreement state being reported to:

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

(ii) The name and address of the general licensee to whom source material was distributed; a responsible agent, by name or position and phone number, of the general licensee to whom the material was sent; and the type, physical form, and quantity of source material transferred; and

(iii) The total quantity of each type and physical form of source material transferred in the reporting period to all such generally licensed recipients within the agreement state.

(c) Submit each report by January 31st of each year covering all transfers for the previous calendar year. If no transfers were made to persons generally licensed under 10 C.F.R.

40.22 or equivalent department rules or agreement state regulations during the current period, a report shall be submitted to the department so indicating. If no transfers have been made to general licensees in a particular ((~~agreement~~)) state during the reporting period, this information shall be reported to the responsible ((~~agreement state~~)) agency upon request by the agency.

(5) Each person licensed under 10 C.F.R. 40.54 or equivalent department or agreement state regulations shall maintain all information that supports the reports required by this section concerning each transfer to a general licensee for a period of one year after the event is included in a report to the department, NRC, or to an agreement state agency.

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

WAC 246-235-095 Manufacture, assembly, or distribution of luminous safety devices, certain calibration sources or ice detectors under general license. (1) *Special requirements for the manufacture, assembly or repair of luminous safety devices for use in aircraft.* An application for a specific license to manufacture, assemble, repair, or initially transfer luminous safety devices containing tritium or promethium-147 for use in aircraft for distribution to persons generally licensed under WAC 246-233-025 will be approved subject to the following conditions:

(a) The applicant satisfies the general requirements specified in WAC 246-235-020; and

(b) The applicant satisfies the requirements of Sections 32.53, 32.54, 32.55, and 32.56 of 10 C.F.R. Part 32 or their equivalent.

(2) *Special requirements for license to manufacture calibration sources containing americium-241((~~, plutonium~~)) or radium-226 for distribution to persons generally licensed under WAC 246-233-035.* An application for a specific license to manufacture calibration and reference sources containing americium-241((~~, plutonium~~)) or radium-226 to persons generally licensed under WAC 246-233-035 will be approved subject to the following conditions:

(a) The applicant satisfies the general requirement of WAC 246-235-020; and

(b) The applicant satisfies the requirements of Sections 32.57, 32.58, and 32.59 of 10 C.F.R. Part 32 and Section 70.39 of 10 C.F.R. Part 70 or their equivalent.

(3) *Licensing the manufacture and distribution of ice detection devices.* An application for a specific license to manufacture and distribute ice detection devices to persons generally licensed under WAC 246-233-030 will be approved subject to the following conditions:

(a) The applicant satisfies the general requirements of WAC 246-235-020; and

(b) The criteria of Sections 32.61 and 32.62 of 10 C.F.R. Part 32 are met.

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

WAC 246-235-108 Sealed source and device registration and inactivation. (1) Any manufacturer or initial distributor of a sealed source or device containing a sealed source may submit a request to the department ((~~or NRC~~)) for evaluation of radiation safety information about its product and for its registration.

(2) Request for review must be sent to the department ((~~or to NRC's office of nuclear material safety and safeguards, ATTN: SSDR,~~)) by an appropriate method ((~~listed in 10 C.F.R. 30.6(a)~~)), such as hard copy, properly signed electronic document, or fax.

(3) The request for review of a sealed source or a device must include sufficient information about the design, manufacture, prototype testing, quality control program, labeling, proposed uses and leak testing and, for a device, the request must also include sufficient information about installation, service and maintenance, operating and safety instructions, and its potential hazards, to provide reasonable assurance that the radiation safety properties of the source or device are adequate to protect health and minimize danger to life and property.

(4) The department normally evaluates a sealed source or a device using radiation safety criteria in accepted industry standards. If these standards and criteria do not readily apply to a particular case, the department formulates reasonable standards and criteria with the help of the manufacturer or distributor. The department shall use criteria and standards sufficient to ensure that the radiation safety properties of the device or sealed source are adequate to protect health and minimize danger to life and property. 10 C.F.R. 32 Subpart A includes specific criteria that apply to certain exempt products, Subpart B includes specific criteria applicable to certain generally licensed devices, and Subpart C includes specific provisions that apply to certain specifically licensed items.

(5) After completion of the evaluation, the department issues a certificate of registration to the person making the request. The certificate of registration acknowledges the availability of the submitted information for inclusion in an application for a specific license proposing use of the product, or concerning use under an exemption from licensing or general license as applicable for the category of certificate.

(6) The person submitting the request for evaluation and registration of safety information about the product shall manufacture and distribute the product in accordance with:

(a) The statements and representations, including quality control program, contained in the request; and

(b) The provisions of the registration certificate.

(7) Authority to manufacture or initially distribute a sealed source or device to specific licensees may be provided in the license without the issuance of a certificate of registration in the following cases:

(a) Calibration and reference sources containing no more than:

(i) 37 megabecquerels (one millicurie) for beta or gamma emitting radionuclides; or

(ii) 0.37 megabecquerels (ten microcuries), for alpha emitting radionuclides; or

(b) The intended recipients are qualified by training and experience and have sufficient facilities and equipment to safely use and handle the requested quantity of radioactive material in any form in the case of unregistered sources or, for registered sealed sources contained in unregistered devices, are qualified by training and experience and have

sufficient facilities and equipment to safely use and handle the requested quantity of radioactive material in unshielded form, as specified in their licenses and:

(i) The intended recipients are licensed under WAC 246-235-090 of this chapter, 10 C.F.R. 33, or comparable provisions of an agreement state;

(ii) The recipients are authorized for research and development; or

(iii) The sources and devices are to be built to the unique specifications of the particular recipient and contain no more than 740 gigabecquerels (20 curies) of tritium (H-3) or 7.4 gigabecquerels (200 millicuries) of any other radionuclide.

(8) After the certificate is issued, the department may conduct an additional review as it determines is necessary to ensure compliance with current regulatory standards. In conducting its review, the department will complete its evaluation in accordance with criteria specified in this section. The department may request such additional information as it considers necessary to conduct its review and the certificate holder shall provide the information as requested.

(9)(a) A certificate holder who no longer manufactures or initially transfers any of the sealed sources or devices covered by a particular certificate issued by the department ((~~or NRC~~)) shall request inactivation of the registration certificate from the ((~~issuing regulatory authority~~)) department. Such a request must be made to the department((~~, or (as appropriate) to NRC's office of nuclear material safety and safeguards, ATTN: SSDR~~)) by an appropriate method ((~~listed in 10 C.F.R. 30.6(a)~~)) and must normally be made no later than two years after initial distribution of all of the sources or devices covered by the certificate has ceased. However if the certificate holder determines that an initial transfer was in fact the last initial transfer more than two years after that transfer, the certificate holder shall request inactivation of the certificate within ninety days of this determination and briefly describe the circumstances of the delay.

(b) If a distribution license is to be terminated in accordance with chapters 246-232, 246-233, and 246-235 WAC, the licensee shall request inactivation of its registration certificates associated with that distribution license before the department will terminate the license. Such a request for inactivation of certificates must indicate that the license is being terminated and include the associated specific license number.

(c) A specific license to manufacture or initially transfer a source or device covered only by an inactivated certificate no longer authorizes the licensee to initially transfer such sources or devices for use. Servicing of devices must be in accordance with any conditions in the certificate, including in the case of an inactive certificate.

AMENDATORY SECTION (Amending WSR 16-13-079, filed 6/14/16, effective 7/15/16)

WAC 246-237-023 Access authorization program requirements. (1) Granting unescorted access authorization.

(a) Licensees shall implement the requirements of this chapter for granting initial or reinstated unescorted access authorization.

(b) Individuals who have been determined to be trustworthy and reliable shall also complete the security training required by WAC 246-237-043(3) before being allowed unescorted access to Category 1 or Category 2 quantities of radioactive material.

(2) Reviewing officials. Reviewing officials are the only individuals who may make trustworthiness and reliability determinations that allow individuals to have unescorted access to Category 1 or Category 2 quantities of radioactive materials possessed by the licensee.

(a) Each licensee shall name one or more individuals to be reviewing officials. After completing the background investigation on the reviewing official, the licensee shall provide, under oath or affirmation, a certification that the reviewing official is deemed trustworthy and reliable by the licensee. The fingerprints of the named reviewing official must be taken by a law enforcement agency, federal or state agencies that provide fingerprinting services to the public, or commercial fingerprinting services authorized by a state to take fingerprints. The licensee shall recertify that the reviewing official is deemed trustworthy and reliable every ten years in accordance with WAC ((~~246-237-025(2)~~)) 246-237-025(3).

(b) Reviewing officials must be permitted to have unescorted access to Category 1 or Category 2 quantities of radioactive materials or access to safeguards information or safeguards information-modified handling, if the licensee possesses safeguards information or safeguards information-modified handling.

(c) Reviewing officials cannot approve other individuals to act as reviewing officials.

(d) A reviewing official does not need to undergo a new background investigation before being named by the licensee as the reviewing official if:

(i) The individual has undergone a background investigation that included fingerprinting and an FBI criminal history records check and has been determined to be trustworthy and reliable by the licensee; or

(ii) The individual is subject to a category listed in WAC 246-237-029(1).

(3) Informed consent.

(a) Licensees may not initiate a background investigation without the informed and signed consent of the subject individual. This consent must include authorization to share personal information with other individuals or organizations as necessary to complete the background investigation. Before a final adverse determination, the licensee shall provide the individual with an opportunity to correct any inaccurate or incomplete information that is developed during the background investigation. Licensees do not need to obtain signed consent from those individuals who meet the requirements of WAC 246-237-025(2). A signed consent must be obtained prior to any reinvestigation.

(b) The subject individual may withdraw their consent at any time. Licensees shall inform the individual that:

(i) If an individual withdraws their consent, the licensee may not initiate any elements of the background investigation that were not in progress at the time the individual withdrew their consent; and

(ii) The withdrawal of consent for the background investigation is sufficient cause for denial or termination of unescorted access authorization.

(4) Personal history disclosure. Any individual who is applying for unescorted access authorization shall disclose the personal history information that is required by the licensee's access authorization program for the reviewing official to make a determination of the individual's trustworthiness and reliability. Refusal to provide, or the falsification of, any personal history information required by this chapter is sufficient cause for denial or termination of unescorted access.

(5) Determination basis.

(a) The reviewing official shall determine whether to permit, deny, unfavorably terminate, maintain, or administratively withdraw an individual's unescorted access authorization based on an evaluation of all of the information collected to meet the requirements of this chapter.

(b) The reviewing official may not permit any individual to have unescorted access until the reviewing official has evaluated all of the information collected to meet the requirements of this chapter and determined that the individual is trustworthy and reliable. The reviewing official may deny unescorted access to any individual based on information obtained at any time during the background investigation.

(c) The licensee shall document the basis for concluding whether or not there is reasonable assurance that an individual is trustworthy and reliable.

(d) The reviewing official may terminate or administratively withdraw an individual's unescorted access authorization based on information obtained after the background investigation has been completed and the individual granted unescorted access authorization.

(e) Licensees shall maintain a list of persons currently approved for unescorted access authorization. When a licensee determines that a person no longer requires unescorted access or meets the access authorization requirement, the licensee shall remove the person from the approved list as soon as possible, but no later than seven working days, and take prompt measures to ensure that the individual is unable to have unescorted access to the material.

(6) Procedures. Licensees shall develop, implement, and maintain written procedures for implementing the access authorization program. The procedures must include provisions for the notification of individuals who are denied unescorted access. The procedures must include provisions for the review, at the request of the affected individual, of a denial or termination of unescorted access authorization. The procedures must contain a provision to ensure that the individual is informed of the grounds for the denial or termination of unescorted access authorization and allow the individual an opportunity to provide additional relevant information.

(7) Right to correct and complete information.

(a) Prior to any final adverse determination, licensees shall provide each individual subject to this chapter with the right to complete, correct, and explain information obtained as a result of the licensee's background investigation. Confirmation of receipt by the individual of this notification must be maintained by the licensee for a period of one year from the date of the notification.

(b) If, after reviewing their criminal history record, an individual believes that it is incorrect or incomplete in any respect and wishes to change, correct, update, or explain anything in the record, the individual may initiate challenge procedures. These procedures include direct application by the individual challenging the record to the law enforcement agency that contributed the questioned information or a direct challenge as to the accuracy or completeness of any entry on the criminal history record to the FBI, Criminal Justice Information Services Division, ATTN: SCU, Mod. D-2, 1000 Custer Hollow Road, Clarksburg, WV 26306 as set forth in 28 C.F.R. 16.30 through 16.34. In the latter case, the FBI will forward the challenge to the agency that submitted the data, and will request that the agency verify or correct the challenged entry. Upon receipt of an official communication directly from the agency that contributed the original information, the FBI Identification Division makes any changes necessary in accordance with the information supplied by that agency. Licensees must provide at least ten days for an individual to initiate action to challenge the results of an FBI criminal history records check after the record being made available for their review. The licensee may make a final adverse determination based upon the criminal history records only after receipt of the FBI's confirmation or correction of the record.

(8) Records.

(a) The licensee shall retain documentation regarding the trustworthiness and reliability of individual employees for three years from the date the individual no longer requires unescorted access to Category 1 or Category 2 quantities of radioactive material.

(b) The licensee shall retain a copy of the current access authorization program procedures as a record for three years after the procedure is no longer needed. If any portion of the procedure is superseded, the licensee shall retain the superseded material for three years after the record is superseded.

(c) The licensee shall retain the list of persons approved for unescorted access authorization for three years after the list is superseded or replaced.

AMENDATORY SECTION (Amending WSR 16-13-079, filed 6/14/16, effective 7/15/16)

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 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 identifica-

tion 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 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 ((~~department~~)) 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 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 years of the date on which these elements were last completed.

AMENDATORY SECTION (Amending WSR 16-13-079, filed 6/14/16, effective 7/15/16)

WAC 246-237-077 Advance notification of shipment of Category 1 quantities of radioactive material. As specified in subsections (1) and (2) of this section, each licensee shall provide advance notification to the department and the governor of a state, or the governor's designee, of the shipment of licensed material in a Category 1 quantity, through or across the boundary of the state, before transport, or delivery to a carrier for transport, of the licensed material outside the confines of the licensee's facility or other place of use or storage.

(1) Procedures for submitting advance notification.

(a) The notification must be made to the department and to the office of each appropriate governor or governor's designee. The contact information, including telephone and mailing addresses, of governors and governors' designees, is available on the NRC's web site at ((~~http://nrc-stp.ornl.gov/special/designee.pdf~~)) https://scp.nrc.gov/special/designee.pdf. A list of the contact information is also available upon request from the Director, Division of Material Safety, State, Tribal and Rulemaking Programs, Office of Nuclear Material Safety and Safeguards, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555-0001. Notifications to the department must be made to the attention of the Director, Office of Radiation Protection.

(b) A notification delivered by mail must be postmarked at least seven days before transport of the shipment commences at the shipping facility.

(c) A notification delivered by any means other than mail must reach the department at least four days before transport of the shipment commences and must reach the office of the governor or the governor's designee at least four days before transport of a shipment within or through the state.

(2) Information to be furnished in advance notification of shipment. Each advance notification of shipment of Category 1 quantities of radioactive material must contain the following information, if available at the time of notification:

(a) The name, address, and telephone number of the shipper, carrier, and receiver of the Category 1 radioactive material;

(b) The license numbers of the shipper and receiver;

(c) A description of the radioactive material contained in the shipment, including the radionuclides and quantities;

(d) The point of origin of the shipment and the estimated time and date when shipment will commence;

(e) The estimated time and date the shipment is expected to enter each state along the route;

(f) The estimated time and date of arrival of the shipment at the destination; and

(g) A point of contact, with a telephone number, for current shipment information.

(3) Revision notice.

(a) The licensee shall provide any information not previously available at the time of the initial notification, as soon as the information becomes available but not later than commencement of the shipment, to the governor of the state or the governor's designee and to the department.

(b) A licensee shall promptly notify the governor of the state or the governor's designee of any changes to the information provided in accordance with subsections (2) and (3)(a) of this section. The licensee shall also immediately notify the department of any such changes.

(4) Cancellation notice. Each licensee who cancels a shipment for which advance notification has been sent shall send a cancellation notice to the department and to the governor of each state or to the governor's designee previously notified. The licensee shall send the cancellation notice before the shipment would have commenced or as soon thereafter as possible. The licensee shall state in the notice that it is a cancellation and identify the advance notification which is being canceled.

(5) Records. The licensee shall retain a copy of the advance notification and any revision and cancellation notices as a record for three years.

(6) Protection of information. State officials, state employees, and other individuals, whether or not licensees of the department, NRC, or an agreement state who receive schedule information of the kind specified in subsection (2) of this section shall protect that information against unauthorized disclosure as specified in WAC 246-237-043(4).

AMENDATORY SECTION (Amending WSR 13-17-036, filed 8/12/13, effective 9/12/13)

WAC 246-249-020 Site use permit. (1) Each generator and each broker of radioactive waste shall:

(a) Possess an active valid, and unencumbered site use permit prior to the shipment of such waste to, or the disposal of such waste at any commercial disposal facility in the state of Washington.

(b) Renew the site use permit annually to maintain the permit in active status.

(2) If a generator or broker does not renew the permit:

(a) The department shall place the permit in inactive status; and

(b) The generator or broker shall pay a reinstatement fee in addition to the annual site use permit fee as required in WAC 246-254-165.

(3) Each generator and each broker of radioactive waste shall:

(a) Pay the site use permit fees required in WAC 246-254-165;

(b) Submit a completed application for a site use permit to the department on a form provided by the department;

(c) Ensure that each application is signed by the individual broker or generator or by an individual authorized to sign on behalf of the entity generating or brokering the waste; and

(d) Submit the application for site use permit renewal a minimum of four weeks prior to the expiration date of the permit.

(4) Number of permits required by each generator.

(a) Generators who own multiple facilities may apply for one site use permit provided:

(i) All facilities are within the same state; and

(ii) The generator has identified a single contact person who is responsible for responding to the department on matters pertaining to waste shipments for all of the facilities.

(b) Generators who own multiple facilities shall apply for separate site use permits for each facility when:

(i) The facilities are located in different states; or

(ii) The generator has identified different contact persons for each facility who are responsible for responding to the department on matters pertaining to waste shipments.

(c) When a facility both generates and brokers waste, each generator and broker shall possess separate generator and broker site use permits.

(5) Each broker shall:

(a) Ensure a generator of waste has an active, valid, and unencumbered site use permit prior to shipment of waste for disposal;

(b) Ensure the waste will arrive at the disposal facility prior to the expiration date of the generator's site use permit;

(c) Ensure all radioactive waste contained within a shipment accepted for disposal at any commercial radioactive waste disposal facility in the state of Washington is traceable to the original generators and states, regardless of whether the waste is shipped directly from the point of generation to the disposal facility or shipped through a licensed service facility, such as a facility for recycling, processing, compacting, incinerating, collecting, or brokering waste; and

(d) As consignor, assumes co-responsibility with a generator for all aspects of that generator's waste until it can be documented to the department's satisfaction that the broker's sphere of responsibility was limited.

(6) Any generator or broker shipping waste for disposal at the commercial low-level radioactive waste disposal site that was originally generated in the Rocky Mountain compact region shall attach to the shipping manifest and provide to the disposal site operator a copy of the letter granting approval to export waste from the Rocky Mountain compact region.

(7) Suspension or revocation of permit.

(a) The department may suspend the site use permit of the responsible generator, or broker, or both the generator and broker if one or more packages in a shipment of waste does not meet one or more of the requirements of the license issued to the commercial low-level radioactive waste disposal site operator, Title 246 WAC, NRC regulations, DOT regulations, or the conditions of the disposal site operator's radioactive materials license.

(b) The site use permit of a generator or broker may be suspended or revoked if any other licensed commercial low-level radioactive waste disposal site in the United States has refused to accept waste from that generator or broker.

(c) A suspended site use permit may be reinstated provided:

(i) The generator or broker whose permit has been suspended submits a quality assurance procedure designed to correct previous ((~~problem[s] [s]and~~)) problems and to achieve and maintain compliance with all applicable requirements; and

(ii) A point-of-origin inspection by the state of Washington of the waste management activities of the generator or broker whose permit has been suspended, indicated compliance with all applicable requirements and regulations.

(8) Additional generator and broker requirements. Permittees shall provide additional information as requested by the department for the safe management of radioactive waste in the state of Washington.

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

WAC 246-252-030 Criteria related to disposition of uranium mill tailings or wastes. As used in this section, the term "by-product material" means the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.

As required by WAC 246-235-110(6), each applicant for a license to possess and use source material in conjunction with uranium or thorium milling, or by-product material at sites formerly associated with such milling, is required to include in a license application proposed specifications relating to the milling operation and the disposition of tailings or waste resulting from such milling activities. This section establishes criteria relating to the siting, operation, decontamination, decommissioning, and reclamation of mills and tailings or waste systems and sites at which such mills and systems are located and site and by-product material ownership. Applications must clearly demonstrate how these criteria have been addressed. The specifications shall be developed considering the expected full capacity of tailings or waste systems and the lifetime of mill operations. Where later expansions of systems or operations may be likely, the amenability of the disposal system to accommodate increased capacities without degradation in long-term stability and other performance factors shall be evaluated.

Licensees or applicants may propose alternatives to the specific requirements in these criteria. The alternative proposals may take into account local or regional conditions, including geology, topography, hydrology, and meteorology. The department may find that the proposed alternatives meet the department's requirements if the alternatives will achieve a level of stabilization and containment of the sites concerned, and a level of protection for public health, safety, and the environment from radiological and nonradiological hazards associated with the sites, which is equivalent to, to the extent practicable, or more stringent than the level which would be achieved by the requirements of the standards promulgated by the United States Environmental Protection Agency in 40 C.F.R. 192, Subparts D and E.

(1) Criterion 1 - In selecting among alternative tailings disposal sites or judging the adequacy of existing tailings sites, the following site features which would contribute to meeting the broad objective of permanent isolation of the tailings and associated contaminants from man and the environment for one thousand years to the extent reasonably achievable, and in any case, for at least two hundred years without ongoing active maintenance shall be considered:

(a) Remoteness from populated areas;

(b) Hydrogeologic and other environmental conditions conducive to continued immobilization and isolation of contaminants from groundwater sources; and

(c) Potential for minimizing erosion, disturbance, and dispersion by natural forces over the long term.

The site selection process must be an optimization to the maximum extent reasonably achievable in terms of these features.

In the selection of disposal sites, primary emphasis shall be given to isolation of tailings or wastes, a matter having long-term impacts, as opposed to consideration only of short-term convenience or benefits, such as minimization of transportation or land acquisition costs. While isolation of tailings will be a function of both site characteristics and engineering design, overriding consideration shall be given to siting features given the long-term nature of the tailings hazards.

Tailings shall be disposed in a manner such that no active maintenance is required to preserve the condition of the site.

(2) Criterion 2 - To avoid proliferation of small waste disposal sites, by-product material from in-situ extraction operations, such as residues from solution evaporation or contaminated control processes, and wastes from small remote above ground extraction operations shall be disposed at existing large mill tailings disposal sites; unless, considering the nature of the wastes, such as their volume and specific activity and the costs and environmental impacts of transporting the wastes to a large disposal site, such off-site disposal is demonstrated to be impracticable or the advantage of on-site burial clearly outweighs the benefits of reducing the perpetual surveillance obligations.

(3) Criterion 3 - The "prime option" for disposal of tailings is placement below grade, either in mines or specially excavated pits (that is, where the need for any specially constructed retention structure is eliminated).

The evaluation of alternative sites and disposal methods performed by mill operators in support of their proposed tailings disposal program (provided in applicants' environmental reports) shall reflect serious consideration of this disposal mode. In some instances, below grade disposal may not be the most environmentally sound approach, such as might be the case if a groundwater formation is relatively close to the surface or not very well isolated by overlying soils and rock. Also, geologic and topographic conditions might make full, below grade burial impracticable; for example, near-surface bedrock could create prominent excavation costs while more suitable alternate sites may be available. Where full below grade burial is not practicable, the size of the retention structures, and the size and steepness of slopes of associated

exposed embankments, shall be minimized by excavation to the maximum extent reasonably achievable or appropriate, given the geologic and hydrogeologic conditions at a site. In these cases, it must be demonstrated that an above-grade disposal program will provide reasonably equivalent isolation of the tailings from natural erosional forces.

(4) Criterion 4 - The following site and design criteria shall be adhered to whether tailings or wastes are disposed of above or below grade:

(a) Upstream rainfall catchment areas must be minimized to decrease erosion potential and the size of the probable maximum flood which could erode or wash out sections of the tailings disposal area.

(b) Topographic features shall provide good wind protection.

(c) Embankment and cover slopes shall be relatively flat after final stabilization to minimize erosion potential and to provide conservative factors of safety assuring long-term stability. The broad objective should be to contour final slopes to grades which are as close as possible to those which would be provided if tailings were disposed of below grade; this could, for example, lead to slopes of about ten horizontal to one vertical (10h:1v) or less steep. In general, slopes should not be steeper than about 5h:1v. Where steeper slopes are proposed, reasons why a slope less steep than 5h:1v would be impracticable should be provided, and compensating factors and conditions which make such slopes acceptable should be identified.

(d) A fully self-sustaining vegetative cover shall be established or rock cover employed to reduce wind and water erosion to negligible levels.

Where a full vegetative cover is not likely to be self-sustaining due to climatic conditions, such as in semi-arid and arid regions, rock cover shall be employed on slopes of the impoundment system. The NRC will consider relaxing this requirement for extremely gentle slopes such as those which may exist on the top of the pile.

The following factors shall be considered in establishing the final rock cover design to avoid displacement of rock particles by human and animal traffic or by natural processes, and to preclude undercutting and piping:

(i) Shape, size, composition, gradation of rock particles (excepting bedding material, average particle size shall be at least cobble size or greater);

(ii) Rock cover thickness and zoning of particles by size; and

(iii) Steepness of underlying slopes.

(e) Individual rock fragments must be dense, sound, and resistant to abrasion, and free from defects that would tend to unduly increase their destruction by water and frost actions. Weak, friable, or laminated aggregate may not be used. Shale, rock laminated with shale, and cherts may not be used.

Rock covering of slopes may be unnecessary where top covers are very thick (on the order of ten meters or greater); impoundment slopes are very gentle (on the order of 10h:1v or less); bulk cover materials have inherently favorable erosion resistance characteristics; and there is negligible drainage catchment area upstream of the pile, and good wind protection as described in (a) and (b) of this subsection (Criterion 4).

(f) Impoundment surfaces shall be contoured to avoid areas of concentrated surface runoff or abrupt or sharp changes in slope gradient. In addition to rock cover on slopes, areas toward which surface runoff might be directed shall be well protected with substantial rock cover (riprap). In addition to providing for stability of the impoundment systems itself, the overall stability, erosion potential, and geomorphology of surrounding terrain shall be evaluated to assure that there are no processes, such as gully erosion, which would lead to impoundment instability.

(g) The impoundment may not be located near a capable fault that could cause a maximum credible earthquake larger than that which the impoundment could reasonably be expected to withstand. As used in this criterion, the term "capable fault" has the same meaning as defined in Section III (g) of Appendix A of 10 C.F.R. Part 100. The term "maximum credible earthquake" means that earthquake which would cause the maximum vibratory ground motion based upon an evaluation of earthquake potential considering the regional and local geology and seismology and specific characteristics of local subsurface material.

(h) The impoundment, where feasible, should be designed to incorporate features which will promote deposition of suspended particles. For example, design features which promote deposition of sediment suspended in any runoff which flows into the impoundment area might be utilized; the object of such a design feature would be to enhance the thickness of cover over time.

(5) Criterion 5 - Criteria 5(a) through 5(g) and new Criterion 13 incorporate the basic groundwater protection standards imposed by the United States Environmental Protection Agency in 40 C.F.R. Part 192, Subparts D and E (48 FR 45926; October 7, 1983) which apply during operations and prior to the end of closure. Groundwater monitoring to comply with these standards is required by Criterion 7.

(a) The primary groundwater protection standard is a design standard for surface impoundments used to manage uranium and thorium by-product material. Surface impoundments (except for an existing portion) must have a liner that is designed, constructed, and installed to prevent any migration of wastes out of the impoundment to the adjacent subsurface soil, groundwater, or surface water at any time during the active life (including the closure period) of the impoundment. The liner may be constructed of materials that may allow wastes to migrate into the liner (but not into the adjacent subsurface soil, groundwater, or surface water) during the active life of the facility, provided that impoundment closure includes removal or decontamination of all waste residues, contaminated containment system components (liners), contaminated subsoils, and structures and equipment contaminated with waste and leachate. For impoundments that will be closed with the liner material left in place, the liner must be constructed of materials that can prevent wastes from migrating into the liner during the active life of the facility.

(b) The liner required by (a) of this subsection must be:

(i) Constructed of materials that have appropriate chemical properties and sufficient strength and thickness to prevent failure due to pressure gradients (including static head and external hydrogeologic forces), physical contact with the waste or leachate to which they are exposed, climatic condi-

tions, the stress of installation, and the stress of daily operation;

(ii) Placed upon a foundation or base capable of providing support to the liner and resistance to pressure gradients above and below the liner to prevent failure of the liner due to settlement, compression, or uplift; and

(iii) Installed to cover all surrounding earth likely to be in contact with the wastes or leachate.

(c) The applicant or licensee will be exempted from the requirements of (a) of this subsection if the department finds, based on a demonstration by the applicant or licensee, that alternate design and operating practices, including the closure plan, together with site characteristics will prevent the migration of any hazardous constituents into groundwater or surface water at any future time. In deciding whether to grant an exemption, the department will consider:

(i) The nature and quantity of the wastes;

(ii) The proposed alternate design and operation;

(iii) The hydrogeologic setting of the facility, including the attenuation capacity and thickness of the liners and soils present between the impoundment and groundwater or surface water; and

(iv) All other factors which would influence the quality and mobility of the leachate produced and the potential for it to migrate to groundwater or surface water.

(d) A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave actions; rainfall; run-on; from malfunctions of level controllers, alarms, and other equipment; and human error.

(e) When dikes are used to form the surface impoundment, the dikes must be designed, constructed, and maintained with sufficient structural integrity to prevent massive failure of the dikes. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the impoundment.

(f) Uranium and thorium by-product materials must be managed to conform to the following secondary groundwater protection standard: Hazardous constituents entering the groundwater from a licensed site must not exceed the specified concentration limits in the uppermost aquifer beyond the point of compliance during the compliance period. Hazardous constituents are those constituents identified by the department pursuant to (g) of this subsection. Specified concentration limits are those limits established by the department as indicated in (j) of this subsection. The department will also establish the point of compliance and compliance period on a site specific basis through license conditions and orders. The objective in selecting the point of compliance is to provide the earliest practicable warning that the impoundment is releasing hazardous constituents to the groundwater. The point of compliance must be selected to provide prompt indication of groundwater contamination on the hydraulically downgradient edge of the disposal area. The department must identify hazardous constituents, establish concentration limits, set the compliance period, and adjust the point of compliance, if needed, when the detection monitoring established under criterion 7 indicates leakage of hazardous constituents from the disposal area.

(g) A constituent becomes a hazardous constituent subject to (j) of this subsection when the constituent:

(i) Is reasonably expected to be in or derived from the by-product material in the disposal area;

(ii) Has been detected in the groundwater in the uppermost aquifer; and

(iii) Is listed in WAC 246-252-050 Appendix A.

(h) The department may exclude a detected constituent from the set of hazardous constituents on a site specific basis if it finds that the constituent is not capable of posing a substantial present or potential hazard to human health or the environment. In deciding whether to exclude constituents, the department will consider the following:

(i) Potential adverse effect on groundwater quality, considering:

(A) The physical and chemical characteristics of the waste in the licensed site, including its potential for migration;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity of groundwater and the direction of groundwater flow;

(D) The proximity and withdrawal rates of groundwater users;

(E) The current and future uses of groundwater in the area;

(F) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;

(G) The potential for health risks caused by human exposure to waste constituents;

(H) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

(I) The persistence and permanence of the potential adverse effects.

(ii) Potential adverse effects on hydraulically connected surface water quality, considering:

(A) The volume and physical and chemical characteristics of the waste in the licensed site;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity and quality of groundwater, and the direction of groundwater flow;

(D) The patterns of rainfall in the region;

(E) The proximity of the licensed site to surface waters;

(F) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(G) The existing quality of surface water, including other sources of contamination and the cumulative impact on surface water quality;

(H) The potential for health risks caused by human exposure to waste constituents;

(I) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(J) The persistence and permanence of the potential adverse effects.

(i) In making any determinations under (h) and (k) of this subsection about the use of groundwater in the area around the facility, the department will consider any identification of underground sources of drinking water and exempted aquifers made by the United States Environmental Protection Agency.

(j) At the point of compliance, the concentration of a hazardous constituent must not exceed:

(i) The department approved background concentration of that constituent in the groundwater;

(ii) The respective value given in the table in subsection (5)(l) of this section if the constituent is listed in the table and if the background level of the constituent is below the value listed; or

(iii) An alternate concentration limit established by the department.

(k) Conceptually, background concentrations pose no incremental hazards and the drinking water limits in (j)(i) of this subsection state acceptable hazards but these two options may not be practically achievable at a specific site. Alternate concentration limits that present no significant hazard may be proposed by licensees for department consideration. Licensees must provide the basis for any proposed limits including consideration of practicable corrective actions, that limits are as low as reasonably achievable, and information on the factors the department must consider.

The department will establish a site specific alternate concentration limit for a hazardous constituent as provided in (j) of this subsection if it finds that the constituent will not pose a substantial present or potential hazard to human health or the environment as long as the alternate concentration limit is not exceeded. In establishing alternate concentration limits, the department will apply its as low as reasonably achievable criterion in this chapter. The department will also consider the following factors:

(i) Potential adverse effects on groundwater quality, considering:

(A) The physical and chemical characteristics of the waste in the licensed site including its potential for migration;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity of groundwater and the direction of groundwater flow;

(D) The proximity and withdrawal rates of groundwater users;

(E) The current and future uses of groundwater in the area;

(F) The existing quality of groundwater, including other sources of contamination and their cumulative impact on the groundwater quality;

(G) The potential for health risks caused by human exposure to waste constituents;

(H) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents;

(I) The persistence and permanence of the potential adverse effects.

(ii) Potential adverse effects on hydraulically connected surface water quality, considering:

(A) The volume and physical and chemical characteristics of the waste in the licensed site;

(B) The hydrogeological characteristics of the facility and surrounding land;

(C) The quantity and quality of groundwater, and the direction of groundwater flow;

(D) The patterns of rainfall in the region;

(E) The proximity of the licensed site to surface waters;

(F) The current and future uses of surface waters in the area and any water quality standards established for those surface waters;

(G) The existing quality of surface water including other sources of contamination and the cumulative impact on surface water quality;

(H) The potential for health risks caused by human exposure to waste constituents;

(I) The potential damage to wildlife, crops, vegetation, and physical structures caused by exposure to waste constituents; and

(J) The persistence and permanence of the potential adverse effects.

(l) MAXIMUM VALUES FOR GROUNDWATER PROTECTION:

Constituent or Property	Maximum Concentration
	Milligrams per liter
Arsenic	0.05
Barium	1.0
Cadmium	0.01
Chromium	0.05
Lead	0.05
Mercury	0.002
Selenium	0.01
Silver	0.05
Endrin (1,2,3,4,10,10-hexachloro-1,7 -expoxy-1,4,4a,5,6,7,8,9a-octahydro-1, 4-endo, endo-5,8-dimethano naphthalene)	0.0002
Lindane (1,2,3,4,5,6-hexachlorocyclohexane, gamma isomer)	0.004
Methoxychlor (1,1,1-Trichloro-2,2-bis) (p-methoxyphenylethane)	0.1
Toxaphene ($C_{10}H_{10}Cl_6$, Technical chlorinated camphene, 67-69 percent chlorine)	0.005
2,4-D (2,4-Dichlorophenoxyacetic acid)	0.1
2,4,5-TP Silvex (2,4,5-Trichlorophenoxypropionic acid)	0.01
	Picocuries per liter
Combined radium - 226 and radium - 228	5
Gross alpha - particle activity (excluding radon and uranium when producing uranium by-product material or thorium when producing thorium by-product material)	15

(m) If the groundwater protection standards established under (f) of this subsection are exceeded at a licensed site, a corrective action program must be put into operation as soon

as is practicable, and in no event later than eighteen months after the department finds that the standards have been exceeded. The licensee shall submit the proposed corrective action program and supporting rationale for department approval prior to putting the program into operation, unless otherwise directed by the department. The objective of the program is to return hazardous constituent concentration levels in groundwater to the concentration limits set as standards. The licensee's proposed program must address removing the hazardous constituents that have entered the groundwater at the point of compliance or treating them in place. The program must also address removing or treating in place any hazardous constituents that exceed concentration limits in groundwater between the point of compliance and the downgradient facility property boundary. The licensee shall continue corrective action measures to the extent necessary to achieve and maintain compliance with the groundwater protection standard. The department will determine when the licensee may terminate corrective action measures based on data from the groundwater monitoring program and other information that provide reasonable assurance that the groundwater protection standard will not be exceeded.

(n) In developing and conducting groundwater protection programs, applicants and licensees shall also consider the following:

(i) Installation of bottom liners (where synthetic liners are used, a leakage detection system must be installed immediately below the liner to ensure major failures are detected if they occur. This is in addition to the groundwater monitoring program conducted as provided in Criterion 7. Where clay liners are proposed or relatively thin, in-situ clay soils are to be relied upon for seepage control, tests must be conducted with representative tailings solutions and clay materials to confirm that no significant deterioration of permeability or stability properties will occur with continuous exposure of clay to tailings solutions. Tests must be run for a sufficient period of time to reveal any effects if they are going to occur (in some cases deterioration has been observed to occur rather rapidly after about nine months of exposure)).

(ii) Mill process designs which provide the maximum practicable recycle of solutions and conservation of water to reduce the net input of liquid to the tailings impoundment.

(iii) Dewatering of tailings by process devices or in-situ drainage systems (at new sites, tailings must be dewatered by a drainage system installed at the bottom of the impoundment to lower the phreatic surface and reduce the driving head of seepage, unless tests show tailings are not amenable to such a system. Where in-situ dewatering is to be conducted, the impoundment bottom must be graded to assure that the drains are at a low point. The drains must be protected by suitable filter materials to assure that drains remain free running. The drainage system must also be adequately sized to assure good drainage).

(iv) Neutralization to promote immobilization of hazardous constituents.

(o) Where groundwater impacts are occurring at an existing site due to seepage, action must be taken to alleviate conditions that lead to excessive seepage impacts and restore groundwater quality. The specific seepage control and groundwater protection method, or combination of methods, to be used must be worked out on a site-specific basis. Technical specifications must be prepared to control installation of seepage control systems. A quality assurance, testing, and inspection program, which includes supervision by a qualified engineer or scientist, must be established to assure the specifications are met.

(p) In support of a tailings disposal system proposal, the applicant/operator shall supply information concerning the following:

(i) The chemical and radioactive characteristics of the waste solutions.

(ii) The characteristics of the underlying soil and geologic formations particularly as they will control transport of contaminants and solutions. This includes detailed information concerning extent, thickness, uniformity, shape, and orientation of underlying strata. Hydraulic gradients and conductivities of the various formations must be determined. This information must be gathered from borings and field survey methods taken within the proposed impoundment area and in surrounding areas where contaminants might migrate to groundwater. The information gathered on boreholes must include both geologic and geophysical logs in sufficient number and degree of sophistication to allow determining significant discontinuities, fractures, and channeled deposits of high hydraulic conductivity. If field survey methods are used, they should be in addition to and calibrated with borehole logging. Hydrologic parameters such as permeability may not be determined on the basis of laboratory analysis of samples alone; a sufficient amount of field testing (e.g., pump tests) must be conducted to assure actual field properties are adequately understood. Testing must be conducted to allow estimating chemi-sorption attenuation properties of underlying soil and rock.

(iii) Location, extent, quality, capacity and current uses of any groundwater at and near the site.

(q) Steps must be taken during stockpiling of ore to minimize penetration of radionuclides into underlying soils; suitable methods include lining or compaction of ore storage areas.

(6) Criterion 6 - (a) In disposing of waste by-product material, licensees shall place an earthen cover (or approved alternative) over tailings or wastes at the end of milling operations and shall close the waste disposal area in accordance with a design[1] which provides reasonable assurance of control of radiological hazards to:

(i) Be effective for 1,000 years, to the extent reasonably achievable, and, in any case, for at least 200 years; and

(ii) Limit releases of Radon-222 from uranium by-product materials, and Radon-220 from thorium by-product materials, to the atmosphere so as not to exceed an average[2] release rate of 20 picocuries per square meter per second (pCi/m^2s) to the extent practicable throughout the effective design life determined pursuant to (a)(i) of this subsection (this criterion). In computing required tailings cover thicknesses, moisture in soils in excess of amounts found normally in similar soils in similar circumstances may not be considered. Direct gamma exposure from the tailings or wastes should be reduced to background levels. The effects of any thin synthetic layer may not be taken into account in determining the calculated radon exhalation level. If nonsoil mate-

rials are proposed as cover materials, it must be demonstrated that these materials will not crack or degrade by differential settlement, weathering, or other mechanism, over long-term intervals.

(b) As soon as reasonably achievable after emplacement of the final cover to limit releases of Radon-222 from uranium by-product material and prior to placement of erosion protection barriers or other features necessary for long-term control of the tailings, the licensees shall verify through appropriate testing and analysis that the design and construction of the final radon barrier is effective in limiting releases of Radon-222 to a level not exceeding 20 pCi/m^2s averaged over the entire pile or impoundment using the procedures described in 40 C.F.R. part 61, appendix B, Method 115, or another method of verification approved by NRC as being at least as effective in demonstrating the effectiveness of the final radon barrier.

(c) When phased emplacement of the final radon barrier is included in the applicable reclamation plan, the verification of Radon-222 release rates required in (b) of this subsection (this criterion) must be conducted for each portion of the pile or impoundment as the final radon barrier for that portion is emplaced.

(d) Within ninety days of the completion of all testing and analysis relevant to the required verification in (b) and (c) of this subsection (this criterion), the uranium mill licensee shall report to the department the results detailing the actions taken to verify that levels of release of Radon-222 do not exceed 20 pCi/m^2s when averaged over the entire pile or impoundment. The licensee shall maintain records until termination of the license documenting the source of input parameters including the results of all measurements on which they are based, the calculations or analytical methods used to derive values for input parameters, and the procedure used to determine compliance. These records shall be kept in a form suitable for transfer to the custodial agency at the time of transfer of the site to DOE or a state for long-term care if requested.

(e) Near surface cover materials (i.e., within the top three meters) may not include waste or rock that contains elevated levels of radium; soils used for near surface cover must be essentially the same, as far as radioactivity is concerned, as that of surrounding surface soils. This is to ensure that surface radon exhalation is not significantly above background because of the cover material itself.

(f) The design requirements in this criterion for longevity and control of radon releases apply to any portion of a licensed or disposal site unless such portion contains a concentration of radium in land, averaged over areas of 100 square meters, which, as a result of by-product material, does not exceed the background level by more than:

(i) 5 picocuries per gram (pCi/g) of radium-226, or, in the case of thorium by-product material, radium-228, averaged over the first 15 centimeters (cm) below the surface; and

(ii) 15 pCi/g of radium-226, or, in the case of thorium by-product material, radium-228, averaged over 15-cm thick layers more than 15 cm below the surface.

(g) By-product material containing concentrations of radionuclides other than radium in soil, and surface activity on remaining structures, must not result in a total effective dose equivalent (TEDE) exceeding the dose from cleanup of radium contaminated soil to the standard (benchmark dose) contained in (f) of this subsection, and must be at levels which are as low as is reasonably achievable (ALARA). If more than one residual radionuclide is present in the same 100 square meter area, the sum of the ratios for each radionuclide of concentration present to the concentration limit will not exceed "1" (unity). A calculation of the potential peak annual TEDE within 1000 years to the average member of the critical group that would result from applying the radium standard, not including radon, on the site must be submitted for approval. The use of decommissioning plans with benchmark doses which exceed 100 mrem/yr, before application of ALARA, requires the approval of the department. This requirement for dose criteria does not apply to sites that have decommissioning plans for soil and structures approved before June 11, 1999.

(h) The licensee shall also address the nonradiological hazards associated with the wastes in planning and implementing closure. The licensee shall ensure that disposal areas are closed in a manner that minimizes the need for further maintenance. To the extent necessary to prevent threats to human health and the environment, the licensee shall control, minimize, or eliminate post-closure escape of nonradiological hazardous constituents, leachate, contaminated rainwater, or waste decomposition products to the ground or surface waters or to the atmosphere.

[1] In the case of thorium by-product materials, the standard applies only to design. Monitoring for radon emissions from thorium by-product materials after installation of an appropriately designed cover is not required.

[2] This average applies to the entire surface of each disposal area over a period of at least one year, but a period short compared to 100 years. Radon will come from both by-product materials and from covering materials. Radon emissions from covering materials should be estimated as part of developing a closure plan for each site. The standard, however, applies only to emissions from by-product materials to the atmosphere.

Criterion 6A - (a) For impoundments containing uranium by-product materials, the final radon barrier must be completed as expeditiously as practicable considering technological feasibility after the pile or impoundment ceases operation in accordance with a written, department-approved reclamation plan. (The term as expeditiously as practicable considering technological feasibility as specifically defined in WAC 246-252-010 includes factors beyond the control of the licensee.) Deadlines for completion of the final radon barrier and, if applicable, the following interim milestones must be established as a condition of the individual license: Windblown tailings retrieval and placement on the pile and interim stabilization (including dewatering or the removal of free-standing liquids and recontouring). The placement of erosion protection barriers or other features necessary for long-term control of the tailings must also be completed in a timely manner in accordance with a written, approved reclamation plan.

(b) The department may approve a licensee's request to extend the time for performance of milestones related to emplacement of the final radon barrier if, after providing an opportunity for public participation, the department finds that the licensee has adequately demonstrated in the manner required in subsection (6)(b) of this section (Criterion 6) that

releases of Radon-222 do not exceed an average of 20 pCi/m^2s. If the delay is approved on the basis that the radon releases do not exceed 20 pCi/m^2s, a verification of radon levels, as required by subsection (6)(b) of this section (Criterion 6), must be made annually during the period of delay. In addition, once the department has established the date in the reclamation plan for the milestone for completion of the final radon barrier, the department may extend that date based on cost if, after providing an opportunity for public participation, the department finds that the licensee is making good faith efforts to emplace the final radon barrier, the delay is consistent with the definitions of available technology, and the radon releases caused by the delay will not result in a significant incremental risk to the public health.

(c) The department may authorize by license amendment, upon licensee request, a portion of the impoundment to accept uranium by-product material or such materials that are similar in physical, chemical, and radiological characteristics to the uranium mill tailings and associated wastes already in the pile or impoundment from other sources, during the closure process. No such authorization will be made if it results in a delay or impediment to emplacement of the final radon barrier over the remainder of the impoundment in a manner that will achieve levels of Radon-222 releases not exceeding 20 pCi/m^2s averaged over the entire impoundment. The verification required in subsection (6)(b) of this section (Criterion 6) may be completed with a portion of the impoundment being used for further disposal if the department makes a final finding that the impoundment will continue to achieve a level of Radon-222 releases not exceeding 20 pCi/m^2s averaged over the entire impoundment. In this case, after the final radon barrier is complete except for the continuing disposal area:

(i) Only by-product material will be authorized for disposal;

(ii) The disposal will be limited to the specified existing disposal area; and

(iii) This authorization will only be made after providing opportunity for public participation.

Reclamation of the disposal area, as appropriate, must be completed in a timely manner after disposal operations cease in accordance with subsection (6)(a) of this section (Criterion 6); however, these actions are not required to be complete as part of meeting the deadline for final radon barrier construction.

(7) Criterion 7 - At least one full year prior to any major site construction, a preoperational monitoring program must be conducted to provide complete baseline data on a milling site and its environs. Throughout the construction and operating phases of the mill, an operational monitoring program must be conducted to complete the following:

(a) To measure or evaluate compliance with applicable standards and regulations;

(b) To evaluate performance of control systems and procedures;

(c) To evaluate environmental impacts of operation; and

(d) To detect potential long-term effects.

The licensee shall establish a detection monitoring program needed for the department to set the site-specific groundwater protection standards in Criterion 5 of this section. For all monitoring under this paragraph, the licensee or applicant will propose for department approval as license conditions, which constituents are to be monitored on a site-specific basis. A detection monitoring program has two purposes. The initial purpose of the program is to detect leakage of hazardous constituents from the disposal area so that the need to set groundwater protection standards is monitored. If leakage is detected, the second purpose of the program is to generate data and information needed for the department to establish the standards under Criterion 5. The data and information must provide a sufficient basis to identify those hazardous constituents which require concentration limit standards and to enable the department to set the limits for those constituents and the compliance period. They may also need to provide the basis for adjustments to the point of compliance. For licenses in effect September 30, 1983, the detection monitoring programs must have been in place by October 1, 1984. For licenses issued after September 30, 1983, the detection monitoring programs must be in place when specified by the department in orders or license conditions. Once groundwater protection standards have been established pursuant to Criterion 5, the licensee shall establish and implement a compliance monitoring program. The purpose of the compliance monitoring program is to determine that the hazardous constituent concentrations in groundwater continue to comply with the standards set by the department. In conjunction with a corrective action program, the licensee shall establish and implement a corrective action monitoring program. The purpose of the corrective action monitoring program is to demonstrate the effectiveness of the corrective actions. Any monitoring program required by this paragraph may be based on existing monitoring programs to the extent the existing programs can meet the stated objective for the program.

(8) Criterion 8 - Milling operations shall be conducted so that all airborne effluent releases are reduced to as low as is reasonably achievable. The primary means of accomplishing this shall be by means of emission controls. Institutional controls, such as extending the site boundary and exclusion area, may be employed to ensure that off-site exposure limits are met, but only after all practicable measures have been taken to control emissions at the source. Notwithstanding the existence of individual dose standards, strict control of emissions is necessary to assure that population exposures are reduced to the maximum extent reasonably achievable and to avoid site contamination. The greatest potential sources of off-site radiation exposure (aside from radon exposure) are dusting from dry surfaces of the tailings disposal area not covered by tailings solution and emissions from yellowcake drying and packaging operations. During operations and prior to closure, radiation doses from radon emissions from surface impoundments shall be kept as low as is reasonably achievable. Checks shall be made and logged hourly of all parameters (e.g., differential pressure and scrubber water flow rate) which determine the efficiency of yellowcake stack emission control equipment operation. It shall be determined whether or not conditions are within a range prescribed to ensure that the equipment is operating consistently near peak efficiency; corrective action shall be taken when performance is outside of prescribed ranges. Effluent control devices shall be opera-

tive at all times during drying and packaging operations and whenever air is exhausting from the yellowcake stack.

Drying and packaging operations shall terminate when controls are inoperative. When checks indicate the equipment is not operating within the range prescribed for peak efficiency, actions shall be taken to restore parameters to the prescribed range. When this cannot be done without shutdown and repairs, drying and packaging operations shall cease as soon as practicable.

Operations may not be restarted after cessation due to off-normal performance until needed corrective actions have been identified and implemented. All such cessations, corrective actions, and restarts shall be reported to the department in writing, within ten days of the subsequent restart.

To control dusting from tailings, that portion not covered by standing liquids shall be wetted or chemically stabilized to prevent or minimize blowing and dusting to the maximum extent reasonably achievable. This requirement may be relaxed if tailings are effectively sheltered from wind, such as may be the case where they are disposed of below grade and the tailings surface is not exposed to wind. Consideration shall be given in planning tailings disposal programs to methods which would allow phased covering and reclamation of tailings impoundments since this will help in controlling particulate and radon emissions during operation. To control dustings from diffuse sources, such as tailings and ore pads where automatic controls do not apply, operators shall develop written operating procedures specifying the methods of control which will be utilized.

Milling operations producing or involving thorium by-product material shall be conducted in such a manner as to provide reasonable assurance that the annual dose equivalent does not exceed twenty-five millirems to the whole body, seventy-five millirems to the thyroid, and twenty-five millirems to any other organ of any member of the public as a result of exposures to the planned discharge of radioactive materials, Radon-220 and its daughters excepted, to the general environment.

Uranium and thorium by-product materials shall be managed so as to conform to the applicable provisions of Title 40 of the Code of Federal Regulations, Part 440, Ore Mining and Dressing Point Source Category: Effluent Limitations Guidelines and New Source Performance Standards, Subpart C, Uranium, Radium, and Vanadium Ores Subcategory, as codified on January 1, 1983.

The licensee shall establish a detection monitoring program needed to establish the groundwater protection standards in subsection (5)(f) of this section. A detection monitoring program has two purposes. The initial purpose of the program is to detect leakage of hazardous constituents from the disposal area so that the need to set groundwater protection standards is monitored. If leakage is detected, the second purpose of the program is to generate data and information needed for the department to establish the standards under subsection (5)(f) of this section. The data and information must provide a sufficient basis to identify those hazardous constituents which require concentration limit standards and to enable the department to set the limits for those constituents and the compliance period. They may also need to provide the basis for adjustments to the point of compliance. For licenses in effect September 30, 1983, the detection monitoring programs must have been in place by October 1, 1984. For licenses issued after September 30, 1983, the detection monitoring programs must be in place when specified by the department in orders or license conditions. Once groundwater protection standards have been established pursuant to subsection (5)(f) of this section, the licensee shall establish and implement a compliance monitoring program. The purpose of the compliance monitoring program is to determine that the hazardous constituent concentrations in groundwater continue to comply with the standards set by the department. In conjunction with a corrective action program, the licensee shall establish and implement a corrective action monitoring program. The purpose of the corrective action monitoring program is to demonstrate the effectiveness of the corrective actions. Any monitoring program required by this paragraph may be based on existing monitoring programs to the extent the existing programs can meet the stated objective for the program.

Daily inspections of tailings or waste retention systems must be conducted by a qualified engineer or scientist and documented. The department must be immediately notified of any failure in a tailings or waste retention system that results in a release of tailings or waste into unrestricted areas, or of any unusual conditions (conditions not contemplated in the design of the retention system) which if not corrected could indicate the potential or lead to failure of the system and result in a release of tailings or waste into unrestricted areas.

(9) Criterion 9 - (a) Pursuant to chapter 70.121 RCW, and except as otherwise provided, financial surety arrangements must be established by each mill operator before the commencement of operations to assure that sufficient funds will be available to carry out the decontamination and decommissioning of the mill and site and for the reclamation of any tailings or waste disposal areas. The amount of funds to be ensured by such surety arrangements must be based on department-approved cost estimates in a department-approved plan, or a proposed revision to the plan submitted to the department for approval, if the proposed revision contains a higher cost estimate for:

(i) Decontamination and decommissioning of mill buildings and the milling site to levels which allow unrestricted use of these areas upon decommissioning; and

(ii) The reclamation of tailings or waste areas in accordance with technical criteria delineated in this section.

(b) Each cost estimate must contain:

(i) A detailed cost estimate for decontamination, decommissioning, and reclamation, in an amount reflecting:

(A) The cost of an independent contractor to perform the decontamination, decommissioning, and reclamation activities; and

(B) An adequate contingency factor.

(ii) An estimate of the amount of radioactive contamination in on-site subsurface material;

(iii) Identification of and justification for using the key assumptions contained in the decommissioning cost estimate; and

(iv) A description of the method of assuring funds for decontamination, decommissioning, and reclamation.

(c) The licensee shall submit this plan in conjunction with an environmental report that addresses the expected environmental impacts of the milling operation, decommissioning and tailings reclamation, and evaluates alternatives for mitigating these impacts. The plan must include a signed original of the financial instrument obtained to satisfy the surety arrangement requirements of this criterion (unless a previously submitted and approved financial instrument continues to cover the cost estimate for decommissioning). The surety arrangement must also cover the cost estimate and the payment of the charge for long-term surveillance and control required by subsection (10) of this section.

(d) To avoid unnecessary duplication and expense, the department may accept financial sureties that have been consolidated with financial or surety arrangements established to meet requirements of other federal or state agencies or local governing bodies for decommissioning, decontamination, reclamation, and long-term site surveillance and control, provided such arrangements are considered adequate to satisfy these requirements and that the portion of the surety which covers the decommissioning and reclamation of the mill, mill tailings site and associated areas, and the long-term funding charge is clearly identified and committed for use in accomplishing these activities.

(e) The licensee's surety mechanism will be reviewed annually by the department to assure, that sufficient funds would be available for completion of the reclamation plan if the work had to be performed by an independent contractor.

(f) The amount of surety liability should be adjusted to recognize any increases or decreases resulting from:

(i) Inflation;

(ii) Changes in engineering plans;

(iii) Activities performed;

(iv) Spills, leakage or migration of radioactive material producing additional contamination in on-site subsurface material that must be remediated to meet applicable remediation criteria;

(v) Waste inventory increasing above the amount previously estimated;

(vi) Waste disposal costs increasing above the amount previously estimated;

(vii) Facility modifications;

(viii) Changes in authorized possession limits;

(ix) Actual remediation costs that exceed the previous cost estimate;

(x) On-site disposal; and

(xi) Any other conditions affecting costs.

(g) Regardless of whether reclamation is phased through the life of the operation or takes place at the end of operations, an appropriate portion of surety liability must be retained until final compliance with the reclamation plan is determined.

(h) The appropriate portion of surety liability retained until final compliance with the reclamation plan is determined will be at least sufficient at all times to cover the costs of decommissioning and reclamation of the areas that are expected to be disturbed before the next license renewal. The term of the surety mechanism must be open ended, unless it can be demonstrated that another arrangement would provide an equivalent level of assurance. This assurance would be provided with a surety instrument which is written for a specified time (for example five years) and which must be automatically renewed unless the surety notifies the department and the licensee with reasonable time (for example ninety days) before the renewal date of their intention not to renew. In such a situation the surety requirement still exists and the licensee would be required to submit an acceptable replacement surety within a brief time to allow at least sixty days for the department to collect.

(i) Proof of forfeiture must not be necessary to collect the surety. In the event that the licensee cannot provide an acceptable replacement surety within the required time, the surety shall be automatically collected before its expiration. The surety instrument must provide for collection of the full face amount immediately on demand without reduction for any reason, except for trustee fees and expenses provided for in a trust agreement, and that the surety will not refuse to make full payment. The conditions described previously would have to be clearly stated on any surety instrument which is not open-ended, and must be agreed to by all parties. Financial surety arrangements generally acceptable to the department are:

(i) Trust funds;

(ii) Surety bonds;

(iii) Irrevocable letters of credit; and

(iv) Combinations of the financial surety arrangements or other types of arrangements as may be approved by the department. If a trust is not used, then a standby trust must be set up to receive funds in the event the department exercises its right to collect the surety. The surety arrangement and the surety or trustee, as applicable, must be acceptable to the department. Self-insurance, or any arrangement which essentially constitutes self-insurance (for example, a contract with a state or federal agency), will not satisfy the surety requirement because this provides no additional assurance other than that which already exists through license requirements.

(10) Criterion 10 - (a) A minimum charge of two hundred fifty thousand dollars (1978 United States dollars) accrued as specified in WAC 246-235-086(4) to cover the costs of long-term surveillance shall be paid by each mill operator to the agency prior to the termination of a uranium or thorium mill license. If site surveillance or control requirements at a particular site are determined, on the basis of a site-specific evaluation, to be significantly greater than those specified in (a) of this subsection (e.g., if fencing is determined to be necessary), variance in funding requirements may be specified by the department. The total charge to cover the costs of long-term surveillance shall be such that, with an assumed one percent annual real interest rate, the collected funds will yield interest in an amount sufficient to cover the annual costs of site surveillance. The charge will be adjusted annually prior to actual payments to recognize inflation. The inflation rate to be used is that indicated by the change in the consumer price index published by the United States Department of Labor, Bureau of Labor Statistics. Contributions by a licensee to the long-term care trust fund pursuant to chapter 70.121 RCW shall be transferred to cover the costs assessed under this criterion.

(11) Criterion 11 - These criteria relating to ownership of tailings and their disposal sites become effective on Novem-

ber 8, 1981, and apply to all licenses terminated, issued, or renewed after that date.

Any uranium or thorium milling license or tailings license shall contain such terms and conditions as NRC determines necessary to assure that prior to termination of the license, the licensee will comply with ownership requirements of this criterion for sites used for tailings disposal.

Title to the by-product material licensed pursuant to WAC 246-252-030 and land, including any interests therein (other than land owned by the United States or by the state of Washington) which is used for the disposal of any such by-product material, or is essential to ensure the long-term stability of such disposal site, shall be transferred to the United States or the state of Washington. In view of the fact that physical isolation must be the primary means of long-term control, and government land ownership is a desirable supplementary measure, ownership of certain severable subsurface interests (for example, mineral rights) may be determined to be unnecessary to protect the public health and safety and the environment. In any case, the applicant/operator must demonstrate a serious effort to obtain such subsurface rights, and must, in the event that certain rights cannot be obtained, provide notification in local public land records of the fact that the land is being used for the disposal of radioactive material and is subject to either a NRC general or specific license prohibiting the disruption and disturbance of the tailings. In some rare cases, such as may occur with deep burial where no ongoing site surveillance will be required, surface land ownership transfer requirements may be waived. For licenses issued before November 8, 1981, NRC may take into account the status of the ownership of such land, and interests therein, and the ability of a licensee to transfer title and custody thereof to the United States or the state. If NRC, subsequent to title transfer, determines that use of the surface or subsurface estates, or both, of the land transferred to the United States or to a state will not endanger the public health, safety, welfare or environment, NRC may permit the use of the surface or subsurface estates, or both, of such land in a manner consistent with the provisions provided in these criteria. If NRC permits such use of such land, it will provide the person who transferred such land with the right of first refusal with respect to such use of such land.

Material and land transferred to the United States or a state in accordance with this criterion must be transferred without cost to the United States or a state other than administrative and legal costs incurred in carrying out such transfer.

The provisions of this part, respecting transfer of title and custody to land and tailings and wastes, do not apply in the case of lands held in trust by the United States for any Indian Tribe, or lands owned by such Indian Tribe subject to a restriction against alienation imposed by the United States. In the case of such lands which are used for the disposal of by-product material, as defined in this section, the licensee shall enter into arrangements with NRC as may be appropriate to assure the long-term surveillance of such lands by the United States.

(12) Criterion 12 - The final disposition of tailings or wastes at milling sites should be such that ongoing active maintenance is not necessary to preserve isolation. As a minimum, annual site inspections must be conducted by the government agency retaining ultimate custody of the site where tailings or wastes are stored, to confirm the integrity of the stabilized tailings or waste systems, and to determine the need, if any, for maintenance or monitoring. Results of the inspection must be reported to NRC within sixty days following each inspection. NRC may require more frequent site inspections if, on the basis of a site-specific evaluation, such a need appears necessary, due to the features of a particular tailings or waste disposal system.

(13) Criterion 13 - Secondary groundwater protection standards required by Criterion 5 of this section are concentration limits for individual hazardous constituents. The list of constituents found in Appendix A of this chapter, chapter 246-252 WAC, identifies the constituents for which standards must be set and complied with if the specific constituent is reasonably expected to be in or derived from the by-product material and has been detected in groundwater. For purposes of this criterion, the property of gross alpha activity will be treated as if it is a hazardous constituent. Thus, when setting standards under subsection (5)(j) of this section, the department will also set a limit for gross alpha activity.

WSR 17-01-043
PERMANENT RULES
DEPARTMENT OF HEALTH
(Board of Osteopathic Medicine and Surgery)

[Filed December 13, 2016, 1:49 p.m., effective January 13, 2017]

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

Purpose: WAC 246-854-200 Sexual misconduct, the board of osteopathic medicine and surgery has amended the rule to clarify what forcible or nonconsensual acts are within the definition of sexual misconduct by osteopathic physician assistants.

Citation of Existing Rules Affected by this Order: Amending WAC 246-854-200.

Statutory Authority for Adoption: RCW 18.57.005, 18.57A.020, and 18.130.050.

Other Authority: RCW 18.130.062 and Executive Order 06-03.

Adopted under notice filed as WSR 16-16-087 on July 29, 2016.

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 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: September 23, 2016.

C. Hunter, DO
Chair

AMENDATORY SECTION (Amending WSR 07-12-091, filed 6/6/07, effective 7/7/07)

WAC 246-854-200 Sexual misconduct. (1) ((~~Definitions:~~)) The definitions in this subsection apply throughout this section unless the context clearly requires otherwise:

(a) "Patient" means a person who is receiving health care or treatment, or has received health care or treatment without a termination of the osteopathic physician assistant-patient relationship. The determination of when a person is a patient is made on a case-by-case basis with consideration given to a number of factors, including the nature, extent and context of the professional relationship between the osteopathic physician assistant and the person. The fact that a person is not actively receiving treatment or professional services is not the sole determining factor.

(b) "Osteopathic physician assistant" means a person licensed to practice osteopathic medicine and surgery under chapter 18.57A RCW.

(c) "Key third party" means a person in a close personal relationship with the patient and includes, but is not limited to, spouses, partners, parents, siblings, children, guardians and proxies.

(2) An osteopathic physician assistant shall not engage in sexual misconduct with a current patient or a key third party. An osteopathic physician assistant engages in sexual misconduct when he or she engages in the following behaviors with a patient or key third party:

(a) Sexual intercourse or genital to genital contact;

(b) Oral to genital contact;

(c) Genital to anal contact or oral to anal contact;

(d) Kissing in a romantic or sexual manner;

(e) Touching breasts, genitals or any sexualized body part for any purpose other than appropriate examination or treatment;

(f) Examination or touching of genitals without using gloves;

(g) Not allowing a patient the privacy to dress or undress;

(h) Encouraging the patient to masturbate in the presence of the osteopathic physician assistant or masturbation by the osteopathic physician assistant while the patient is present;

(i) Offering to provide practice-related services, such as medication, in exchange for sexual favors;

(j) Soliciting a date;

(k) Engaging in a conversation regarding the sexual history, preferences or fantasies of the osteopathic physician assistant.

(3) Sexual misconduct also includes sexual contact with any person involving force, intimidation, or lack of consent; or a conviction of a sex offense as defined in RCW 9.94A.-030.

(4) An osteopathic physician assistant shall not engage in any of the conduct described in subsection (2) of this section with a former patient or key third party if the osteopathic physician assistant:

(a) Uses or exploits the trust, knowledge, influence, or emotions derived from the professional relationship; or

(b) Uses or exploits privileged information or access to privileged information to meet the osteopathic physician assistant's personal or sexual needs.

(((~~(4)~~))) (5) To determine whether a patient is a current patient or a former patient, the board will analyze each case individually, and will consider a number of factors((~~,~~)) including, but not limited to, the following:

(a) Documentation of formal termination;

(b) Transfer of the patient's care to another health care provider;

(c) The length of time that has passed;

(d) The length of time of the professional relationship;

(e) The extent to which the patient has confided personal or private information to the osteopathic physician assistant;

(f) The nature of the patient's health problem;

(g) The degree of emotional dependence and vulnerability.

(((~~(5)~~))) (6) This section does not prohibit conduct that is required for medically recognized diagnostic or treatment purposes if the conduct meets the standard of care appropriate to the diagnostic or treatment situation.

(((~~(6)~~))) (7) It is not a defense that the patient, former patient, or key third party initiated or consented to the conduct, or that the conduct occurred outside the professional setting.

(((~~(7)~~))) (8) A violation of any provision of this rule shall constitute grounds for disciplinary action.

WSR 17-01-045
PERMANENT RULES
DEPARTMENT OF HEALTH
(Dental Quality Assurance Commission)

[Filed December 13, 2016, 1:56 p.m., effective January 13, 2017]

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

Purpose: WAC 246-817-550 and 246-817-560, acts that may be performed by licensed dental hygienists under general and close supervision. The adopted rules add three new tasks to acts under general supervision, includes one task from close supervision under general supervision, and amends local anesthetics under close supervision.

Citation of Existing Rules Affected by this Order: Amending WAC 246-817-550 and 246-817-560.

Statutory Authority for Adoption: RCW 18.32.0365 and 18.29.050.

Adopted under notice filed as WSR 16-19-079 on September 20, 2016.

A final cost-benefit analysis is available by contacting Jennifer Santiago, P.O. Box 47852, Olympia, WA 98501, phone (360) 236-4893, fax (360) 236-2901, email jennifer.santiago@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 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 2, Repealed 0.

Date Adopted: October 28, 2016.

C. Madden
Commission Chairperson

AMENDATORY SECTION (Amending WSR 14-12-057, filed 5/30/14, effective 6/30/14)

WAC 246-817-550 Acts that may be performed by licensed dental hygienists under general supervision. A dentist may allow a dental hygienist licensed under ((~~the provisions of~~)) chapter 18.29 RCW to perform the following acts under the dentist's general supervision:

(1) Head and neck examination.

(2) Oral inspection and measuring of periodontal pockets, with no diagnosis.

(((~~2~~))) (3) Patient education in oral hygiene.

(((~~3~~))) (4) Take intra-oral and extra-oral radiographs.

(((~~4~~))) (5) Apply topical preventive or prophylactic agents.

(((~~5~~))) (6) Administer local anesthetic agents and adjunctive procedures if all conditions in (a) through (d) of this subsection are met. Adjunctive procedures include local anesthetic reversal agents and buffered anesthetic.

(a) The patient is at least eighteen years of age;

(b) The patient has been examined by the delegating dentist within the previous twelve months;

(c) There has been no change in the patient's medical history since the last examination. If there has been a change in the patient's medical history within that time, the dental hygienist must consult with the dentist before administering local anesthetics;

(d) The delegating dentist who performed the examination has approved the patient for the administration of local anesthetics by a dental hygienist under general supervision and documented this approval in the patient's record;

(e) If any of the conditions in (a) through (d) of this subsection are not met, then close supervision is required.

(7) Polish and smooth restorations.

(((~~6~~))) (8) Oral prophylaxis and removal of deposits and stains from the surfaces of the teeth.

(((~~7~~))) (9) Record health histories.

(((~~8~~))) (10) Take and record blood pressure and vital signs.

(((~~9~~))) (11) Perform sub-gingival and supra-gingival scaling.

(((~~10~~))) (12) Perform root planing.

(((~~11~~))) (13) Apply sealants.

(((~~12~~))) (14) Apply topical anesthetic agents.

(15) Deliver oral antibiotic prophylaxis as prescribed by a dentist.

(16) Take impressions, bite registration, or digital scans of the teeth and jaws for:

(a) Diagnostic and opposing models;

(b) Fixed and removable orthodontic appliances, occlusal guards, bleaching trays, and fluoride trays; and

(c) Temporary indirect restorations such as temporary crowns.

AMENDATORY SECTION (Amending WSR 06-14-018, filed 6/23/06, effective 7/24/06)

WAC 246-817-560 Acts that may be performed by licensed dental hygienists under close supervision. In addition to the acts ((~~performed under~~)) allowed in WAC 246-817-520 and 246-817-550, a dentist may allow a dental hygienist licensed under ((~~the provisions of~~)) chapter 18.29 RCW to perform the following acts under the dentist's close supervision:

(1) Perform soft-tissue curettage.

(2) ((~~Give injections of a local anesthetic.~~)) Administer local anesthetic agents and adjunctive procedures.

(a) General supervision is allowed if all conditions in WAC 246-817-550 (6)(a) through (d) are met.

(b) Adjunctive procedures include local anesthetic reversal agents and buffered anesthetic.

(3) Place restorations into the cavity prepared by the dentist, and thereafter could carve, contour, and adjust contacts and occlusion of the restoration.

(4) Administer nitrous oxide analgesia.

(5) Place antimicrobials.

WSR 17-01-051
PERMANENT RULES
EMPLOYMENT SECURITY DEPARTMENT
[Filed December 13, 2016, 4:05 p.m., effective January 13, 2017]

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

Purpose: Changes to job search requirements and the job search (JSR) program have been amended to modify and streamline the review process, and to make the JSR program more flexible. The definition of "in-person job search activity" is modified to include programs monitored by the local WorkSource office. Benefits are denied indefinitely to individuals who fail to appear for a review of their job search for all benefits claimed, rather than denying only the weeks prior to the review and continuing to allow claimants to draw benefits.

WAC 192-110-015 is modified to provide standby status to individuals unemployed due to natural disaster, allows standby to claimants with a probable, rather than definite, return date, clarifies the weeks included in the standby period, and provides that standby will not be granted when the employment is not covered by Title 50 RCW or the comparable laws of another state or the federal government.

Citation of Existing Rules Affected by this Order: Amending WAC 192-110-015, 192-180-005, 192-180-010,

192-180-014, 192-180-015, 192-180-020, 192-180-025, and 192-180-030.

Statutory Authority for Adoption: RCW 50.12.010 and 50.12.040.

Adopted under notice filed as WSR 16-19-069 on September 19, 2016.

Changes Other than Editing from Proposed to Adopted Version: The proposed amendment to WAC 192-110-015 would have reduced the number of weeks a claimant could be on standby during any single period from eight to four weeks. After reviewing stakeholder testimony on this proposal, the department is withdrawing this language and reverting to the language in the current rule regarding the number of weeks of standby available with the claimant's regular employer.

A final cost-benefit analysis is available by contacting Juanita Myers, Employment Security Department, 212 Maple Park Avenue, P.O. Box 9046, Olympia, WA 98507, phone (360) 902-9665, fax (360) 902-9605, email jmyers@esd.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 0, Repealed 0.

Number of Sections Adopted at 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 8, 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 8, Repealed 0.

Date Adopted: November 30, 2016.

Dale Peinecke
Commissioner

AMENDATORY SECTION (Amending WSR 05-19-018, filed 9/9/05, effective 10/10/05)

WAC 192-110-015 Applications by standby workers—RCW 50.20.010. (1) **What is "standby?"**

(a) "Standby" means you are temporarily unemployed because of a lack of work but:

(i) You expect to return to work with your regular employer((.)) within four weeks; or

(ii) You expect to begin full-time work with a new employer within two weeks; or

(iii) You are temporarily unemployed due to natural disaster.

(b) You do not have to register for work or look for other work while you are on standby.

(c) You must be available for all hours of work offered by your regular employer.

(2) **How long can I be on standby?**

(a) You can ask to be on standby for up to four weeks, beginning with the date of the request.

(b) We will ask your employer to verify that you are on standby and your expected return to work date:

(i) If your employer does not reply, you can be on standby for up to four weeks;

(ii) If your employer confirms you are on standby, you can be on standby for up to four weeks or until the return to work date given by your employer, whichever is earlier;

(iii) If your employer replies that you are not on standby or do not have a return to work date within eight weeks, we will require you to immediately register for work and to look for work.

(c) Your regular employer may ask to extend your standby status for more than four, but no more than eight, weeks (except as provided in (2)(d) below). This request must be approved by the department. We will consider the following before deciding whether to approve standby for more than four weeks:

(i) How long you have been out of work;

(ii) Whether other suitable work is available;

(iii) The impact on you and your employer if you accept other work; and

(iv) Other factors that apply to your situation.

(d) At his or her discretion, the commissioner may grant standby for more than eight weeks in a benefit year. Exceptions can be made due to natural disaster. Exceptions can also be made in other extraordinary circumstances when the employer ((~~must apply~~)) applies in writing and shows there are conditions that apply to the business that are so unique or unusual compared to similar businesses that having their employees on standby for more than eight weeks is necessary.

(e) We can approve standby if you have obtained a definite offer of bona fide ((~~job with a new employer~~)) full-time work that has a ((~~definite~~)) probable start date within ((~~four~~)) two weeks, which includes the week of the job offer and up to two additional weeks. If the standby request under this subsection is part of your initial claim, standby begins with the date of the request.

(f) The job, however, must be ((~~in employment~~)):

(i) With a new employer or with a former employer to whom you are no longer attached as provided in subsection (3)(f) of this section; and

(ii) Covered by Title 50 RCW or the comparable laws of another state or the federal government.

(3) **Are there conditions that apply to a request for standby?**

(a) You must have a ((~~definite~~)) probable date when you will return to work for your regular employer;

(b) We will not approve standby if you only have prospects of future work with ((~~the~~)) your regular employer((,)) or a promise of more work at some unspecified date((~~, or when the return to work date depends on conditions beyond the employer's control, such as weather~~));

(c) We will not approve standby with your regular employer unless the employment is covered by Title 50 RCW or the comparable laws of another state or the federal government;

(d) Except for claimants who qualify as part-time eligible workers under RCW 50.20.119, we will not approve standby if you regularly work ((~~fewer than~~)) less than full-

time. For purposes of this section, "full-time" means forty hours each week ((~~for the employer; and~~

~~(d) Except as provided in subsection (2)(d), we will not approve standby for more than eight weeks in any benefit year.~~)) or the number of hours that are full-time for your occupation and labor market area;

(e) Any week(s) that you do not qualify for benefits ((~~because of your earnings~~)) will not be considered as part of the maximum eight weeks((~~,~~)) of standby; and

(f) After eight consecutive weeks of unemployment, we will no longer consider you attached to that employer. You must meet the job search requirements specified by RCW 50.20.010 (1)(c) and 50.20.240.

AMENDATORY SECTION (Amending WSR 13-09-010, filed 4/5/13, effective 5/6/13)

WAC 192-180-005 Registration for work—RCW 50.20.010(1) and 50.20.230. (1) **Am I required to register for work?** You must register for work unless you are:

(a) Attached to an employer, meaning you are:

(i) Partially unemployed as defined in WAC 192-180-013(1);

(ii) On standby as defined by WAC 192-110-015;

(iii) Unemployed because you are on strike or locked out from the worksite as provided in RCW 50.20.090; or

(iv) Participating in the shared work program under chapter 50.60 RCW;

(b) A member of a union that participates in the referral union program (see WAC 192-210-110);

(c) Participating in a training program approved by the commissioner; or

(d) The subject of an antiharassment order. This includes any court-issued order providing for your protection, such as restraining orders, no contact orders, domestic violence protective orders, and similar documents.

(2) **How soon do I have to register?**

(a) If you live within the state of Washington, the department will register you automatically based on information contained in your application for benefits. In unusual circumstances where you are not automatically registered, you must register within one week of the date on which you are notified by the department of the requirement to register for work.

(b) If you live in another state, you must register for work within one week of the date your first payment is issued on your new or reopened claim.

(3) **Where do I register for work?** You will be registered for work with ((~~your local WorkSource office~~)) the department. However, if you live in another state, you must register for work with the equivalent public employment agency in that state.

(4) **What is the penalty if I do not register for work?** You will not be eligible for benefits for any week in which you are not registered for work as required by this section.

AMENDATORY SECTION (Amending WSR 10-11-046, filed 5/12/10, effective 6/12/10)

WAC 192-180-010 Job search requirements—Directives—RCW 50.20.010 (1)(c) and 50.20.240. (1) **Do I have to look for work?** You must be actively seeking work unless you are:

(a) Attached to an employer as defined in WAC 192-180-005(1); or

(b) Participating in a training program approved by the commissioner.

(2) **When should I start my job search?** You must look for work every week that you file a claim for benefits, unless you are exempt under subsection (1) of this section.

(3) **What are my weekly job search requirements?**

(a) At a minimum, you must:

(i) Make job search contacts with at least three employers each week; or

(ii) Participate in three approved in-person job search activities ((~~at~~)) through the WorkSource office or ((~~local employment center~~)) the equivalent public employment agency in the state in which you reside, or any combination of employer contacts or in-person job search activities for a total of three.

(b) Based on your individual circumstances, such as your occupation, experience, or labor market area, the department may issue you a directive requiring more than three employer contacts or job search activities each week.

(c) If you are a member of a referral union you must be registered with your union, eligible for and actively seeking dispatch, and comply with your union's dispatch or referral requirements (see WAC 192-210-120). Your benefits may be denied for any weeks in which you fail to meet these requirements and you may be directed to seek work outside of your union.

(4) **What is a "job search contact"?** A job search contact is a contact with an employer to inquire about or apply for a job. You ((~~may~~)) must use job search methods that are customary for your occupation and labor market area((~~,~~)) including, but not limited to, in-person, telephone, internet, or telefax contacts. The work applied for must be suitable (see RCW 50.20.100 and 50.20.110) unless you choose to look for work in a lower skill area. A contact does not count if it is made with an employer whom you know is not hiring, or if the department decides the contact is designed in whole or in part to avoid meeting the job search requirements. Simply posting your resume online (for example, ((~~Monster.com~~)) Simplyhired.com or Craigslist) does not constitute a job search contact for purposes of this section; in addition to posting your resume, an application or contact with an employer for a ((~~specific~~)) job must be submitted to count as one of the required weekly job search contacts.

(5) **What is an "in-person job search activity"?** This is an activity provided or monitored through the WorkSource office or ((~~local employment center~~)) the equivalent public employment agency in the state in which you reside that will assist you in your reemployment efforts. It includes, but is not limited to, job search workshops, training classes, or other facilitated services provided or monitored by WorkSource staff or other affiliated agencies and approved by the local WorkSource ((~~administrator~~)) office. For claimants residing in Washington state, an in-person job search activity must be documented in the department's ((~~services, knowledge and information exchange system (SKIES)~~)) computer system to qualify. For interstate claimants, the activity must be docu-

mented ((~~in the one-stop system~~)) by the equivalent public employment agency in the state in which you reside.

(6) **What is a directive?** A directive is a written notice from the department telling you that specific methods of job search are required in order to meet the job search requirements. A written directive need not have been issued to deny benefits for failure to meet the job search requirements in subsection (3) of this section, unless the directive is required under WAC 192-180-012.

(7) **When is a directive issued?** The department can issue a directive to clarify or to increase the job search requirements you must meet. Examples include, but are not limited to, cases in which you need to:

(a) Increase the number of employer contacts each week;

(b) Change your method of looking for work (((~~such as from resumes to in-person contacts~~)));

(c) Expand the geographic area in which you look for work; ((~~or~~))

(d) Look for work in a secondary occupation; or

(e) Accurately record your job search activities as required by WAC 192-180-015.

(8) **When is the directive effective?** The directive is effective when it is given in writing by the department. It stays in effect until a new written directive is given((~~, or it is~~)); the directive is rescinded in writing; your benefit year ends; or you receive final payment on any extension of benefits related to that benefit year, whichever is later.

AMENDATORY SECTION (Amending WSR 05-13-156, filed 6/21/05, effective 7/22/05)

WAC 192-180-014 Requirements of individuals who leave work due to domestic violence or stalking—RCW 50.20.010 (1)(c). If you are allowed benefits because the department decides you left work for good cause due to domestic violence or stalking, each week you claim benefits you must demonstrate an attachment to the labor market by being able to work, available for work, and actively seeking suitable work. In general, claimants are required to make at least three job search contacts each week. You may make the number of contacts that are consistent with your need to address issues raised by domestic violence or stalking as long as you meet the requirements of RCW 50.20.010 (1)(c) by making at least one job search contact each week you claim benefits. You may substitute participation in an approved job search activity ((~~at~~)) through the WorkSource office or ((~~local employment center~~)) the equivalent public employment agency in the state in which you reside for the required job search contact.

AMENDATORY SECTION (Amending WSR 10-11-046, filed 5/12/10, effective 6/12/10)

WAC 192-180-015 Tracking job search activities—RCW 50.20.240. (1) **Do I need to keep track of my job search activities?** You must keep a record or log of your job search contacts and the in-person job search activities you receive through the WorkSource office ((~~or local employment center~~)), other affiliated agency, or equivalent public employment agency in the state in which you reside unless you are:

(a) ((~~A member of a full referral union;~~

~~(b)~~)) Allowed benefits because you left work to protect yourself or a member of your immediate family from domestic violence or stalking as provided in RCW 50.20.050 (2)(b)(iv); or

(((~~c~~))) (b) Exempt from ((~~job search requirements~~)) registration for work under WAC ((~~192-180-010(1)~~)) 192-180-005 (1)(a) through (c).

(2) **What information do I need to keep in the log?**

(a) Your job search log must contain ((~~at least the following information:~~

~~(a) For in-person or telephone job search contacts, record the date contact was made; the employer's name, address and telephone number; how contact was made (in-person, telephone, etc.); the name or position of the person you contacted; and the type of work you applied for. If application was made online, by newspaper or other means in which there is no direct employer contact, include date, web address, or newspaper name or address, the job applied for, such as a job reference number, **or** attach a copy of the job announcement or a confirmation notice received after your application was submitted~~)) sufficient information to establish to the department's satisfaction that you met the job search requirements;

(b) For in-person job search activities at the WorkSource office ((~~or local reemployment center~~)), other affiliated agency, or the equivalent public employment agency in the state in which you reside, record the date contact was made((~~:~~)), and a description of the services you received or the activities in which you participated.

(3) **Is there a specific form I must use?** The department will supply you with a ((~~form (EMS 10313)~~)) job search log to use in tracking your job search activities. You may use your own form or tracking method as long as ((~~you record all information required by~~)) it meets the requirements of this section.

(4) **How long should I keep my log?** Keep your log for at least ((~~sixty~~)) thirty days after the end of your benefit year or thirty days after receiving your final payment on any extension of benefits, whichever is later.

AMENDATORY SECTION (Amending WSR 05-01-076, filed 12/9/04, effective 1/9/05)

WAC 192-180-020 Monitoring job search activities—RCW 50.20.240. (1) **Will my job search activities be monitored?** Every week that you file a claim for benefits, you must certify ((~~that you meet~~)) whether you met the job search requirements. The department may review your job search activities at any time. ((~~If~~)) Once you have been paid benefits for five or more weeks in any benefit year, you must provide the department with a copy of your job search log upon request. ((~~You must bring a copy of your job search log to any job search review interview (see WAC 192-180-025) for which you have been scheduled.~~))

(2) **Will the department verify the information on my job search log?** Employer contacts and other job search activities on your log ((~~will~~)) may be verified ((~~whenever the department has a question about the information reported. In addition, when you are scheduled for a job search review~~

~~interview, your log will be verified with the listed employers on a random basis~~)) by the department.

AMENDATORY SECTION (Amending WSR 10-11-046, filed 5/12/10, effective 6/12/10)

WAC 192-180-025 Job search reviews ((~~interviews~~)). (1) **What is a job search review (JSR) ((~~interview~~))?** The JSR is ((~~an interview between you and a representative of the WorkSource office or local employment center. Its purpose is to~~)) a review of your job search activities by the department. At a minimum, the department will review your job search documentation, ((~~identify any barriers to your reemployment, develop a plan for resolving barriers that may be identified, and provide advice on how to improve~~)) your ability to work, availability for work, and your efforts to find work. The department may also promote an active search for work by directing you to resources that will assist you with your job search efforts. ((~~For interstate claimants, this interview may be conducted by telephone or by the local employment center in a contracted state.~~))

(2) **Will my job search activities be reviewed?** Yes, you must ((~~bring~~)) provide your job search log to the ((~~interview~~)) department when requested. The ((~~interviewer~~)) department will review your log ((~~with you and discuss~~)), review your eligibility for benefits as required by RCW 50.20.010 (1)(c), and, when appropriate, provide feedback on areas in which your job search can be improved((~~. The employer contacts and job search activities included in your log will be verified at random. The interviewer may further verify any reported contacts at his or her discretion~~)).

(3) **How many weeks will be reviewed?** The ((~~interviewer~~)) department will review at least one week of your job search documentation at the initial ((~~interview~~)) JSR.

(a) If the documentation shows you met the job search requirements for that week, no further action will be taken at that time except as provided in WAC 192-180-020(2). You may be scheduled for another JSR at a later date.

(b) If the documentation shows that you substantially complied with the job search requirements, you will not be scheduled for an all weeks JSR. However, your benefits may be denied for that week and the department will issue you a work search directive explaining how your job search efforts or documentation of those efforts must be modified.

(c) If the job search documentation ((~~is unsatisfactory~~)) fails to show that you substantially complied with the job search requirements, the department will reschedule you for a second ((~~interview~~)) JSR in which ((~~we will review~~)) your ((~~documentation~~)) job search for all weeks claimed will be reviewed.

(4) **What happens if I ((~~don't attend~~)) do not participate in the initial JSR ((~~interview~~))?** If you fail to ((~~attend~~)) participate in the initial JSR ((~~interview and you have an:~~)), the department will determine if your failure is excused or unexcused.

(a) If you have an excused absence, ((~~WorkSource staff~~)) the department will reschedule you for a ((~~review~~)) JSR of one week of your job search documentation.

You may be excused from ((~~attending~~)) participating in the initial JSR ((~~interview~~)) only for ((~~the following reasons~~)) good cause:

(i) ((~~Jury duty;~~)) Your illness or disability or that of a member of your immediate family that prevents you from participating;

(ii) ((~~National Guard duty;~~)) Your employment or presence at a job interview scheduled with an employer;

(iii) Natural disaster or similar acts of nature; or

(iv) ((~~Verifiable employment or a job interview.~~

~~(b) **Unexcused absence,** the following will apply:~~

~~(i)~~)) Factors specific to your situation which would prevent a reasonably prudent person in similar circumstances from participating.

(b) If you have an unexcused absence, the department will:

(i) Schedule you for ((~~an interview in which we will review~~)) a JSR of your job search activities for all weeks claimed; and

(ii) ((~~The department will~~)) Deny your benefits for the week of the initial ((~~interview~~)) JSR unless you can show good cause for not ((~~attending~~)) participating. (See WAC 192-180-030.)

(5) **What does "all weeks" mean?** For purposes of this section, "all weeks" means the latest of the following:

(a) Weeks claimed since you filed your application for benefits; or

(b) Weeks claimed since your last all weeks JSR ((~~interview, if applicable~~)).

(6) **((~~Do I need to bring anything else to~~)) Will the department verify my identity at the JSR interview?** Yes, you must be prepared to ((~~present proof of your identity during the JSR interview. Acceptable documents are:~~

~~(a) State or government issued driver's license or identification card with photo;~~

~~(b) U.S. passport (expired or unexpired);~~

~~(c) Permanent resident card or alien registration receipt card (Form I-551);~~

~~(d) Unexpired employment authorization document, with photo;~~

~~(e) School identification card with photo;~~

~~(f) Voter's registration card;~~

~~(g) U.S. military identification card or draft record;~~

~~(h) Military dependent's identification card;~~

~~(i) U.S. Coast Guard merchant mariner card; or~~

~~(j) Native American tribal document~~)) provide the department with sufficient information to verify your identity.

AMENDATORY SECTION (Amending WSR 05-01-076, filed 12/9/04, effective 1/9/05)

WAC 192-180-030 ((~~Penalties.~~)) Are there penalties if I do not comply with the job search monitoring program? (1) ((~~**Is there a penalty if I don't look for work or fail to report for the JSR interview as directed?**~~)) If you fail to participate in a JSR when directed, benefits will be denied under RCW 50.20.010(1) for the specific week or weeks in which you failed to participate.

(2) Benefits will be denied ((~~if~~)) under RCW 50.20.010 (1)(c) for the specific week or weeks in which you fail to:

(a) Meet the minimum job search requirements;

(b) Provide information about your job search activities ((~~and, once you have been paid five weeks of benefits,~~));

(c) Provide a copy of your job search logs upon request if you have been paid five or more weeks of benefits; or

(((~~c~~))) (d) Comply with any job search directive issued by the department((~~; or~~

~~(d) Report to a scheduled job search review interview.~~

~~(2) **How long will my benefits be denied?** Benefits will be denied for the specific week or week(s) in which you fail to act as described in subsection (1).~~

~~(3) **What is the penalty if I don't attend a JSR that has been scheduled to review all weeks claimed?** If you fail to appear for a review of your job search logs for all weeks claimed, fail to produce your job search logs for those weeks, or your logs fail to establish that you have met the minimum job search requirements, such failure will be treated as non-disclosure under RCW 50.20.160(3) and your benefits may be denied for any weeks at issue~~)).

(e) Such failure will be considered misrepresentation for purposes of redetermination under RCW 50.20.160(3). Such misrepresentation, however, will not be treated as fraud unless all criteria in WAC 192-100-050(1) are established.

(3) If you fail to participate in an all weeks JSR without good cause, benefits are denied under RCW 50.20.010 (1)(c) and 50.20.240. The denial is indefinite and will continue until you participate in a scheduled JSR with the department.

WSR 17-01-054
PERMANENT RULES
DEPARTMENT OF FISH AND WILDLIFE

[Order 16-327—Filed December 14, 2016, 9:33 a.m., effective January 14, 2017]

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

Purpose: The purpose of the rule is to expressly prohibit fishing guides and charter boat operators from reusing charter stamps rather than issuing new stamps as contemplated by RCW 77.32.430. The adoption of the proposed rule will do the following: (1) Lay out the process for validating charter stamps so the stamps cannot be reused; and (2) ensure that charter stamp validation violations and the reuse of stamps are penalized appropriately.

Statutory Authority for Adoption: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047.

Adopted under notice filed as WSR 16-17-053 on August 11, 2016.

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 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: December 11, 2016.

Brad Smith, Chair
Fish and Wildlife Commission

NEW SECTION

WAC 220-69-23801 Charter stamps—Charter boat and guide operator issuance duties. It is unlawful for a charter boat or guide operator to fail to comply with the charter stamp validation requirements as provided for in this section.

(1) Before any fishing commences, the charter boat or guide operator shall write the validation date across every charter stamp issued to a client in ink. The validation date is the first day on which a client may fish for, harvest or possess fish, shellfish, or seaweed.

(2)(a) Each failure to validate a charter boat stamp is punishable as an infraction under RCW 77.15.160, so long as the charter boat or guide operator has not committed prior infractions under this subsection in the same calendar year involving a cumulative stamp value of more than one hundred fifty dollars.

(b) Each failure to validate a charter boat stamp is punishable as a gross misdemeanor under RCW 77.15.813 when the charter boat or guide operator has previously committed infractions under (a) of this subsection in the same calendar year involving a cumulative value of more than one hundred fifty dollars.

WSR 17-01-055
PERMANENT RULES
DEPARTMENT OF FISH AND WILDLIFE

[Order 16-326—Filed December 14, 2016, 9:34 a.m., effective January 14, 2017]

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

Purpose: The purpose of this rule is to reduce the illicit seafood trade involving certain species of king crab that are imported and sold in Washington state and negatively impact the local crab market. The current list of classified shellfish species in rule does not include three species of king crab which make up a significant proportion of the Alaskan crab harvest, and are known to be involved in the illicit seafood trade. The amended rule will add these three shellfish species and broaden the agency's scope of regulatory authority to monitor and investigate the illicit seafood trade involving king crab.

Citation of Existing Rules Affected by this Order: Amending WAC 220-12-020.

Statutory Authority for Adoption: RCW 77.04.012, 77.04.013, 77.04.020, 77.04.055, and 77.12.047.

Adopted under notice filed as WSR 16-17-055 on August 12, 2016.

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 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: December 11, 2016.

Brad Smith, Chair
Fish and Wildlife Commission

AMENDATORY SECTION (Amending WSR 12-09-046, filed 4/13/12, effective 5/14/12)

WAC 220-12-020 Shellfish—Classification. The following species are classified as shellfish under RCW 77.12.047 and are subject to the provisions of this title:

Abalone	
Pinto abalone	*Haliotis kamtschatkana*
Mussel	
Blue mussel	*Mytilus trossulus*
California mussel	*Mytilus californianus*
Mediterranean mussel	*Mytilus galloprovincialis*
Scallops	
Pacific pink scallop	*Chlamys rubida*
Rock scallop	*Crassadoma gigantea*
Spiny scallop	*Chlamys hastata*
Weathervane scallop	*Patinopecten caurinus*
Clams	
All macoma clams	*Macoma spp.*
Butter clam	*Saxidomus giganteus*
Common cockle	*Clinocardium nuttallii*
Geoduck	*Panopea abrupta*
Horse or Gaper clam	*Tresus nuttallii*, *Tresus capax*
Mud or soft shell clam	*Mya arenaria*
Manila clam	*Venerupis philippinarum*
Piddock	*Zirfaea pilsbryi*
Razor clam	*Siliqua patula*
Rock or native little neck clam	*Leukoma staminea*
Varnish clam	*Nuttallia obscurata*
All other marine clams existing in Washington in a wild state	
Oysters	
All oysters	(Ostreidae)
Squid	
All squid	Sepiolida or Teuthida
Octopus	
Octopus	*Enteroctopus dolfleini*
Barnacles	
Goose barnacle	*Pollicipes polymerus*
Shrimp	
Coonstripe shrimp	*Pandalus danae*
Coonstripe shrimp	*Pandalus hypsinotus*
Ghost or sand shrimp	*Neotrypaea spp.*
Humpy shrimp	*Pandalus goniurus*
Mud shrimp	*Upogebia pugettensis*
Ocean pink shrimp	*Pandalus jordani*
Pink shrimp	*Pandalus eous*
Sidestripe shrimp	*Pandalopsis dispar*
Spot shrimp	*Pandalus platyceros*
Crab	
Dungeness or Pacific crab	*Cancer magister*
Red rock crab	*Cancer productus*
Tanner crab	*Chionoecetes tanneri*
King and box crab	*Lopholithodes spp.*
Blue king crab	*Paralithodes platypus*
Red king crab	*Paralithodes camtschaticus*
Golden king crab	*Lithodes aequispinus*
Crawfish	
Crawfish	*Pacifastacus sp.*
Sea cucumber	
Sea cucumber	*Parastichopus californicus*
Sea urchin	
Green urchin	*Strongylocentrotus droebachiensis*
Red urchin	*Strongylocentrotus franciscanus*
Purple urchin	*Strongylocentrotus purpuratus*

WSR 17-01-059
PERMANENT RULES
CRIMINAL JUSTICE TRAINING COMMISSION

[Filed December 14, 2016, 12:36 p.m., effective January 14, 2017]

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

Purpose: WAC 139-05-915 Requirements of training for law enforcement and corrections dog handlers and certification of canine teams, changes to WAC 139-05-915 are needed to establish guidelines in reference to canine training. Currently, canine team standards are established by WAC. If approved, the Washington state criminal justice training commission will establish and adopt canine team standards by policy.

Statutory Authority for Adoption: RCW 43.101.080.

Adopted under notice filed as WSR 16-22-013 on October 21, 2016.

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 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 1, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: December 14, 2016.

Sonja Peterson
Rules Coordinator

AMENDATORY SECTION (Amending WSR 05-20-029, filed 9/28/05, effective 10/29/05)

WAC 139-05-915 Requirements of training for law enforcement and corrections dog handlers and certification of canine teams. (((~~(1) Title and scope: These rules are intended to set minimum standards of performance for the certification of canine teams that are used for law enforcement or corrections purposes. This process is not related to nor does it have any effect upon the requirements for peace officer certification. Nothing in these rules is intended to limit the use of canine teams employed by other state or federal agencies for law enforcement purposes, or the use of volunteer canine teams where the handler is not a Washington peace officer or corrections officer.~~

~~(2) For purposes of this section, the following definitions will apply:~~

~~(a) "Dog handler" means any fully commissioned law enforcement officer or corrections officer of a state, county, city, municipality, or combination thereof, agency who is responsible for the routine care, control, and utilization of a police canine within a law enforcement or corrections assignment; and~~

~~(b) "Canine team" means a specific officer and a specific canine controlled by that officer in the capacity of handler, formally assigned by the employing agency to work together in the performance of law enforcement or corrections duties.~~

~~(c) "Training" means any structured classroom or practical learning exercise conducted, evaluated, and documented by an experienced dog handler or trainer, certified as an instructor with recognized expertise on canine subjects associated with the development of the trainee's competency in the care, control, and utilization of a police canine.~~

~~(d) "Evaluator" means a certified peace officer or corrections officer, who has a minimum of three years experience as a dog handler and is recognized as a trainer of canines by a professional organization of police and/or corrections dog handlers/trainers or by the handler's employing agency. The trainer must have trained a canine team in accordance with the training requirements of WAC 139-05-915, or be recognized by the commission as a certified instructor with expertise in canine training of a specific police canine subject for the purpose of testing and certifying dog handlers and canines to work as a canine team.~~

~~(3) A dog handler must, as a precondition of such assignment, successfully complete the basic law enforcement academy or basic corrections officer academy, or otherwise comply with the basic training requirement prescribed by WAC 139-05-200 and 139-05-210 of the commission.~~

~~(4) Prior to such assignment, a dog handler must successfully complete training according to the nature and purpose of utilization of the police canine for which such handler is responsible.~~

~~(a) A dog handler who is responsible for the routine and regular utilization of a police canine within general patrol or investigative activities, must successfully complete a minimum of four hundred hours of training, which will include, but not be limited to:~~

~~(i) Philosophies/theories of police canine;~~

~~(ii) Legal and liability aspects, including applicable department policies;~~

~~(iii) Public relations;~~

~~(iv) Care and maintenance;~~

~~(v) Obedience and control;~~

~~(vi) Tracking;~~

~~(vii) Trailing;~~

~~(viii) Area search;~~

~~(ix) Building search;~~

~~(x) Evidence search;~~

~~(xi) Pursuit and holding; and~~

~~(xii) Master protection.~~

~~(b) A dog handler who is responsible for the primary and specialized utilization of a police canine in the search for and detection of specific substances, excluding explosives, must successfully complete a minimum of two hundred hours of training, which will include, but not be limited to:~~

~~(i) Philosophies/theories of police canine;~~

~~(ii) Legal and liability aspects, including applicable department policies;~~

~~(iii) Public relations;~~

~~(iv) Care and maintenance;~~

(v) Obedience and control;
(vi) Area search;
(vii) Building search;
(viii) Evidence search;
(ix) Vehicle search; and
(x) Detection of specific substances.

(c) A dog handler who is responsible for the primary and specialized utilization of a police canine in the search for and detection of explosive substances and devices, must successfully complete a minimum of four hundred hours of training, which will include, but not be limited to:

(i) Philosophies/theories of police canine;
(ii) Legal and liability aspects, including applicable department policies;
(iii) Public relations;
(iv) Care and maintenance;
(v) Obedience and control;
(vi) Area search;
(vii) Private and commercial conveyance search;
(viii) Building search;
(ix) Evidence search; and
(x) Detection of explosives.

(d) A dog handler who is responsible for the routine and regular utilization of a police canine solely for self-protection and assistance in hostile or potentially hostile situations, must successfully complete at least two hundred hours of training, which will include, but not be limited to:

(i) Philosophies/theories of police canine;
(ii) Legal and liability aspects, including applicable department policies;
(iii) Public relations;
(iv) Care and maintenance;
(v) Obedience and control;
(vi) Pursuit and holding; and
(vii) Master protection.

(5) The commission will develop and adopt a minimum performance standard for canine teams performing specific law enforcement or corrections functions. It is the handler's responsibility to keep their canines under control at all times. Each handler must be able to make their canine perform to a level that is deemed acceptable by the commission in the category for the team's intended use as a condition of certification.

(6) Certification of canine teams:

(a) The handler and the canine will be considered as a team and it is the team who will be certified. If the canine or the handler changes, a new team exists and the team must be certified.

(b) A dog handler may not use a canine for police purposes unless the handler is certified to handle a specific canine for a specific purpose.

(c) In evaluating the proficiency of the canine team, the evaluators shall use the standards approved by the commission for that particular skill category. Performance will be rated on a pass/fail basis. The evaluator has the discretion to discontinue the testing if excessive time has been spent without results, or if there is a concern about safety issues involving the canine, handler, or equipment.

(d) The commission will certify a canine team who can successfully show proficiency, under scrutiny of a canine evaluator, in all of the areas in which the canine will be used:

(i) Patrol and investigation:
(A) Obedience;
(B) Protection and control;
(C) Area search;
(D) Building search; and
(E) Tracking.
(ii) Detection:
(A) Building search;
(B) Vehicle search;
(C) Exterior search; and
(D) Obedience.
(iii) Explosive detection:
(A) Obedience;
(B) Building search;
(C) Private and commercial conveyance search;
(D) Exterior search.
(iv) Master protection:
(A) Obedience;
(B) Protection and control.

(e) Each certification issued pursuant to these rules will remain valid as long as the composition and responsibility of the canine team does not change. A canine team's certification expires if the specific handler and canine, originally paired at the time of certification, cease to perform canine team functions together or if the function for which the team was certified changes. It is recommended that teams recertify on an annual basis.

(f) If the canine team fails any phase of an evaluation, the team must be reevaluated in that particular phase. Canine teams will be allowed three attempts to successfully pass the requirements of each phase during an evaluation. If the team does not pass by the third attempt, the team must be reevaluated in all phases at a different time to be scheduled by the evaluator and approved by the commission.

(7) Recordkeeping:

(a) Each agency is required to keep training, performance, and identification records on canines. The records must stay with the agency responsible for the canine team. The records will be made available for review in the event that the canine is sold or transferred to another agency. The records will include, but not be limited to:

(i) Microchip number (if applicable);
(ii) Canine's name;
(iii) Breed;
(iv) Training records;
(v) Certification date;
(vi) Date acquired or purchased;
(vii) Source from which the canine was acquired;
(viii) Purpose, use, or assignment of canine;
(ix) Handler's name;
(x) The date and reason the canine was released from service; and
(xi) Copies of all incident reports in which use of the canine resulted in the use of force.

(b) These records must be retained for a period of one year from the date the canine is removed from active service

~~unless a longer retention is required by statute or local ordinance.~~

~~(c) It is the responsibility of the handler to advise their employing agency of the fact that they have met the standards for canine certification. The proof of certification with the evaluator's signature along with a request for canine certification must be submitted to the commission by the employing agency. This will be considered as a request for certification. Upon verification that the minimum requirements have been met, the commission will issue certification to the canine team.~~

~~(8) It is recommended that a canine intended for use by a law enforcement or corrections agency, be positively identified by having a microchip medically inserted in the canine. Any canine that is sold by a vendor to a Washington state governmental agency for use as a law enforcement or corrections canine should be able to be identified by microchip placed in the canine at the vendor's expense prior to the canine being sold to the law enforcement or corrections agency.~~

~~Once the microchip has been inserted, it is recommended that it not be removed except for medical necessity. If it becomes necessary to remove the microchip, the reason for the removal must be documented and entered into the canine's training records and a new microchip inserted, if medically appropriate.~~)) Canine teams working in the state of Washington shall be certified to the adopted standards as set by criminal justice training commission (CJTC) policy. The standards shall be maintained by commission staff and readily available to stakeholders. These standards include the minimum performance standards for canine teams performing specific law enforcement or corrections functions. As a condition of certification, each handler must ensure that the canine performs to a level that is deemed acceptable by the commission in the category for the team's intended use.

An evaluator shall be a person who is recognized and appointed by the CJTC to perform the testing of the canine teams. The qualifications to become an evaluator relating to canine certification shall be outlined in the evaluation policy adopted by the CJTC.

In evaluating the proficiency of the canine team, evaluators shall use the standards approved by the commission for that particular discipline. Each certification issued pursuant to these rules will remain valid for twelve months, as long as the composition and responsibility of the canine team does not change. A canine team's certification shall automatically expire if the specific handler and canine, originally paired at the time of certification, cease to perform canine team functions together or if the function for which the team was certified changes.

This process is not related to, nor does it have any effect upon, the requirements for peace officer certification. Nothing in these rules is intended to limit the use of canine teams employed by other state or federal agencies for law enforcement purposes, or the use of volunteer canine teams where the handler is not a Washington peace officer or corrections officer.

WSR 17-01-062
PERMANENT RULES
STATE BOARD OF HEALTH

[Filed December 14, 2016, 4:40 p.m., effective January 14, 2017]

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

Purpose: Chapter 246-290 WAC, Group A public water supplies, the rule adopts the federal revised total coliform rule, revises the water system planning submittal time frame, establishes new emergency sources and supply requirements, revises the triggers for requiring continuous disinfection and monitoring, and makes technical changes to clarify existing requirements.

Citation of Existing Rules Affected by this Order: Amending WAC 246-290-001, 246-290-002, 246-290-010, 246-290-025, 246-290-030, 246-290-035, 246-290-060, 246-290-100, 246-290-105, 246-290-106, 246-290-107, 246-290-108, 246-290-125, 246-290-130, 246-290-135, 246-290-200, 246-290-220, 246-290-300, 246-290-310, 246-290-320, 246-290-415, 246-290-416, 246-290-451, 246-290-453, 246-290-480, 246-290-630, 246-290-638, 246-290-654, 246-290-660, 246-290-662, 246-290-664, 246-290-668, 246-290-672, 246-290-676, 246-290-690, 246-290-692, 246-290-694, 246-290-71001, 246-290-72001, 246-290-72004, 246-290-72005, 246-290-72007, 246-290-72012, 246-290-810, 246-290-820, and 246-290-830.

Statutory Authority for Adoption: RCW 43.20.050.

Other Authority: RCW 70.119A.080.

Adopted under notice filed as WSR 16-17-139 on August 23, 2016.

Changes Other than Editing from Proposed to Adopted Version: WAC 246-290-010(232), the amendment clarifies the intent that a wholesale system may provide wholesale water to other public water systems in its service area.

WAC 246-290-106(5), the amendment adds back the current rule language to clarify that systems are allowed to interconnect for public health and safety issues prior to meeting the requirements of this section. This allows systems to be responsive and avoid curtailment prior to meeting the planning requirements is [in] WAC 246-290-106.

WAC 246-290-108(2), the amendment clarifies that municipal water suppliers may exclude wholesale areas provided that systems receiving wholesale water complies with the consistency review when developing a water system plan for any new service connections within its service area.

WAC 246-290-451 (4)(d), the amendment clarifies that both a microbial contaminant threat and one of the conditions listed in (i) through (vii) determines whether or not a system must provide continuous disinfection.

WAC 246-290-451 (4)(d)(v), the amendment clarifies that a shallow well is considered "shallow" with the first open interval fifty feet or less from the ground surface at the wellhead.

WAC 246-290-638 (4)(b)(i), the amendment adds two additional EPA-approved methods for turbidity, HACH Method 10258, and the SWAN AMI Turbiwell method that were left off the list of approved methods.

WAC 246-290-638 (4)(c)(i), the amendment clarifies reduced calibration frequency needed for the two added methods in 246-290-638 (4)(b)(i).

WAC 246-290-638(5), the amendment matches the sentence structure with the language in 40 C.F.R. 141.74 (a)(2) to be consistent between the state rule and the federal rule.

WAC 246-290-810 (4)(i), the amendment clarifies that distribution system leakage annual totals for the past six or more years is included in a water system plan submission for approval.

A final cost-benefit analysis is available by contacting Theresa Phillips, Department of Health, P.O. Box 47820, Olympia, WA 98504-7820, phone (360) 236-3147, email theresa.phillips@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 19, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

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

Number of Sections Adopted on the Agency's Own Initiative: New 1, Amended 26, 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 45, Repealed 0.

Date Adopted: December 13, 2016.

Michelle A. Davis
Executive Director

AMENDATORY SECTION (Amending WSR 99-07-021, filed 3/9/99, effective 4/9/99)

WAC 246-290-001 Purpose and scope. (1) The purpose of this chapter is to define basic regulatory requirements and to protect the health of consumers using public drinking water supplies.

(2) The rules of this chapter are specifically designed to ensure:

(a) Adequate design, construction, sampling, management, maintenance, and operation practices; and

(b) Provision of safe and high quality drinking water in a reliable manner and in a quantity suitable for intended use.

(3) Purveyors shall be responsible for complying with the regulatory requirements of this chapter.

(4) These rules are intended to conform with Public Law 93-523, the Federal Safe Drinking Water Act of 1974, and Public Law 99-339, the Safe Drinking Water Act Amendments of 1986, and certain provisions of Public Law 104-182, the Safe Drinking Water Act Amendments of 1996.

(5) The rules set forth are adopted under chapter 43.20 RCW. Other statutes relating to this chapter are:

(a) RCW 43.20B.020, Fees for services—Department of health and department of social and health services;

(b) Chapter 43.70 RCW, Department of health;

(c) Chapter 70.05 RCW, Local health department, boards, officers—Regulations;

(d) Chapter 70.116 RCW, Public Water System Coordination Act of 1977;

(e) Chapter 70.119 RCW, Public water supply systems—((~~Certification and regulation of~~)) Operators;

(f) Chapter 70.119A RCW, Public water systems—Penalties and compliance; and

(g) Chapter 70.142 RCW, Chemical contaminants and water quality.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-002 Guidance. (1) The department has numerous guidance documents available to help purveyors comply with state and federal rules regarding drinking water. These include documents on the following subjects:

(a) Compliance;
(b) Consumer and public education;
(c) Contaminants;
(d) Cross-connection control and backflow prevention;
(e) Emergency response and drinking water security;
(f) Engineering design and water treatment;
(g) Financial assistance and state revolving fund (SRF);
(h) General information;
(i) Groundwater protection;
(j) Growth management;
(k) Operations and maintenance;
(l) Operator certification;
(m) Planning and financial viability;
(n) Regulations;
(o) Small water systems;
(p) System approval;
(q) Water quality monitoring and source protection;
(r) Water system planning; and
(s) Water use efficiency.

(2) The department's guidance documents are available ((~~at minimal or no cost by contacting the office of drinking water's publication service at 360-236-3100 or 800-521-0323. Individuals can also request the documents via the internet at http://www.doh.wa.gov/ehp/dw or through conventional~~)) online at https://fortress.wa.gov/doh/eh/dw/publications/publications.cfm or through U.S. mail at P.O. Box 47822, Olympia, Washington 98504-7822.

(3) Federal guidance documents are available from the Environmental Protection Agency (EPA) for a wide range of topics. These are available from the EPA Office of Ground Water and Drinking Water web site at ((~~www.epa.gov/drink.index.cfm~~)) http://water.epa.gov/drink.index.cfm.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-010 Definitions, abbreviations, and acronyms. The definitions in this section apply throughout this chapter unless the context clearly indicates otherwise.

(1) **"Acute"** means posing an immediate risk to human health.

(2) **"ADD"** means an average day demand.

(3) **"AG"** means an air gap.

(4) **"Alternative filtration technology"** means a filtration process for substantial removal of particulates (generally > 2-log *Giardia lamblia* cysts and ≥ 2-log removal of *Crypto-*

sporidium oocysts) by other than conventional, direct, diatomaceous earth, or slow sand filtration processes.

(5) **"Analogous treatment system"** means an existing water treatment system that has unit processes and source water quality characteristics that are similar to a proposed treatment system.

(6) **"ANSI"** means the American National Standards Institute.

(7) **"Approved air gap"** means a physical separation between the free-flowing end of a potable water supply pipeline and the overflow rim of an open or nonpressurized receiving vessel.

To be an air gap approved by the department, the separation must be at least:

(a) Twice the diameter of the supply piping measured vertically from the overflow rim of the receiving vessel, and in no case be less than one inch, when unaffected by vertical surfaces (sidewalls); and

(b) Three times the diameter of the supply piping, if the horizontal distance between the supply pipe and a vertical surface (sidewall) is less than or equal to three times the diameter of the supply pipe, or if the horizontal distance between the supply pipe and intersecting vertical surfaces (sidewalls) is less than or equal to four times the diameter of the supply pipe and in no case less than one and one-half inches.

(8) **"Approved atmospheric vacuum breaker (AVB)"** means an AVB of make, model, and size that is approved by the department. AVBs that appear on the current approved backflow prevention assemblies list developed by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research or that are listed or approved by other nationally recognized testing agencies (such as IAPMO, ANSI, or UL) acceptable to the authority having jurisdiction are considered approved by the department.

(9) **"Approved backflow preventer"** means an approved air gap, an approved backflow prevention assembly, or an approved AVB. The terms "approved backflow preventer," "approved air gap," or "approved backflow prevention assembly" refer only to those approved backflow preventers relied upon by the purveyor for the protection of the public water system. The requirements of WAC 246-290-490 do not apply to backflow preventers installed for other purposes.

(10) **"Approved backflow prevention assembly"** means an RPBA, RPDA, DCVA, DCDA, PVBA, or SVBA of make, model, and size that is approved by the department. Assemblies that appear on the current approved backflow prevention assemblies list developed by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research or other entity acceptable to the department are considered approved by the department.

(11) **"As-built drawing"** means the drawing created by an engineer from the collection of the original design plans, including changes made to the design or to the system, that reflects the actual constructed condition of the water system.

(12) **"Assessment source water monitoring"** means an evaluation of groundwater sources that may be at risk for fecal contamination. Assessment source water monitoring involves the collection of source water samples at regular intervals and analysis of those samples for fecal indicators as directed by the department.

(13) **"Authority having jurisdiction"** (formerly known as local administrative authority) means the local official, board, department, or agency authorized to administer and enforce the provisions of the Uniform Plumbing Code as adopted under chapter 19.27 RCW.

(14) **"Authorized agent"** means any person who:

(a) Makes decisions regarding the operation and management of a public water system whether or not he or she is engaged in the physical operation of the system;

(b) Makes decisions whether to improve, expand, purchase, or sell the system; or

(c) Has discretion over the finances of the system.

(15) **"Authorized consumption"** means the volume of metered and unmetered water used for municipal water supply purposes by consumers, the purveyor, and others authorized to do so by the purveyor, including, but not limited to, fire fighting and training, flushing of mains and sewers, street cleaning, and watering of parks and landscapes. These volumes may be billed or unbilled.

(16) **"AVB"** means an atmospheric vacuum breaker.

(17) **"Average day demand (ADD)"** means the total quantity of water use from all sources of supply as measured or estimated over a calendar year divided by three hundred sixty-five. ADD is typically expressed as gallons per day (gpd) per equivalent residential unit (ERU).

(18) **"AWWA"** means the American Water Works Association.

(19) **"Backflow"** means the undesirable reversal of flow of water or other substances through a cross-connection into the public water system or consumer's potable water system.

(20) **"Backflow assembly tester"** means a person holding a valid BAT certificate issued under chapter 246-292 WAC.

(21) **"Backpressure"** means a pressure (caused by a pump, elevated tank or piping, boiler, or other means) on the consumer's side of the service connection that is greater than the pressure provided by the public water system and which may cause backflow.

(22) **"Backsiphonage"** means backflow due to a reduction in system pressure in the purveyor's distribution system and/or consumer's water system.

(23) **"Bag filter"** means a pressure-driven separation device that removes particulate matter larger than 1 micrometer using an engineered porous filtration media. They are typically constructed of a nonrigid, fabric filtration media housed in a pressure vessel in which the direction of flow is from the inside of the bag to outside.

(24) **"Bank filtration"** means a water treatment process that uses a well to recover surface water that has naturally infiltrated into groundwater through a river bed or bank(s). Infiltration is typically enhanced by the hydraulic gradient imposed by a nearby pumping water supply or other well(s).

(25) **"BAT"** means a backflow assembly tester.

(26) **"Best available technology"** means the best technology, treatment techniques, or other means that EPA finds, after examination for efficacy under field conditions, are available, taking cost into consideration.

(27) **"Blended sample"** means a sample collected from two or more individual sources at a point downstream of the confluence of the individual sources and prior to the first connection.

(28) **"C"** means the residual disinfectant concentration in mg/L at a point before or at the first consumer.

(29) **"Cartridge filter"** means a pressure-driven separation device that removes particulate matter larger than 1 micrometer using an engineered porous filtration media. They are typically constructed as rigid or semi-rigid, self-supporting filter elements housed in pressure vessels in which flow is from the outside of the cartridge to the inside.

(30) **"Category red operating permit"** means an operating permit identified under chapter 246-294 WAC. Placement in this category results in permit issuance with conditions and a determination that the system is inadequate.

(31) **"CCP"** means composite correction program.

(32) **"CCS"** means a cross-connection control specialist.

(33) **"C.F.R."** means the Code of Federal Regulations.

(34) **"Chemical contaminant treatment facility"** means a treatment facility specifically used for the purpose of removing chemical contaminants.

(35) **"Clarification"** means a treatment process that uses gravity (sedimentation) or dissolved air (flotation) to remove flocculated particles.

(36) **"Clean compliance history"** means a record of:

(a) No *E. coli* MCL violations;

(b) No monitoring violations under WAC 246-290-300(3); and

(c) No coliform treatment technique trigger exceedances or treatment technique violations under WAC 246-290-320(2) or 246-290-415.

(37) **"Closed system"** means any water system or portion of a water system in which water is transferred to a higher pressure zone closed to the atmosphere, such as when no gravity storage is present.

(((~~37~~))) (38) **"Coagulant"** means a chemical used in water treatment to destabilize particulates and accelerate the rate at which they aggregate into larger particles.

(((~~38~~))) (39) **"Coagulation"** means a process using coagulant chemicals and rapid mixing to destabilize colloidal and suspended particles and agglomerate them into flocs.

(((~~39~~))) (40) **"Combination fire protection system"** means a fire sprinkler system that:

(a) Is supplied only by the purveyor's water;

(b) Does not have a fire department pumper connection; and

(c) Is constructed of approved potable water piping and materials that serve both the fire sprinkler system and the consumer's potable water system.

(((~~40~~))) (41) **"Combined distribution system"** means the interconnected distribution system consisting of the distribution systems of wholesale systems and of the consecutive systems that receive finished water.

(((~~41~~))) (42) **"Completely treated water"** means water from a surface water source, or a groundwater source under the direct influence of surface water (GWI) source that receives filtration or disinfection treatment that fully complies with the treatment technique requirements of Part 6 of this chapter as determined by the department.

(((~~42~~))) (43) **"Composite correction program (CCP)"** means a program that consists of two elements - a comprehensive performance evaluation (CPE) and comprehensive technical assistance (CTA).

(((~~43~~))) (44) **"Composite sample"** means a sample in which more than one source is sampled individually by the water system and then composited by a certified laboratory by mixing equal parts of water from each source (up to five different sources) and then analyzed as a single sample.

(((~~44~~))) (45) **"Comprehensive monitoring plan"** means a schedule that describes both the frequency and appropriate locations for sampling of drinking water contaminants as required by state and federal rules.

(((~~45~~))) (46) **"Comprehensive performance evaluation (CPE)"** means a thorough review and analysis of a treatment plant's performance-based capabilities and associated administrative, operation and maintenance practices. It is conducted to identify factors that may be adversely impacting a plant's capability to achieve compliance and emphasizes approaches that can be implemented without significant capital improvements.

The comprehensive performance evaluation must consist of at least the following components:

(a) Assessment of plant performance;

(b) Evaluation of major unit processes;

(c) Identification and prioritization of performance limiting factors;

(d) Assessment of the applicability of comprehensive technical assistance; and

(e) Preparation of a CPE report.

(((~~46~~))) (47) **"Comprehensive technical assistance (CTA)"** means the performance improvement phase that is implemented if the CPE results indicate improved performance potential. The system must identify and systematically address plant-specific factors. The CTA is a combination of using CPE results as a basis for follow-up, implementing process control priority-setting techniques, and maintaining long-term involvement to systematically train staff and administrators.

(((~~47~~))) (48) **"Confirmation"** means to demonstrate the accuracy of results of a sample by analyzing another sample from the same location within a reasonable period of time, generally not to exceed two weeks. Confirmation is when analysis results fall within plus or minus thirty percent of the original sample results.

(((~~48~~))) (49) **"Confluent growth"** means a continuous bacterial growth covering a portion or the entire filtration area of a membrane filter in which bacterial colonies are not discrete.

(((~~49~~))) (50) **"Consecutive system"** means a public water system that receives some or all of its finished water from one or more wholesale systems. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems.

(((~~50~~))) (51) **"Construction completion report"** means a form provided by the department and completed for each specific construction project to document:

(a) Project construction in accordance with this chapter and general standards of engineering practice;

(b) Physical capacity changes; and

(c) Satisfactory test results.

The completed form must be stamped with an engineer's seal, and signed and dated by a professional engineer.

(((~~(51)~~))) (52) **"Consumer"** means any person receiving water from a public water system from either the meter, or the point where the service line connects with the distribution system if no meter is present. For purposes of cross-connection control, "consumer" means the owner or operator of a water system connected to a public water system through a service connection.

(((~~(52)~~))) (53) **"Consumer's water system,"** as used in WAC 246-290-490, means any potable or industrial water system that begins at the point of delivery from the public water system and is located on the consumer's premises. The consumer's water system includes all auxiliary sources of supply, storage, treatment, and distribution facilities, piping, plumbing, and fixtures under the control of the consumer.

(((~~(53)~~))) (54) **"Contaminant"** means a substance present in drinking water that may adversely affect the health of the consumer or the aesthetic qualities of the water.

(((~~(54)~~))) (55) **"Contingency plan"** means that portion of the wellhead protection program section of the water system plan or small water system management program that addresses the replacement of the major well(s) or wellfield in the event of loss due to groundwater contamination.

(((~~(55)~~))) (56) **"Continuous monitoring"** means determining water quality with automatic recording analyzers that operate without interruption twenty-four hours per day.

(((~~(56)~~))) (57) **"Conventional filtration treatment"** means a series of processes including coagulation, flocculation, clarification, and filtration that together result in substantial particulate removal in compliance with Part 6 of this chapter.

(((~~(57)~~))) (58) **"Corrective action plan"** means specific written actions and deadlines developed by the water system or the department that the system must follow as a result of either the identification of significant deficiencies during a sanitary survey or the determination of a fecal indicator-positive sample in source water monitoring.

(((~~(58)~~))) (59) **"Cost-effective"** means the benefits exceed the costs.

(((~~(59)~~))) (60) **"Council"** means the Washington state building code council under WAC 51-04-015(2).

(((~~(60)~~))) (61) **"CPE"** means a comprehensive performance evaluation.

(((~~(61)~~))) (62) **"Critical water supply service area (CWSSA)"** means a geographical area which is characterized by a proliferation of small, inadequate water systems, or by water supply problems which threaten the present or future water quality or reliability of service in a manner that efficient and orderly development may best be achieved through coordinated planning by the water utilities in the area as set forth by the Public Water System Coordination Act, chapter 70.116 RCW and chapter 246-293 WAC.

(((~~(62)~~))) (63) **"Cross-connection"** means any actual or potential physical connection between a public water system or the consumer's water system and any source of nonpotable liquid, solid, or gas that could contaminate the potable water supply by backflow.

(((~~(63)~~))) (64) **"Cross-connection control program"** means the administrative and technical procedures the purveyor implements to protect the public water system from contamination via cross-connections as required in WAC 246-290-490.

(((~~(64)~~))) (65) **"Cross-connection control specialist"** means a person holding a valid CCS certificate issued under chapter 246-292 WAC.

(((~~(65)~~))) (66) **"Cross-connection control summary report"** means the annual report that describes the status of the purveyor's cross-connection control program.

(((~~(66)~~))) (67) **"CT"** or **"CTcalc"** means the product of "residual disinfectant concentration" (C) and the corresponding "disinfectant contact time" (T) i.e., "C" x "T."

(((~~(67)~~))) (68) **"$CT_{99.9}$"** means the CT value required for 99.9 percent (3-log) inactivation of *Giardia lamblia* cysts.

(((~~(68)~~))) (69) **"CTA"** means comprehensive technical assistance.

(((~~(69)~~))) (70) **"CTreq"** means the CT value a system shall provide to achieve a specific percent inactivation of *Giardia lamblia* cysts or other pathogenic organisms of health concern as directed by the department.

(((~~(70)~~))) (71) **"Curtailment"** means short-term, infrequent actions by a purveyor and its consumers to reduce their water use during or in anticipation of a water shortage.

(((~~(71)~~))) (72) **"CWSSA"** means a critical water supply service area.

(((~~(72)~~))) (73) **"DBPs"** means disinfection byproducts.

(((~~(73)~~))) (74) **"DCDA"** means a double check detector assembly.

(((~~(74)~~))) (75) **"DCVA"** means a double check valve assembly.

(((~~(75)~~))) (76) **"Dead storage"** means the volume of stored water not available to all consumers at the minimum design pressure under WAC 246-290-230 (5) and (6).

(((~~(76)~~))) (77) **"Demand forecast"** means an estimate of future water system water supply needs assuming historically normal weather conditions and calculated using numerous parameters, including population, historic water use, local land use plans, water rates and their impacts on consumption, employment, projected water use efficiency savings from implementation of a water use efficiency program, and other appropriate factors.

(((~~(77)~~))) (78) **"Department"** means the Washington state department of health or health officer as identified in a joint plan of ((~~operation~~)) responsibility under WAC 246-290-030(1).

(((~~(78)~~))) (79) **"Design and construction standards"** means department design guidance and other peer reviewed documents generally accepted by the engineering profession as containing fundamental criteria for design and construction of water facility projects. Design and construction standards are comprised of performance and sizing criteria and reference general construction materials and methods.

(((~~(79)~~))) (80) **"Detectable residual disinfectant concentration"** means 0.2 mg/L free chlorine, total chlorine, combined chlorine, or chlorine dioxide.

(81) **"Diatomaceous earth filtration"** means a filtration process for substantial removal of particulates (> 2-log *Giardia lamblia* cysts) in which:

(a) A precoat cake of graded diatomaceous earth filter media is deposited on a support membrane (septum); and

(b) Water is passed through the cake on the septum while additional filter media, known as body feed, is continuously added to the feed water to maintain the permeability of the filter cake.

(((~~(80)~~))) (82) **"Direct filtration"** means a series of processes including coagulation, flocculation, and filtration (but excluding sedimentation) that together result in substantial particulate removal in compliance with Part 6 of this chapter.

(((~~(81)~~))) (83) **"Direct service connection"** means a service hookup to a property that is contiguous to a water distribution main and where additional distribution mains or extensions are not needed to provide service.

(((~~(82)~~))) (84) **"Disinfectant contact time (T in CT)"** means:

(a) When measuring the first or only C, the time in minutes it takes water to move from the point of disinfectant application to a point where the C is measured; and

(b) For subsequent measurements of C, the time in minutes it takes water to move from one C measurement point to the C measurement point for which the particular T is being calculated.

(((~~(83)~~))) (85) **"Disinfection"** means the use of chlorine or other agent or process the department approves for killing or inactivating microbiological organisms, including pathogenic and indicator organisms.

(((~~(84)~~))) (86) **"Disinfection profile"** means a summary of *Giardia lamblia* inactivation through a surface water treatment plant.

(((~~(85)~~))) (87) **"Distribution coliform sample"** means a sample of water collected from a representative location in the distribution system at or after the first service and analyzed for coliform presence in compliance with this chapter.

(((~~(86)~~))) (88) **"Distribution-related projects"** means distribution projects such as storage tanks, booster pump facilities, transmission mains, pipe linings, and tank coating. It does not mean source of supply (including interties) or water quality treatment projects.

(((~~(87)~~))) (89) **"Distribution system"** means all piping components of a public water system that serve to convey water from transmission mains linked to source, storage and treatment facilities to the consumer excluding individual services.

(((~~(88)~~))) (90) **"Domestic or other nondistribution system plumbing problem((~~,~~))"** means contamination of a system having more than one service connection with the contamination limited to the specific service connection from which the sample was taken.

(((~~(89)~~))) (91) **"Dual sample set"** means a set of two samples collected at the same time and same location, with one sample analyzed for TTHM and the other sample analyzed for HAA5. Dual sample sets are collected for the purposes of conducting an IDSE under WAC 246-290-300 (6)(b)(i)(F) and determining compliance with the TTHM and HAA5 MCLs under WAC 246-290-310(4).

(((~~(90)~~))) (92) **"Duplicate (verification) sample"** means a second sample collected at the same time and location as the first sample and used for verification.

(((~~(91)~~))) (93) **"DVGW"** means Deutsche Vereinigung des Gas und Wasserfaches.

(((~~(92)~~))) (94) **"Elected governing board"** means the elected officers with ultimate legal responsibility for operational, technical, managerial, and financial decisions for a public water system.

(((~~(93)~~))) (95) **"Emergency"** means an unforeseen event that causes damage or disrupts normal operations and requires immediate action to protect public health and safety.

(((~~(94)~~))) (96) **"Emergency source"** means any source that ((~~is approved by the department~~)) a purveyor intends to use for emergency purposes only((~~, is~~)) and not used for routine or seasonal water demands((~~, is physically disconnected, and is identified in the purveyor's emergency response plan~~)).

(((~~(95)~~))) (97) **"Engineering design review report"** means a form provided by the department and completed for a specific distribution-related project to document:

(a) Engineering review of a project report and/or construction documents under the submittal exception process in WAC 246-290-125(3); and

(b) Design in accordance with this chapter and general standards of engineering practice.

(c) The completed form must be stamped with engineer's seal, and signed and dated by a professional engineer.

(((~~(96)~~))) (98) **"EPA"** means the U.S. Environmental Protection Agency.

(((~~(97)~~))) (99) **"Equalizing storage"** means the volume of storage needed to supplement supply to consumers when the peak hourly demand exceeds the total source pumping capacity.

(((~~(98)~~))) (100) **"Equivalent residential unit (ERU)"** means a system-specific unit of measure used to express the amount of water consumed by a typical full-time single family residence.

(((~~(99)~~))) (101) **"ERU"** means an equivalent residential unit.

(((~~(100) **"Existing service area"** means a specific area within which direct service or retail service connections to customers of a public water system are currently available.~~

(~~(101)~~))) (102) **"Expanding public water system"** means a public water system ((~~installing additions, extensions, changes, or alterations to their existing source, transmission, storage, or distribution facilities that will enable the system to increase in size its existing service area and/or its~~)) that increases the geographical area where direct service connections are available or increases the approved number of ((~~approved~~)) service connections. ((~~Exceptions:~~

~~(a) A system that connects new approved individual retail or direct service connections onto an existing distribution system within an existing service area; or~~

~~(b) A distribution system extension in an existing service area identified in a current and approved water system plan or project report.~~

(~~(102)~~))) (103) **"Filter profile"** means a graphical representation of individual filter performance in a direct or conventional surface water filtration plant, based on continuous turbidity measurements or total particle counts versus time

for an entire filter run, from startup to backwash inclusively, that includes an assessment of filter performance while another filter is being backwashed.

(((~~103~~))) (104) **"Filtration"** means a process for removal of particulate matter from water by passage through porous media.

(((~~104~~))) (105) **"Financial viability"** means the capability of a water system to obtain sufficient funds to construct, operate, maintain, and manage a public water system, on a continuing basis, in full compliance with federal, state, and local requirements.

(((~~105~~))) (106) **"Finished water"** means water introduced into a public water system's distribution system and is intended for distribution and consumption without further treatment, except as treatment necessary to maintain water quality in the distribution system (e.g., booster disinfection, addition of corrosion control chemicals).

(((~~106~~))) (107) **"Finished water storage facility"** means a water storage structure that is integrated with a water system's distribution network to provide for variable system demands including, but not limited to, daily equalizing storage, standby storage, or fire reserves, or to provide for disinfectant contact time.

(((~~107~~))) (108) **"Fire flow"** means the maximum rate and duration of water flow needed to suppress a fire under WAC 246-293-640 or as required under local fire protection authority standards.

(((~~108~~))) (109) **"Fire suppression storage"** means the volume of stored water available during fire suppression activities to satisfy minimum pressure requirements per WAC 246-290-230.

(((~~109~~))) (110) **"First consumer"** means the first service connection associated with any source (i.e., the point where water is first withdrawn for human consumption, excluding connections where water is delivered to another water system covered by these regulations).

(((~~110~~))) (111) **"Flocculation"** means a process enhancing agglomeration and collection of colloidal and suspended particles into larger, more easily settleable or filterable particles by gentle stirring.

(((~~111~~))) (112) **"Flowing stream"** means a course of running water flowing in a definite channel.

(((~~112~~))) (113) **"Flow-through fire protection system"** means a fire sprinkler system that:

(a) Is supplied only by the purveyor's water;

(b) Does not have a fire department pumper connection;

(c) Is constructed of approved potable water piping and materials to which sprinkler heads are attached; and

(d) Terminates at a connection to a toilet or other plumbing fixture to prevent stagnant water.

(((~~113~~))) (114) **"Forecasted demand characteristics"** means the factors that may affect a public water system's projected water needs.

(((~~114~~))) (115) **"Future service area"** means a specific area a ((~~public~~)) water system in a CWSSA plans to provide water service((~~. This is~~)) as determined by a written agreement between purveyors under ((~~WAC 246-293-250 or by the purveyor's elected governing board or governing body if not required under WAC 246-293-250~~)) chapter 70.116 RCW and chapter 246-293 WAC.

(((~~115~~))) (116) **"GAC"** means granular activated carbon.

(((~~116~~))) (117) **"GAC10"** means granular activated carbon filter beds with an empty-bed contact time of ten minutes based on average daily flow and a carbon reactivation frequency of every one hundred eighty days, except that the reactivation frequency for GAC10 used as a best available technology for compliance with MCLs under WAC 246-290-310(4) shall be one hundred twenty days.

(((~~117~~))) (118) **"GAC20"** means granular activated carbon filter beds with an empty-bed contact time of twenty minutes based on average daily flow and a carbon reactivation frequency of every two hundred forty days.

(((~~118~~))) (119) **"Governing body"** means the individual or group of individuals with ultimate legal responsibility for operational, technical, managerial, and financial decisions for a public water system.

(((~~119~~))) (120) **"gph"** means gallons per hour.

(((~~120~~))) (121) **"gpm"** means gallons per minute.

(((~~121~~))) (122) **"Grab sample"** means a water quality sample collected at a specific instant in time and analyzed as an individual sample.

(((~~122~~))) (123) **"Groundwater system"** means all public water systems that use groundwater including:

(a) Consecutive systems receiving finished groundwater; or

(b) Surface water systems with groundwater sources except those systems that combine all sources prior to treatment.

(((~~123~~))) (124) **"Groundwater under the direct influence of surface water (GWI)"** means any water beneath the surface of the ground that the department determines has the following characteristics:

(a) Significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as *Giardia lamblia* or, *Cryptosporidium*; or

(b) Significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH closely correlating to climatological or surface water conditions where natural conditions cannot prevent the introduction of surface water pathogens into the source at the system's point of withdrawal.

(((~~124~~))) (125) **"Guideline"** means a department document assisting the purveyor in meeting a rule requirement.

(((~~125~~))) (126) **"GWI"** means groundwater under the direct influence of surface water.

(((~~126~~))) (127) **"GWR"** means groundwater rule.

(((~~127~~))) (128) **"HAA5"** means haloacetic acids (five).

(((~~128~~))) (129) **"Health officer"** means the health officer of the city, county, city-county health department or district, or an authorized representative.

(((~~129~~))) (130) **"Heterotrophic Plate Count (HPC)"** means a procedure to measure a class of bacteria that use organic nutrients for growth. The density of these bacteria in drinking water is measured as colony forming units per milliliter and is referred to as the HPC.

(((~~130~~))) (131) **"High health cross-connection hazard"** means a cross-connection involving any substance that could impair the quality of potable water and create an actual

public health hazard through injury, poisoning, or spread of disease.

(((~~131~~))) (132) **"HPC"** means heterotrophic plate count.

(((~~132~~))) (133) **"Human consumption"** means the use of water for drinking, bathing or showering, hand washing, food preparation, cooking, or oral hygiene.

(((~~133~~))) (134) **"Hydraulic analysis"** means the study of a water system's distribution main and storage network to determine present or future adequacy for provision of service to consumers within the established design parameters for the system under peak flow conditions, including fire flow. The analysis is used to establish any need for improvements to existing systems or to substantiate adequacy of design for distribution system components such as piping, elevated storage, booster stations or similar facilities used to pump and convey water to consumers.

(((~~134~~))) (135) **"IAPMO"** means the International Association of Plumbing and Mechanical Officials.

(((~~135~~))) (136) **"IDSE"** means an initial distribution system evaluation.

(((~~136~~))) (137) **"Inactivation"** means a process which renders pathogenic microorganisms incapable of producing disease.

(((~~137~~))) (138) **"Inactivation ratio"** means the ratio obtained by dividing CTcalc by CTreq.

(((~~138~~))) (139) **"Incompletely treated water"** means water from a surface or GWI source that receives filtration and/or disinfection treatment that does not fully comply with the treatment technique requirements of Part 6 of this chapter as determined by the department.

(((~~139~~))) (140) **"In-line filtration"** means a series of processes, including coagulation and filtration (but excluding flocculation and sedimentation) that together result in particulate removal.

(((~~140~~))) (141) **"In-premises protection"** means a method of protecting the health of consumers served by the consumer's potable water system, located within the property lines of the consumer's premises by the installation of an approved air gap or backflow prevention assembly at the point of hazard, which is generally a plumbing fixture.

(((~~141~~))) (142) **"Intertie"** means an interconnection between public water systems permitting the exchange or delivery of water between those systems.

(((~~142~~))) (143) **"kPa"** means kilo pascal (SI units of pressure).

(((~~143~~))) (144) **"Lake or reservoir"** means a natural or man-made basin or hollow on the earth's surface in which water collects or is stored that may or may not have a current or single direction of flow.

(((~~144~~))) (145) **"Legionella"** means a genus of bacteria containing species which cause a type of pneumonia called Legionnaires' Disease.

(((~~145~~))) (146) **"Level 1 assessment"** means an evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and when possible, the likely reason that the system triggered the assessment. The assessment is conducted by the system operator or the purveyor.

(147) **"Level 2 assessment"** means an evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and when possible, the likely reason that the system triggered the assessment. A level 2 assessment is a more detailed examination of the system (including the system's monitoring and operational practices) than is a level 1 assessment through the use of a more comprehensive investigation and review of available information, additional internal and external resources, and other relevant practices. The level 2 assessment is conducted by a party approved by the department.

(148) **"Limited alternative to filtration"** means a process that ensures greater removal and/or inactivation efficiencies of pathogenic organisms than would be achieved by the combination of filtration and chlorine disinfection.

(((~~146~~))) (149) **"Local plans and regulations"** means any comprehensive plan or development regulation adopted under chapter 36.70A RCW or any other applicable comprehensive plan, land use plan, or development regulation adopted by a city, town, or county for the applicable service area.

(((~~147~~))) (150) **"Locational running annual average (LRAA)"** means the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

(((~~148~~))) (151) **"Low cross-connection hazard"** means a cross-connection that could impair the quality of potable water to a degree that does not create a hazard to the public health, but does adversely and unreasonably affect the aesthetic qualities of potable waters for domestic use.

(((~~149~~))) (152) **"LRAA"** means the locational running annual average.

(((~~150~~))) (153) **"Major project"** means all construction projects subject to the State Environmental Policy Act (SEPA) under chapter 43.21C RCW, and meeting the requirements of WAC 246-03-030 (3)(a) ((~~and include all surface water source development, all water system storage facilities greater than one-half million gallons, new transmission lines longer than one thousand feet and larger than eight inches in diameter located in new rights of way and major extensions to existing water distribution systems involving use of pipes greater than eight inches in diameter, that are designed to increase the existing service area by more than one square mile~~)).

(((~~151~~))) (154) **"Mandatory curtailment"** means curtailment required by a public water system of specified water uses and consumer classes for a specified period of time.

(((~~152~~))) (155) **"Marginal costs"** means the costs incurred by producing the next increment of supply.

(((~~153~~))) (156) **"Maximum contaminant level (MCL)"** means the maximum permissible level of a contaminant in water the purveyor delivers to any public water system user, measured at the locations identified under WAC ((~~246-290-300~~)) 246-290-310, Table ((~~3~~)) 5.

(((~~154~~))) (157) **"Maximum contaminant level violation"** means a confirmed measurement above the MCL and for a duration of time, where applicable, as outlined under WAC 246-290-310.

(((~~155~~))) (158) **"Maximum day demand (MDD)"** means the highest actual or estimated quantity of water that is, or is expected to be, used over a twenty-four hour period,

excluding unusual events or emergencies. MDD is typically expressed as gallons per day per ERU (gpd/ERU).

(((~~156~~))) (159) **"MCL"** means the maximum contaminant level.

(((~~157~~))) (160) **"MDD"** means the maximum day demand.

(((~~158~~))) (161) **"Membrane filtration"** means a pressure or vacuum driven separation process in which particulate matter larger than 1 micrometer is rejected by an engineered barrier, primarily through a size-exclusion mechanism, and which has a measurable removal efficiency of a target organism that can be verified through the application of a direct integrity test. This definition includes the common membrane technologies of microfiltration, ultrafiltration, nanofiltration, and reverse osmosis.

(((~~159~~))) (162) **"mg/L"** means milligrams per liter (1 mg/L = 1 ppm).

(((~~160~~))) (163) **"mL"** means a milliliter.

(((~~161~~))) (164) **"mm"** means a millimeter.

(((~~162~~))) (165) **"Monitoring waiver"** means an action taken by the department under WAC 246-290-300 (4)(g) or (((~~8~~))) (7)(f) to allow a water system to reduce specific monitoring requirements based on a determination of low source vulnerability to contamination.

(((~~163~~))) (166) **"MRDL"** means the maximum residual disinfectant level.

(((~~164~~))) (167) **"MRDLG"** means the maximum residual disinfectant level goal.

(((~~165~~))) (168) **"MTTP"** means maximum total trihalomethane potential.

(((~~166~~))) (169) **"Municipal water supplier"** means an entity that supplies water for municipal water supply purposes.

(((~~167~~))) (170) **"Municipal water supply purposes"** means a beneficial use of water:

(a) For residential purposes through fifteen or more residential service connections or for providing residential use of water for a nonresidential population that is, on average, at least twenty-five people for at least sixty days a year;

(b) For governmental or governmental proprietary purposes by a city, town, public utility((~~,~~)) district, county, sewer district, or water district; or

(c) Indirectly for the purposes in (a) or (b) of this definition through the delivery of treated or raw water to a public water system for such use.

(i) If water is beneficially used under a water right for the purposes listed in (a), (b), or (c) of this definition, any other beneficial use of water under the right generally associated with the use of water within a municipality is also for "municipal water supply purposes," including, but not limited to, beneficial use for commercial, industrial, irrigation of parks and open spaces, institutional, landscaping, fire flow, water system maintenance and repair, or related purposes.

(ii) If a governmental entity holds a water right that is for the purposes listed in (a), (b), or (c) of this definition, its use of water or its delivery of water for any other beneficial use generally associated with the use of water within a municipality is also for "municipal water supply purposes," including, but not limited to, beneficial use for commercial, industrial, irrigation of parks and open spaces, institutional, landscaping, fire flow, water system maintenance and repair, or related purposes.

(((~~168~~))) (171) **"Nested storage"** means one component of storage is contained within the component of another.

(((~~169~~))) (172) **"Nonacute"** means posing a possible or less than immediate risk to human health.

(((~~170~~))) (173) **"Nonresident"** means a person having access to drinking water from a public water system((~~, but~~)) who lives elsewhere. Examples include travelers, transients, employees, students, etc.

(((~~171~~))) (174) **"Normal operating conditions"** means those conditions associated with the designed, day-to-day provision of potable drinking water that meets regulatory water quality standards and the routine service expectations of the system's consumers at all times, including meeting fire flow demands. Operation under conditions such as power outages, floods, or unscheduled transmission or distribution disruptions, even if considered in the system design, are considered abnormal.

(((~~172~~))) (175) **"NSF"** means NSF International (formerly known as the National Sanitation Foundation (NSF)).

(((~~173~~))) (176) **"NTNC"** means nontransient noncommunity.

(((~~174~~))) (177) **"NTU"** means a nephelometric turbidity unit.

(((~~175~~))) (178) **"ONORM"** means Osterreichisches Normungsinstitut.

(((~~176~~))) (179) **"Operational storage"** means the volume of distribution storage associated with source or booster pump normal cycling times under normal operating conditions and is additive to the equalizing and standby storage components, and to fire flow storage if this storage component exists for any given tank.

(((~~177~~))) (180) **"PAA"** means a project approval application.

(((~~178~~))) (181) **"pCi/L"** means picocuries per liter.

(((~~179~~))) (182) **"Peak hourly demand (PHD)"** means the maximum rate of water use, excluding fire flow, that can be expected to occur within a defined service area over a continuous sixty minute time period. PHD is typically expressed in gallons per minute (gpm).

(((~~180~~))) (183) **"Peak hourly flow"** means, for the purpose of CT calculations, the greatest volume of water passing through the system during any one hour in a day.

(((~~181~~))) (184) **"Performance criteria"** means the level at which a system shall operate in order to maintain system reliability compliance, in accordance with WAC 246-290-420, and to meet consumers' reasonable expectations.

(((~~182~~))) (185) **"Permanent residence"** means any dwelling that is, or could reasonably be expected to be, occupied on a continuous basis.

(((~~183~~))) (186) **"Permanent source"** means a public water system supply source that is used regularly each year, and based on expected operational requirements of the system, will be used more than three consecutive months in any twelve-month period. For seasonal water systems that are in operation for less than three consecutive months per year, their sources shall also be considered to be permanent.

(((~~184~~))) (187) **"PHD"** means peak hourly demand.

(((~~185~~))) (188) **"Plant intake"** means the works or structures at the head of a conduit through which water is diverted from a source (e.g., river or lake) into the treatment plant.

(((~~186~~))) (189) **"Point of disinfectant application"** means the point where the disinfectant is added, and where water downstream of that point is not subject to contamination by untreated surface water.

(((~~187~~))) (190) **"Population served"** means the number of persons, resident and nonresident, having immediate access to drinking water from a public water system, whether or not persons have actually consumed water from that system. The number of nonresidents shall be the average number of persons having immediate access to drinking water on days access was provided during that month. In the absence of specific population data, the number of residents shall be computed by multiplying the number of active services by two and one-half.

(((~~188~~))) (191) **"Potable"** means water suitable for drinking by the public.

(((~~189~~))) (192) **"Potential GWI"** means a source identified by the department as possibly under the influence of surface water, and includes, but is not limited to, all wells with a screened interval fifty feet or less from the ground surface at the wellhead and located within two hundred feet of a surface water, and all Ranney wells, infiltration galleries, and springs.

(((~~190~~))) (193) **"ppm"** means parts per million (1 ppm = 1 mg/L).

(((~~191~~))) (194) **"Premises isolation"** means a method of protecting a public water system by installation of approved air gaps or approved backflow prevention assemblies at or near the service connection or alternative location acceptable to the purveyor to isolate the consumer's water system from the purveyor's distribution system.

(((~~192~~))) (195) **"Presedimentation"** means a preliminary treatment process used to remove gravel, sand, and other particulate material from the source water through settling before the water enters the primary clarification and filtration processes in a treatment plant.

(((~~193~~))) (196) **"Pressure filter"** means an enclosed vessel containing properly sized and graded granular media through which water is forced under greater than atmospheric pressure.

(((~~194~~))) (197) **"Primary disinfection"** means a treatment process for achieving inactivation of *Giardia lamblia* cysts, viruses, or other pathogenic organisms of public health concern to comply with the treatment technique requirements of Part 6 of this chapter.

(((~~195~~))) (198) **"Primary standards"** means standards based on chronic, nonacute, or acute human health effects.

(((~~196~~))) (199) **"Primary turbidity standard"** means an accurately prepared formazin solution or commercially prepared polymer solution of known turbidity (prepared in accordance with "standard methods") that is used to calibrate bench model and continuous turbidimeters (instruments used to measure turbidity).

(((~~197~~))) (200) **"Project approval application (PAA)"** means a department form documenting ownership of water system, design engineer for the project, and type of project.

(((~~198~~))) (201) **"Protected groundwater source"** means a groundwater source the purveyor shows to the department's satisfaction as protected from potential sources of contamination on the basis of hydrogeologic data and/or satisfactory water quality history.

(((~~199~~))) (202) **"psi"** means pounds per square inch.

(((~~200~~))) (203) **"Public forum"** means a meeting open to the general public that allows for their participation.

(((~~201~~))) (204) **"Public water system"** is defined and referenced under WAC 246-290-020.

(((~~202~~))) (205) **"Purchased source"** means water a purveyor purchases from a public water system not under the control of the purveyor for distribution to the purveyor's consumers.

(((~~203~~))) (206) **"Purveyor"** means an agency, subdivision of the state, municipal corporation, firm, company, mutual or cooperative association, institution, partnership, or person or other entity owning or operating a public water system. Purveyor also means the authorized agents of these entities.

(((~~204~~))) (207) **"PVBA"** means a pressure vacuum breaker assembly.

(((~~205~~))) (208) **"RAA"** means the running annual average.

(((~~206~~))) (209) **"Reclaimed water"** means effluent derived in any part from sewage from a wastewater treatment system that has been adequately and reliably treated, so that as a result of that treatment, it is suitable for beneficial use or a controlled use that would not otherwise occur, and it is no longer considered wastewater.

(((~~207~~))) (210) **"Record drawings"** means the drawings bearing the seal and signature of a professional engineer that reflect the modifications made to construction documents, documenting actual constructed conditions of the water system facilities.

(((~~208~~))) (211) **"Recreational tract"** means an area that is clearly defined for each occupant, but has no permanent structures with internal plumbing, and the area has been declared in the covenants or on the recorded plat in order to be eligible for reduced design considerations.

(((~~209~~))) (212) **"Regional public water supplier"** means a water system that provides drinking water to one, or more, other public water systems.

(((~~210~~))) (213) **"Regularly"** means four hours or more per day for four days or more per week.

(((~~211~~))) (214) **"Removal credit"** means the level (expressed as a percent or log) of *Giardia* and virus removal the department grants a system's filtration process.

(((~~212~~))) (215) **"Repeat sample"** means a sample collected to confirm the results of a previous analysis.

(((~~213~~))) (216) **"Resident"** means an individual living in a dwelling unit served by a public water system.

(((~~214~~))) (217) **"Residual disinfectant concentration"** means the analytical level of a disinfectant, measured in milligrams per liter, that remains in water following the application (dosing) of the disinfectant after some period of contact time.

(((~~215~~))) (218) **"Retail service area"** means the specific area defined by the municipal water supplier where the municipal water supplier has a duty to provide service to all

new service connections((~~. This area must include the municipal water supplier's existing service area and may also include areas where future water service is planned if the requirements of RCW 43.20.260 are met~~)) as set forth in RCW 43.20.260.

(((~~216~~))) (219) **"RPBA"** means reduced pressure backflow assembly.

(((~~217~~))) (220) **"RPDA"** means reduced pressure detector assembly.

(((~~218~~))) (221) **"SAL"** means state advisory level.

(((~~219~~))) (222) **"Same farm"** means a parcel of land or series of parcels that are connected by covenants and devoted to the production of livestock or agricultural commodities for commercial purposes and does not qualify as a **Group A** public water system.

(((~~220~~))) (223) **"Sanitary defect"** means a defect that could provide a pathway of entry for microbial contamination into the distribution system or that is indicative of a failure or imminent failure in a barrier that is already in place.

(224) **"Sanitary survey"** means a review, inspection, and assessment of a public water system, by the department or department designee, to determine the adequacy of the system and its operation for producing and distributing safe and reliable drinking water. Each survey includes, but is not limited to, an evaluation of the following components:

(a) Source;

(b) Treatment;

(c) Distribution system;

(d) Finished water storage;

(e) Pump, pump facilities, and controls;

(f) Monitoring, reporting, and data verification;

(g) System management and operation; and

(h) Operator compliance.

(((~~221~~))) (225) **"Satellite system management agency (SMA)"** means a person or entity that is approved by the department to own or operate public water systems on a regional or county-wide basis without the necessity for a physical connection between the systems.

(((~~222~~))) (226) **"SCA"** means a sanitary control area.

(((~~223~~))) (227) **"SDWA"** means the Safe Drinking Water Act.

(((~~224~~))) (228) **"Seasonal source"** means a public water system source used on a regular basis, that is not a permanent or emergency source.

(((~~225~~))) (229) **"Seasonal system"** means a noncommunity water system defined and referenced under WAC 246-290-020 that is not operated as a public water system on a year-round basis and starts up and shuts down at the beginning and end of each operating season.

(230) **"Secondary standards"** means standards based on factors other than health effects.

(((~~226~~))) (231) **"SEPA"** means the State Environmental Policy Act.

(((~~227~~))) (232) **"Service area"** means the specific area ((~~or areas~~)) a water system currently serves ((~~or plans to provide~~)) and areas where future water service((~~. This may be comprised of the existing service area, retail service area, future service area, and~~)) is planned. A wholesale system may include areas where it provides wholesale water ((~~is provided~~)) to other public water systems in its service area. A water system in a CWSSA includes its future service area in its service area as "future service area" as defined under chapters 70.116 RCW and 246-293 WAC.

(((~~228~~))) (233) **"Service connection"** means a connection to a public water system designed to provide potable water to a single family residence, or other residential or nonresidential population. When the connection provides water to a residential population without clearly defined single family residences, the following formulas shall be used in determining the number of services to be included as residential connections on the WFI form:

(a) Divide the average population served each day by two and one-half; or

(b) Using actual water use data, calculate the total ERUs represented by the service connection in accordance with department design guidance.

(c) In no case shall the calculated number of services be less than one.

(((~~229~~))) (234) **"Severe health cross-connection hazard"** means a cross-connection which could impair the quality of potable water and create an immediate, severe public health hazard through poisoning or spread of disease by contaminants from radioactive material processing plants, nuclear reactors, or wastewater treatment plants.

(((~~230~~))) (235) **"Simple disinfection"** means any form of disinfection that requires minimal operational control in order to maintain the disinfection at proper functional levels, and that does not pose safety concerns that would require special care, equipment, or expertise. Examples include hypochlorination, UV-light, contactor chlorination, or any other form of disinfection practice that is safe to use and easy to routinely operate and maintain.

(((~~231~~))) (236) **"Slow sand filtration"** means a process involving passage of source water through a bed of sand at low velocity (generally less than 0.10 gpm/ft^2) that results in substantial particulate removal (> 2-log *Giardia lamblia* cysts) by physical and biological mechanisms.

(((~~232~~))) (237) **"SMA"** means a satellite system management agency.

(((~~233~~))) (238) **"SOC"** means a synthetic organic chemical.

(((~~234~~))) (239) **"Societal perspective"** means:

A point of view that includes a broad spectrum of public benefits((~~,~~)) including, but not limited to:

(a) Enhanced system reliability;

(b) Savings that result from delaying, deferring, or minimizing capital costs; and

(c) Environmental benefits such as increased water in streams, improvements in aquifer recharge and other environmental factors.

(((~~235~~))) (240) **"Source meter"** means a meter that measures total output of a water source over specific time periods.

(((~~236~~))) (241) **"Source water"** means untreated water that is not subject to recontamination by surface runoff and:

(a) For unfiltered systems, enters the system immediately before the first point of disinfectant application; and

(b) For filtered systems, enters immediately before the first treatment unit of a water treatment facility.

(((~~237~~))) (242) **"SPI"** means a special purpose investigation.

(((~~238~~))) (243) **"Special purpose investigation (SPI)"** means on-site inspection of a public water system by the department or designee to address a potential public health concern, regulatory violation, or consumer complaint.

(((~~239~~))) (244) **"Special purpose sample"** means a sample collected for reasons other than the monitoring compliance specified in this chapter.

(((~~240~~))) (245) **"Spring"** means a source of water where an aquifer comes in contact with the ground surface.

(((~~241~~))) (246) **"SRF"** means the state revolving fund.

(((~~242~~))) (247) **"SSNC"** means state significant noncomplier.

(((~~243~~))) (248) **"Standard methods"** means the book, titled *Standard Methods for the Examination of Water and Waste Water,* jointly published by the American Public Health Association, American Water Works Association (AWWA), and Water Pollution Control Federation. This book is available through public libraries or may be ordered from AWWA, 6666 West Quincy Avenue, Denver, Colorado 80235. The edition to be used is that specified by EPA for the relevant drinking water parameter in 40 C.F.R. Part 141.

(((~~244~~))) (249) **"Standby storage"** means the volume of stored water available for use during a loss of source capacity, power, or similar short-term emergency.

(((~~245~~))) (250) **"State advisory level (SAL)"** means a level established by the department and state board of health for a contaminant without an existing MCL. The SAL represents a level that when exceeded, indicates the need for further assessment to determine if the chemical is an actual or potential threat to human health.

(((~~246~~))) (251) **"State board of health"** and **"board"** means the board created by RCW 43.20.030.

(((~~247~~))) (252) **"State building code"** means the codes adopted by and referenced in chapter 19.27 RCW; the state energy code; and any other codes so designated by the Washington state legislature as adopted and amended by the council.

(((~~248~~))) (253) **"State revolving fund (SRF)"** means the revolving loan program financed by the state and federal governments and managed by the state for the purpose of assisting water systems to meet their capital needs associated with complying with the federal Safe Drinking Water Act under chapter 246-296 WAC.

(((~~249~~))) (254) **"State significant noncomplier (SSNC)"** means a system that is violating or has violated department rules, and the violations may create, or have created an imminent or a significant risk to human health.

The violations include, but are not limited to:

(a) Repeated violations of monitoring requirements;

(b) Failure to address an exceedance of permissible levels of regulated contaminants;

(c) Failure to comply with treatment technique standards or requirements;

(d) Failure to comply with waterworks operator certification requirements; or

(e) Failure to submit to a sanitary survey.

(((~~250~~))) (255) **"Subpart H System"** see definition for **"surface water system."**

(((~~251~~))) (256) **"Surface water"** means a body of water open to the atmosphere and subject to surface runoff.

(((~~252~~))) (257) **"Surface water system"** means a public water system that uses in whole, or in part, source water from a surface supply, or GWI supply. This includes systems that operate surface water treatment facilities, and systems that purchase "completely treated water" (((~~(as defined in this subsection)~~))). A "surface water system" is also referred to as a "Subpart H System" in some federal regulatory language adopted by reference and the two terms are considered equivalent for the purposes of this chapter.

(((~~253~~))) (258) **"Susceptibility assessment"** means the completed Susceptibility Assessment Survey Form developed by the department to evaluate the hydrologic setting of the water source and assess its contribution to the source's overall susceptibility to contamination from surface activities.

(((~~254~~))) (259) **"SUVA"** means specific ultraviolet absorption.

(((~~255~~))) (260) **"SVBA"** means spill resistant vacuum breaker assembly.

(((~~256~~))) (261) **"SWTR"** means the surface water treatment rule.

(((~~257~~))) (262) **"Synthetic organic chemical (SOC)"** means a manufactured carbon-based chemical.

(((~~258~~))) (263) **"System capacity"** means the system's operational, technical, managerial, and financial capability to achieve and maintain compliance with all relevant local, state, and federal plans and regulations.

(((~~259~~))) (264) **"System physical capacity"** means the maximum number of service connections or equivalent residential units (ERUs) that the system can serve when considering the limitation of each system component such as source, treatment, storage, transmission, or distribution, individually and in combination with each other.

(((~~260~~))) (265) **"T"** means disinfectant contact time in minutes.

(((~~261~~))) (266) **"Time-of-travel"** means the time required for groundwater to move through the water bearing zone from a specific point to a well.

(((~~262~~))) (267) **"TNC"** means transient noncommunity.

(((~~263~~))) (268) **"TNTC"** means too numerous to count.

(((~~264~~))) (269) **"TOC"** means total organic carbon.

(((~~265~~))) (270) **"Too numerous to count (TNTC)"** means the total number of bacterial colonies exceeds 200 on a 47-mm diameter membrane filter used for coliform detection.

(((~~266~~))) (271) **"Tracer study"** means a field study conducted to determine the disinfectant contact time, T, provided by a water system component, such as a clearwell or storage reservoir, used for *Giardia lamblia* cyst and virus inactivation. The study involves introducing a tracer chemical at the inlet of the contact basin and measuring the resulting outlet tracer concentration as a function of time.

(((~~267~~))) (272) **"Transmission line"** means pipes used to convey water from source, storage, or treatment facilities to points of distribution or distribution mains, and from source facilities to treatment or storage facilities. This also can include transmission mains connecting one section of distribution system to another section of distribution system

as long as this transmission main is clearly defined on the plans and no service connections are allowed along the transmission main.

(((~~268~~))) (273) **"Treatment technique requirement"** means a department-established requirement for a public water system to provide treatment, such as filtration or disinfection, as defined by specific design, operating, and monitoring requirements. A "treatment technique requirement" is established in lieu of a primary MCL when monitoring for the contaminant is not economically or technologically feasible.

(((~~269~~))) (274) **"Triggered source water monitoring"** means collection of groundwater source samples as a result of a total coliform-positive routine sample in the distribution system under WAC 246-290-300(3).

(((~~270~~))) (275) **"Trihalomethane (THM)"** means one of a family of organic compounds, named as derivatives of methane, where three of the four hydrogen atoms in methane are each substituted by a halogen atom in the molecular structure. THMs may occur when chlorine, a halogen, is added to water containing organic material and are generally found in water samples as disinfection byproducts.

(((~~271~~))) (276) **"TTHM"** means total trihalomethane.

(((~~272~~))) (277) **"Turbidity event"** means a single day or series of consecutive days, not to exceed fourteen, when one or more turbidity measurement each day exceeds 5 NTU.

(((~~273~~))) (278) **"Two-stage lime softening"** means a process in which chemical addition and hardness precipitation occur in each of two distinct unit clarification processes in series prior to filtration.

(((~~274~~))) (279) **"T10"** means the time it takes ten percent of the water passing through a system contact tank intended for use in the inactivation of *Giardia lamblia* cysts, viruses, and other microorganisms of public health concern, as determined from a tracer study conducted at peak hourly flow or from published engineering reports or guidance documents for similarly configured tanks.

(((~~275~~))) (280) **"ug/L"** means micrograms per liter.

(((~~276~~))) (281) **"UL"** means the Underwriters Laboratories, Inc.

(((~~277~~))) (282) **"umhos/cm"** means micromhos per centimeter.

(((~~278~~))) (283) **"Unapproved auxiliary water supply"** means a water supply (other than the purveyor's water supply) on or available to the consumer's premises that is either not approved for human consumption by the health agency having jurisdiction or is not otherwise acceptable to the purveyor.

(((~~279~~))) (284) **"Uncovered finished water storage facility"** means a tank, reservoir, or other facility used to store water, which will undergo no further treatment to reduce microbial pathogens except residual disinfection and is directly open to the atmosphere without a suitable watertight roof or cover.

(((~~280~~))) (285) **"Uniform Plumbing Code (UPC)"** means the code adopted under RCW 19.27.031(4) and implemented under chapter 51-56 WAC. This code establishes statewide minimum plumbing standards applicable within the property lines of the consumer's premises.

(((~~281~~))) (286) **"UPC"** means the Uniform Plumbing Code.

(((~~282~~))) (287) **"Used water"** means water which has left the control of the purveyor.

(((~~283~~))) (288) **"UTC"** means the utilities and transportation commission.

(((~~284~~))) (289) **"Verification"** means to demonstrate the results of a sample to be precise by analyzing a duplicate sample. Verification occurs when analysis results fall within plus or minus thirty percent of the original sample.

(((~~285~~))) (290) **"Virus"** means a virus of fecal origin which is infectious to humans and transmitted through water.

(((~~286~~))) (291) **"VOC"** means a volatile organic chemical.

(((~~287~~))) (292) **"Volatile organic chemical (VOC)"** means a manufactured carbon-based chemical that vaporizes quickly at standard pressure and temperature.

(((~~288~~))) (293) **"Voluntary curtailment"** means a curtailment of water use requested, but not required of consumers.

(((~~289~~))) (294) **"WAC"** means the Washington Administrative Code.

(((~~290~~))) (295) **"Waterborne disease outbreak"** means the significant occurrence of acute infectious illness, epidemiologically associated with drinking water from a public water system, as determined by the appropriate local health agency or the department.

(((~~291~~))) (296) **"Water demand efficiency"** means minimizing water use by the public water system's consumers through purveyor sponsored activities that may include, but are not limited to, distributing water saving devices, providing rebates or incentives to promote water efficient technologies or by providing water audits to homes, businesses, or landscapes.

(((~~292~~))) (297) **"Water facilities inventory (WFI) form"** means the department form summarizing each public water system's characteristics.

(((~~293~~))) (298) **"Water right"** means a certificated water right, water right permit, valid claim, or other authorization, on record with or accepted by the department of ecology, authorizing the beneficial use of water in accordance with all applicable state laws.

(((~~294~~))) (299) **"Water right self-assessment"** means an evaluation of the legal ability of a water system to use water for existing or proposed usages in conformance with state water right laws. The assessment may be done by a water system, a purveyor, the department of ecology, or any combination thereof.

(((~~295~~))) (300) **"Watershed"** means the region or area that:

(a) Ultimately drains into a surface water source diverted for drinking water supply; and

(b) Affects the physical, chemical, microbiological, and radiological quality of the source.

(((~~296~~))) (301) **"Water shortage"** means a situation during which the water supplies of a system cannot meet normal water demands for the system, including peak periods.

(((~~297~~))) (302) **"Water shortage response plan"** means a plan outlining policies and activities to be implemented to reduce water use on a short-term basis during or in anticipation of a water shortage.

(((~~298~~))) (303) **"Water supply characteristics"** means the factors related to a public water system's source of water supply that may affect its availability and suitability to provide for both short-term and long-term needs.

Factors include, but are not limited to:

(a) Source location;

(b) Name of any body of water and water resource inventory area from which water is diverted or withdrawn;

(c) Production capacity;

(d) The source's natural variability;

(e) The system's water rights for the source;

(f) Other legal demands on the source such as water rights for other uses;

(g) Conditions established to protect species listed under the Endangered Species Act in 50 C.F.R. 17.11;

(h) Instream flow restrictions established under Title 173 WAC; and

(i) Any conditions established by watershed plans approved under chapter 90.82 RCW and RCW 90.54.040(1) or salmon recovery plans under chapter 77.85 RCW.

(((~~299~~))) (304) **"Water supply efficiency"** means increasing a public water system's transmission, storage and delivery potential through activities that may include, but are not limited to:

(a) System-wide water audits;

(b) Documenting authorized uses;

(c) Conducting leak surveys; and

(d) Repairs on:

(i) Meters;

(ii) Lines;

(iii) Storage facilities; and

(iv) Valves.

(((~~300~~))) (305) **"Water use efficiency (WUE)"** means increasing water supply efficiency and water demand efficiency to minimize water withdrawals and water use.

(((~~301~~))) (306) **"Water use efficiency program"** means policies and activities focusing on increasing water supply efficiency and water demand efficiency to minimize water withdrawals and water use.

(((~~302~~))) (307) **"Well field"** means a group of wells one purveyor owns or controls that:

(a) Draw from the same aquifer or aquifers as determined by comparable inorganic chemical analysis and comparable static water level and top of the open interval elevations; and

(b) Discharge water through a common pipe and the common pipe shall allow for collection of a single sample before the first distribution system connection.

(((~~303~~))) (308) **"Wellhead protection area (WHPA)"** means the portion of a well's, wellfield's or spring's zone of contribution defined using WHPA criteria established by the department.

(((~~304~~))) (309) **"WFI"** means a water facilities inventory form.

(((~~305~~))) (310) **"Wholesale system"** means a public water system that treats source water as necessary to produce finished water and then delivers some or all of that finished water to another public water system. Delivery may be through a direct connection or through the distribution system of one or more consecutive systems.

(((~~306~~))) (311) **"WHPA"** means a wellhead protection area.

(((~~307~~))) (312) **"WUE"** means water use efficiency.

(((~~308~~))) (313) **"Zone of contribution"** means the area surrounding a pumping well or spring that encompasses all areas or features that supply groundwater recharge to the well or spring.

AMENDATORY SECTION (Amending WSR 11-17-062, filed 8/15/11, effective 10/1/11)

WAC 246-290-025 Adoption by reference. The following sections and subsections of Title 40 Code of Federal Regulations (C.F.R.) Part 141 National Primary Drinking Water Regulations and Part 143 National Secondary Drinking Water Regulations revised as of July 1, (((~~2009~~))) 2016, (((~~and including all amendments and modifications thereto effective as of the date of adoption of this chapter~~))) are adopted by reference:

141.2 Definitions. Only those definitions listed as follows:

Action level;

Corrosion inhibitor;

Effective corrosion inhibitor residual;

Enhanced coagulation;

Enhanced softening;

First draw sample;

Haloacetic acids (five) (HAA5);

(((~~First draw sample;~~)))

Large water system;

Lead service line;

Maximum residual disinfectant level (MRDL);

Maximum residual disinfectant level goal (MRDLG);

Medium-size water system;

Optimal corrosion control treatment;

Service line sample;

Single family structure;

Small water system;

Specific ultraviolet absorption (SUVA); and

Total Organic Carbon (TOC).

(((~~141.12~~	~~Maximum contaminant levels for organic chemicals.~~)))
141.13	Maximum contaminant levels for turbidity.
(((~~141.21~~	~~Coliform monitoring.~~)))
141.22	Turbidity sampling and analytical requirements.
141.23(a) - excluding (i)(2)	141.23(j), Inorganic chemical sampling.
141.23(m) -	141.23(o)

141.24(a) - 141.24(d), Organic chemicals ((~~other than total trihalomethanes~~)), sampling and analytical requirements.	
141.24 (f)(1) - 141.24 (f)(15),	
141.24 (f)(18), 141.24 (f)(19),	
141.24 (f)(21), 141.24 (f)(22)	
141.24 (g)(1) - 141.24 (g)(9),	
141.24 (g)(12) - 141.24 (g)(14),	
141.24 (h)(1) - 141.24 (h)(11),	
141.24 (h)(14) - 141.24 (h)(17)	
141.24 (h)(20)	
141.25(a),	141.25 (c) - (d), Analytical methods for radioactivity.
141.26	Monitoring frequency and compliance for ((~~radioactivity~~)) radionuclides in community water systems.
141.31(d)	Reporting ((~~of public notices and compliance certifications~~)) requirements.
141.33(e)	Record maintenance ((~~of public notices and certifications~~)).
141.40	Monitoring requirements for unregulated contaminants.
141.61	Maximum contaminant levels for organic contaminants.
141.62, excluding (b)	Maximum contaminant levels for inorganic ((~~chemical and physical~~)) contaminants.
141.63(e)	Maximum contaminant levels (MCLs) for microbiological contaminants.
141.64	Maximum contaminant levels ((~~and Best Available Technologies (BATs)~~)) for disinfection byproducts.
141.65(c)	((~~Best Available Technologies (BATs) for~~)) Maximum Residual Disinfectant Levels.
141.66	Maximum contaminant levels for radionuclides.
Control of Lead and Copper	
141.80, excluding (c)(3)(v)	General requirements.
141.81	Applicability of corrosion control treatment steps to small, medium-size and large water systems.
141.82(a) - 141.82(h)	Description of corrosion control treatment requirements.
141.83	Source water treatment requirements.
141.84	Lead service line replacement requirements.
141.85	Public education and supplemental monitoring requirements.
141.86 (a) - (f)	Monitoring requirements for lead and copper in tap water.
141.87	Monitoring requirements for water quality parameters.
141.88	Monitoring requirements for lead and copper in source water.
141.89	Analytical methods ((~~for lead and copper testing~~)).
141.90, excluding (a)(4)	Reporting requirements.
141.91	Recordkeeping requirements.
Disinfectants and Disinfection Byproducts (D/DBP)	
141.130	General requirements.
141.131	Analytical requirements.
141.132, excluding (c)(1)(i)	Monitoring requirements.
141.133	Compliance requirements.
141.134	Reporting and recordkeeping requirements.
141.135	Treatment technique for control of disinfection byproduct precursors.
Subpart O - Consumer Confidence Reports	
141.153 (h)(6) and (7)	Contents of the reports.
Enhanced Filtration ((~~- Reporting and Recordkeeping~~)) and Disinfection - Systems Serving 10,000 or More People	
141.175(b)	((~~Individual filter reporting and follow-up action requirements for systems treating surface water with conventional, direct, or in-line filtration and serving at least 10,000 people.~~)) Reporting and recordkeeping requirements.
Subpart Q - Public Notification of Drinking Water Violations	
141.201, excluding (3)(ii) of Table 1	General public notification requirements.
141.202, excluding (3) of Table 1	Tier 1 Public Notice - Form, manner, and frequency of notice.
141.203	Tier 2 Public Notice - Form, manner, and frequency of notice.
141.204	Tier 3 Public Notice - Form, manner, and frequency of notice.
141.205	Content of the public notice.
141.206	Notice to new billing units or new customers.
141.207	Special notice of the availability of unregulated contaminant monitoring results.

141.208	Special notice for exceedances of the SMCL for fluoride.
141.211	Special notice for repeated failure to conduct monitoring of the source water for *Cryptosporidium* ((~~monitoring~~)) and for failure to determine bin classification or mean *Cryptosporidium* level.

Appendix A to Subpart Q of Part 141 - NPDWR violations and other situations requiring ((~~PN~~)) public notice

Appendix B to Subpart Q of Part 141 - Standard health effects language for ((~~PN~~)) public notification

Appendix C to Subpart Q of Part 141- List of acronyms used in ((~~PN~~)) public notification regulation

141.400	General requirements and applicability.
141.402(c)	Groundwater source microbial monitoring and analytical methods.
141.403 (b)(3)(i) through (iii)	Treatment technique requirements for groundwater systems.

Subpart T - Enhanced Filtration and Disinfection - Systems Serving Fewer Than 10,000 People

141.530 - 141.544	Disinfection profile and benchmark.
141.563	((~~Follow-up actions required.~~)) What follow-up action is my system required to take based on continuous turbidity monitoring?
141.570, excluding (c)	((~~Reporting requirements.~~)) What does Subpart T require that my system report to the state?

Subpart U ((~~and V~~)) - Initial Distribution System Evaluations ((~~and Stage 2 Disinfection Byproducts Requirements.~~))

141.600 - 141.605	Initial distribution system evaluations.

Subpart V - Stage 2 Disinfection Byproducts Requirements

141.620 - 141.629, excluding 624	Stage 2 Disinfection Byproducts Requirements.

Subpart W - Enhanced Treatment for *Cryptosporidium*

141.700-722 Enhanced Treatment for *Cryptosporidium*

Subpart Y - Revised Total Coliform Rule

141.852	Analytical methods and laboratory certification.
141.860 (c) - (d)	Violations

Part 143 - National Secondary Drinking Water Regulations

143.1	Purpose.
143.2	Definitions.
143.3	Secondary maximum contaminant levels.
143.4	Monitoring.

Copies of the incorporated sections and subsections of Title 40 C.F.R. are available from the Department of Health((,)) online at: http://www/doh.wa.gov/CommunityandEnvironment/DrinkingWater/RegulationandCompliance/Rules, or P.O. Box 47822, Olympia, Washington 98504-7822, or by calling the department's drinking water hotline at 800-521-0323.

AMENDATORY SECTION (Amending WSR 99-07-021, filed 3/9/99, effective 4/9/99)

WAC 246-290-030 General administration. (1) The department and the health officer for each local health jurisdiction may develop a joint plan of ((~~operation~~)) responsibility. Wherever in this chapter the term "department" is used, the term "health officer" may be substituted based on the terms of this joint plan of responsibility. This plan shall:

(a) List the roles and responsibilities of each agency;

(b) Specifically designate those **Group A** systems for which the department and local health officer have primary responsibility;

(c) Provide for an agreed-to level of public water system oversight;

(d) Be signed by the department and the local health department or district; and

(e) Be reviewed at least once every five years and updated as needed.

((~~Wherever in this chapter the term "department" is used, the term "health officer" may be substituted based on the terms of this plan of operation.~~))

(2) The department shall, upon request, review and report on the adequacy of water supply supervision to both the state and local boards of health.

(3) The local board of health may adopt rules governing **Group A** water systems within its jurisdiction for which the health officer has assumed primary responsibility. Adopted local board of health rules shall be:

(a) No less stringent than this chapter; and

(b) Revised, if necessary, within twelve months after the effective date of revised state board of health rules. During this time period, existing local rules shall remain in effect, except provisions of the revised state board of health rules that are more stringent than the local board of health rules shall apply.

(4) For those **Group A** water systems where the health officer has assumed primary responsibility, the health officer may approve project reports and construction documents in accordance with engineering criteria approved by the department and listed under Part 3 of this chapter and water system plans in accordance with planning criteria listed under WAC 246-290-100.

(5) ((~~An advisory committee shall be established to provide advice to the department on the organization, functions, service delivery methods, and funding of the drinking water program. Members shall be appointed by the department for fixed terms of no less than two years, and may be reappointed. The committee shall reflect a broad range of interests in the regulation of public water supplies, including water utilities of all sizes, local governments, business groups, special purpose districts, local health jurisdictions,~~

~~other state and federal agencies, financial institutions, environmental organizations, the legislature, professional engineers engaged in water system design, and other groups substantially affected by the department's role in implementing state and federal requirements for public water systems.~~

~~(6)~~)) The department may develop guidance to clarify sections of the rules as needed and make these available for distribution. ((~~Copies of the~~)) Guidance may be obtained by contacting the ((~~division~~)) office of drinking water.

(((~~(7)~~))) (6) Fees may be charged and collected by the department as authorized in chapter 43.20B RCW and by local health ((~~agencies~~)) jurisdictions as authorized in RCW 70.05.060 to recover all or a portion of the costs incurred in administering this chapter or that are required to be paid under WAC 246-290-990.

(((~~(8)~~))) (7) All state and local agencies involved in review, approval, surveillance, testing, ((~~and/or~~)) or operation of public water systems, or issuance of permits for buildings or sewage systems shall be governed by these rules and any decisions of the department.

AMENDATORY SECTION (Amending WSR 99-07-021, filed 3/9/99, effective 4/9/99)

WAC 246-290-035 Water system ownership. (1) The following requirements apply to all newly developed public water systems:

(a) Except for systems proposed within an ((~~individual~~)) existing water system's approved service area in a ((~~critical water supply service area as governed by the Public Water System Coordination Act, chapter 70.116 RCW and chapter 246-293 WAC,~~)) CWSSA and offered service by that existing system, any proposed new public water system must be owned or operated by a department approved satellite management agency (SMA) if one is available;

(b) The approval of any proposed new public water system shall be conditioned upon the periodic review of the system's operational history to determine its ability to meet the department's financial viability and other operating requirements. If, upon periodic review, the department determines the system is in violation of financial viability or other operating requirements, the system shall transfer ownership to an approved SMA or obtain operation and management by an approved SMA, if such ownership or operation and management can be made with reasonable economy and efficiency.

(2) An owner of a public water system who is proposing to transfer or has transferred ownership shall:

(a) Provide written notice to the department and all consumers at least one year prior to the transfer, unless the new owner agrees to an earlier date. Notification shall include a time schedule for transferring responsibilities, identification of the new owner, and under what authority the new ownership will operate. If the system is a corporation, identification of the registered agent shall also be provided;

(b) Ensure all health-related standards pursuant to this chapter are met during transfer of the utility. It shall also be the responsibility of the utility transferring ownership to inform and train the new owner regarding operation of the utility; and

(c) Comply with the operating permit requirements pursuant to chapter 246-294 WAC.

(3) The purveyor may be required to document compliance with other relevant ownership requirements, such as those pursuant to UTC jurisdiction under Title 80 RCW.

(4) No purveyor may end utility operations without providing written notice to all customers and to the department at least one year prior to termination of service. A purveyor that fails to provide such notice remains subject to the provisions of this chapter.

AMENDATORY SECTION (Amending WSR 03-08-037, filed 3/27/03, effective 4/27/03)

WAC 246-290-060 Variances, exemptions, and waivers. (1) General.

(a) The state board of health may grant variances, exemptions, and waivers of the requirements of this chapter according to the procedures outlined in subsection (5) of this section. See WAC 246-290-300 (4)(g) and (((~~(8)~~))) (7)(f) for monitoring waivers.

(b) Consideration by the board of requests for variances, exemptions, and waivers shall not be considered adjudicative proceedings as that term is defined in chapter 34.05 RCW.

(c) Statements and written material regarding the request may be presented to the board at or before the public hearing where the application will be considered. Allowing cross-examination of witnesses shall be within the discretion of the board.

(d) The board may grant a variance, exemption, or waiver if it finds:

(i) Due to compelling factors, the public water system is unable to comply with the requirements; and

(ii) The granting of the variance, exemption, or waiver will not result in an unreasonable risk to the health of consumers.

(2) Variances.

(a) MCL.

(i) The board may grant a MCL variance to a public water system that cannot meet the MCL requirements because of characteristics of the source water that is reasonably available to the system.

(ii) A MCL variance may only be granted in accordance with 40 C.F.R. 141.4.

(iii) A variance shall not be granted from the MCL for presence of ((~~total coliform~~)) *E. coli* under WAC 246-290-310(2).

(b) Treatment techniques.

(i) The board may grant a treatment technique variance to a public water system if the system demonstrates that the treatment technique is not necessary to protect the health of consumers because of the nature of the system's source water.

(ii) A treatment technique variance granted in accordance with 40 C.F.R. 141.4.

(iii) A variance shall not be granted from any treatment technique requirement under Part 6 of chapter 246-290 WAC.

(c) The board shall condition the granting of a variance upon a compliance schedule as described in subsection (6) of this section.

(3) Exemptions.

(a) The board may grant a MCL or treatment technique exemption to a public water system that cannot meet an MCL standard or provide the required treatment in a timely manner, or both, in accordance with 40 C.F.R. 141.4.

(b) No exemption shall be granted from:

(i) The requirement to provide a residual disinfectant concentration in the water entering the distribution system under WAC 246-290-662 or 246-290-692; or

(ii) The MCL for presence of ((~~total coliform~~)) *E. coli* under WAC 246-290-310(2).

(c) The board shall condition the granting of an exemption upon a compliance schedule as described in subsection (6) of this section.

(4) Waivers. The board may grant a waiver to a public water system if the system cannot meet the requirements of these regulations pertaining to any subject not covered by EPA variance and/or exemption regulations.

(5) Procedures.

(a) For variances and exemptions. The board shall consider granting a variance or exemption to a public water system in accordance with 40 C.F.R. 141.4.

(b) For waivers. The board shall consider granting a waiver upon completion of the following actions:

(i) The purveyor applies to the department in writing. The application, which may be in the form of a letter, shall clearly state the reason for the request;

(ii) The purveyor provides notice of the purveyor's application to consumers and provides proof of the notice to the department;

(iii) The department prepares a recommendation to the board; and

(iv) The board provides notice for and conducts a public hearing on the purveyor's request.

(6) Compliance schedule.

(a) The board shall condition the granting of a variance or exemption based on a compliance schedule. The compliance schedule shall include:

(i) Actions the purveyor shall undertake to comply with a MCL or treatment technique requirement within a specified time period; and

(ii) A description and time-table for implementation of interim control measures the department may require while the purveyor completes the actions required in (a)(i) of this subsection.

(b) The purveyor shall complete the required actions in the compliance schedule within the stated time frame.

(7) Extensions to variances and exemptions.

((~~(a)~~)) The board may extend the final date of compliance prescribed in the compliance schedule for a variance and/or exemption in accordance with 40 C.F.R. 141.4.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-100 Water system plan. (1) The purpose of this section is to establish a uniform process for purveyors to:

(a) Demonstrate ((~~the system's operational, technical, managerial, and financial capability to achieve and maintain compliance with relevant local, state, and federal plans and regulations~~)) system capacity as defined in WAC 246-290-010;

(b) Demonstrate how the system will address present and future needs in a manner consistent with other relevant plans and local, state, and federal laws, including applicable land use plans;

(c) Establish eligibility for funding under chapter 246-296 WAC.

(2) Purveyors of the following categories of community public water systems shall submit a water system plan for review and approval by the department:

(a) Systems ((~~having~~)) serving one thousand or more service((~~s~~)) connections;

(b) Systems required to develop water system plans under the Public Water System Coordination Act of 1977 (chapter 70.116 RCW);

(c) Any system experiencing problems related to ((~~planning, operation, and/or management~~)) system capacity, as determined by the department;

(d) All new systems;

(e) Any ((~~expanding~~)) system((~~; and~~)) proposing to:

(i) Increase or otherwise modify the service area identified in a previously approved planning document; or

(ii) Increase the geographical area where direct service is provided if a planning or engineering document has not been previously approved; or

(iii) Install additions, extensions, or changes to existing source, storage, or transmission facilities and increase the approved number of service connections.

(f) Any system proposing to use the document submittal exception process in WAC 246-290-125; or

(g) Any system operating under or proposing to operate under an unspecified number of service connections.

(3) The purveyor shall work with the department to establish the relative priority and level of detail for ((~~a~~)) each element of the water system plan. ((~~In general,~~)) The ((~~scope~~)) priority and level of detail ((~~of the plan will~~)) must be related to size, complexity, water supply characteristics, forecasted demand characteristics, past performance, planning history, and use of the water system. Project reports may be combined with a water system plan.

(4) ((~~In order to demonstrate system capacity, the water system plan~~)) The purveyor shall, at a minimum, address the following elements((~~, as a minimum, for a period of at least twenty years into the future~~)) in the water system plan:

(a) Description of the water system, including:

(i) Ownership and management, including the current names, addresses, and telephone numbers of the owners, operators, and emergency contact persons for the system;

(ii) System history and background;

(iii) Related plans, such as coordinated water system plans, abbreviated coordinated water system plans, local land use plans, groundwater management plans, and basin plans;

(iv) Service area maps, ((~~characteristics, agreements, and policies. Water systems must include their existing service area and future service area. Municipal water suppliers must define their retail service area and meet the requirements under WAC 246-290-106. Municipal water suppliers must identify where their water rights place of use will be~~

~~expanded to their service area if the requirements under WAC 246-290-107 have been met; and~~

~~(v)~~)) including retail service area and future service area, if applicable, and areas where wholesale water is provided to other public water systems. Municipal water suppliers shall identify the area that will expand their water rights' place of use if the requirements under WAC 246-290-107 have been met;

(v) Service area characteristics, agreements, and policies;

(vi) Satellite management, if applicable.

(b) Basic planning data, including:

(i) Current population, service connections, water use, and equivalent residential units; and

(ii) Sufficient water production and consumption data to identify trends including the following elements:

(A) Monthly and annual production totals for each source, including water purchased from another public water system;

(B) Annual usage totals for each customer class as determined by the purveyor;

(C) Annual usage totals for water supplied to other public water systems; and

(D) For systems serving one thousand or more total connections, a description of the seasonal variations in consumption patterns of each customer class defined by the purveyor.

(iii) Designated land use, zoning, ((~~future~~)) population, and water demand ((~~for a consecutive six-year~~)) within the water system's service area for the plan approval period, and at least a twenty-year planning period ((~~within the water system's service area~~)).

(c) Demand forecasts, developed under WAC 246-290-221, for ((~~a consecutive six-year and~~)) the plan approval period, and at least a twenty-year planning period. These shall show future use with and without savings expected from the system's water use efficiency program.

(d) For systems serving one thousand or more total connections, a demand forecast ((~~projecting~~)) for the plan approval period and at least a twenty-year planning period that projects demand if the measures deemed cost-effective per WAC 246-290-810 were implemented.

(e) System analysis, including:

(i) System design standards;

(ii) Water quality analysis;

(iii) ((~~System~~)) Inventory ((~~description~~)) and analysis of water system facilities; and

(iv) Summary of system deficiencies.

(f) Water resource analysis for the plan approval period and at least a twenty-year planning period, including:

(i) A water use efficiency program. Municipal water suppliers must meet the requirements in WAC 246-290-810;

(ii) Source of supply analysis, which includes:

(A) An evaluation of water supply alternatives if additional water rights will be pursued within twenty years; and

(B) A narrative description of the system's water supply characteristics and the foreseeable effect from current and future use on the water quantity and quality of any body of water from which its water is diverted or withdrawn based on existing data and studies;

(iii) A water shortage response plan as a component of the reliability and emergency response requirements under WAC 246-290-420;

(iv) Water right self-assessment;

(v) Water supply reliability analysis;

(vi) Interties; and

(vii) For systems serving one thousand or more total connections, an evaluation of opportunities for the use of reclaimed water, where they exist, as defined in RCW ((~~90.46.010(4)~~)) 90.46.120.

(g) Source water protection program under WAC 246-290-135.

(h) Operation and maintenance program under WAC 246-290-415 and 246-290-654(5), as applicable.

(i) Improvement program, including a ((~~six-year~~)) capital improvement schedule that identifies all capital improvements scheduled within the plan approval period and any major projects or other capital improvements planned within at least a twenty-year planning period.

(j) Financial program, including demonstration of financial viability by providing:

(i) A summary of past income and expenses;

(ii) A ((~~one-year~~)) balanced operational budget for ((~~systems serving one thousand or more connections or a six-year balanced operational budget for systems serving less than one thousand connections~~)) the plan approval period;

(iii) A plan for collecting the revenue necessary to maintain cash flow stability and to fund the capital improvement program and emergency improvements; and

(iv) An evaluation that has considered:

(A) The affordability of water rates; and

(B) The feasibility of adopting and implementing a rate structure that encourages water demand efficiency.

(k) Other documents, such as:

(i) Documentation of SEPA compliance;

(ii) Agreements; and

(iii) Comments from each local government with jurisdiction and adjacent utilities.

(5) Purveyors intending to implement the project report and construction document submittal exceptions authorized under WAC 246-290-125 must include:

(a) Standard construction specifications for distribution mains; and/or

(b) Design and construction standards for distribution-related projects, including:

(i) Description of project report and construction document internal review procedures, including engineering design review and construction completion reporting requirements;

(ii) Construction-related policies and requirements for external parties, including consumers and developers;

(iii) Performance and sizing criteria; and

(iv) General reference to construction materials and methods.

(6) ((~~The department, at its discretion, may require reports from purveyors identifying the progress in developing their water system plans.~~)) Purveyors shall submit reports identifying the progress in developing their water system plans if required by the department.

(7) Purveyors shall transmit water system plans to adjacent utilities and each local government with jurisdiction, to assess consistency with ongoing and adopted planning efforts.

(8) Prior to department approval of a water system plan or a water system plan update, the purveyor shall:

(a) Hold an informational meeting for the water system consumers and notify consumers in a way that is appropriate to the size of the water system; and

(b) Obtain ((~~the~~)) approval of the water system plan from the purveyor's governing body or elected governing board.

(9) Department approval of a water system plan ((~~shall be in effect for six~~)) is effective for ten years from the date of written approval unless:

(a) ((~~Major projects subject to SEPA as defined in WAC 246-03-030 (3)(a) are proposed that are not addressed in the plan;~~

~~(b) Changes occur in the basic planning data significantly affecting system improvements identified~~)) The purveyor requests and receives a plan approval period of less than ten years; or

(((~~(c)~~))) (b) The department requests an updated plan ((~~or plan amendment~~)).

(10) The purveyor shall update the water system plan and obtain department approval at ((~~least every six years.~~)) or before the expiration of the current plan approval if the system ((~~no longer~~)) meets any of the conditions of subsection (2) of this section((~~, the purveyor shall as directed by the department, either:~~

~~(a) Submit a water system plan amendment for review and approval with the scope to be determined by the department; or~~

~~(b) Meet the requirements under WAC 246-290-105~~)).

(11) Water system plan amendments. A purveyor may submit an amendment to its current approved water system plan for department approval at any time during the plan approval period. Project reports may be included in a water system plan amendment to meet the requirements under WAC 246-290-110(3). Department approval of a water system plan amendment does not alter the current plan approval period in accordance with subsection (9) of this section and does not satisfy the requirement of subsection (2) of this section to update the water system plan.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-105 Small water system management program. (1) The purpose of a small water system management program is to:

(a) Demonstrate the system's operational, technical, managerial, and financial capability to achieve and maintain compliance with all relevant local, state, and federal plans and regulations; and

(b) Establish eligibility for funding under chapter 246-296 WAC.

(2) All noncommunity systems and ((~~all~~)) community systems not required to complete a water system plan ((~~as described~~)) under WAC 246-290-100(2) shall develop and implement a small water system management program.

(3) The purveyor shall submit this program for department review and approval ((~~to the department~~)) when:

(a) A new NTNC public water system is created;

(b) An existing system has operational, technical, managerial, or financial problems, as determined by the department; or

(c) An existing system without approved construction documents is seeking as-built system approval under WAC 246-290-140; or

(d) A system applies for funding under chapter 246-296 WAC.

(4) Content and detail shall be consistent with the size, complexity, past performance, and use of the public water system. General content topics shall include, but not be limited to, the following elements:

(a) System management;

(b) Annual operating permit;

(c) Water facilities inventory form;

(d) Service area and facility map. Municipal water suppliers ((~~must~~)) shall identify ((~~where~~)) the area that will expand their water rights' place of use ((~~will be expanded to their service area~~)) if the requirements under WAC 246-290-107 have been met;

(e) Water right self-assessment;

(f) Description of the system's source(s) including the name and location of any body of water from which its water is diverted or withdrawn;

(g) A water use efficiency program. Municipal water suppliers must meet the requirements in WAC 246-290-810;

(h) Water production and consumption data including each of the following:

(i) Monthly and annual production for each source, including water purchased from another public water system;

(ii) Annual consumption totals for residential and nonresidential connections;

(iii) Total annual volume of water supplied to other public water systems;

(i) Average daily demand;

(j) Current population served;

(k) The forecast of average daily demand based on the system's approved number of connections that considers:

(i) Water use trends based on actual water use records; and

(ii) Applicable land use plans;

(l) An evaluation that has considered the feasibility of adopting and implementing a rate structure that encourages water demand efficiency;

(m) Source water protection program;

(n) Component inventory and assessment;

(o) List of planned system improvements;

(p) Water quality monitoring program;

(q) Operation and maintenance program under WAC 246-290-415(2) and 246-290-654(5) as applicable;

(r) Cross-connection control program;

(s) Emergency response plan; and

(t) Budget.

(5) The department may require changes be made to a small water system management program if necessary to effectively accomplish the program's purpose.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-106 Duty to provide service. Municipal water suppliers required to submit a water system plan for department approval under WAC 246-290-100(2) must also include in the water system plan the provisions of this section as required under RCW 43.20.260. In approving a water system plan, the department shall ensure that water service to be provided by the water system for any new industrial, commercial, or residential use is consistent with local plans and regulations.

(1) A municipal water supplier has a duty to provide retail water service to all new service connections within its retail service area if:

(a) It can be available in a timely and reasonable manner;

(b) There is sufficient water rights to provide water service;

(c) There is sufficient capacity to serve the water in a safe and reliable manner as determined by the department; and

(d) It is consistent with the requirements of local plans and regulations and, for water service by the water utility of a city or town, with the utility service extension ordinances of the city or town.

(2) Municipal water suppliers ((~~must provide~~)) shall include a retail service area map in the water system plan.

(3) Municipal water suppliers must meet the requirements of WAC 246-290-108 ((~~for their retail service area~~)).

(4) Municipal water suppliers ((~~must provide~~)) shall include their service policies and conditions of service including how new service will be provided in the water system plan.

(5) Municipal water suppliers may provide temporary water service to another water system ((~~if a written agreement with the water system is in place.~~

~~(6)~~)) to resolve a significant public health and safety concern((~~, the department may allow water service to be extended~~)) prior to meeting the requirements of this section.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-107 Place of use expansion. The place of use of a surface or groundwater right may be expanded to include any portion of the approved service area that was not previously within the place of use for the water right when documented in an approved planning or engineering document under chapter 43.20 RCW or in accordance with procedures adopted under chapter 70.116 RCW. This occurs as an effect of the department's approval of a service area identified in a water system plan, water system plan amendment, small water system management program, engineering document, or as an effect of the local legislative authority's approval of a service area as part of a coordinated water system plan.

(1) The following conditions must be met:

(a) The municipal water supplier is in compliance with the terms of the water system plan or small water system management program, including those regarding water use efficiency.

(b) The alteration of the place of use is not inconsistent regarding an area added to the place of use with any local plans and regulations.

(c) The alteration of the place of use is not inconsistent regarding an area added to the place of use with any watershed plan approved under chapter 90.82 RCW or a comprehensive watershed plan approved under RCW 90.54.040(1) after September 3, 2003, if such a watershed plan has been approved for the area.

(2) As part of the planning or engineering document, municipal water suppliers must:

(a) Identify the ((~~portions of the service~~)) area where the place of use will be expanded.

(b) Document that subsection (1)(a) and (c) of this section are met.

(c) Meet the requirements of WAC 246-290-108 for the ((~~portions of the service~~)) area where the place of use will be expanded.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-108 Consistency with local plans and regulations. Consistency with local plans and regulations applies to planning and engineering documents under WAC 246-290-106, 246-290-107, and 246-290-110.

(1) Municipal water suppliers must include a consistency review and supporting documentation in its planning or engineering document describing how it has considered consistency with local plans and regulations. This review must include elements of local plans and regulations, as they reasonably relate to water service to be provided by a municipal water supplier for any new connection, including:

(a) Land use and zoning within the ((~~applicable~~)) service area;

(b) ((~~Six-year~~)) Growth projections used in the demand forecast;

(c) Utility service extension ordinances of a city or town when water service is provided by the water utility of the city or town;

(d) Provisions of water service for new service connections; and

(e) Other relevant elements related to water supply planning as determined by the department.

(2) Municipal water suppliers must request each local government with jurisdiction over the ((~~applicable~~)) service area to provide a consistency review. Municipal water suppliers may exclude wholesale areas from the consistency review provided the water system receiving the wholesale water complies with the requirements for a consistency review when developing a water system plan for any new connection within the service area of the system receiving the wholesale water.

(a) Municipal water suppliers shall provide each local government with jurisdiction sixty days to review the planning or engineering document unless another state statute or state regulation requires a different time frame. The municipal water supplier must provide the local government with jurisdiction an additional thirty days for review if requested.

(b) If an inconsistency is documented by the local government with jurisdiction within the time frame outlined in (a) of this subsection, the municipal water supplier must provide the inconsistency information to the department.

(c) If the local government with jurisdiction documents in writing an inconsistency exists with local plans and regulations, the municipal water supplier shall address the inconsistency. The local government with jurisdiction shall be provided sixty days to review any revisions or responses that address the inconsistency.

(3) If the local government with jurisdiction does not provide a consistency review, the municipal water supplier shall complete the consistency review as described in subsection (1) of this section. The municipal water supplier must also document:

(a) The amount of time provided to each local government with jurisdiction to review the planning and engineering documents as defined in subsection (2) of this section; and

(b) The efforts taken to request a consistency review from the local government with jurisdiction.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-125 Project report and construction document submittal exceptions. (1) The following projects do not require project reports under WAC 246-290-110 and construction documents under WAC 246-290-120 to be submitted to the department for review and approval prior to installation:

(a) Installation of valves, fittings, ((~~and~~)) meters, ((~~including~~)) and approved backflow prevention assemblies;

(b) Installation of hydrants under WAC 246-290-230 (3) and (6);

(c) Repair of a system component or replacement with a component of a similar capacity and material in accordance with the original construction specifications of the approved design. For the purposes of replacing existing pipe, similar capacity includes one standard pipe size larger((~~.~~)); or

(d) Maintenance or painting of surfaces not contacting potable water.

(2) Purveyors may elect to not submit to the department for review and approval project reports under WAC 246-290-110 and construction documents under WAC 246-290-120 for new distribution mains if:

(a) The purveyor has on file with the department a current department-approved water system plan that includes standard construction specifications for distribution mains; and

(b) The purveyor maintains on file a completed construction completion report (department form) in accordance with WAC 246-290-120(5) and makes it available for review upon request by the department.

(3) Purveyors may elect to not submit to the department for review and approval project reports under WAC 246-290-110 and construction documents under WAC 246-290-120 for review and approval of other distribution-related projects as defined in WAC 246-290-010 providing:

(a) The purveyor has on file with the department a current department-approved water system plan, in accordance with WAC 246-290-100(5);

(b) The purveyor submits a written request with a new water system plan or an amendment to a water system plan, and updates the request with each water system plan update. The written request should specifically identify the types of projects or facilities for which the submittal exception procedure is requested;

(c) The purveyor has documented that they have employed or hired under contract the services of a professional engineer licensed in the state of Washington to review distribution-related projects not submitted to the department for review and approval. The review engineer and design engineer shall not be the same individual. The purveyor shall provide written notification to the department whenever they propose to change their designated review engineer;

(d) If the project is a new transmission main, storage tank, or booster pump station, it must be identified in the capital improvement program of the utility's water system plan. If not, either the project report must be submitted to the department for review and approval, or the water system plan must be amended;

(e) A project summary file is maintained by the purveyor for each project and made available for review upon request by the department, and includes:

(i) Descriptive project summary;

(ii) Anticipated completion schedule;

(iii) Consistency with utility's water system plan;

(iv) Water right self-assessment, where applicable;

(v) Change in system physical capacity;

(vi) Copies of original design and record drawings;

(vii) Engineering design review report (department form). The form shall:

(A) Bear the seal, date, and signature of a professional engineer licensed in the state of Washington prior to the start of construction;

(B) Provide a descriptive reference to completed project report and/or construction documents reviewed, including date of design engineer's seal and signature; and

(C) State the project report and/or construction documents have been reviewed, and the design is in accordance with department regulations and principles of standard engineering practice;

(f) The construction completion report is submitted to the department in accordance with WAC 246-290-120(5) for new storage tanks and booster pump stations, and maintained on file with the water system for all other distribution-related projects;

(g) A WFI is completed in accordance with WAC 246-290-120(6); and

(h) The purveyor meets the requirements of chapter 246-294 WAC to have a category "green" operating permit.

(4) Source of supply (including interties) and water quality treatment-related projects shall not be eligible for the submittal exception procedure.

(5) Purveyors not required to prepare a water system plan under WAC 246-290-100 shall be eligible for the submittal exception procedure if the purveyor:

(a) Has a department-approved water system plan meeting the requirements of WAC 246-290-100;

(b) Complies with all other requirements in this section; and

(c) Ensures that all work required to be prepared under the direction of a professional engineer be accomplished per WAC 246-290-040 and chapter 18.43 RCW.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-130 Source approval. (1) Every purveyor shall obtain drinking water from the highest quality source feasible. No new source, previously unapproved source, or modification of an existing source shall be used as a public water supply without department approval. No intake or other connection shall be maintained between a public water system and a source of water not approved by the department.

(2) Before initiating source development or modification, the purveyor shall contact the department to identify submittal requirements.

(3) Any party seeking source approval shall provide the department sufficient documentation, in a project report, construction documents, or in supplemental documents, that the source:

(a) Is reasonable and feasible for the type and size of the system;

(b) May legally be used in conformance with state water rights laws;

(c) Supplies water that is physically and reliably available in the necessary quantities, as shown in:

(i) A hydrogeologic assessment of the proposed source;

(ii) A general description of the watershed, spring, and/or aquifer recharge area affecting the quantity or quality of flow, which includes seasonal variation and upstream water uses that may significantly affect the proposed source;

(iii) For groundwater and spring sources, well source development data that are available from a pump test at the maximum design rate and duration, or are available from other sources of information, that establish pump settings (depth) in the well and demonstrate adequacy of water quantity to meet design criteria while not leading to water quality problems;

(iv) For groundwater and spring sources, installation of a source meter or other equivalent device that reliably measures volume of flow into the system;

(d) Is, or is not, a GWI under WAC 246-290-640, and meets or can meet the applicable requirements for GWI sources as described in that section including treatment;

(e) Adequately provides for source protection, as shown in:

(i) For surface water and GWI sources, the watershed control program identified under WAC 246-290-135 and Part 6 of this chapter;

(ii) For wells, a preliminary department susceptibility assessment or equivalent information, and preliminary WHPA delineation and contaminant inventory, under the requirements for sanitary control and wellhead protection under WAC 246-290-135;

(f) Is designed and constructed in conformance with this chapter, and relevant requirements of chapter 173-160 WAC (department of ecology well construction standards);

(g) Meets water quality standards under WAC 246-290-310, as shown in an initial water quality analysis that includes, at a minimum, the following:

(i) Bacteriological;

(ii) Complete inorganic chemical and physical except that the MCL for arsenic under WAC 246-290-310 does not apply to TNC systems;

(iii) Complete VOC;

(iv) Radionuclides, if source approval is requested for a community system;

(v) SOC, except where waived or not required under WAC ((~~246-290-310~~)) 246-290-300; and

(vi) Any other information required by the department relevant to the circumstances of the particular source.

Sources that otherwise would not meet water quality standards may be approved if treatment is provided.

(4) The required documentation under subsection (3) of this section shall include, at a minimum:

(a) A water right self-assessment;

(b) A map showing the project location and vicinity;

(c) A map depicting topography, distances to the surface water intake, well or spring from existing property lines, buildings, potential sources of contamination, ditches, drainage patterns, and any other natural or man-made features affecting the quality or quantity of water;

(d) The dimensions, location, and legal documentation of the SCA under WAC 246-290-135;

(e) A copy of the on-site inspection form completed by the department or local health department representative;

(f) A copy of the water well report including the unique well identification tag number, depth to open interval or top of screened interval, overall depth of well from the top of the casing, vertical elevation, and location (both plat location and latitude/longitude); and

(g) Documentation of source meter installation. The purveyor may utilize other documents, such as a water system plan, susceptibility assessment, wellhead protection program, project report, or construction documents, to provide the documentation and information to the department, provided that the documents are current, and the purveyor indicates the location in the document of the relevant information.

(5) If treatment of a source is necessary to meet water quality standards, the purveyor may be required to meet the provisions of WAC 246-290-250 and Part 6 of this chapter, if applicable, prior to or as a condition of approval.

(6) An intertie must be adequately described in a written agreement between the purveyor and the supplier of the water, and otherwise meet the requirements of WAC 246-290-132.

(7) The purveyor shall not construct facilities for source development and use without prior approval of the department pursuant to the provisions of WAC 246-290-120.

(8) The purveyor may request a conditional source approval, such as one that sets limits on use or requires interim treatment, if further analysis of the quality of the source is required before final approval.

(9) For sources or supplies of water used by bottled water or ice plants to produce bottled water or ice:

(a) If the bottled water or ice plant is a Group A community water system and the plant uses the system's source for the water that is bottled or made into ice, the source and supply used for the bottled water and ice shall meet the applicable Group A requirements;

(b) If the bottled water or ice plant uses its own source for the water that is bottled or made into ice, and the plant is not a Group A community water system, the owner or operator shall obtain source approval from the department, and the source water shall meet the ongoing source water quality monitoring requirements for a Group A community system;

(c) If the bottled water or ice plant purchases the water for bottling or making ice from another source or supply, the water shall meet the minimum requirements for a Group A community water system, and the owner or operator of the plant shall ensure that the water meets the requirements;

(d) The source or supply for the water that is bottled or made into ice shall be protected from contamination prior to the bottling or ice making process; and

(e) In addition to the requirements imposed under this subsection, the processing of bottled water shall be subject to regulation by the state department of agriculture and the United States Food and Drug Administration.

NEW SECTION

WAC 246-290-131 Emergency sources and supplies. (1) A purveyor with an emergency source shall provide, at a minimum, the following information in its department-approved emergency response program required under WAC 246-290-415 (2)(d):

(a) Source name, department identification number, capacity, and location;

(b) Engineering design department approval status;

(c) Routine water quality emergency source monitoring schedule, if applicable; and

(d) Procedures to activate the emergency source for the purpose of supplying the distribution system, including:

(i) Persons authorized to activate the source;

(ii) Conditions in which the emergency source will be activated;

(iii) Operational steps that will be taken before the source is activated;

(iv) Water quality sampling performed immediately before activating the source and while the emergency source is in operation; and

(v) Steps that will be taken to inform the public and the department before activating the source.

(2) A purveyor may maintain a physical connection between an emergency source and the distribution system if:

(a) The emergency source is an emergency intertie with another Group A water system, approved under WAC 246-290-132; or

(b) The emergency source is a drilled and cased well which:

(i) Is identified in the purveyor's department-approved emergency response program in accordance with WAC 246-290-420;

(ii) Has an isolation valve between the emergency source and the distribution system that is secured in the fully closed position when not in use; and

(iii) Has the motor starter locked-out and tagged-out in the off position so that the pump is isolated from the power supply when not in use.

(3) A purveyor with an emergency source that does not meet the requirements of subsection (2) of this section shall:

(a) Physically disconnect the emergency source from the distribution system by the removal of a pipe segment or by an alternate means as determined by the department; and

(b) Receive permission from the department or health officer before physically connecting and activating the emergency source for the purpose of supplying the distribution system.

(4) Unless otherwise directed by the department, a purveyor using trucked water as an emergency drinking water supply shall only use water that:

(a) Originates from a Group A public water system that is in compliance with the requirements of this chapter;

(b) Is treated with chlorine when the truck is filled by adding one-half cup of six to eight and twenty-five one hundredths of one percent regular unscented household bleach per one thousand gallons of water, or equivalent;

(c) Has a free chlorine residual equal to or greater than 0.5 mg/L at the time of delivery; and

(d) Is collected, temporarily stored, and delivered by tanks, bladders, pumps, pipes and other equipment that:

(i) Are contaminant-free and constructed and maintained to prevent contamination; and

(ii) Have not previously been used to carry nonfood products, toxic substances, or petroleum products.

(5) Purveyors using trucked water as an emergency drinking water supply shall:

(a) Receive permission from the department, health officer, or local or state emergency management agency prior to use;

(b) Measure the free chlorine residual of the delivered water and only accept water that has a free chlorine residual that is equal to or greater than 0.5 mg/L at the time of delivery;

(c) Store trucked water in the delivery truck or in an approved component of the purveyor's water system; and

(d) Maintain records of trucked water deliveries, including the hauler, water source, chlorine test results, and delivery date, time, and volume. Records must be available for review upon request by the department or health officer.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-135 Source water protection. (1) The department may require monitoring and controls in addition to those specified in this section if the department determines a potential risk exists to the water quality of a source.

(2) SCA.

(a) The purveyor shall maintain an SCA around all sources for the purpose of protecting them from existing and potential sources of contamination.

(b) For wells and springs, the minimum SCA shall have a radius of one hundred feet (thirty meters) and two hundred feet (sixty meters) respectively, unless engineering justification demonstrates that a smaller area can provide an adequate level of source water protection. The justification shall address geological and hydrological data, well construction details, mitigation measures, and other relevant factors necessary to assure adequate sanitary control.

(c) The department may require a larger SCA than specified in (b) of this subsection, or additional mitigation measures if land use, geological, or hydrological data support the decision. It shall be the purveyor's responsibility to obtain the protection needed.

(d) The purveyor shall prohibit the construction, storage, disposal, or application of any source of contamination within the SCA without the permission of the purveyor.

(e) The SCA shall be owned by the purveyor in fee simple, or the purveyor shall have the right to exercise complete sanitary control of the land through other legal provisions.

(f) A purveyor, owning all or part of the SCA in fee simple or having possession and control, shall send to the department copies of legal documentation, such as a duly recorded declaration of covenant, restricting the use of the land. This legal documentation shall state:

(i) Constructing, storing, disposing, or applying any source of contamination is prohibited without the permission of the purveyor; and

(ii) If any change in ownership of the system or SCA is considered, all affected parties shall be informed of these requirements.

(g) Where portions of the control area are in the possession and control of another, the purveyor shall obtain a duly recorded restrictive covenant which shall run with the land, restricting the use of the land in accordance with this chapter and provide the department with copies of the appropriate documentation.

(3) Wellhead protection.

(a) Purveyors of water systems using groundwater or spring sources shall develop and implement a wellhead protection program.

(b) The wellhead protection program shall be part of the water system plan required under WAC 246-290-100 or the small water system management program required under WAC 246-290-105.

(c) The purveyor's wellhead protection program shall contain, at a minimum, the following elements:

(i) A completed susceptibility assessment or equivalent information;

(ii) WHPA delineation for each well, wellfield, or spring with the six month, one, five and ten year time of travel boundaries marked, or boundaries established using alternate criteria approved by the department in those settings where groundwater time of travel is not a reasonable delineation criteria. WHPA delineations shall be done in accordance with recognized methods such as those described in the following sources:

(A) Department guidance on wellhead protection; or

(B) EPA guidance for delineation of wellhead protection areas;

(iii) An inventory, including identification of site locations and owners/operators, of all known and potential groundwater contamination sources located within the defined WHPA(s) having the potential to contaminate the source water of the well(s) or spring(s). This list shall be updated every two years;

(iv) Documentation of purveyor's notification to all owners/operators of known or potential sources of groundwater contamination ((~~listed in (c)(B)(iii)~~)) identified under (c)(iii) of this subsection;

(v) Documentation of purveyor's notification to regulatory agencies and local governments of the boundaries of the WHPA(s) and the findings of the WHPA inventory;

(vi) A contingency plan to ensure consumers have an adequate supply of potable water in the event that contamination results in the temporary or permanent loss of the principal source of supply (major well(s) or wellfield); and

(vii) Documentation of coordination with local emergency incident responders (including police, fire and health departments), including notification of WHPA boundaries, results of susceptibility assessment, inventory findings, and contingency plan.

(4) Watershed control program.

(a) Purveyors of water systems using surface water or GWI sources shall develop and implement a watershed control program under Part 6 of chapter 246-290 WAC as applicable.

(b) The watershed control program shall be part of the water system plan required ((~~in~~)) under WAC 246-290-100 or the small water system management program required ((~~in~~)) under WAC 246-290-105.

(c) The purveyor's watershed control program shall contain, at a minimum, the following elements:

(i) Watershed description and inventory, including location, hydrology, land ownership and activities that may adversely affect source water quality;

(ii) An inventory of all potential surface water contamination sources and activities, including identification of site locations and owner/operators, located within the watershed and having the significant potential to contaminate the source water quality;

(iii) Watershed control measures, including documentation of ownership and relevant written agreements, and monitoring of activities and water quality;

(iv) System operation, including emergency provisions; and

(v) Documentation of water quality trends.

(d) ((~~The purveyor shall submit the~~)) Purveyors who have not received previous department approval of a watershed control program shall submit a watershed control program to the department for approval. Following department approval, the purveyor shall implement the watershed control program as approved.

(e) Purveyors of systems using unfiltered surface or GWI sources and meeting the criteria to remain unfiltered as specified in WAC 246-290-690 shall submit an annual report to the department that summarizes the effectiveness of the watershed control program. Refer to WAC 246-290-690 for further information about this report.

(f) ((~~The~~)) Purveyors required to develop a small water system management program under WAC 246-290-105 shall update the watershed control program at least every six years((~~, or more frequently if required by the department~~)).

(g) Purveyors required to submit a water system plan under WAC 246-290-100 shall update the watershed control program when the water system plan is updated.

(h) The department may require purveyors to update the watershed control program more frequently if the department determines that a potential risk exists to the water quality of a source.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-200 Design standards. (1) Purveyors shall ensure that good engineering criteria and practices are used in the design and construction of all public water systems, such as those set out in:

(a) Department guidance on design for Group A public water systems;

(b) The most recent published edition of the International Building Code (IBC), the Uniform Plumbing Code (UPC), and other national model codes adopted in Washington state;

(c) The most recent published edition of *Recommended Standards for Water Works, A Committee Report of the Great Lakes - Upper Mississippi River Board of State Public Health and Environmental Managers*;

(d) Standard specifications of the American Public Works Association, the American Society of Civil Engineers, AWWA, or the American Society for Testing and Materials;

(e) Design criteria, such as contained in current college texts and professional journal articles, acceptable to the department;

(f) Chapter 173-160 WAC *Minimum Standards for Construction and Maintenance of ((~~Water~~)) Wells*;

(g) The latest edition of the PNWS-AWWA Cross-Connection Control Manual, or the University of Southern California (USC) Manual of Cross-Connection Control.

(2) In addition, purveyors of new or expanding public water systems shall consider and use, as appropriate, the following design factors:

(a) Historical water use;

(b) Community versus recreational uses of water;

(c) Local conditions and/or regulations;

(d) Community expectations;

(e) Public Water System Coordination Act considerations where appropriate;

(f) Provisions for systems and component reliability in accordance with WAC 246-290-420;

(g) Wind pressures, seismic risk, snow loads, and flooding;

(h) Other risks from potential disasters, as feasible; and

(i) Other information as required by the department.

AMENDATORY SECTION (Amending WSR 03-08-037, filed 3/27/03, effective 4/27/03)

WAC 246-290-220 Drinking water materials and additives. (1) All materials shall conform to the ANSI/NSF Standard 61 if in substantial contact with potable water supplies. For the purposes of this section, "substantial contact" means the elevated degree that a material in contact with water may release leachable contaminants into the water such that levels of these contaminants may be unacceptable with respect to either public health or aesthetic concerns. It should take into consideration the total material/water interface area of exposure, volume of water exposed, length of time water is in contact with the material, and level of public health risk. Examples of water system components that would be considered to be in "substantial contact" with drinking water are filter media, storage tank interiors or liners, distribution piping, membranes, exchange or adsorption media, or other similar components that would have high potential for contacting the water. Materials associated with components such as valves, pipe fittings, debris screens, gaskets, or similar appurtenances would not be considered to be in substantial contact.

(2) Materials or additives in use prior to the effective date of these regulations that have not been listed under ANSI/NSF Standard 60 or 61 may be used for their current applications until the materials are scheduled for replacement, or that stocks of existing additives are depleted and scheduled for reorder.

(3) Any treatment chemicals, with the exception of commercially retailed hypochlorite compounds such as unscented Clorox, Purex, etc., added to water intended for potable use must comply with ANSI/NSF Standard 60. The maximum application dosage recommendation for the product certified by the ANSI/NSF Standard 60 shall not be exceeded in practice.

(4) Any products used to coat, line, seal, patch water contact surfaces or that have substantial water contact within the collection, treatment, or distribution systems must comply with the appropriate ANSI/NSF Standard 60 or 61. Application of these products must comply with recommendations contained in the product certification.

(5) The department may accept continued use of, and proposals involving, certain noncertified chemicals or materials on a case-by-case basis, if all of the following criteria are met:

(a) The chemical or material has an acknowledged and demonstrable history of use in the state for drinking water applications;

(b) There exists no substantial evidence that the use of the chemical or material has caused consumers to register complaints about aesthetic issues, or health related concerns, that could be associated with leachable residues from the material; and

(c) The chemical or material has undergone testing through a protocol acceptable to the department and has been found to not contribute leachable compounds into drinking water at levels that would be of public health concern.

(6) Any pipe, pipe fittings, plumbing fittings, fixtures, solder, or flux used in the installation or repair of a public water system shall be lead-free:

(a) This prohibition shall not apply to leaded joints necessary for the repair of cast iron pipes; and

(b) Within the context of this section, lead-free shall mean:

(i) No more than ((~~eight~~)) a weighted average of twenty-five one-hundredths of one percent lead, calculated in ((~~pipes~~

~~and pipe fittings;~~)) accordance with 42 U.S.C. 300g-6(d)(2); and

(ii) No more than two-tenths of one percent lead in solder and flux((~~; and~~

~~(iii) Fittings and fixtures that are in compliance with standards established in accordance with 42 U.S.C. 300g-6(e)~~)).

(7) Exceptions to the lead-free requirements of subsection (6) of this section include:

(a) Pipes, pipe fittings, plumbing fittings, or fixtures, including backflow preventers, that are used exclusively for nonpotable services such as manufacturing, industrial processing, irrigation, outdoor watering, or any other uses where the water is not anticipated to be used for human consumption; or

(b) Toilets, bidets, urinals, fill valves, flushometer valves, tub fillers, fire hydrants, shower valves, service saddles, or water distribution main gate valves that are two inches in diameter or larger.

AMENDATORY SECTION (Amending WSR 11-17-062, filed 8/15/11, effective 10/1/11)

WAC 246-290-300 Monitoring requirements. (1) General.

(a) The monitoring requirements specified in this section are minimums. The department may require additional monitoring when:

(i) Contamination is present or suspected in the water system;

(ii) A groundwater source is determined to be a potential GWI;

(iii) The degree of source protection is not satisfactory;

(iv) Additional monitoring is needed to verify source vulnerability for a requested monitoring waiver;

(v) Under other circumstances as identified in a department order; or

(vi) Additional monitoring is needed to evaluate continuing effectiveness of a treatment process where problems with the treatment process may exist.

(b) Special purpose samples collected by the purveyor shall not count toward fulfillment of the monitoring requirements of this chapter unless the quality of data and method of sampling and analysis are acceptable to the department.

(c) The purveyor shall ensure samples required by this chapter are collected, transported, and submitted for analysis according to EPA-approved methods. The analyses shall be performed by a laboratory accredited by the state. Qualified water utility, accredited laboratory, health department personnel, and other parties approved by the department may conduct measurements for pH, temperature, residual disinfectant concentration, alkalinity, bromide, chlorite, TOC, SUVA, turbidity, calcium, conductivity, orthophosphate, and silica as required by this chapter, provided, these measurements are made according to EPA approved methods.

(d) Compliance samples required by this chapter shall be taken at locations listed in Table ((~~3~~)) 4 of this section.

(e) Purveyors failing to comply with a monitoring requirement shall notify:

(i) The department under WAC 246-290-480; and

(ii) The owner or operator of any consecutive system served and the appropriate water system users under 40 C.F.R. 141.201 and Part 7, Subpart A of this chapter.

(2) Selling and receiving water.

(a) Source monitoring. Purveyors, with the exception of those that "wheel" water to their consumers (i.e., sell water that has passed through another purchasing purveyor's distribution system), shall conduct source monitoring under this chapter for the sources under their control. The level of monitoring shall satisfy the monitoring requirements associated with the total population served by the source.

(b) Distribution system monitoring. The purveyor of a system that receives and distributes water shall perform distribution-related monitoring requirements. Monitoring shall include, but not be limited to, the following:

(i) Collect coliform samples under subsection (3) of this section;

(ii) Collect disinfection byproduct samples as required by subsection (6) of this section;

(iii) Perform the distribution system residual disinfectant concentration monitoring under subsection (6) of this section, and as required under WAC 246-290-451, 246-290-664, or 246-290-694. Systems with fewer than one hundred connections shall measure residual disinfectant concentration at the same time and location that a routine or repeat coliform sample is collected, unless the department determines that more frequent monitoring is necessary to protect public health;

(iv) Perform lead and copper monitoring required under 40 C.F.R. 141.86, 141.87, and 141.88;

(v) Perform the distribution system monitoring under 40 C.F.R. 141.23(b) for asbestos if applicable;

(vi) Other monitoring as required by the department.

(c) Reduced monitoring for regional programs. The receiving purveyor may receive reductions in the coliform, lead and copper, disinfection byproduct (including THMs and HAA5) and distribution system disinfectant residual concentration monitoring requirements, provided the receiving system:

(i) Purchases water from a purveyor that has a department-approved regional monitoring program;

(ii) Has a written agreement with the supplying system or regional water supplier that is acceptable to the department, and which identifies the responsibilities of both the supplying and receiving system(s) with regards to monitoring, reporting and maintenance of the distribution system; and

(iii) Has at least one compliance monitoring location for disinfection byproducts, if applicable.

(d) Periodic review of regional programs. The department may periodically review the sampling records of public water systems participating in a department-approved monitoring program to determine if continued reduced monitoring is appropriate. If the department determines a change in the monitoring requirements of the receiving system is appropriate:

(i) The department shall notify the purveyor of the change in monitoring requirements; and

(ii) The purveyor shall conduct monitoring as directed by the department.

(3) Bacteriological.

(a) The purveyor shall be responsible for collection and submittal of coliform samples from representative points throughout the distribution system. Samples shall be collected after the first service and at regular time intervals each month the system provides water to consumers. Samples shall be collected that represent normal system operating conditions.

(i) Systems providing disinfection treatment shall measure the residual disinfectant concentration within the distribution system at the same time and location of routine and repeat samples.

(ii) Systems providing disinfection treatment shall assure that disinfectant residual concentrations are measured and recorded on all coliform sample report forms submitted for compliance purposes.

(b) Coliform monitoring plan.

(i) ((~~The purveyor shall prepare a written coliform monitoring plan and base routine monitoring upon the plan. The plan shall include coliform sample collection sites and a sampling schedule.~~

~~(ii)~~)) Systems shall develop a written coliform monitoring plan that identifies sampling sites and a sample collection schedule that are representative of water throughout the distribution system. The plan is subject to department review and approval. Systems shall collect total coliform samples according to the plan. Monitoring may take place at a customer's premises, dedicated sampling station, or other designated compliance sampling location. Routine and repeat sample sites and any sampling points necessary to meet the requirements of Part 6 of this chapter and WAC 246-290-300 (3)(h) must be identified in the plan.

(ii) Systems shall collect samples at regular time intervals throughout the month, except for systems that use groundwater and serve four thousand nine hundred or fewer people may collect all required samples on a single day if the samples are taken from different sites.

(iii) Systems shall take at least the minimum number of required samples even if the system has had an *E. coli* MCL violation or has exceeded the coliform treatment technique triggers in WAC 246-290-320(2).

(iv) Systems may conduct more compliance monitoring than is required under subsection (3)(b) of this section to investigate potential problems in the distribution system and use monitoring as a tool to assist in identifying problems. Systems may take more than the minimum number of required routine samples and must include the results in calculating whether or not the coliform treatment technique triggers in WAC 246-290-320(2) have been exceeded only if the samples are taken in accordance with the plan and are representative of water throughout the distribution system.

(v) Systems shall identify repeat monitoring locations in the plan. Unless the provisions of subsection (3)(b)(i) through (iv) of this section are met, the system shall collect at least one repeat sample from the sample tap where the original total coliform-positive sample was taken, and at least one repeat sample at a tap within five service connections upstream and at least one repeat sample at a tap within five service connections downstream of the original sample site. If a total coliform-positive sample is at the end of the distribution system, or one service connection away from the end of the distribution system, the system shall still take all required repeat samples. The department may allow an alternative sampling location in lieu of the requirement to collect at least one repeat sample upstream or downstream of the original sampling site. Systems may propose repeat monitoring locations to the department that the system believes to be representative of a pathway for contamination of the distribution system. A system may elect to specify either alternative fixed locations or criteria for selecting repeat sampling sites on a situational basis in a standard operating procedure (SOP) in its plan. The system shall design its SOP to focus the repeat samples at locations that best verify and determine the extent of potential contamination of the distribution system area based on specific situations. The department may modify the SOP or require alternative monitoring locations as needed.

(vi) The purveyor shall:

(A) Keep the coliform monitoring plan on file with the system and make it available to the department for inspection upon request;

(B) Revise or expand the plan at any time the plan no longer ensures representative monitoring of the system, or as directed by the department; and

(C) Submit the plan to the department for review and approval when requested and as part of the water system plan required under WAC 246-290-100.

(c) Special purpose coliform samples. Special purpose coliform samples, such as those taken to determine whether disinfection practices are sufficient following pipe placement, replacement, or repair, must not be used to determine whether or not the coliform treatment technique trigger has been exceeded. Repeat samples taken in accordance with subsection (3) of this section are not considered special purpose coliform samples, and must be used to determine whether or not the coliform treatment technique trigger has been exceeded.

(d) Invalidation of total coliform samples. A total coliform-positive sample invalidated under subsection (3) of this section does not count toward meeting the minimum monitoring requirements of this section.

(i) The department may invalidate a total coliform-positive sample if one or more of the following conditions are met:

(A) The laboratory establishes that improper sample analysis caused the total coliform-positive result;

(B) The department, on the basis of the results of repeat samples collected as required under subsection (3) of this section, determines that the total coliform-positive samples resulted from a domestic or other nondistribution system plumbing problem. The department may not invalidate a sample on the basis of repeat sample results unless all repeat samples collected at the same tap as the original total coliform-positive sample are also total coliform-positive, and all repeat samples collected at a location other than the original tap are total coliform-negative. For example, the department may not invalidate a total coliform-positive sample on the basis of repeat samples if all the repeat samples are total coliform-negative, or if the system has only one service connection; or

(C) The department has substantial grounds to believe that a total coliform-positive result is due to a circumstance or condition that does not reflect water quality in the distribution system. In this case, the system shall still collect all repeat samples required under subsection (3) of this section, and use the samples to determine whether a coliform treatment technique trigger under WAC 246-290-320(2) has been exceeded.

(ii) Unless total coliforms are detected, a laboratory shall invalidate a total coliform sample if the sample produces a turbid culture in the absence of gas production using an analytical method where gas formation is examined such as the multiple-tube fermentation technique, produces a turbid culture in the absence of an acid reaction in the presence-absence coliform test, or exhibits confluent growth or produces colonies TNTC with an analytical method using a membrane filter such as a membrane filter technique. If a laboratory invalidates a sample because of such interference, the system shall collect another sample from the same location as the original sample within twenty-four hours of notification of the interference problem, and have it analyzed for the presence of total coliforms. The system shall continue to resample within twenty-four hours and have the samples analyzed until it obtains a valid result. The department may waive the twenty-four hour time limit on a case-by-case basis.

(e) Monitoring frequency. The number of required routine coliform samples is based on total population served.

(i) Purveyors of **community** systems shall collect and submit for analysis no less than the number of routine samples listed in Table ((~~1~~)) 2 during each calendar month of operation;

(ii) Unless directed otherwise by the department, purveyors of **noncommunity** systems shall collect and submit for analysis no less than the number of samples required in Table ((~~1, and no less than required under 40 C.F.R. 141.21~~)) 2. Each month's population shall be based on the average daily population and shall include all residents and nonresidents served during that month. During months when the average daily population served is less than twenty-five, routine sample collection is not required when:

(A) Using only protected groundwater sources;

(B) ((~~No coliform were detected in samples during~~)) The system has a clean compliance history for a minimum of twelve months;

(C) The system has no sanitary defects or significant deficiencies;

(D) The system has detected no total coliform-positive routine or repeat samples in the previous month; and

(((~~(C) One~~)) (E) The system has collected and submitted for analysis one routine sample ((~~has been collected and submitted for analysis~~)) during one of the previous two months.

(iii) Purveyors of NTNC and TNC systems are not required to collect routine samples in months when the population served is zero.

(iv) Purveyors of systems serving both a resident and a nonresident population shall base their minimum sampling requirement on the total of monthly populations served, both resident and nonresident as determined by the department, but no less than the minimum required in Table ((~~1, and~~

~~(iv) Purveyors of systems with a nonresident population lasting two weeks or less during a month shall sample as directed by the department. Sampling shall be initiated at least two weeks prior to the time service is provided to consumers.~~

~~(v) Purveyors of TNC systems shall not be required to collect routine samples in months where the population served is zero or the system has notified the department of an unscheduled closure.~~

~~(d) Invalid samples. When a routine or repeat coliform sample is determined invalid under WAC 246-290-320 (2)(d), the purveyor shall:~~

~~(i) Not include the sample in the determination of monitoring compliance; and~~

~~(ii) Take follow-up action as defined in WAC 246-290-320 (2)(d).~~

~~(e) Assessment source water monitoring. If directed by the department, a groundwater system must conduct assessment source water monitoring which may include, but is not limited to, collection of at least one representative groundwater source sample each month the source provides groundwater to the public, for a minimum of twelve months.~~

~~(i) Sampling must be conducted as follows:~~

~~(A) Source samples must be collected at a location prior to any treatment. If the water system's configuration does not allow sampling at the source itself, the department may approve an alternative source sampling location representative of the source water quality.~~

~~(B) Source samples must be at least 100 mL in size and must be analyzed for *E. coli* using one of the analytical methods under 40 C.F.R. 141.402(e).~~

~~(ii) A groundwater system may use a triggered source water sample collected under WAC 246-290-320 (2)(g) to meet the requirements for assessment source water monitoring.~~

~~(iii) Groundwater systems with an *E. coli* positive assessment source water sample that is not invalidated under WAC 246-290-320 (2)(g)(vii), and consecutive systems receiving water from this source must:~~

~~(A) Provide Tier 1 public notice under Part 7, Subpart A of this chapter and special notification under WAC 246-290-71005 (4) and (5); and~~

~~(B) Take corrective action as required under WAC 246-290-453(1).~~

~~(iv) The purveyor of a groundwater system that fails to conduct assessment source water monitoring as directed by the department shall provide Tier 2 public notice under Part 7, Subpart A of this chapter.~~

~~(f) The purveyor using a surface water or GWI source shall collect representative source water samples for bacteriological density analysis under WAC 246-290-664 and 246-290-694 as applicable.~~

~~TABLE 1~~
~~MINIMUM MONTHLY ROUTINE COLIFORM SAMPLING REQUIREMENTS~~

~~Population Served [1]~~		~~Minimum Number of Routine Samples/Calendar Month~~	
~~During Month~~		~~When NO samples with a coliform presence were collected during the previous month~~	~~When ANY samples with a coliform presence were collected during the previous month~~
~~1~~ -	~~1,000~~	~~1*~~	~~5~~
~~1,001~~ -	~~2,500~~	~~2*~~	~~5~~
~~2,501~~ -	~~3,300~~	~~3*~~	~~5~~
~~3,301~~ -	~~4,100~~	~~4*~~	~~5~~
~~4,101~~ -	~~4,900~~	~~5~~	~~5~~
~~4,901~~ -	~~5,800~~	~~6~~	~~6~~
~~5,801~~ -	~~6,700~~	~~7~~	~~7~~
~~6,701~~ -	~~7,600~~	~~8~~	~~8~~
~~7,601~~ -	~~8,500~~	~~9~~	~~9~~
~~8,501~~ -	~~12,900~~	~~10~~	~~10~~
~~12,901~~ -	~~17,200~~	~~15~~	~~15~~
~~17,201~~ -	~~21,500~~	~~20~~	~~20~~
~~21,501~~ -	~~25,000~~	~~25~~	~~25~~
~~25,001~~ -	~~33,000~~	~~30~~	~~30~~
~~33,001~~ -	~~41,000~~	~~40~~	~~40~~
~~41,001~~ -	~~50,000~~	~~50~~	~~50~~
~~50,001~~ -	~~59,000~~	~~60~~	~~60~~
~~59,001~~ -	~~70,000~~	~~70~~	~~70~~
~~70,001~~ -	~~83,000~~	~~80~~	~~80~~
~~83,001~~ -	~~96,000~~	~~90~~	~~90~~
~~96,001~~ -	~~130,000~~	~~100~~	~~100~~
~~130,001~~ -	~~220,000~~	~~120~~	~~120~~
~~220,001~~ -	~~320,000~~	~~150~~	~~150~~
~~320,001~~ -	~~450,000~~	~~180~~	~~180~~
~~450,001~~ -	~~600,000~~	~~210~~	~~210~~
~~600,001~~ -	~~780,000~~	~~240~~	~~240~~
~~780,001~~ -	~~970,000~~	~~270~~	~~270~~
~~970,001~~ -	~~1,230,000[3]~~	~~300~~	~~300~~

~~[1] Does not include the population of a consecutive system that purchases water. The sampling requirement for consecutive systems is a separate determination based upon the population of that system.~~

~~[2] Noncommunity systems using only protected groundwater sources and serving less than 25 individuals, may collect and submit for analysis, one sample every three months.~~

~~[3] Systems serving populations larger than 1,230,000 shall contact the department for the minimum number of samples required per month.~~

~~* In addition to the provisions of subsection (1)(a) of this section, if a system of this size cannot show evidence of having been subject to a sanitary survey on file with the department, or has been determined to be at risk to bacteriological concerns following a survey, the minimum number of samples required per month may be increased by the department after additional consideration of factors such as monitoring history, compliance record, operational problems, and water quality concerns for the system.~~))

2.

(v) Seasonal systems.

(A) In accordance with WAC 246-290-480 (2)(f)(ii), seasonal systems shall certify that a department-approved start-up procedure, which may include a requirement for start-up sampling, was completed prior to serving water to the public.

(B) Seasonal systems shall monitor every month that it is in operation unless it meets the criteria in subsection (3)(e)(ii) of this section.

(C) The department may exempt a seasonal system from some or all of the requirements in subsection (3)(e)(v)(A) of this section if the entire distribution system remains pressurized during the entire period that the system is not operating, except that systems that monitor less frequently than monthly shall still monitor during the vulnerable period designated by the department.

Table 2
Total Coliform Monitoring Frequency

Population served	Minimum number of samples per month
1 to 1,000*	1
1,001 to 2,500	2
2,501 to 3,300	3
3,301 to 4,100	4
4,101 to 4,900	5
4,901 to 5,800	6
5,801 to 6,700	7
6,701 to 7,600	8
7,601 to 8,500	9
8,501 to 12,900	10
12,901 to 17,200	15
17,201 to 21,500	20
21,501 to 25,000	25
25,001 to 33,000	30
33,001 to 41,000	40
41,001 to 50,000	50
50,001 to 59,000	60
59,001 to 70,000	70
70,001 to 83,000	80
83,001 to 96,000	90
96,001 to 130,000	100
130,001 to 220,000	120
220,001 to 320,000	150
320,001 to 450,000	180

Population served	Minimum number of samples per month
450,001 to 600,000	210
600,001 to 780,000	240
780,001 to 970,000	270
970,001 to 1,230,000	300
1,230,001 to 1,520,000	330
1,520,001 to 1,850,000	360
1,850,001 to 2,270,000	390
2,270,001 to 3,020,000	420
3,020,001 to 3,960,000	450
3,960,001 or more	480

*Noncommunity systems using only protected groundwater sources and serving less than twenty-five individuals, may collect and submit for analysis, one sample every three months per WAC 246-290-300 (3)(e)(ii).

(f) Repeat monitoring.

(i) If a routine sample taken under subsection (3) of this section is total coliform-positive, the system shall collect a set of repeat samples within twenty-four hours of being notified of the positive result. Additional treatment, such as batch or shock chlorination must not be started prior to the collection of repeat samples unless the department gives prior authorization. The purveyor shall contact the department to determine the best interim approach in this situation. The system shall collect no fewer than three repeat samples for each total coliform-positive sample found. The department may extend the twenty-four hour limit on a case-by-case basis if the system has a logistical problem in collecting the repeat samples within twenty-four hours that is beyond its control. Following the collection of repeat samples, and before the analytical results are known, the system may provide interim precautionary treatment or other means to protect public health.

(ii) The system shall collect all repeat samples on the same day, except the department may allow a system with a single connection to collect the required set of repeat samples over a three-day period or to collect a larger volume of repeat samples in one or more sample containers of any size, as long as the total volume collected is at least 300 ml.

(iii) The system shall collect an additional set of repeat samples in the manner specified in subsection (3)(f)(i) through (iii) of this section if one or more repeat samples in the current set of repeat samples is total coliform-positive. The system shall collect the additional set of repeat samples within twenty-four hours of being notified of the positive result, unless the department extends the time limit as provided in subsection (3)(f)(i) of this section. The system shall continue to collect additional sets of repeat samples until either total coliforms are not detected in one complete set of repeat samples or the system determines that a coliform treatment technique trigger specified in WAC 246-290-320 (2)(a) has been exceeded as a result of a repeat sample being total coliform-positive and notifies the department. If a treatment technique trigger identified in WAC 246-290-320 (2)(a) is exceeded as a result of a routine sample being total coliform-positive, the system is required to conduct only one round of repeat monitoring for each total coliform-positive routine sample.

(iv) After a system collects a routine sample and before it gets the results of the analysis of that sample, if it collects subsequent routine samples from within five adjacent service connections of the initial sample, and the initial sample, after analysis, is found to contain total coliforms, then the system may count the subsequent samples as a repeat sample instead of as a routine sample.

(v) Results of all routine and repeat samples taken under subsection (3)(e) and (f) of this section not invalidated by the department under subsection (3)(d) of this section must be used to determine whether a coliform treatment technique trigger specified in WAC 246-290-320 (2)(a) has been exceeded.

(g) *E. coli* testing.

(i) If any routine or repeat sample is total coliform-positive, the system shall analyze that total coliform-positive culture medium to determine if *E. coli* are present. If *E. coli* are present, the system shall notify the department by the end of the day when the system is notified of the test result.

(ii) The department may allow a system, on a case-by-case basis, to forgo *E. coli* testing on a total coliform-positive sample if the system assumes that the total coliform-positive sample is *E. coli*-positive. Accordingly, the system shall notify the department as specified in WAC 246-290-320 (1)(a).

(h) Triggered source water monitoring.

(i) All groundwater systems with their own groundwater sources must conduct triggered source water monitoring unless the following conditions exist:

(A) The system has submitted a project report and received department approval that it provides at least 4-log treatment of viruses using inactivation, removal, or a department-approved combination of 4-log virus inactivation and removal before or at the first customer for each groundwater source; and

(B) The system is conducting compliance monitoring under WAC 246-290-453(2).

(ii) Any groundwater source sample required under this subsection (3) must be collected at the source prior to any treatment unless otherwise approved by the department.

(iii) Any groundwater source sample collected under this subsection (3) must be at least 100 mL in size and must be analyzed for *E. coli* using one of the analytical methods under 40 C.F.R. 141.402(c).

(iv) Groundwater systems shall collect at least one sample from each groundwater source in use at the time a routine sample collected under subsection (3) of this section is total coliform-positive and not invalidated under subsection (3)(d) of this section. These source samples must be collected within twenty-four hours of notification of the total coliform-positive sample. The following exceptions apply:

(A) The twenty-four hour time limit may be extended if granted by the department and will be determined on a case-by-case basis. If an extension is granted, the system shall sample by the deadline set by the department.

(B) Systems with more than one groundwater source may meet the requirements of subsection (3)(h)(iv) of this section by sampling a representative groundwater source or sources. The system shall have a department-approved triggered source water monitoring plan that identifies one or more groundwater sources that are representative of each monitoring site in the system's coliform monitoring plan under subsection (3)(b) of this section. The plan must be approved by the department before representative sampling will be allowed.

(v) Groundwater systems with an *E. coli* positive source water sample that is not invalidated under subsection (3)(h)(vii) of this section, shall:

(A) Notify the department by the end of the day when the system is notified of the test result.

(B) Provide Tier 1 public notice as required under Part 7, Subpart A of this chapter and special notification under WAC 246-290-71005 (4) and (5);

(C) If directed by the department, take corrective action as required under WAC 246-290-453(1); and

(D) Systems that are not directed by the department to take corrective action shall collect five additional samples from the same source within twenty-four hours of being notified of the *E. coli* positive source water sample. If any of the five additional samples are *E. coli* positive, the system shall take corrective action under WAC 246-290-453(1).

(vi) Any consecutive groundwater system that has a total coliform-positive routine sample collected under this subsection and not invalidated under subsection (3)(d) of this section shall notify each wholesale system it receives water from within twenty-four hours of being notified of the total coliform-positive sample and comply with subsection (3)(h) of this section.

(A) A wholesale groundwater system that receives notice from a consecutive system under subsection (3)(h)(vi) of this section shall conduct triggered source water monitoring under subsection (3)(h) of this section unless the department determines and documents in writing that the total coliform-positive sample collected was caused by a distribution system deficiency in the consecutive system.

(B) If the wholesale groundwater system source sample is *E. coli* positive, the wholesale system shall notify all consecutive systems served by that groundwater source within twenty-four hours of being notified of the results and shall meet the requirements of subsection (3)(h)(v) of this section.

(C) Any consecutive groundwater system receiving water from a source with an *E. coli* positive sample shall notify water system users as required under subsection (3)(h)(v)(B) of this section.

(vii) An *E. coli* positive groundwater source sample may be invalidated only if one of the following conditions apply:

(A) The system provides the department with written notice from the laboratory that improper sample analysis occurred; or

(B) The department determines and documents in writing that there is substantial evidence that the *E. coli* positive groundwater sample is not related to source water quality.

(viii) If the department invalidates an *E. coli* positive groundwater source sample, the system shall collect another source water sample within twenty-four hours of being notified by the department of its invalidation decision and have the sample analyzed using the same analytical method. The department may extend the twenty-four hour time limit as allowed under subsection (3)(h)(iv)(A) of this section.

(ix) Groundwater systems that fail to meet any of the monitoring requirements of subsection (3)(h) of this section shall conduct Tier 2 public notification under Part 7, Subpart A of this chapter.

(i) Assessment source water monitoring. If directed by the department, a groundwater system shall conduct assessment source water monitoring which may include, but is not limited to, the collection of at least one representative groundwater source sample each month the source provides groundwater to the public, for a minimum of twelve months.

(i) Sampling must be conducted as follows:

(A) Source samples must be collected at a location prior to any treatment. If the water system's configuration does not allow sampling at the source itself, the department may approve an alternative source sampling location representative of the source water quality.

(B) Source samples must be at least 100 mL in size and must be analyzed for *E. coli* using one of the analytical methods under 40 C.F.R. 141.402(c).

(ii) A groundwater system may use a triggered source water sample collected under subsection (3)(h) of this section to meet the requirements for assessment source water monitoring.

(iii) A groundwater system with an *E. coli* positive assessment source water sample that is not invalidated under subsection (3)(h)(vii) of this section, and consecutive systems receiving water from this source shall:

(A) Provide Tier 1 public notice under Part 7, Subpart A of this chapter and special notification under WAC 246-290-71005 (4) and (5); and

(B) Take corrective action as required under WAC 246-290-453(1).

(iv) A groundwater system that fails to conduct assessment source water monitoring as directed by the department shall provide Tier 2 public notice under Part 7, Subpart A of this chapter.

(4) Inorganic chemical and physical.

(a) A complete inorganic chemical and physical analysis shall consist of the primary and secondary chemical and physical substances.

(i) Primary chemical and physical substances are antimony, arsenic, asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, nitrate (as N), nitrite (as N), selenium, sodium, thallium, and for unfiltered surface water, turbidity. (Except that the MCL for arsenic under WAC 246-290-310 does not apply to TNC systems.)

(ii) Secondary chemical and physical substances are chloride, color, hardness, iron, manganese, specific conductivity, silver, sulfate, total dissolved solids*, and zinc.

* Required only when specific conductivity exceeds seven hundred micromhos/centimeter.

(b) Purveyors shall monitor for all primary and secondary chemical and physical substances identified in Table ((4)) 5 and Table ((5)) 6. Samples shall be collected in accordance with the monitoring requirements referenced in 40 C.F.R. 141.23 introductory text, 141.23(a) through 141.23(j),

((~~excluding (i)(2),~~)) and 40 C.F.R. 143.4, except for composite samples for systems serving less than three thousand three hundred one persons. For these systems, compositing among different systems may be allowed if the systems are owned or operated by a department-approved satellite management agency.

(c) Samples required by this subsection shall be taken at designated locations under 40 C.F.R. 141.23(a) through 141.23(j), ((~~excluding (i)(2),~~)) and 40 C.F.R. 143.4, and Table ((~~3~~)) 4 herein.

(i) Wellfield samples shall be allowed from department designated wellfields; and

(ii) Under 40 C.F.R. 141.23 (a)(3), alternate sampling locations may be used if approved by the department. The process for determining these alternate sites is described in department guidance. Purveyors of community and NTNC systems may ask the department to approve an alternate sampling location for multiple sources within a single system that are blended prior to entry to the distribution system. Alternate sampling plans shall address the following:

(A) Source vulnerability;

(B) Individual source characteristics;

(C) Previous water quality information;

(D) Status of monitoring waiver applications; and

(E) Other information deemed necessary by the department.

(d) Composite samples:

(i) Under 40 C.F.R. 141.23 (a)(4), purveyors may ask the certified lab to composite samples representing as many as five individual samples from within one system. Sampling procedures and protocols are outlined in department guidance; and

(ii) For systems serving a population of less than three thousand three hundred one, the department may approve composite sampling between systems when those systems are part of an approved satellite management agency.

(e) When the purveyor provides treatment for one or more inorganic chemical or physical contaminants, the department may require the purveyor to sample before and after treatment. The department shall notify the purveyor if and when this additional source sampling is required.

(f) Inorganic monitoring plans.

(i) Purveyors of community and NTNC systems shall prepare an inorganic chemical monitoring plan and base routine monitoring on the plan.

(ii) The purveyor shall:

(A) Keep the monitoring plan on file with the system and make it available to the department for inspection upon request;

(B) Revise or expand the plan at any time the plan no longer reflects the monitoring requirements, procedures or sampling locations, or as directed by the department; and

(C) Submit the plan to the department for review and approval when requested and as part of the water system plan required under WAC 246-290-100.

(g) Monitoring waivers.

(i) Purveyors may request in writing, a monitoring waiver from the department for any nonnitrate/nitrite inorganic chemical and physical monitoring requirements identified in this chapter.

(ii) Purveyors requesting a monitoring waiver shall comply with applicable subsections of 40 C.F.R. 141.23 (b)(3), and 141.23 (c)(3).

(iii) Purveyors shall update and resubmit requests for waiver renewals as applicable during each compliance cycle or period or more frequently as directed by the department.

(iv) Failure to provide complete and accurate information in the waiver application shall be grounds for denial of the monitoring waiver.

(h) The department may require the purveyor to repeat sample for confirmation of results.

(i) Purveyors with emergency and seasonal sources shall monitor those sources when they are in use.

(5) Lead and copper. Monitoring for lead and copper shall be conducted in accordance with 40 C.F.R. 141.86 (a) - (f), 141.87, and 141.88. All systems that have fewer than five drinking water taps used for human consumption shall collect at least one sample from each tap and then collect additional samples from those taps on different days during the monitoring period to meet the required number of samples as described in 40 C.F.R. 141.86(c).

(6) Disinfection byproducts (DBP), disinfectant residuals, and disinfection byproduct precursors (DBPP). Purveyors of community and NTNC systems providing water treated with chemical disinfectants and TNC systems using chlorine dioxide shall monitor as follows:

(a) General requirements.

(i) Systems shall collect samples during normal operating conditions.

(ii) All monitoring shall be conducted in accordance with the analytical requirements in 40 C.F.R. 141.131.

(iii) Systems may consider multiple wells drawing from a single aquifer as one treatment plant for determining the minimum number of TTHM and HAA5 samples required, with department approval in accordance with department guidance.

(iv) Systems required to monitor under this subsection shall prepare and implement a monitoring plan in accordance with 40 C.F.R. 141.132(f) or 40 C.F.R. 141.622, as applicable.

(A) Community and NTNC surface water and GWI systems that deliver water that has been treated with a disinfectant other than ultraviolet light and serve more than three thousand three hundred people shall submit a monitoring plan to the department.

(B) The department may require submittal of a monitoring plan from systems not specified in subsection (6)(a)(iv)(A) of this section, and may require revision of any monitoring plan.

(C) Failure to monitor for TTHM, HAA5, or bromate will be treated as a violation for the entire period covered by the annual average where compliance is based on a running annual average of monthly or quarterly samples or averages.

(D) Failure to monitor for chlorine and chloramine residuals will be treated as a violation for the entire period covered by the annual average where compliance is based on a running annual average of monthly or quarterly samples or averages and the systems' failure to monitor makes it impossible to determine compliance with the MRDLs.

(b) Disinfection byproducts - **Community** and **NTNC** systems only.

(i) TTHMs and HAA5.

(A) Systems shall monitor for TTHM and HAA5 in accordance with 40 C.F.R. 141.132 (b)(1)(i) until the dates set in Table ((~~2~~)) 3. On and after the dates set in Table ((~~2~~)) 3, the systems shall monitor in accordance with 40 C.F.R. 141.620, 141.621, and 141.622.

Table ((~~2~~)) 3

Population Served	Routine Monitoring Start Date[1]
100,000 or more	April 1, 2012
50,000 - 99,999	October 1, 2012
10,000 - 49,999	October 1, 2013
Less than 10,000	October 1, 2013[2]
	October 1, 2014[3]

[1]Systems that have nonemergency interties with other systems must comply with the dates associated with the largest system in their combined distribution system.

[2]Surface water and GWI systems that did not have to do *Cryptosporidium* monitoring under 40 C.F.R. 141.701 (a)(4).

[3]Surface water and GWI systems that also did *Cryptosporidium* monitoring under 40 C.F.R. 141.701 (a)(4).

(B) With department approval, systems may reduce monitoring in accordance with 40 C.F.R. 141.132 (b)(1)(ii) and (iii), or 40 C.F.R. 141.623, as applicable.

(C) Systems on department-approved reduced monitoring schedules may be required to return to routine monitoring, or initiate increased monitoring in accordance with 40 C.F.R. 141.132 (b)(1)(iv), 40 C.F.R. 141.625, or 40 C.F.R. 141.627, as applicable.

(D) The department may return systems on increased monitoring to routine monitoring if, after one year, annual average results for TTHMs and HAA5 are less than or equal to 0.060 mg/L and 0.045 mg/L, respectively, or monitoring results are consistently below the MCLs indicating that increased monitoring is no longer necessary. After the dates set in Table ((~~2~~)) 3, systems must meet requirements of 40 C.F.R. 141.628 and 40 C.F.R. 141.625(c) to return to routine monitoring.

(E) After the dates set in Table ((~~2~~)) 3, systems must calculate operational evaluation levels each calendar quarter and take action, as needed, in accordance with 40 C.F.R. 141.626.

(F) NTNC systems serving ten thousand or more people and community systems must comply with the provisions of 40 C.F.R. Subpart U - Initial Distribution System Evaluation ((~~at~~)) under:

40 C.F.R. 141.600	General requirements.
40 C.F.R. 141.601	Standard monitoring.
40 C.F.R. 141.602	System specific studies.
40 C.F.R. 141.603	40/30 certification.
40 C.F.R. 141.604	Very small system waivers.
40 C.F.R. 141.605	Subpart V compliance monitoring location recommendations.

(ii) Chlorite - Only systems that use **chlorine dioxide.**

(A) Systems using chlorine dioxide shall conduct daily and monthly monitoring in accordance with 40 C.F.R. 141.132 (b)(2)(i) and additional chlorite monitoring in accordance with 40 C.F.R. 141.132 (b)(2)(ii).

(B) With department approval, monthly monitoring may be reduced in accordance with 40 C.F.R. 141.132 (b)(2)(iii)(B). Daily monitoring at entry to distribution required by 40 C.F.R. 141.132 (b)(2)(i)(A) may not be reduced.

(iii) Bromate - Only systems that use **ozone.**

(A) Systems using ozone for disinfection or oxidation must conduct bromate monitoring in accordance with 40 C.F.R. 141.132 (b)(3)(i).

(B) With department approval, monthly bromate monitoring may be reduced to once per quarter in accordance with 40 C.F.R. 141.132 (b)(3)(ii)(B).

(c) Disinfectant residuals.

(i) Chlorine and chloramines. Systems that deliver water continuously treated with chlorine or chloramines, including consecutive systems, shall monitor and record the residual disinfectant level in the distribution system under WAC 246-290-300 (2)(b), 246-290-451((~~(7)~~)), 246-290-664(6), or 246-290-694(8)((~~, but in no case less than as required by 40 C.F.R. 141.74 (b)(6), 40 C.F.R. 141.74 (c)(3), 40 C.F.R. 141.132(c), or 40 C.F.R. 141.624~~)).

(ii) Chlorine dioxide. Community, NTNC, or TNC systems that use chlorine dioxide shall monitor in accordance with 40 C.F.R. 141.132 (c)(2) and record results.

(d) Disinfection byproducts precursors.

Community and NTNC surface water or GWI systems that use conventional filtration with sedimentation as defined in WAC 246-290-660(3) shall monitor under 40 C.F.R. 141.132(d), and meet the requirements of 40 C.F.R. 141.135.

(7) Organic chemicals.

(a) Purveyors of community and NTNC water systems shall comply with monitoring requirements under 40 C.F.R. 141.24 (a) - (d), 141.24 (f)(1) - (f)(15), 141.24 (f)(18) - (19), 141.24 (f)(21), 141.24 (g)(1) - (9), 141.24 (g)(12) - (14), 141.24 (h)(1) - (11), and 141.24 (h)(14) - (17).

(b) Sampling locations shall be as defined in 40 C.F.R. 141.24(f), 141.24(g), and 141.24(h).

(i) Wellfield samples shall be allowed from department designated wellfields; and

(ii) Under 40 C.F.R. 141.24 (f)(3) and 141.24 (h)(3), alternate sampling locations may be allowed if approved by the department. These alternate locations are described in department guidance. Purveyors may ask the department to approve an alternate sampling location for multiple sources within a single system that are blended prior to entry to the distribution system. The alternate sampling location shall consider the following:

(A) Source vulnerability;

(B) An updated organic monitoring plan showing location of all sources with current and proposed sampling locations;

(C) Individual source characteristics;

(D) Previous water quality information;

(E) Status of monitoring waiver applications; and

(F) Other information deemed necessary by the department.

(c) Composite samples:

(i) Purveyors may ask the certified lab to composite samples representing as many as five individual samples from within one system. Sampling procedures and protocols are outlined in department guidance;

(ii) For systems serving a population of less than three thousand three hundred one, the department may approve composite sampling between systems when those systems are part of an approved satellite management agency.

(d) The department may require the purveyor to sample both before and after treatment for one or more organic contaminants. The department shall notify the purveyor if and when this additional source sampling is required.

(e) Organic chemical monitoring plans.

(i) Purveyors of community and NTNC systems shall prepare an organic chemical monitoring plan and base routine monitoring on the plan.

(ii) The purveyor shall:

(A) Keep the monitoring plan on file with the system and make it available to the department for inspection upon request;

(B) Revise or expand the plan at any time the plan no longer reflects the monitoring requirements, procedures or sampling locations, or as directed by the department; and

(C) Submit the plan to the department for review and approval when requested and as part of the water system plan required under WAC 246-290-100.

(f) Monitoring waivers.

(i) Purveyors may request in writing, a monitoring waiver from the department for any organic monitoring requirement except those relating to unregulated VOCs;

(ii) Purveyors requesting a monitoring waiver shall comply with 40 C.F.R. 141.24 (f)(7), 141.24 (f)(10), 141.24 (h)(6), and 141.24 (h)(7);

(iii) Purveyors shall update and resubmit requests for waiver renewals as directed by the department; and

(iv) Failure to provide complete and accurate information in the waiver application shall be grounds for denial of the monitoring waiver.

(g) Purveyors with emergency and seasonal sources shall monitor those sources under the applicable requirements of this section when they are actively providing water to consumers.

(8) Radionuclides. Monitoring for radionuclides shall be conducted under 40 C.F.R. 141.26.

(9) *Cryptosporidium* and *E. coli* source monitoring. Purveyors with surface water or GWI sources shall monitor the sources in accordance with 40 C.F.R. 141.701 and 702.

(10) Other substances.

On the basis of public health concerns, the department may require the purveyor to monitor for additional substances.

TABLE ((3)) 4
MONITORING LOCATION

Sample Type	Sample Location
Asbestos	One sample from distribution system or if required by department, from the source.
Bacteriological	From representative points throughout distribution system.
Cryptosporidium and *E. coli* (Source Water) - WAC 246-290-630(16)	Under 40 C.F.R. 141.703.
Complete Inorganic Chemical & Physical	From a point representative of the source, after treatment, and prior to entry to the distribution system.
Lead/Copper	From the distribution system at targeted sample tap locations.
Nitrate/Nitrite	From a point representative of the source, after treatment, and prior to entry to the distribution system.
Disinfection Byproducts - TTHMs and HAA5 - WAC 246-290-300(6)	Under 40 C.F.R. 141.132 (b)(1) (Subpart L of the C.F.R.).
Disinfection Byproducts - TTHMs and HAA5 - WAC 246-290-300(6)	Under 40 C.F.R. 141.600 - 629 (IDSE and LRAA in Subparts U and V of the C.F.R.).
Disinfection Byproducts - Chlorite (Systems adding chlorine dioxide)	Under 40 C.F.R. 141.132 (b)(2).
Disinfection Byproducts - Bromate (Systems adding ozone)	Under 40 C.F.R. 141.132 (b)(3).
Disinfectant Residuals - Chlorine and Chloramines	Under 40 C.F.R. 141.132 (c)(1).
Disinfectant Residuals - Chlorine dioxide	Under 40 C.F.R. 141.132 (c)(2).
Disinfection Precursors - Total Organic Carbon (TOC)	Under 40 C.F.R. 141.132(d).
Disinfection Precursors - Bromide (Systems using ozone)	From the source before treatment.
Radionuclides	From a point representative of the source, after treatment and prior to entry to distribution system.
Organic Chemicals (VOCs & SOCs)	From a point representative of the source, after treatment and prior to entry to distribution system.

Sample Type	Sample Location
Other Substances (unregulated chemicals)	From a point representative of the source, after treatment, and prior to entry to the distribution system, or as directed by the department.

AMENDATORY SECTION (Amending WSR 09-21-045, filed 10/13/09, effective 1/4/10)

WAC 246-290-310 Maximum contaminant levels (MCLs) and maximum residual disinfectant levels (MRDLs). (1) General.

(a) The purveyor shall be responsible for complying with the standards of water quality identified in this section. If a substance exceeds its MCL or its maximum residual disinfectant level (MRDL), the purveyor shall take follow-up action under WAC 246-290-320.

(b) When enforcing the standards described under this section, the department shall enforce compliance with the primary standards as its first priority.

(2) Bacteriological.

(a) ((~~MCLs~~)) An *E. coli* MCL under this subsection ((~~shall be~~)) is considered a primary standard((~~s~~)).

(b) ((~~If coliform presence is detected in any sample, the purveyor shall take follow-up action under WAC 246-290-320(2).~~

~~(c) Acute~~)) *E. coli* MCL. An ((~~acute~~)) *E. coli* MCL ((~~for coliform bacteria~~)) violation occurs each month in which a system is required to monitor for total coliforms when there is:

(i) ((~~Fecal coliform presence in a repeat sample;~~

~~(ii)~~)) *E. coli* presence in a repeat sample following a total coliform presence routine sample; ((~~or~~

~~(iii)~~)) (ii) Total coliform presence in any repeat samples collected as a follow-up to a sample with ((~~fecal coliform or~~)) *E. coli* presence;

(iii) The system fails to take all required repeat samples following an *E. coli* presence routine sample; or

(iv) The system fails to test for *E. coli* when any repeat samples test positive for total coliform.

Note: For the purposes of the public notification requirements in Part 7, Subpart A of this chapter, an ((~~acute~~)) *E. coli* MCL is a violation that requires Tier 1 public notification.

(((~~(d) Nonacute MCL. A nonacute MCL for coliform bacteria occurs when:~~

~~(i) Systems taking less than forty routine samples during the month have more than one sample with coliform presence; or~~

~~(ii) Systems taking forty or more routine samples during the month have more than 5.0 percent with coliform presence.~~

~~(e) MCL compliance. The purveyor shall determine compliance with the coliform MCL for each month the system provides drinking water to the public. In determining MCL compliance, the purveyor shall:~~

~~(i) Include:~~

~~(A) Routine samples; and~~

~~(B) Repeat samples.~~

~~(ii) Not include:~~

~~(A) Samples invalidated under WAC 246-290-320 (2)(d); and~~

~~(B) Special purpose samples.~~))

(3) Inorganic chemical and physical.

(a) The primary and secondary MCLs are listed in Table ((~~4~~)) 5 and ((~~5~~)) 6:

TABLE ((~~4~~)) 5
INORGANIC CHEMICAL CHARACTERISTICS

Substance	Primary MCLs (mg/L)
Antimony (Sb)	0.006
Arsenic (As)	0.010*
Asbestos	7 million fibers/liter (longer than 10 microns)
Barium (Ba)	2.0
Beryllium (Be)	0.004
Cadmium (Cd)	0.005
Chromium (Cr)	0.1
Copper (Cu)	**
Cyanide (HCN)	0.2
Fluoride (F)	4.0
Lead (Pb)	**
Mercury (Hg)	0.002
Nickel (Ni)	0.1
Nitrate (as N)	10.0
Nitrite (as N)	1.0
Selenium (Se)	0.05
Sodium (Na)	**
Thallium (Tl)	0.002
Substance	**Secondary MCLs (mg/L)**
Chloride (Cl)	250.0
Fluoride (F)	2.0
Iron (Fe)	0.3
Manganese (Mn)	0.05
Silver (Ag)	0.1
Sulfate (SO_4)	250.0
Zinc (Zn)	5.0

Note* Does not apply to TNC systems.

Note** Although the state board of health has not established MCLs for copper, lead, and sodium, there is sufficient public health significance connected with copper, lead, and sodium levels to require inclusion in inorganic chemical and physical source monitoring. For lead and copper, the EPA has established distribution system related levels at which a system is required to consider corrosion control. These levels, called "action levels," are 0.015 mg/L for lead and 1.3 mg/L for copper and are applied to the highest concentration in ten percent of all samples collected from the distribution system.

The EPA has also established a recommended level of twenty mg/L for sodium as a level of concern for those consumers that may be restricted for daily sodium intake in their diets.

TABLE ((5)) 6
PHYSICAL CHARACTERISTICS

Substance	Secondary MCLs
Color	15 Color Units
Specific Conductivity	700 umhos/cm
Total Dissolved Solids (TDS)	500 mg/L

(b) Compliance with the MCLs, except for nitrate and nitrite, in this subsection is determined by a running annual average at each sampling point. The system will not be considered in violation of the MCL until it has completed one year of quarterly sampling and at least one sampling point is in violation of the MCL. If one sampling point is in violation of the MCL, the system is in violation of the MCL.

(i) If any sample will cause the running annual average to exceed the MCL at any sampling point, the system is out of compliance with the MCL immediately.

(ii) If a system fails to collect the required number of samples, compliance will be based on the total number of samples collected.

(iii) If a sample result is less than the detection limit, zero will be used to calculate the running annual average.

(c) Compliance with the MCLs for nitrate and nitrite is determined based on one sample if the levels of these contaminants are below the MCLs as determined under Table ((4)) 5 of this section. If the levels of nitrate or nitrite exceed the MCLs in the initial sample, a confirmation sample is required under 40 C.F.R. 141.23 (f)(2), and compliance shall be determined based on the average of the initial and confirmation samples.

(4) Disinfection byproducts.

(a) The department shall consider standards under this subsection as primary standards. The MCLs in this subsection apply to monitoring required by WAC 246-290-300(6) and 40 C.F.R. 141.620 - 629.

(b) The MCLs for disinfection byproducts are as follows:

Disinfection Byproduct	MCL (mg/L)
Total Trihalomethanes (TTHMs)	0.080
Haloacetic acids (five) (HAA5)	0.060
Bromate	0.010
Chlorite	1.0

(c) Whether a system has exceeded the disinfection byproduct MCLs shall be determined in accordance with 40 C.F.R. 141.133. Beginning on the dates specified for compliance in 40 C.F.R. 141.620(c), compliance with the TTHMs and HAA5 MCLs shall be based on the LRAAs as required by 40 C.F.R. 141.64 (b)(2) and 40 C.F.R. 141.620(d). Compliance with the Bromate and Chlorite MCL will continue to be determined in accordance with 40 C.F.R. 141.133.

(5) Disinfectant residuals.

(a) The department shall consider standards under this subsection primary standards. The MRDLs in this subsection apply to monitoring required by WAC 246-290-300(6).

(b) The MRDL for disinfectants is as follows:

Disinfectant Residual	MRDL (mg/L)
Chlorine	4.0 (as Cl_2)
Chloramines	4.0 (as Cl_2)
Chlorine Dioxide	0.8 (as ClO_2)

(c) Whether a system has exceeded MRDLs shall be determined in accordance with 40 C.F.R. 141.133.

(6) Radionuclides.

(a) The department shall consider standards under this subsection primary standards.

(b) The MCLs for radium-226 and radium-228, gross alpha particle activity, beta particle and photon radioactivity, and uranium shall be as listed in 40 C.F.R. 141.66.

(7) Organic chemicals.

(a) The department shall consider standards under this subsection primary standards.

(b) VOCs.

(i) The MCLs for VOCs shall be as listed in 40 C.F.R. 141.61(a).

(ii) The department shall determine compliance with this subsection based on compliance with 40 C.F.R. 141.24(f).

(c) SOCs.

(i) MCLs for SOCs shall be as listed in 40 C.F.R. 141.61(c).

(ii) The department shall determine compliance with this subsection based on compliance with 40 C.F.R. 141.24(h).

(8) Other chemicals.

(a) The state board of health shall determine maximum contaminant levels for any additional substances.

(b) Purveyors may be directed by the department to comply with state advisory levels (SALs) for contaminants that do not have a MCL established in chapter 246-290 WAC. SALs shall be:

(i) MCLs that have been promulgated by the EPA, but which have not yet been adopted by the state board of health; or

(ii) State board of health adopted levels for substances recommended by the department and not having an EPA established MCL. A listing of these may be found in the department document titled *Procedures and References for the Determination of State Advisory Levels for Drinking Water Contaminants* dated June 1996, that has been approved by the state board of health and is available.

AMENDATORY SECTION (Amending WSR 11-17-062, filed 8/15/11, effective 10/1/11)

WAC 246-290-320 Follow-up action. (1) General.

(a) When an MCL or MRDL violation or exceedance occurs, the purveyor shall take follow-up action as described in this section.

(b) When a primary standard violation occurs, the purveyor shall:

(i) Notify the department under WAC 246-290-480;

(ii) Notify the consumers served by the system and the owner or operator of any consecutive system served in accordance with 40 C.F.R. 141.201 through 208, and Part 7, Subpart A of this chapter;

(iii) Determine the cause of the contamination; and

(iv) Take action as directed by the department.

(c) When a secondary standard violation occurs, the purveyor shall notify the department and take action as directed by the department.

(d) The department may require additional sampling for confirmation of results.

(2) Bacteriological. Coliform treatment technique triggers and assessment requirements for protection against potential fecal contamination.

(a) ((~~When coliform bacteria are present in any sample and the sample is not invalidated under (d) of this subsection, the purveyor shall ensure the following actions are taken:~~

~~(i) The sample is analyzed for fecal coliform or *E. coli*. When a sample with a coliform presence is not analyzed for *E. coli* or fecal coliforms, the sample shall be considered as having a fecal coliform presence for MCL compliance purposes;~~

~~(ii) Repeat samples are collected in accordance with (b) of this subsection;~~

~~(iii) Triggered source water monitoring is conducted in accordance with (g) of this subsection unless the department determines and documents in writing that the total coliform positive sample collected was caused by a distribution system deficiency;~~

~~(iv) The department is notified in accordance with WAC 246-290-480; and~~

~~(v) The cause of the coliform presence is determined and corrected.~~

~~(b) Repeat samples.~~

~~(i) The purveyor shall collect repeat samples in order to confirm the original sample results and to determine the cause of the coliform presence. Additional treatment, such as batch or shock chlorination, shall not be instituted prior to the collection of repeat samples unless prior authorization by the department is given. Following collection of repeat samples, and before the analytical results are known, there may be a need to provide interim precautionary treatment or other means to insure public health protection. The purveyor shall contact the department to determine the best interim approach in this situation.~~

~~(ii) The purveyor shall collect and submit for analysis a set of repeat samples for every sample in which the presence of coliforms is detected. A set of repeat coliform samples consists of:~~

~~(A) Four repeat samples for systems collecting one routine coliform sample each month; or~~

~~(B) Three repeat samples for all systems collecting more than one routine coliform sample each month.~~

~~(iii) The purveyor shall collect repeat sample sets according to Table 7;~~

~~(iv) The purveyor shall collect one set of repeat samples for each sample with a coliform presence. All samples in a set of repeat samples shall be collected on the same day and submitted for analysis within twenty-four hours after notification by the laboratory of a coliform presence, or as directed by the department.~~

~~(v) When repeat samples have coliform presence, the purveyor shall:~~

~~(A) Contact the department and collect a minimum of one additional set of repeat samples as directed by the department; or~~

~~(B) Collect one additional set of repeat samples for each sample where coliform presence was detected.~~

~~(vi) The purveyor of a system providing water to consumers via a single service shall collect repeat samples from the same location as the sample with a coliform presence. The set of repeat samples shall be collected:~~

~~(A) On the same collection date;~~

~~(B) Over consecutive days with one sample collected each day until the required samples in the set of repeat samples are collected; or~~

~~(C) As directed by the department.~~

~~(vii) If a sample with a coliform presence was collected from the first two or last two active services, the purveyor shall monitor as directed by the department;~~

~~(viii) The purveyor may change a previously submitted routine sample to a sample in a set of repeat samples when the purveyor:~~

~~(A) Collects the sample within five active adjacent service connections of the location from which the initial sample with a coliform presence was collected;~~

~~(B) Collects the sample after the initial sample with a coliform presence was submitted for analysis;~~

~~(C) Collects the sample on the same day as other samples in the set of repeat samples, except under (b)(iv) of this subsection; and~~

~~(D) Requests and receives approval from the department for the change.~~

~~(ix) The department may determine that sets of repeat samples specified under this subsection are not necessary during a month when a nonacute coliform MCL violation is determined for the system.~~

~~Table 7~~

~~REPEAT SAMPLE REQUIREMENTS~~

~~# OF ROUTINE SAMPLES COLLECTED EACH MONTH~~	~~# OF SAMPLES IN A SET OF REPEAT SAMPLES~~	~~LOCATIONS FOR REPEAT SAMPLES (COLLECT AT LEAST ONE SAMPLE PER SITE)~~
~~1~~	4	~~♦ Site of previous sample with a coliform presence~~

# OF ROUTINE SAMPLES COLLECTED EACH MONTH	# OF SAMPLES IN A SET OF REPEAT SAMPLES	LOCATIONS FOR REPEAT SAMPLES (COLLECT AT LEAST ONE SAMPLE PER SITE)
		♦ Within 5 active services upstream of site of sample with a coliform presence ♦ Within 5 active services downstream of site of sample with a coliform presence ♦ At any other active service or from a location most susceptible to contamination (i.e., well or reservoir)
more than 1	3	♦ Site of previous sample with a coliform presence ♦ Within 5 active services upstream of site of sample with a coliform presence ♦ Within 5 active services downstream of site of sample with a coliform presence

(c) Monitoring frequency following a coliform presence. Systems having one or more coliform presence samples that were not invalidated during the previous month shall collect and submit for analysis the minimum number of samples shown in the last column of Table 2.

(i) The purveyor may obtain a reduction in the monitoring frequency requirement when one or more samples with a coliform presence were collected during the previous month, if the purveyor proves to the satisfaction of the department;

(A) The cause of the sample with a coliform presence; and

(B) The problem is corrected before the end of the next month the system provides water to the public.

(ii) If the monitoring frequency requirement is reduced, the purveyor shall collect and submit at least the minimum number of samples required when no samples with a coliform presence were collected during the previous month.

(d) Invalid samples. Routine and repeat coliform samples may be determined to be invalid under any of the following conditions:

(i) A certified laboratory determines that the sample results show:

(A) Multiple tube technique cultures that are turbid without appropriate gas production;

(B) Presence-absence technique cultures that are turbid in the absence of an acid reaction;

(C) Occurrence of confluent growth patterns or growth of TNTC (too numerous to count) colonies without a surface sheen using a membrane filter analytic technique;

(ii) The analyzing laboratory determines there is excess debris in the sample.

(iii) The analyzing laboratory establishes that improper sample collection or analysis occurred;

(iv) The department determines that a nondistribution system problem has occurred as indicated by:

(A) All samples in the set of repeat samples collected at the same location, including households, as the original coliform presence sample also are coliform presence; and

(B) All other samples from different locations (households, etc.) in the set of repeat samples are free of coliform.

(v) The department determines a coliform presence result is due to a circumstance or condition that does not reflect water quality in the distribution system.

(e) Follow-up action when an invalid sample is determined. The purveyor shall take the following action when a coliform sample is determined to be invalid:

(i) Collect and submit for analysis an additional coliform sample from the same location as each invalid sample within twenty-four hours of notification of the invalid sample; or

(ii) In the event that it is determined that the invalid sample resulted from circumstances or conditions not reflective of distribution system water quality, collect a set of samples in accordance with Table 7; and

(iii) Collect and submit for analysis samples as directed by the department.

(f) Invalidated samples shall not be included in determination of the sample collection requirement for compliance with this chapter.

(g) Triggered source water monitoring.

(i) All groundwater systems with their own groundwater source(s) must conduct triggered source water monitoring unless the following conditions exist:

(A) The system has submitted a project report and received approval that it provides at least 4-log treatment of viruses (using inactivation, removal, or a department approved combination of 4-log virus inactivation and removal) before or at the first customer for each groundwater source; and

(B) The system is conducting compliance monitoring under WAC 246-290-453(2).

(ii) Any groundwater source sample required under this subsection must be collected at the source prior to any treatment unless otherwise approved by the department.

(iii) Any source sample collected under this subsection must be at least 100 mL in size and must be analyzed for *E. coli* using one of the analytical methods under 40 C.F.R. 141.402(c).

(iv) Groundwater systems must collect at least one sample from each groundwater source in use at the time a routine sample collected under WAC 246-290-300(3) is total coliform-positive and not invalidated under (d) of this subsection. These source samples must be collected within twenty-four hours of notification of the total coliform-positive sample. The following exceptions apply:

(A) The twenty-four hour time limit may be extended if granted by the department and will be determined on a case-

~~by-case basis. If an extension is granted, the system must sample by the deadline set by the department.~~

~~(B) Systems with more than one groundwater source may meet the requirements of (g)(iv) of this subsection by sampling a representative groundwater source or sources. The system must have an approved triggered source water monitoring plan that identifies one or more groundwater sources that are representative of each monitoring site in the system's coliform monitoring plan under WAC 246-290-300 (3)(b). This plan must be approved by the department before representative sampling will be allowed.~~

~~(C) Groundwater systems serving one thousand people or fewer may use a repeat sample collected from a groundwater source to meet the requirements of (b) and (g)(iv) of this subsection. If the repeat sample collected from the groundwater source is *E. coli* positive, the system must comply with (g)(v) of this subsection.~~

~~(v) Groundwater systems with an *E. coli* positive source water sample that is not invalidated under (g)(vii) of this subsection, must:~~

~~(A) Provide Tier 1 public notice under Part 7, Subpart A of this chapter and special notification under WAC 246-290-71005 (4) and (5);~~

~~(B) If directed by the department, take corrective action as required under WAC 246-290-453(1); and~~

~~(C) Systems that are not directed by the department to take corrective action must collect five additional samples from the same source within twenty-four hours of being notified of the *E. coli* positive source water sample. If any of the five additional samples are *E. coli* positive, the system must take corrective action under WAC 246-290-453(1).~~

~~(vi) Any consecutive groundwater system that has a total coliform-positive routine sample collected under WAC 246-290-300(3) and not invalidated under (d) of this subsection, must notify each wholesale system it receives water from within twenty-four hours of being notified of the total coliform-positive sample and comply with (g) of this subsection.~~

~~(A) A wholesale groundwater system that receives notice from a consecutive system under (g)(vi) of this subsection must conduct triggered source water monitoring under (g) of this subsection unless the department determines and documents in writing that the total coliform-positive sample collected was caused by a distribution system deficiency in the consecutive system.~~

~~(B) If the wholesale groundwater system source sample is *E. coli* positive, the wholesale system must notify all consecutive systems served by that groundwater source within twenty-four hours of being notified of the results and must meet the requirements of (g)(v) of this subsection.~~

~~(C) Any consecutive groundwater system receiving water from a source with an *E. coli* positive sample must notify all their consumers as required under (g)(v)(A) of this subsection.~~

~~(vii) An *E. coli* positive groundwater source sample may be invalidated only if the following conditions apply:~~

~~(A) The system provides the department with written notice from the laboratory that improper sample analysis occurred; or~~

~~(B) The department determines and documents in writing that there is substantial evidence that the *E. coli* positive groundwater sample is not related to source water quality.~~

~~(viii) If the department invalidates an *E. coli* positive groundwater source sample, the system must collect another source water sample within twenty-four hours of being notified by the department of its invalidation decision and have it analyzed using the same analytical method. The department may extend the twenty-four hour time limit under (g)(iv)(A) of this subsection.~~

~~(ix) Groundwater systems that fail to meet any of the monitoring requirements of (g) of this subsection must conduct Tier 2 public notification under Part 7, Subpart A of this chapter.~~)) Treatment technique triggers. Systems shall conduct assessments in accordance with (b) of this subsection after exceeding treatment technique triggers as follows:

(i) Level 1 treatment technique triggers.

(A) For systems taking forty or more routine samples per month, the system exceeds 5.0 percent total coliform-positive samples for the month.

(B) For systems taking fewer than forty routine samples per month, the system has two or more total coliform-positive samples in the same month.

(C) The system fails to take every required repeat sample after any single total coliform-positive routine sample.

(ii) Level 2 treatment technique triggers.

(A) An *E. coli* MCL violation, as specified in WAC 246-290-310 (2)(b).

(B) A second level 1 treatment technique trigger as defined in (a)(i) of this subsection within a rolling twelve-month period, unless the department has determined a likely reason that the samples that caused the first level 1 treatment technique trigger were total coliform-positive and has established that the system has corrected the problem.

(b) Requirements for assessments.

(i) Systems shall conduct level 1 and 2 assessments to identify the possible presence of sanitary defects and defects in distribution system coliform monitoring practices. Level 1 assessments must be conducted by the system operator or purveyor. Level 2 assessments must be conducted by the department or a party approved by the department which may include the system operator.

(ii) When conducting assessments, systems shall direct the assessor to evaluate minimum elements that include:

(A) Review and identification of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired;

(B) Changes in distribution operation and maintenance that could affect distributed water quality, including water storage;

(C) Source and treatment considerations that bear on distributed water quality, where appropriate. For example, whether or not a groundwater system is disinfected;

(D) Existing water quality monitoring data;

(E) Inadequacies in sample sites, sampling protocol, and sample processing; and

(F) The system shall conduct the assessment consistent with any department directives that tailor specific assessment elements with respect to the size and type of the system and the size, type, and characteristics of the distribution system.

(iii) Level 1 assessments. A system shall conduct a level 1 assessment consistent with the requirements in subsection (2)(b) of this section if the system exceeds one of the treatment technique triggers in (a)(i) of this subsection.

(A) The system shall complete a level 1 assessment as soon as practical after any treatment technique trigger is met in (a)(i) of this subsection. The completed assessment must describe sanitary defects detected, corrective actions completed, and a proposed timetable for any corrective actions not already completed. The assessment may also note that no sanitary defects were identified. The system shall submit the completed level 1 assessment to the department within thirty days after the system learns that it has exceeded a treatment technique trigger.

(B) Upon completion and submission of the level 1 assessment by the system, the department shall determine if the system has identified a likely cause for the level 1 treatment technique trigger and has corrected the problem. If the system has not corrected the problem, the department shall determine if the proposed timetable for corrective action is sufficient.

(C) If after reviewing the completed level 1 assessment, the department determines the assessment is not sufficient, including any proposed timetable for any corrective actions not already completed, the department may require the system to submit a revised assessment to the department within thirty days from the date of department notification.

(iv) Level 2 assessments. A system shall conduct a level 2 assessment consistent with requirements in subsection (2)(b) of this section if the system exceeds one of the treatment technique triggers in (a)(ii) of this subsection. The system shall comply with any expedited actions or additional actions required by the department in the case of an *E. coli* MCL violation.

(A) A level 2 assessment must be conducted as soon as practical after any treatment technique trigger in (a)(ii) of this subsection and shall be conducted by either a water distribution manager 2, 3, or 4 certified in accordance with chapter 246-292 WAC, a licensed professional engineer that meets the requirements of WAC 246-290-040(1), a local health jurisdiction, or the department. The system shall submit a completed level 2 assessment to the department within thirty days after the system learns that it has exceeded a treatment technique trigger. The completed assessment must describe sanitary defects detected, corrective actions completed, and a proposed timetable for any corrective actions not already completed in accordance with (d) of this subsection. The assessment may also note that no sanitary defects were identified.

(B) Upon completion and submission of the level 2 assessment by the system, the department shall determine if the system has identified a likely cause for the level 2 treatment technique trigger and has corrected the problem. If the system has not corrected the problem, the department shall determine if the proposed timetable for corrective action is sufficient.

(C) If after reviewing the submitted level 2 assessment, the department determines the assessment is not sufficient, including any proposed timetable for any corrective actions not already completed in accordance with (d) of this subsection, the department may require the system to submit a revised assessment within thirty days from the date of department notification.

(c) To achieve compliance with the MCL for *E. coli* under WAC 246-290-310 (2)(b), the following are identified as the best technology, treatment techniques, or other means available:

(i) Protection of wells from fecal contamination by appropriate placement and construction;

(ii) Maintenance of a disinfectant residual throughout the distribution system;

(iii) Proper maintenance of the distribution system including appropriate pipe replacement and repair procedures, main flushing programs, proper operation and maintenance of storage tanks and reservoirs, cross-connection control, and continual maintenance of positive water pressure in all parts of the distribution system;

(iv) Filtration, disinfection, or both, of surface water, using the proper strength of oxidants such as chlorine, chlorine dioxide, or ozone; and

(v) For systems using groundwater, compliance with a wellhead protection program developed and implemented under WAC 246-290-135(3).

(d) Corrective action. Systems shall correct sanitary defects found through either a level 1 or level 2 assessment conducted under (b) of this subsection. For corrections not completed by the time of submission of the assessment to the department, the system shall complete the corrective actions in compliance with a timetable approved by the department in consultation with the system under (e) of this subsection. The system shall notify the department when each scheduled corrective action is completed.

(e) Consultation. At any time during the assessment or corrective action phase, the water system may request a consultation with the department to determine the appropriate actions to be taken. The system may consult with the department on all relevant information that may impact the system's ability to comply with the requirements of subsection (2) of this section, including the method of accomplishment, an appropriate time frame, and other relevant information.

(f) A treatment technique violation occurs when a system exceeds a treatment technique trigger specified in subsection (2)(a) of this section and then fails to conduct the required assessment or complete corrective actions within the time frame specified in subsection (2)(b) and (d) of this section.

(3) Inorganic chemical and physical follow-up monitoring shall be conducted in accordance with the following:

(a) For nonnitrate/nitrite primary inorganic chemicals, 40 C.F.R. 141.23 (a)(4), 141.23 (b)(8), 141.23 (c)(7), 141.23 (c)(9), 141.23 (f)(1), 141.23(g), 141.23(m) and 141.23(n);

(b) For nitrate, 40 C.F.R. 141.23 (a)(4), 141.23 (d)(2), 141.23 (d)(3), 141.23 (f)(2), 141.23(g), 141.23(m), 141.23(n), and 141.23(o);

(c) For nitrite, 40 C.F.R. 141.23 (a)(4), 141.23 (e)(3), 141.23 (f)(2), and 141.23(g); or

(d) The purveyor of any public water system providing service that has secondary inorganic MCL exceedances shall take follow-up action as required by the department. Follow-up action shall be commensurate with the degree of consumer acceptance of the water quality and their willingness to bear

the costs of meeting the secondary standard. For new community water systems and new nontransient noncommunity water systems without active consumers, treatment for secondary contaminant MCL exceedances will be required.

(4) Lead and copper follow-up monitoring shall be conducted in accordance with 40 C.F.R. 141.85(c), 141.86 (d)(2), 141.86 (d)(3), 141.87(c), 141.87(d) and 141.88(b) through 141.88(d).

(5) Turbidity.

Purveyors monitoring turbidity in accordance with Part 6 of this chapter shall provide follow-up under WAC 246-290-634.

(6) Organic chemicals. Follow-up monitoring shall be conducted in accordance with the following:

(a) For VOCs, 40 C.F.R. 141.24 (f)(11) through 141.24 (f)(15), and 141.24 (f)(22); or

(b) For SOCs, 40 C.F.R. 141.24(b), 141.24(c) and 141.24 (h)(7) through 141.24 (h)(11), and 141.24 (h)(20).

(7) Radionuclide follow-up monitoring shall be conducted under 40 C.F.R. 141.26 (a)(2)(iv), 141.26 (a)(3)(ii) through (v), 141.26 (a)(4), 141.26 (b)(6), and 141.26 (c)(5).

(8) The department shall determine the purveyor's follow-up action when a substance not included in this chapter is detected.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-415 Operations and maintenance. (1) The purveyor shall ensure that the system is operated in accordance with the operations and maintenance program as established in the approved water system plan required under WAC 246-290-100 or the small water system management program under WAC 246-290-105.

(2) The operations and maintenance program shall include the following elements as applicable:

(a) Water system management and personnel;

(b) Operator certification;

(c) Comprehensive monitoring plan for all contaminants under WAC 246-290-300;

(d) Emergency response program;

(e) Cross-connection control program; and

(f) Maintenance of service reliability in accordance with WAC 246-290-420.

(3) Seasonal system startup.

(a) Seasonal systems shall submit a start-up procedure to the department for review and approval.

(b) Seasonal systems shall certify in accordance with WAC 246-290-480 (2)(f)(ii) that a department-approved start-up procedure, which may include a requirement for start-up sampling, was completed prior to serving water to the public.

(c) A treatment technique violation occurs when a seasonal system fails to complete a department-approved start-up procedure prior to serving water to the public.

(4) The purveyor shall ensure that the system is operated in accordance with good operations procedures such as those available in texts, handbooks, and manuals available from the following sources:

(a) American Water Works Association (AWWA)((~~, 6666 West Quincy Avenue, Denver, Colorado 80235~~));

(b) American Society of Civil Engineers (ASCE)((~~, 345 East 47th Street, New York, New York 10017-2398~~));

(c) Ontario Ministry of the Environment((~~, 135 St. Clair Avenue West, Toronto, Ontario M4V1B5, Canada~~));

(d) The Chlorine Institute((~~, 2001 "L" Street NW, Washington, D.C. 20036~~));

(e) California State University((~~, 600 "J" Street, Sacramento, California 95819~~));

(f) Health Research Inc.((~~, Health Education Services Division, P.O. Box 7126, Albany, New York 12224~~)); and

(g) Any other standards acceptable to the department.

(((~~4~~))) (5) The purveyor shall not establish or maintain a bypass to divert water around any feature of a treatment process, except by written approval from the department.

(((~~5~~))) (6) The purveyor shall take preventive or corrective action as directed by the department when results of an inspection conducted by the department indicate conditions which are currently or may become a detriment to system operation.

(((~~6~~))) (7) The purveyor of a system using surface water or GWI shall meet operational requirements specified in Part 6 of this chapter.

(((~~7~~))) (8) The purveyor shall have a certified operator if required under chapter 70.119 RCW and chapter 246-292 WAC.

(((~~8~~))) (9) The purveyor shall at all times employ reasonable security measures to assure the raw water intake facilities, water treatment processes, water storage facilities, and the distribution system are protected from possible damage or compromise by unauthorized persons, animals, vegetation, or similar intruding agents. Such measures include elements such as locks on hatches, fencing of facilities, screening of reservoir vents or openings, and other recommendations as may be found in the current edition of the *Recommended Standards for Water Works, A Committee Report of the Great Lakes - Upper Mississippi River Board of State Public Health and Environmental Managers.*

(((~~9~~))) (10) All purveyors utilizing groundwater wells shall monitor well levels from ground level to the static water level on a seasonal basis, including low demand and high demand periods, to document the continuing availability of the source to meet projected, long-term demands. Purveyors shall maintain this data and provide it to the department upon request.

(((~~10~~))) (11) All operation and maintenance practices shall conform to Part 5 of this chapter.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-416 Sanitary surveys. (1) All public water systems shall submit to a sanitary survey conducted by the department, or the department's designee, based upon the following schedule:

(a) For community water systems, every three years. In accordance with 40 C.F.R. 141.21 (d)(3), community water systems may qualify to be surveyed every five years if the system meets the following criteria:

(i) Provides at least 4-log treatment of viruses (using inactivation, removal, or a department-approved combination of 4-log inactivation and removal) before or at the first customer for all its groundwater sources; or

(ii) Has no total coliform or *E. coli* MCL violations since the last sanitary survey;

(iii) Has no coliform treatment technique violations for failure to conduct the required assessment or complete corrective actions in response to a treatment technique trigger since the last sanitary survey;

(iv) Has no more than one total coliform monitoring violation since the last sanitary survey; and

((~~(iv)~~)) (v) Has no unresolved significant deficiencies from the current sanitary survey.

(b) For transient noncommunity and nontransient noncommunity water systems, every five years.

(c) For community water systems that use a surface water or GWI source, every three years. Sanitary surveys may be reduced to every five years upon written approval from the department.

(d) The department may schedule a sanitary survey or increases the frequency of surveys if it determines a public health threat exists or is suspected.

(2) All public water system purveyors shall be responsible for:

(a) Ensuring cooperation in scheduling sanitary surveys with the department, or its designee;

(b) At the department's request, provide any existing information that will enable the department to conduct a sanitary survey;

(c) Ensuring the unrestricted availability of all facilities and records at the time of a sanitary survey or special purpose investigation; and

(d) Taking preventive or corrective action as directed by the department when results of a sanitary survey indicate conditions which are currently or may become a detriment to system operation or public health.

(3) All public water systems that use a surface water or GWI source shall, within forty-five days following receipt of a sanitary survey report that identifies significant deficiencies, identify in writing to the department how the system will correct the deficiencies and propose a schedule to complete the corrections. The department may modify the schedule if necessary to protect the health of water system users.

(4) A groundwater system with significant deficiencies must meet the treatment technique requirements of WAC 246-290-453(1) and the special notification requirements under WAC 246-290-71005 (4) and (5) except where the department determines that the significant deficiency is in a portion of the distribution system that is served solely by surface water or GWI.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-451 Disinfection of drinking water. (1) No portion of a public water system containing potable water shall be put into service, nor shall service be resumed until the facility has been effectively disinfected.

(a) In cases of new construction, drinking water shall not be furnished to the consumer until satisfactory bacteriological samples have been analyzed by a laboratory certified by the state; ((~~and~~))

(b) In cases of existing water mains, when the integrity of the main is lost resulting in a significant loss of pressure that places the main at risk to ((~~cross-connection~~)) contamination, the purveyor shall use standard industry practices ((~~such as flushing, disinfection, and/or bacteriological sampling~~)) to ensure adequate and safe water quality prior to the return of the line to service((~~:~~)), including at least one of the following:

(i) Flushing;

(ii) Disinfection; or

(iii) Bacteriological sampling.

(c) If a cross-connection is confirmed, the purveyor shall satisfy the reporting requirements as described under WAC 246-290-490(8).

(2) The procedure used for disinfection shall conform to standards published by the American Water Works Association, or other industry standards acceptable to the department.

(3) The purveyor of a system using surface water or GWI shall meet disinfection requirements specified in Part 6 of this chapter.

(4) If the department determines that any of the following conditions apply, the purveyor ((~~of a system using groundwater~~)) shall provide continuous disinfection of the source and meet the requirements under subsection (6) of this section ((~~if required by the department to disinfect for any of the following reasons~~)):

(a) ((~~Determination that the~~)) A groundwater source is in hydraulic connection to surface water under WAC 246-290-640(4);

(b) A history of unsatisfactory ((~~source~~)) total coliform sampling results for a groundwater source; ((~~or~~))

(c) A ((~~microbiological~~)) microbial contaminant threat within ((~~the~~)) a groundwater source sanitary control area as defined in WAC 246-290-135;

(d) A microbial contaminant threat to a source, as documented in a susceptibility assessment, a sanitary survey, or a special purpose investigation which also includes, but is not limited to, one or more of the following conditions:

(i) A poorly constructed source;

(ii) An inadequate surface seal;

(iii) High groundwater;

(iv) Lack of confining layers in the aquifer;

(v) A shallow well source, with the first open interval fifty feet or less from the ground surface at the wellhead;

(vi) A drilled well in fractured bedrock; or

(vii) A source at risk of flooding.

(e) Desalination of a seawater water source by reverse osmosis.

(5) ((~~The purveyor of a groundwater system that is required to disinfect as a result of becoming a SSNC due to repeated total coliform MCL or major repeat violations shall meet the requirements under subsection (7) of this section.~~)) If the department determines that any of the following conditions apply, the purveyor shall provide continuous disinfection of the distribution system and meet the requirements under subsection (7) of this section:

(a) *E. coli* MCL violations;

(b) Level 1 or level 2 assessment treatment technique triggers;

(c) Failure to complete level 1 or level 2 assessments as required under WAC 246-290-320 (2)(b);

(d) Failure to complete corrective actions required under WAC 246-290-320 (2)(d); or

(e) Facility failures that threaten to degrade water quality in the distribution system.

(6) If disinfection is required under subsection (4) of this section, the following requirements must be met:

(a) Provide ((~~a minimum contact time at or before the first customer of:~~

~~(i) Thirty minutes if 0.2 mg/L free chlorine residual is maintained;~~

~~(ii) Ten minutes if 0.6 mg/L free chlorine residual is maintained; or~~

~~(iii)~~)) any combination of free chlorine residual concentration (C), measured in mg/L at or before the first customer and contact time (T), measured in minutes between the location of chlorine treatment and residual measurement, that result in a CT product (C x T) of greater than or equal to six((~~; and~~

~~(b) Maintain a detectable residual disinfectant concentration in all active parts of the distribution system, measured as total chlorine, free chlorine, combined chlorine, or chlorine dioxide.~~

~~(c)~~)) without exceeding the chlorine MRDL in WAC 246-290-310(5).

(b) The department may require the purveyor to provide longer contact times, higher chlorine residuals, or additional treatment to protect the health of consumers served by the water system.

(((~~(d)~~))) (c) To demonstrate the required level of treatment is maintained, the purveyor shall:

(i) Monitor the residual disinfectant concentration at the point of entry to the distribution system, or at a department-approved location, at least once ((~~every Monday through Friday (except holidays)~~))) per day, five days per week or each day that water is supplied by the treatment plant if it operates less than daily;

(ii) ((~~Calculate the daily CT value at or before the first customer~~)) Identify the number of days each month that the treatment process failed to meet the disinfection treatment requirement in this subsection; and

(iii) Submit monthly ((~~groundwater~~)) water treatment reports to the department using a department-approved form by the tenth day of the following month.

(((~~(e)~~))) (d) All analyses required in this subsection shall be conducted in accordance with an EPA ((~~standard methods~~)) approved method. A diethyl-p-phenylenediamine (DPD) colorimetric field test kit relying on a visual color comparison to a visual standard may not be used by a purveyor to comply with the requirements of this subsection.

(((~~(f) The purveyor may be required~~)) (e) The department may require the purveyor to monitor the residual disinfectant concentration each calendar day water is supplied to the distribution system if the department considers source treatment operation ((~~is~~)) unreliable.

(((~~(g)~~))) (f) The department may require the use of continuous residual analyzers and recorders to assure adequate monitoring of residual concentrations.

(7) ((~~If disinfection is required under subsection (5) of this section, or a chemical disinfectant is added to a groundwater source for any other reason, the following requirements must be met:~~)) A purveyor that adds free chlorine, total chlorine, combined chlorine, or chlorine dioxide to the distribution system on a continuous basis shall:

(a) Monitor residual disinfectant concentration at:

(i) Representative points ((~~throughout~~)) in the distribution system at least once ((~~each~~)) per day, ((~~excluding weekends and holidays, and at the same time and location of routine and repeat coliform sample collection. Frequency of disinfection residual monitoring may be reduced upon written request to the department if it can be shown that disinfection residuals can be maintained on a reliable basis without the provision of daily monitoring~~)) five days per week, unless upon written request, the department approves less frequent monitoring; and

(ii) The same time and location of routine and repeat coliform sample collection.

(b) Maintain a detectable residual disinfectant concentration in all active parts of the distribution system, ((~~measured as total chlorine, free chlorine, combined chlorine, or chlorine dioxide. Water in the distribution system with an HPC level less than or equal to 500 organisms/mL is considered to have a detectable residual disinfectant concentration.~~

~~(c) The department may require the purveyor to provide higher chlorine residuals, or additional treatment to protect the health of consumers served by the water system~~)) unless the department approves a written request to use a lower value. At a minimum, the request to use a lower value must identify the instrument used to measure the residual disinfectant concentration and include the manufacturer's documentation of the instrument's accuracy to measure the lower value.

(c) Submit monthly water treatment reports to the department using a department-approved form by the tenth day of the following month.

(d) Conduct all analyses required in this subsection ((~~shall be conducted~~)):

(i) In accordance with an EPA ((~~standard methods.~~

~~(c)~~)) approved method; or

(ii) Using a diethyl-p-phenylenediamine (DPD) colorimetric field test kit unless not allowed by the department.

(e) Colorimetric test strips may not be used by a purveyor to comply with the residual disinfectant concentration monitoring requirements of this subsection.

(f) The department may require the use of continuous residual analyzers and recorders to assure adequate monitoring of residual concentrations.

(g) The department may require the purveyor to provide higher disinfectant residuals, or additional treatment to protect the health of consumers served by the water system.

(h) If a chemical disinfectant is added to the distribution system for purposes other than continuous disinfection and the treatment purposes and procedures are identified in a treatment design approved under WAC 246-290-110 and

246-290-120, the system shall be exempt from the requirements of this section.

(8) Violations.

(a) Failure to provide treatment that meets the applicable requirements of subsection (6) or (7) of this section in two or more calendar days per month in which residual disinfectant concentration monitoring was conducted is a treatment technique violation;

(b) Failure to perform monitoring that meets the applicable requirements of subsection (6) or (7) of this section is a monitoring violation; or

(c) Failure to submit a monthly water treatment plant report to the department using a department-approved form by the tenth day of the following month in accordance with the requirements of subsection (6) or (7) of this section is a reporting violation.

(9) Purveyors that add free chlorine, total chlorine, combined chlorine, or chlorine dioxide to a source or the distribution system for any reason shall, in addition to any other applicable monitoring requirements of this section, measure residual disinfectant concentrations in samples collected at the same time and location that routine or repeat coliform samples are collected, unless the department determines that more frequent monitoring is necessary to protect public health.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-453 ((~~Treatment techniques for groundwater systems.~~)) Corrective action under the GWR. (1) Groundwater systems with significant deficiencies identified under WAC 246-290-416, or source fecal contamination as determined under WAC 246-290-320 (2)(g)(v)(C) or 246-290-300 (3)(e), or as directed by the department under WAC 246-290-320 (2)(g)(v)(B) must:

(a) Take one or more of the following corrective actions:

(i) Correct all significant deficiencies;

(ii) Provide an alternate source of water;

(iii) Eliminate the source of contamination; or

(iv) Provide treatment that reliably achieves at least 4-log treatment of viruses (using inactivation, removal, or a department-approved combination of 4-log virus inactivation and removal) before or at the first customer for the groundwater source.

(b) Consult with the department regarding appropriate corrective action within thirty days unless otherwise directed by the department to implement a specific corrective action.

(c) Complete corrective action as directed by the department or be in compliance with an approved corrective action plan within one hundred twenty days (or earlier if directed by the department) of receiving written notice from the department of a significant deficiency or source fecal contamination under this subsection. Any modifications of a corrective action plan must be approved by the department.

(2) When treatment is installed to provide at least 4-log treatment of viruses under subsection (1)(a)(iv) of this section, compliance monitoring must be conducted and reported as follows:

(a) For chemical disinfection, conduct compliance monitoring under 40 C.F.R. 141.403 (b)(3)(i).

(i) For groundwater systems serving greater than three thousand three hundred people, conduct compliance monitoring under 40 C.F.R. 141.403 (b)(3)(i)(A).

(ii) For groundwater systems serving three thousand three hundred or fewer people, conduct compliance monitoring under 40 C.F.R. 141.403 (b)(3)(i)(B).

(b) For membrane filtration, conduct compliance monitoring under 40 C.F.R. 141.403 (b)(3)(ii).

(c) For alternative treatment, conduct compliance monitoring under 40 C.F.R. 141.403 (b)(3)(iii).

(d) For new sources, conduct compliance monitoring under 40 C.F.R. 141.403 (b)(2)(i) and (ii).

(e) Submit monthly groundwater treatment plant reports to the department using a department-approved form by the tenth day of the following month in accordance with 40 C.F.R. 141.31.

(3) A groundwater system may discontinue 4-log treatment of viruses installed under subsection (1)(a)(iv) of this section or WAC 246-290-451(4) if the department determines and documents in writing that 4-log treatment of viruses is no longer necessary for that groundwater source. A system that discontinues 4-log treatment of viruses is subject to the triggered source water monitoring requirements under WAC 246-290-320 (2)(g).

(4) Failure to meet the compliance monitoring requirements under subsection (2) of this section is a monitoring violation and requires Tier 3 public notification under Part 7, Subpart A of this chapter.

(5) Failure to submit a monthly groundwater treatment plant report to the department using a department-approved form by the tenth day of the following month is a reporting violation.

(6) Failure to provide 4-log treatment of viruses under subsection (1)(a)(iv) of this section is a treatment technique violation if the failure is not corrected within four hours of the time the purveyor determines that at least 4-log treatment of viruses is not maintained and requires Tier 2 public notification under Part 7, Subpart A of this chapter.

((~~(6)~~)) (7) Failure to complete corrective action as directed by the department or be in compliance with an approved corrective action plan within one hundred twenty days (or earlier if directed by the department) of receiving notice from the department of a significant deficiency or an *E. coli* positive groundwater sample that is not invalidated under WAC 246-290-320 (2)(g)(vii) is a treatment technique violation and requires Tier 2 public notification under Part 7, Subpart A of this chapter.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-480 Recordkeeping and reporting. (1) Records. The purveyor shall keep the following records of operation and water quality analyses:

(a) Bacteriological and turbidity analysis results shall be kept for five years. Chemical analysis results shall be kept for as long as the system is in operation. Records of source meter readings shall be kept for ten years. Other records of opera-

tion and analyses required by the department shall be kept for three years. All records shall bear the signature of the operator in responsible charge of the water system or his or her representative. Systems shall keep these records available for inspection by the department and shall send the records to the department if requested. Actual laboratory reports may be kept or data may be transferred to tabular summaries, provided the following information is included:

(i) The date, place, and time of sampling, and the name of the person collecting the sample;

(ii) Identification of the sample type (routine distribution system sample, repeat sample, source or finished water sample, or other special purpose sample);

(iii) Date of analysis;

(iv) Laboratory and person responsible for performing analysis;

(v) The analytical method used; and

(vi) The results of the analysis.

(b) The purveyor shall maintain documentation of any level 1 or level 2 assessment regardless of who conducts the assessment, and documentation of corrective actions completed as a result of the assessments, or other summary documentation of the sanitary defects and corrective actions taken under WAC 246-290-320(2) for department review. The documentation must be maintained by the purveyor for a period of not less than five years after completion of the assessment or corrective action.

(c) For consecutive systems, documentation of notification to the wholesale systems of total coliform-positive samples that are not invalidated under WAC 246-290-300 (3)(d) must be kept for a period of not less than five years.

(d) Records of action taken by the system to correct violations of primary drinking water standards. For each violation, records of actions taken to correct the violation, and copies of public notifications shall be kept for no less than ten years after the last corrective action taken.

(((~~(c)~~))) (e) Copies of any written reports, summaries, or communications relating to sanitary surveys or SPIs of the system conducted by system personnel, by a consultant or by any local, state, or federal agency, shall be kept for ten years after completion of the sanitary survey or SPI involved.

(((~~(d)~~))) (f) Copies of project reports, construction documents and related drawings, inspection reports and approvals shall be kept for the life of the facility.

(((~~(e)~~))) (g) Where applicable, records of the following shall be kept for a minimum of three years:

(i) Chlorine residual;

(ii) Fluoride level;

(iii) Water treatment plant performance including, but not limited to:

(A) Type of chemicals used and quantity;

(B) Amount of water treated;

(C) Results of analyses; and

(iv) Other information as specified by the department.

(((~~(f)~~))) (h) The purveyor shall retain copies of public notices made under Part 7, Subpart A of this chapter and certifications made to the department under 40 C.F.R. 141.33(e) for a period of at least three years after issuance.

(((~~(g)~~))) (i) Purveyors using conventional, direct, or in-line filtration that recycle spent filter backwash water, thickener supernatant, or liquids from dewatering processes within their treatment plant shall, beginning no later than June 8, 2004, collect and retain on file the following information for review and evaluation by the department:

(i) A copy of the recycle notification and information submitted to the department under WAC 246-290-660 (4)(a)(i).

(ii) A list of all recycle flows and the frequency with which they are returned.

(iii) Average and maximum backwash flow rate through the filters and the average and maximum duration of the filter backwash process in minutes.

(iv) Typical filter run length and a written summary of how filter run length is determined.

(v) The type of treatment provided for the recycle flow.

(vi) Data on the physical dimensions of the equalization and/or treatment units, typical and maximum hydraulic loading rates, type of treatment chemicals used and average dose and frequency of use, and frequency at which solids are removed, if applicable.

(((~~(h)~~))) (j) Purveyors required to conduct disinfection profiling and benchmarking under 40 C.F.R. 141.530 through 141.544 shall retain the results on file indefinitely.

(((~~(i)~~))) (k) Copies of monitoring plans developed under this chapter shall be kept for the same period of time as the records of analyses taken under the plan are required to be kept under (a) of this subsection.

(((~~(j)~~))) (l) Purveyors using surface water or GWI sources must keep the records required by 40 C.F.R. 141.722.

(2) Reporting.

(a) Unless otherwise specified in this chapter, the purveyor shall report to the department within forty-eight hours the failure to comply with any national primary drinking water regulation (including failure to comply with any monitoring requirements) as set forth in this chapter. For violations assigned to Tier 1 in WAC 246-290-71001, the department must be notified as soon as possible, but no later than twenty-four hours after the violation is known.

(b) The purveyor shall submit to the department reports required by this chapter, including tests, measurements, and analytic reports. Monthly reports are due before the tenth day of the following month, unless otherwise specified in this chapter.

(c) The purveyor shall submit to the department copies of any written summaries or communications relating to the status of monitoring waivers during each monitoring cycle or as directed by the department.

(d) Source meter readings shall be made available to the department.

(e) Water facilities inventory form (WFI).

(i) Purveyors of **community** and **NTNC** systems shall submit an annual WFI update to the department;

(ii) Purveyors of **TNC** systems shall submit an updated WFI to the department as requested;

(iii) Purveyors shall submit an updated WFI to the department within thirty days of any change in name, category, ownership, or responsibility for management of the water system, or addition of source or storage facilities; and

(iv) At a minimum the completed WFI shall provide the current names, addresses, and telephone numbers of the owners, operators, and emergency contact persons for the system.

(f) Bacteriological. ((~~The purveyor shall notify the department of the presence of:~~))

(i) The purveyor shall notify the department of the presence of total coliform in a sample((~~,~~)) within ten days of notification by the laboratory; ((~~and~~

~~(ii) Fecal coliform or *E. coli* in a sample, by the end of the business day in which the purveyor is notified by the laboratory. If the purveyor is notified of the results after normal close of business, then the purveyor shall notify the department before the end of the next business day.~~))

(ii) Prior to serving water to the public, a seasonal system shall submit a certification to the department demonstrating that the system has complied with the department-approved start-up procedure; and

(iii) The system shall report treatment technique violations identified under WAC 246-290-320 (2)(f) to the department no later than the end of the next business day after the violation is known.

(g) Systems monitoring for disinfection byproducts under WAC 246-290-300(6) shall report information to the department as specified in (a) and (b) of this subsection, and 40 C.F.R. 141.134(b).

(h) Systems monitoring for disinfectant residuals under WAC 246-290-300(6) shall report information to the department as specified in (a) and (b) of this subsection, and 40 C.F.R. 141.134(c).

(i) Systems required to monitor for disinfection byproduct precursor removal under WAC 246-290-300(6) shall report information to the department as specified in (a) and (b) of this subsection, and 40 C.F.R. 141.134(d).

(j) Systems required to monitor for disinfection byproducts under WAC 246-290-300(6) shall report information to the department as specified in (a) and (b) of this subsection, and 40 C.F.R. 141.600 - 629.

(k) Systems subject to the enhanced treatment requirements for *Cryptosporidium* under WAC 246-290-630(4) shall report information to the department as specified in 40 C.F.R. 141.706 and 141.721.

(l) Systems that use acrylamide and epichlorohydrin in the treatment of drinking water, must certify annually in writing to the department that the combination (or product) of dose and monomer level does not exceed the levels specified in (l)(i) and (ii) of this subsection. Certifications shall reference maximum use levels established by an ANSI-accredited listing organization approved by the department.

(i) Acrylamide = 0.05 percent dosed at 1 ppm (or equivalent); and

(ii) Epichlorohydrin = 0.01 percent dosed at 20 ppm (or equivalent).

(m) Use of products that exceed the specified levels constitutes a treatment technique violation and the public must be notified under the public notice requirements under Part 7, Subpart A of this chapter.

(n) Systems shall submit to the department, in accordance with 40 C.F.R. 141.31(d), a certification that the system has complied with the public notification regulations (Part 7, Subpart A of this chapter) when a public notification is required. Along with the certification, the system shall submit a representative copy of each type of notice.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-630 General requirements. (1) The purveyor shall ensure that treatment is provided for surface and GWI sources consistent with the treatment technique requirements specified in Part 6 of chapter 246-290 WAC.

(2) The purveyor shall install and properly operate water treatment processes to ensure at least:

(a) 99.9 percent (3-log) removal and/or inactivation of *Giardia lamblia* cysts;

(b) 99.99 percent (4-log) removal and/or inactivation of viruses; and

(c) 99 percent (2-log) removal of *Cryptosporidium* oocysts if required to filter.

(3) The purveyor shall ensure that the requirements of subsection (2) of this section are met between a point where the source water is not subject to contamination by untreated surface water and a point at or before the first consumer.

(4) The department may require higher levels of removal and/or inactivation of *Giardia lamblia* cysts, *Cryptosporidium* oocysts, and viruses than specified in subsection (2) of this section if deemed necessary to protect the health of consumers served by the system.

(5) The purveyor shall ensure that personnel operating a system subject to Part 6 of chapter 246-290 WAC meet the requirements under chapter 70.119 RCW and chapter 246-292 WAC.

(6) The purveyor of a **Group A community** system serving water from a surface or GWI source to the public before January 1, 1991, shall comply with applicable minimum treatment requirements. The purveyor shall meet either:

(a) The filtration and disinfection requirements under WAC 246-290-660 and 246-290-662 respectively;

(b) The criteria to remain unfiltered under WAC 246-290-690 and the disinfection requirements under WAC 246-290-692; or

(c) The criteria to provide a limited alternative to filtration under WAC 246-290-691 and the disinfection requirements under WAC 246-290-692.

(7) The purveyor of a **Group A noncommunity** system serving water from a surface or GWI source, shall meet either:

(a) The filtration and disinfection requirements under WAC 246-290-660 and 246-290-662, respectively; or

(b) The criteria to provide a limited alternative to filtration under WAC 246-290-691 and the disinfection requirements under WAC 246-290-692.

(8) The purveyor of a **Group A** system first serving water from a surface or GWI source to the public after December 31, 1990, shall meet either:

(a) The filtration and disinfection requirements under WAC 246-290-660 and 246-290-662, respectively; or

(b) The criteria to provide a limited alternative to filtration under WAC 246-290-691 and the disinfection requirements under WAC 246-290-692.

(9) The purveyor of a system required to install filtration may choose to provide a limited alternative to filtration or abandon the surface or GWI source as a permanent or seasonal source and develop an alternate, department-approved source. Purveyors that develop alternate groundwater sources or purchase water from a department-approved public water system using a groundwater source shall no longer be subject to Part 6 of chapter 246-290 WAC, once the alternate source is approved by the department and is on line.

(10) A purveyor that chooses to provide a limited alternative to filtration shall submit an application to the department that contains the information necessary to determine whether the source can meet the criteria.

(11) If a limited alternative to filtration is provided, then the purveyor shall install and properly operate treatment processes to ensure greater removal and/or inactivation efficiencies of *Giardia lamblia* cysts, viruses, or other pathogenic organisms of public health concern (including *Cryptosporidium* oocysts) than would be achieved by the combination of filtration and chlorine disinfection.

(12) Systems that were required to develop a disinfection profile under 40 C.F.R. 141.172 shall provide that profile and a calculated disinfection benchmark, as described in 40 C.F.R. 141.172 (c)(2) and (3), along with other project information specified in WAC 246-290-110, when proposing any change to the disinfection treatment system. The proposal for change shall include an analysis of how the proposed change will affect the current level of disinfection. The profile must also be available for inspection during routine sanitary surveys conducted under WAC 246-290-416.

(13) Community and nontransient noncommunity systems serving less than ten thousand persons must meet the disinfection profiling and benchmarking provisions required under 40 C.F.R. 141.530 through 141.544.

(14) Systems required to develop a disinfection profile under 40 C.F.R. 141.530 shall provide that profile and a calculated disinfection benchmark, as described in 40 C.F.R. 141.543 along with other project information specified in WAC 246-290-110, when proposing any change to the disinfection treatment system. The proposal for change shall include an analysis of how the proposed change will affect the current level of disinfection. The profile must also be available for inspection during routine sanitary surveys conducted under WAC 246-290-416.

(15) A system using conventional, direct, or in-line filtration that must arrange for the conduct of a CPE, under 40 C.F.R. 141.175 (b)(4) or 40 C.F.R. 141.563, may be required to arrange for CTA. The department will determine the need for CTA on a case-by-case basis.

(16) Water systems subject to the requirements of Part 6 of this chapter must also comply with the enhanced treatment requirements for *Cryptosporidium* under 40 C.F.R. Subpart W. The requirements are in addition to the requirements of Part 6 of this chapter and include:

(a) General requirements under 40 C.F.R. 141.700;

(b) Source monitoring requirements under 40 C.F.R. 141.701-707;

(c) Disinfection profiling and benchmarking requirements under 40 C.F.R. 141.708-709;

(d) Treatment technique requirements under 40 C.F.R. 141.710-714;

(e) Requirements for microbial toolbox components under 40 C.F.R. 141.715-720; and

(f) Reporting and recordkeeping requirements under 40 C.F.R. 141.721-722.

(17) Water systems using UV reactors to obtain treatment credit for *Cryptosporidium* ((~~removal~~)) inactivation must:

(a) Validate the reactors using the validation testing procedures specified under 40 C.F.R. 141.720 (d)(2); or

(b) Validate the reactor under Austrian ONORM Standards or German DVGW Standards.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-638 Analytical requirements. (1) The purveyor shall ensure that only qualified persons conduct measurements for pH, temperature, turbidity, and residual disinfectant concentrations. In this section, qualified ((~~shall~~)) means:

(a) A person certified under chapter 246-292 WAC;

(b) An analyst, with experience conducting these measurements, from the state public health laboratory or another laboratory certified by the department; ((~~or~~))

(c) A state or local health ((~~agency~~)) jurisdiction professional experienced in conducting these measurements; or

(d) For the purpose of monitoring distribution system residual disinfectant concentration only, a person designated by and under the direct supervision of a waterworks operator certified under chapter 246-292 WAC.

(2) The purveyor shall ensure that measurements for temperature, turbidity, pH, and residual disinfectant concentration are made in accordance with "standard methods," or other EPA approved methods.

(3) The purveyor shall ensure that samples for coliform and HPC analysis are:

(a) Collected and transported in accordance with department-approved methods; and

(b) Submitted to the state public health laboratory or another laboratory certified by the department to conduct the analyses.

(4) Turbidity monitoring.

(a) The purveyor shall equip the system's water treatment facility laboratory with a:

(i) Bench model turbidimeter; and

(ii) Continuous turbidimeter and recorder if required under WAC 246-290-664 or 246-290-694.

(b) The purveyor shall ensure that bench model and continuous turbidimeters are:

(i) Designed to meet the criteria in "standard methods," EPA Method 180.1, Hach FilterTrak Method 10133, Hach Method 10258, AMI Turbiwell Method, or Great Lakes Instruments Method 2; and

(ii) Properly operated, calibrated, and maintained at all times in accordance with the manufacturer's recommendations.

(c) The purveyor shall validate continuous turbidity measurements for accuracy as follows:

(i) Calibrate turbidity equipment based upon a primary standard in the expected range of measurements on at least a quarterly basis for instruments using an incandescent light source and on at least an annual basis for instruments using an LED or laser light source; and

(ii) Verify continuous turbidimeter performance on a weekly basis, not on consecutive days, with grab sample measurements made using a properly calibrated bench model turbidimeter.

(d) When continuous turbidity monitoring equipment fails, the purveyor shall measure turbidity on grab samples collected at least every four hours from the combined filter effluent and individual filters while the system serves water to the public and the equipment is being repaired or replaced. The purveyor shall have continuous monitoring equipment online within five working days of failure.

(5) Purveyors shall verify instruments used for continuous monitoring of free and total chlorine residual with a grab sample measurement at least every five days, or with a protocol approved by the department as required under 40 C.F.R. 141.74(a)(2).

(6) Purveyors monitoring for *Cryptosporidium* or *E. coli* as required under 40 C.F.R. 141.701 shall collect samples and have them analyzed under 40 C.F.R. 141.704 and 141.705.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-654 Treatment criteria for filtered systems. (1) The purveyor shall operate filters so that maximum flow rates do not exceed those specified in Table 10. The purveyor may operate filters at higher flow rates, if the purveyor demonstrates to the department's satisfaction that filtration at the higher rate consistently achieves at least 99 percent (2-log) removal of *Giardia lamblia* cysts and 99 percent (2-log) removal of *Cryptosporidium* oocysts and meets the turbidity performance requirements of Table 11.

Table 10
FILTRATION OPERATION CRITERIA

FILTRATION TECHNOLOGY/MEDIA	MAXIMUM FILTRATION RATE (gpm/ft^2)
Conventional, Direct and In-Line	
Gravity Filters with Single Media	3
Gravity Filters with Deep Bed, Dual or Mixed Media	6
Pressure Filters with Single Media	2
Pressure Filters with Deep Bed, Dual or Mixed Media	3
Slow Sand	0.1
Diatomaceous Earth	1.0

(2) The purveyor using conventional, direct or in-line filtration shall ensure that effective coagulation is in use at all times the water treatment facility produces water served to the public.

(3) The purveyor using conventional, direct, or in-line filtration shall demonstrate treatment effectiveness for *Giardia lamblia* cyst and *Cryptosporidium* oocyst removal by one of the following methods:

(a) Turbidity reduction method.

(i) The purveyor shall make source and filtered water turbidity measurements in accordance with WAC 246-290-664 (2) and (3) respectively.

(ii) The purveyor shall achieve:

(A) The turbidity performance requirements specified in WAC 246-290-660(1) and at least an eighty percent reduction in source turbidity based on an average of the daily turbidity reductions measured in a calendar month; or

(B) An average daily filtered water turbidity less than or equal to 0.1 NTU.

(b) Particle counting method. The purveyor shall:

(i) Use a particle counting protocol acceptable to the department; and

(ii) Demonstrate at a frequency acceptable to the department at least the following log reduction of particles in the size range of five to fifteen microns (*Giardia lamblia* cyst-sized particles) and three to five microns (*Cryptosporidium* oocyst-sized particles), as applicable:

(A) 2.5-log reduction in *Giardia lamblia* cyst-sized particles and a 2-log reduction in *Cryptosporidium* particles for systems using conventional filtration; or

(B) 2.0 log reduction for systems using direct or in-line filtration.

(c) Microscopic particulate analysis method. The purveyor shall:

(i) Use a protocol acceptable to the department; and

(ii) Demonstrate at a frequency acceptable to the department at least the following log reduction of *Giardia lamblia* cysts and *Cryptosporidium* oocysts or *Giardia lamblia* cyst and *Cryptosporidium* oocyst surrogate indicators as applicable:

(A) 2.5-log reduction in *Giardia lamblia* cysts or surrogates and a 2-log reduction in *Cryptosporidium* oocyst or surrogates for systems using conventional filtration; and

(B) 2.0 log reduction for systems using direct or in-line filtration.

(d) Other methods acceptable to the department.

(4) The purveyor shall ensure continuous disinfection of all water delivered to the public and shall:

(a) Maintain an adequate supply of disinfection chemicals and keep back-up system components and spare parts on hand;

(b) Develop, maintain, and post at the water treatment facility a plan detailing:

(i) How water delivered to the public will be continuously and adequately disinfected; and

(ii) The elements of an emergency notification plan to be implemented whenever the residual disinfectant concentration at entry to distribution falls below 0.2 mg/L for more than one hour.

(c) Implement the plan during an emergency affecting disinfection.

(5) Operations program.

(a) For each water treatment facility treating a surface or GWI source, the purveyor shall develop an operations pro-

gram and make it available to the department for review upon request.

(b) The program shall be submitted to the department as an addendum to the purveyor's water system plan (WAC 246-290-100) or small water system management program (WAC 246-290-105).

(c) The program shall detail how the purveyor will produce optimal filtered water quality at all times the water treatment facility produces water to be served to the public.

(d) The purveyor shall operate the water treatment facility in accordance with the operations program.

(e) The operations program shall include, but not be limited to, a description of:

(i) For conventional, direct or in-line filtration, procedures used to determine and maintain optimized coagulation as demonstrated by meeting the requirements of WAC 246-290-654(3);

(ii) Procedures used to determine chemical dose rates;

(iii) How and when each unit process is operated;

(iv) Unit process equipment maintenance program;

(v) Treatment plant performance monitoring program;

(vi) Laboratory procedures;

(vii) Records;

(viii) Reliability features; and

(ix) Response plans for water treatment facility emergencies, including disinfection failure and watershed emergencies.

(f) The purveyor shall ensure the operations program is:

(i) Readily available at the water treatment facility for use by operators and for department inspection;

(ii) Consistent with department guidelines for operations procedures such as those described in department guidance on surface water treatment and water system planning; and

(iii) Updated as needed to reflect current water treatment facility operations.

(6) Pressure filters. Purveyors using pressure filters shall:

(a) Inspect and evaluate the filters, at least every six months, for conditions that would reduce their effectiveness in removing *Giardia lamblia* cysts;

(b) Maintain, and make available for department review, a written record of pressure filter inspections; and

(c) Be prepared to conduct filter inspections in the presence of a department representative, if requested.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-660 Filtration. (1) Turbidity performance requirements.

(a) The purveyor shall ensure that the turbidity level of representative filtered water samples:

(i) Complies with the performance standards in Table 11;

(ii) Never exceeds 5.0 NTU for any system using slow sand, diatomaceous earth;

(iii) Never exceeds 1.0 NTU for any system using conventional, direct, or in-line filtration; and

(iv) Never exceeds the maximum allowable turbidity determined by the department on a case-by-case basis for any system using an alternative filtration technology approved under WAC 246-290-676 (2)(b).

Table 11

TURBIDITY PERFORMANCE STANDARDS

Filtration Technology	Filtered water turbidity (in NTUs) shall be less than or equal to this value in at least 95% of the measurements made each calendar month
Conventional, Direct and In-line	0.30
Slow Sand	1.0
Diatomaceous Earth	1.0
Alternative Technology	As determined by the department through case-by-case approval of technology, under WAC 246-290-676 (2)(b).

(b) The department may allow the turbidity of filtered water from a system using slow sand filtration to exceed 1.0 NTU, but never 5.0 NTU, if the system demonstrates to the department's satisfaction that the higher turbidity level will not endanger the health of consumers served by the system. As a condition of being allowed to produce filtered water with a turbidity exceeding 1.0 NTU, the purveyor may be required to monitor one or more parameters in addition to the parameters specified under WAC 246-290-664. The department shall notify the purveyor of the type and frequency of monitoring to be conducted.

(2) *Giardia lamblia, Cryptosporidium,* and virus removal credit.

(a) The department shall notify the purveyor of the removal credit granted for the system's filtration process. The department shall specify removal credit for:

(i) Existing filtration facilities based on periodic evaluations of performance and operation; and

(ii) New or modified filtration facilities based on results of pilot plant studies or full scale operation.

(b) Conventional, direct, and in-line filtration.

(i) The removal credit the department may grant to a system using conventional, direct, or in-line filtration and demonstrating effective treatment is as follows:

	Percent Removal Credit (log)					
Filtration Technology	*Giardia*		Virus		*Cryptosporidium*	
	Percent	log	Percent	log	Percent	log
Conventional	99.7	2.5	99	2.0	99	2.0
Direct and in-line	99	2.0	90	1.0	99	2.0

(ii) A system using conventional, direct, or in-line filtration shall be considered to provide effective treatment, if the purveyor demonstrates to the satisfaction of the department that the system meets the:

(A) Turbidity performance requirements under subsection (1) of this section; and

(B) Operations requirements of WAC 246-290-654.

(iii) The department shall not grant removal credit to a system using conventional, direct, or in-line filtration that:

(A) Fails to meet the minimum turbidity performance requirements under subsection (1) of this section; or

(B) Fails to meet the operating requirements under WAC 246-290-654.

(c) Slow sand filtration.

The department may grant a system using slow sand filtration 99 percent (2-log) *Giardia lamblia* cyst and *Cryptosporidium* oocyst removal credit and 99 percent (2-log) virus removal credit, if the system meets the department design requirements under WAC 246-290-676 and meets the minimum turbidity performance requirements in subsection (1) of this section.

(d) Diatomaceous earth filtration.

The department may grant a system using diatomaceous earth filtration 99 percent (2-log) *Giardia lamblia* cyst and *Cryptosporidium* oocyst removal credit and 90 percent (1 log) virus removal credit, if the system meets the department design requirements under WAC 246-290-676 and meets the minimum turbidity performance requirements in subsection (1) of this section.

(e) Alternative filtration technology.

The department shall grant, on a case-by-case basis, *Giardia lamblia* cyst, *Cryptosporidium* oocyst, and virus removal credit for systems using alternative filtration technology based on results of product testing acceptable to the department.

(f) The purveyor granted no *Giardia lamblia* cyst removal credit and no *Cryptosporidium* oocyst removal credit shall:

(i) Provide treatment under WAC 246-290-662 (2)(d); and

(ii) Within ninety days of department notification regarding removal credit, submit an action plan to the department for review and approval. The plan shall:

(A) Detail how the purveyor plans to comply with the turbidity performance requirements in subsection (1) of this section and operating requirements of WAC 246-290-654; and

(B) Identify the proposed schedule for implementation.

(iii) Be considered in violation of the treatment technique specified in WAC 246-290-632 (2)(a)(i) and shall take follow-up action specified in WAC 246-290-634.

(g) Higher level removal credit.

(i) The department may grant a higher level of *Giardia lamblia*, *Cryptosporidium*, and virus removal credit than listed under (b) through (e) of this subsection, if the purveyor demonstrates to the department's satisfaction that the higher level can be consistently achieved.

(ii) As a condition of maintaining the maximum removal credit, purveyors may be required to periodically monitor one or more parameters not routinely monitored under WAC 246-290-664. The department shall notify the purveyor of the type and frequency of monitoring to be conducted.

(3) Disinfection ((~~by product~~)) byproduct precursor removal requirements.

(a) Conventional systems using sedimentation shall meet the treatment technique requirements for control of disinfection ((~~by product~~)) byproduct precursors specified in 40 C.F.R. 141.135.

(i) Applicability of this requirement shall be determined in accordance with 40 C.F.R. 141.135(a).

(ii) Enhanced coagulation and enhanced softening shall be provided in accordance with 40 C.F.R. 141.135(b), if applicable.

(iii) Compliance with the treatment technique requirements for control of disinfection ((~~by product~~)) byproduct precursors shall be determined in accordance with 40 C.F.R. 141.135(c).

(b) For the purposes of compliance with (a) of this subsection, sedimentation shall be considered applicable when:

(i) Surface overflow rates and other design parameters are in conformance with traditionally accepted industry standards and textbook values, such as those prescribed in nationally accepted standards, including the most recent version of the *Recommended Standards for Water Works, A Committee Report of the Great Lakes - Upper Mississippi River Board of State Public Health and Environmental Managers*; and

(ii) The system has received pathogen removal credit for the sedimentation basin.

(4) Filter backwash recycling requirements.

(a) ((~~By no later than December 8, 2003,~~)) Purveyors using conventional, direct, or in-line filtration must **report** to the department, in writing, whether they recycle spent filter backwash water, thickener supernatant, or liquids from dewatering processes within the treatment plant. (((~~(i)~~))) Purveyors that **do** recycle spent filter backwash water, thickener supernatant, or liquids from dewatering processes must also report the following information:

(((~~(A)~~))) (i) A plant schematic showing the origin of all flows that are recycled (including, but not limited to, spent filter backwash water, thickener supernatant, and liquids from dewatering processes), the hydraulic conveyance (i.e., pipe, open channel) used to transport them, and the location where they are reintroduced back into the treatment plant.

(((~~(B)~~))) (ii) Typical recycle flow in gallons per minute (gpm), the highest observed plant flow experienced in the previous year (gpm), design flow for the treatment plant (gpm), and the approved operating capacity for the plant.

(b) ((~~By no later than June 8, 2004,~~)) Purveyors using conventional, direct, or in-line filtration that recycle spent filter backwash water, thickener supernatant, or liquids from dewatering processes within the treatment plant shall:

(i) Return the recycled flow prior to, or concurrent with the location where primary coagulant is introduced into the flow stream.

(ii) By no later than June 8, 2006, complete any capital improvements (physical modifications requiring engineering planning, design, and construction) necessary to meet the requirements of (b)(i) of this subsection.

(iii) On a case-by-case basis, the department may approve an alternate location for the return of recycle flows.

AMENDATORY SECTION (Amending WSR 03-08-037, filed 3/27/03, effective 4/27/03)

WAC 246-290-662 Disinfection for filtered systems. (1) General requirements.

(a) The purveyor shall provide continuous disinfection to ensure that filtration and disinfection together achieve, at all times the system serves water to the public, at least the following:

(i) 99.9 percent (3-log) inactivation and removal of *Giardia lamblia* cysts; and

(ii) 99.99 percent (4-log) inactivation and/or removal of viruses.

(b) Where sources receive sewage discharges and/or agricultural runoff, purveyors may be required to provide greater levels of removal and inactivation of *Giardia lamblia* cysts and viruses to protect the health of consumers served by the system.

(c) Regardless of the removal credit granted for filtration, purveyors shall, at a minimum, provide continuous disinfection to achieve at least 68 percent (0.5-log) inactivation of *Giardia lamblia* cysts and 99 percent (2-log) inactivation of viruses.

(2) Establishing the level of inactivation.

(a) The department shall establish the level of disinfection (log inactivation) to be provided by the purveyor.

(b) The required level of inactivation shall be based on source quality and expected levels of *Giardia lamblia* cyst and virus removal achieved by the system's filtration process.

(c) Based on periodic reviews, the department may adjust, as necessary, the level of disinfection the purveyor shall provide to protect the health of consumers served by the system.

(d) Systems granted no *Giardia lamblia* cyst removal credit and no *Cryptosporidium* oocyst removal credit shall:

(i) Unless directed otherwise by the department, provide interim disinfection to:

(A) Ensure compliance with the monthly coliform MCL under WAC 246-290-310;

(B) Achieve at least 99.9 percent (3-log) inactivation of *Giardia lamblia* cysts; and

(C) Maintain a detectable residual disinfectant concentration, or an HPC level less than 500 organisms/ml, within the distribution system in accordance with subsection (6) of this section. The department may approve a written request to use a lower value. At a minimum, the request to use a lower value must identify the instrument used to measure the residual disinfectant concentration and include the manufacturer's documentation on the instrument's accuracy to measure the lower value.

(ii) Comply with the interim disinfection requirements until the system can demonstrate to the department's satisfaction that it complies with the operating requirements and turbidity performance requirements under WAC 246-290-654 and 246-290-660(1), respectively.

(3) Determining the level of inactivation.

(a) Unless the department has approved a reduced CT monitoring schedule for the system, each day the system serves water to the public, the purveyor, using procedures and CT values acceptable to the department such as those presented in department guidance of surface water treatment, shall determine:

(i) CTcalc values using the system's treatment parameters and calculate the total inactivation ratio achieved by disinfection; and

(ii) Whether the system's disinfection process is achieving the minimum levels of inactivation of *Giardia lamblia* cysts and viruses required by the department.

(b) The department may allow a purveyor to determine the level of inactivation using lower CT values than those specified in (a) of this subsection, provided the purveyor demonstrates to the department's satisfaction that the required levels of inactivation of *Giardia lamblia* cysts and viruses can be achieved.

(4) Determining compliance with the required level of inactivation.

(a) A purveyor shall be considered in compliance with the inactivation requirement when a total inactivation ratio equal to or greater than 1.0 is achieved.

(b) Failure to provide the required level of inactivation on more than one day in any calendar month shall be considered a treatment technique violation.

(5) Residual disinfectant concentration entering the distribution system.

(a) The purveyor shall ensure that all water entering the distribution system contains a residual disinfectant concentration, measured as free or combined chlorine, of at least 0.2 mg/L at all times the system serves water to the public; and

(b) Failure to provide a 0.2 mg/L residual at entry to distribution for more than four hours on any day shall be considered a treatment technique violation.

(6) Residual disinfectant concentration within the distribution system.

(a) The purveyor shall ensure that the residual disinfectant concentration in the distribution system, measured as total chlorine, free chlorine, combined chlorine, or chlorine dioxide, is detectable in at least ninety-five percent of the samples taken each calendar month.

(b) Water in the distribution system with an HPC less than or equal to 500 organisms/ml is considered to have a detectable residual disinfectant concentration for the purposes of compliance with WAC 246-290-662 (6)(a).

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-664 Monitoring for filtered systems. (1) Source coliform monitoring.

(a) The purveyor shall ensure that source water samples of each surface or GWI source are:

(i) Collected before the first point of disinfectant application and before coagulant chemical addition; and

(ii) Analyzed for fecal coliform density in accordance with methods acceptable to the department.

(b) At a minimum, the purveyor shall ensure source samples are collected for fecal coliform analysis at a frequency equal to ten percent of the number of routine coliform samples collected within the distribution system each month under WAC 246-290-300, or once per calendar month, whichever is greater up to a maximum of one sample per day.

(c) With written approval from the department, purveyors of filtered water systems serving less than ten thousand people may collect twenty-six consecutive monthly fecal coliform samples instead of collecting *E. coli* samples every two weeks for twelve months as specified in 40 C.F.R. 141.701 (a)(3)(i). The fecal coliform levels that will trigger *Cryptosporidium* monitoring will be the same as the *E. coli* levels specified in 40 C.F.R. 141.701 (a)(4)(i), (ii), or (iv).

(2) Source turbidity monitoring.

(a) The purveyor using conventional, direct, or in-line filtration shall measure source turbidity at least once per day on a representative sample collected before disinfection and coagulant addition.

(b) Grab sampling or continuous turbidity monitoring and recording may be used to meet the requirement specified in (a) of this subsection.

(c) Purveyors using continuous turbidity monitoring shall record continuous turbidity measurements at equal intervals, at least every four hours, in accordance with a department-approved sampling schedule.

(d) Purveyors using an approved alternative filtration technology may be required to monitor source water turbidity at least once per day on a representative sample as determined by the department.

(3) Filtered water turbidity monitoring.

(a) The purveyor using direct, conventional, or in-line filtration shall:

(i) Continuously monitor turbidity on representative samples from each individual filter unit and from the system's combined filter effluent, prior to clearwell storage;

(ii) For systems serving at least ten thousand people, record continuous turbidity measurements from each individual filter unit at equal intervals of at least every fifteen minutes, and for all systems, from the combined filter effluent at equal intervals of at least every four hours, in accordance with a department-approved sampling schedule;

(iii) ((~~Beginning January 14, 2005,~~)) Systems serving less than ten thousand people shall record continuous turbidity measurements from each individual filter unit at equal intervals of at least every fifteen minutes;

(iv) Systems serving less than ten thousand people and consisting of two or fewer filters may record continuous turbidity measurements from the combined filter effluent at equal intervals of at least fifteen minutes in lieu of recording individual filter turbidity measurements; and

(v) Conduct monitoring in accordance with the analytical techniques under WAC 246-290-638.

(b) The purveyor using slow sand or diatomaceous earth filtration shall:

(i) Continuously monitor turbidity on representative samples from each individual filter unit and from the system's combined filter effluent, prior to clearwell storage;

(ii) Record continuous turbidity measurements from the combined filter effluent at equal intervals of at least every four hours in accordance with a department-approved sampling schedule; and

(iii) Conduct monitoring in accordance with the analytical techniques under WAC 246-290-638.

(c) Purveyors using an alternative filtration technology approved under WAC 246-290-676 shall provide monitoring in accordance with the technology-specific approval conditions determined by the department.

(d) Purveyors using slow sand filtration or an alternative filtration technology may reduce filtered water turbidity monitoring to one grab sample per day with department approval. Reduced turbidity monitoring shall be allowed only where the purveyor demonstrates to the department's satisfaction that a reduction in monitoring will not endanger the health of consumers served by the water system.

(4) Monitoring the level of inactivation and removal.

(a) Each day the system is in operation, the purveyor shall determine the total level of inactivation and removal of *Giardia lamblia* cysts, viruses, and *Cryptosporidium* oocysts achieved.

(b) The purveyor shall determine the total level of inactivation and removal based on:

(i) *Giardia lamblia* cyst, *Cryptosporidium* oocyst, and virus removal credit granted by the department for filtration; and

(ii) Level of inactivation of *Giardia lamblia* cysts and viruses achieved through disinfection.

(c) At least once per day, purveyors shall monitor the following to determine the level of inactivation achieved through disinfection:

(i) Temperature of the disinfected water at each residual disinfectant concentration sampling point used for CT calculations; and

(ii) If using chlorine, pH of the disinfected water at each chlorine residual disinfectant concentration sampling point used for CT calculations.

(d) Each day during peak hourly flow (based on historical information), the purveyor shall:

(i) Determine disinfectant contact time, T, to the point at which C is measured; and

(ii) Measure the residual disinfectant concentration, C, of the water at the point for which T is calculated. The C measurement point shall be located before or at the first consumer.

(e) The department may reduce CT monitoring requirements for purveyors that demonstrate to the department's satisfaction that the required levels of inactivation are consistently exceeded. Reduced CT monitoring shall only be allowed where the purveyor demonstrates to the department's satisfaction that a reduction in monitoring will not endanger the health of consumers.

(5) Monitoring the residual disinfectant concentration entering the distribution system.

(a) Systems serving more than thirty-three hundred people per month.

(i) The purveyor shall continuously monitor and record the residual disinfectant concentration of water entering the distribution system and report the lowest value each day.

(ii) If the continuous monitoring equipment fails, the purveyor shall measure the residual disinfectant concentration on grab samples collected at least every four hours at the entry to the distribution system while the equipment is being repaired or replaced. The purveyor shall have continuous monitoring equipment back online within five working days following failure.

(b) Systems serving thirty-three hundred or less people per month.

(i) The purveyor shall collect grab samples or use continuous monitoring and recording to measure the residual disinfectant concentration entering the distribution system.

(ii) Purveyors of **community** systems choosing to take grab samples shall collect:

(A) Samples at the following minimum frequencies:

Population Served			Number/day
25	-	500	1
501	-	1,000	2
1,001	-	2,500	3
2,501	-	3,300	4

(B) At least one of the grab samples at peak hourly flow; and

(C) The remaining samples evenly spaced over the time the system is disinfecting water that will be delivered to the public.

(iii) Purveyors of **noncommunity** systems choosing to take grab samples shall collect samples for disinfectant residual concentration entering the distribution system as directed by the department.

(iv) When grab samples are collected and the residual disinfectant concentration at the entry to distribution falls below 0.2 mg/L, purveyors shall collect a grab sample every four hours until the residual disinfectant concentration is 0.2 mg/L or more.

(6) Monitoring residual disinfectant concentrations within the distribution system.

(a) The purveyor shall measure the residual disinfectant concentration at representative points within the distribution system on a daily basis or as otherwise approved by the department.

(b) At a minimum, the purveyor shall measure the residual disinfectant concentration within the distribution system at the same time and location that a routine or repeat coliform sample is collected under WAC 246-290-300((~~(3) or 246-290-320(2)~~)) (3)(e) through (g).

(c) The purveyor may measure HPC within the distribution system in lieu of measuring the residual disinfectant concentration under this subsection.

AMENDATORY SECTION (Amending WSR 99-07-021, filed 3/9/99, effective 4/9/99)

WAC 246-290-668 Watershed control. (1) The purveyor shall, to the extent possible, exercise surveillance over conditions and activities in the watershed affecting source water quality. The purveyor shall develop and implement a department-approved watershed control program.

(2) The purveyor shall ((~~ensure that an~~)) include a current evaluation of the watershed ((~~is completed at least every six years. Watershed evaluations shall be performed such that results of the survey are included in the purveyor's~~)) as part of the watershed control program within the water system plan ((~~in accordance with~~)) under WAC 246-290-100 or small water system management program ((~~in accordance with~~)) under WAC 246-290-105, whichever is applicable.

(3) ((~~A professional engineer registered in the state of Washington shall direct the conduct of the watershed evaluation and develop a watershed evaluation report.~~

~~(4) The purveyor shall submit the report to the department within sixty days of completion of the watershed evaluation.~~

~~(5) The report shall describe the watershed, characterize the watershed hydrology, and discuss the purveyor's watershed control program. The report shall also describe:~~)) The watershed evaluation must include a description of:

(a) Conditions/activities in the watershed that are adversely affecting source water quality;

(b) Changes in the watershed that could adversely affect source water quality that have occurred since the last watershed evaluation;

(c) Sample results from the monitoring program the purveyor uses to assess the adequacy of watershed protection ((~~including an evaluation of sampling results~~)); and

(d) Recommendations for improved watershed control.

AMENDATORY SECTION (Amending WSR 03-08-037, filed 3/27/03, effective 4/27/03)

WAC 246-290-672 Interim treatment requirements. (1) Purveyors of existing unfiltered systems installing filtration shall provide interim disinfection treatment to:

(a) Ensure compliance with the monthly coliform MCL under WAC 246-290-310;

(b) Achieve inactivation levels of *Giardia lamblia* cysts on a daily basis each month the system serves water to the public as directed by the department; and

(c) Maintain a detectable residual disinfectant concentration in the distribution system, measured as total chlorine, free chlorine, or combined chlorine in 95 percent or more of the samples taken each calendar month. The department may approve a written request to use a lower value. At a minimum, the request to use a lower value must identify the instrument used to measure the residual disinfectant concentration and include the manufacturer's documentation on the instrument's accuracy to measure the lower value.

(d) Water in the distribution system with an HPC level less than or equal to 500 organisms/ml is considered to have a detectable residual disinfectant concentration for the purposes of compliance with this subsection.

(2) Failure to provide the required level of inactivation in subsection (1)(b) of this section on more than one day in any calendar month shall be considered a treatment technique violation.

(3) The department may require the purveyor to provide higher levels of treatment than specified in subsection (1)(b) of this section when necessary to protect the health of consumers served by the public water system.

(4) Interim treatment requirements shall be met in accordance with a schedule acceptable to the department.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-676 Filtration technology and design criteria. (1) General.

(a) The purveyor proposing to construct new water treatment facilities or to make additions to existing water treatment facilities for surface and GWI sources shall ensure that the facilities comply with the treatment, design, and reliability requirements of Part 6 of chapter 246-290 WAC.

(b) The purveyor shall submit an engineering report to the department describing how the treatment facilities will be designed to comply with the requirements specified in Subparts A, B, and C of Part 6 of chapter 246-290 WAC.

(2) Filtration technology.

(a) The purveyor shall select a filtration technology acceptable to the department using criteria such as those outlined in department guidance on surface water treatment. The following filtration technologies are considered acceptable:

(i) Conventional;

(ii) Direct;

(iii) Diatomaceous earth; and

(iv) Slow sand.

(b) In addition to the technologies specified in subsection (2)(a) of this section, alternative filtration technologies may be acceptable, if the purveyor demonstrates to the department's satisfaction all of the following:

(i) Through acceptable third party testing, that system components do not leach or otherwise add substances to the finished water that would violate drinking water standards, or otherwise pose a threat to public health;

(ii) The technology's effectiveness in achieving at least 99 percent (2-log) removal of *Giardia lamblia* cysts or cyst surrogate particles, and at least 99 percent (2-log) removal of *Cryptosporidium* oocysts or oocyst surrogate particles. The purveyor shall further demonstrate the technology's removal capability through research conducted:

(A) By a party acceptable to the department; and

(B) In accordance with protocol and standards acceptable to the department.

(iii) Through on-site pilot plant studies or other means, that the filtration technology:

(A) In combination with disinfection treatment consistently achieves 99.9 percent (3-log) removal and inactivation of *Giardia lamblia* cysts and 99.99 percent (4-log) removal and inactivation of viruses; and

(B) Meets the applicable turbidity performance requirements as determined by the department for the specific treatment process being considered, but in no case to exceed 1.0 NTU for the finished water.

(3) Pilot studies.

(a) The purveyor shall ensure pilot studies are conducted for all proposed filtration facilities, except where waived based on engineering justification acceptable to the department.

(b) The purveyor shall obtain department approval for the pilot study plan before the pilot filter is constructed and before the pilot study is undertaken.

(c) The pilot study plan shall identify at a minimum:

(i) Pilot filter design;

(ii) Water quality and operational parameters to be monitored;

(iii) Type of data to be collected, frequency of data collection, and length of pilot study; and

(iv) Pilot plant operator qualifications.

(d) The purveyor shall ensure that the pilot study is:

(i) Conducted to simulate proposed full-scale design conditions;

(ii) Conducted over a time period that will demonstrate the effectiveness and reliability of the proposed treatment system during changes in seasonal and climatic conditions; and

(iii) Designed and operated in accordance with good engineering practices and that ANSI/NSF standards 60 and 61 are considered.

(e) When the pilot study is complete, the purveyor shall submit a project report to the department for approval under WAC 246-290-110.

(4) Design criteria.

(a) The purveyor shall ensure that water treatment facilities for surface and GWI sources are designed and constructed in accordance with good engineering practices documented in references such as those identified in WAC 246-290-200.

(b) Filtration facilities.

(i) The purveyor shall ensure that all new filtration facilities and improvements to any existing filtration facilities (excluding disinfection) are designed to achieve at least 99 percent (2-log) removal of *Giardia lamblia* cysts, and 99 percent (2-log) removal of *Cryptosporidium* oocysts; and

(ii) The purveyor shall ensure that all new filtration facilities contain provisions for filtering to waste with appropriate measures for backflow prevention.

(c) The purveyor shall ensure that disinfection systems for new filtration facilities or improvements to existing disinfection facilities are designed to meet the requirements of WAC 246-290-662.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-690 Criteria to remain unfiltered. (1) For a system not using the "limited alternative to filtration" option to remain unfiltered, the purveyor using a surface water or GWI source shall meet the source water quality and site-specific conditions under this section, as demonstrated through monitoring conducted in accordance with WAC 246-290-694.

(2) Source water quality conditions necessary to remain unfiltered.

(a) Coliform limits.

(i) The purveyor shall ensure that representative source water samples taken before the first point of disinfection have a fecal coliform density less than or equal to 20/100 ml in ninety percent or more of all samples taken during the six previous calendar months the system served water to the public. Samples collected on days when source water turbidity exceeds 1.0 NTU shall be included when determining compliance with this requirement.

(ii) The purveyor shall submit a written report to the department if no source fecal coliform data has been submitted for days when source turbidity exceeded 1.0 NTU. The report shall document why sample results are not available and shall be submitted with the routine monitoring reports for the month in which the sample results are not available.

(b) Turbidity limits.

(i) The purveyor shall ensure that the turbidity level in representative source water samples taken before primary disinfection does not exceed 5.0 NTU.

(ii) A system failing to meet the turbidity requirements in (b)(i) of this subsection may remain unfiltered, if:

(A) The purveyor demonstrates to the department's satisfaction that the most recent turbidity event was caused by unusual and unpredictable circumstances; and

(B) Including the most recent turbidity event, there have not been more than:

(I) Two turbidity events in the twelve previous calendar months the system served water to the public; or

(II) Five turbidity events in the one-hundred-twenty previous calendar months the system served water to the public.

(iii) The purveyor of a system experiencing a turbidity event shall submit a written report to the department documenting why the turbidity event(s) occurred. The purveyor shall submit the report with the routine monitoring reports for the month in which the turbidity event(s) occurred.

(iv) The purveyor of a system with alternate, department-approved sources or sufficient treated water storage may avoid a turbidity event by implementing operational adjustments to prevent water with a turbidity exceeding 5.0 NTU from being delivered to consumers.

(v) When an alternate source or treated water storage is used during periods when the turbidity of the surface or GWI source exceeds 5.0 NTU, the purveyor shall not put the surface or GWI source back online, until the source water turbidity is 5.0 NTU or less.

(3) Site-specific conditions to remain unfiltered.

(a) Level of inactivation.

(i) The purveyor shall ensure that the *Giardia lamblia* cyst and virus inactivation levels required under WAC 246-290-692(1) are met in at least eleven of the twelve previous calendar months that the system served water to the public.

(ii) A system failing to meet the inactivation requirements during two of the twelve previous calendar months that the system served water to the public may remain unfiltered, if the purveyor demonstrates to the department's satisfaction that at least one of the failures was caused by unusual and unpredictable circumstances.

(iii) To make a demonstration, the purveyor shall submit to the department a written report documenting the reasons for the failure. The purveyor shall submit the report with the routine monitoring reports for the month in which the failure occurred.

(b) Redundant disinfection components or automatic shutoff.

The purveyor shall ensure that the requirement for redundant disinfection system components or automatic shutoff of water to the distribution system under WAC 246-290-692(3) is met at all times the system serves water to the public.

(c) Disinfectant residual entering the distribution system.

(i) The purveyor shall ensure that the requirement for having a residual entering the distribution system under WAC 246-290-692(4) is met at all times the system serves water to the public.

(ii) A system failing to meet the disinfection requirement under (c)(i) of this subsection may remain unfiltered, if the purveyor demonstrates to the department's satisfaction that the failure was caused by unusual and unpredictable circumstances.

(iii) To make a demonstration, the purveyor shall submit to the department a written report documenting the reasons for the failure. The purveyor shall submit the report with the routine monitoring reports for the month in which the failure occurred.

(d) Disinfectant residuals within the distribution system.

(i) The purveyor shall ensure that the requirement for maintaining a residual within the distribution system under WAC 246-290-692(5) is met on an ongoing basis.

(ii) A system failing to meet the disinfection requirements under (d)(i) of this subsection may remain unfiltered, if the purveyor demonstrates to the department's satisfaction that the failure was caused by something other than a deficiency in source water treatment.

(iii) To make a demonstration, the purveyor shall submit to the department a written report documenting the reasons for the failure. The purveyor shall submit the report with the routine monitoring reports for the month in which the failure occurred.

(e) Watershed control.

(i) The purveyor shall develop and implement a department-approved watershed control program.

(ii) The purveyor shall monitor, limit, and control all facilities and activities in the watershed affecting source quality to preclude degradation of the physical, chemical, microbiological (including viral contamination and contamination by *Cryptosporidium* oocysts), and radiological quality of the source. The purveyor shall demonstrate, through ownership and/or written agreements acceptable to the department, control of all human activities that may adversely impact source quality.

(iii) At a minimum, the purveyor's watershed control program shall:

(A) Characterize the watershed hydrology and land ownership;

(B) Identify watershed characteristics and activities that may adversely affect source water quality; and

(C) Monitor the occurrence of activities that may adversely affect source water quality.

(iv) If the department determines significant changes have occurred in the watershed, the purveyor shall submit, within ninety days of notification, an updated watershed control program to the department for review and approval.

(v) The department may require an unfiltered system to conduct additional monitoring to demonstrate the adequacy of the watershed control program.

(vi) A purveyor shall be considered out of compliance when failing to:

(A) Have a department-approved watershed control program;

(B) Implement the watershed control program to the satisfaction of the department; or

(C) Conduct additional monitoring as directed by the department.

(f) On-site inspections.

(i) The department shall conduct on-site inspections to assess watershed control and disinfection treatment.

(ii) The department shall conduct annual inspections unless more frequent inspections are deemed necessary to protect the health of consumers served by the system.

(iii) For a system to remain unfiltered, the on-site inspection shall indicate to the department's satisfaction that the watershed control program and disinfection treatment comply with (e) of this subsection and WAC 246-290-692, respectively.

(iv) The purveyor with unsatisfactory on-site inspection results shall take action as directed by the department in accordance with a department-established schedule.

(g) Waterborne disease outbreak.

(i) To remain unfiltered, a system shall not have been identified by the department as the cause of a waterborne disease outbreak attributable to a failure in treatment of the surface or GWI source.

(ii) The purveyor of a system identified by the department as the cause of a waterborne disease outbreak may remain unfiltered, if the purveyor demonstrates to the department's satisfaction that system facilities and/or operations have been sufficiently modified to prevent another waterborne disease outbreak.

(h) ((~~Total coliform~~)) *E. coli* MCL.

(i) For a system to remain unfiltered, the purveyor shall ensure that the MCL for ((~~total coliform~~)) *E. coli* under WAC 246-290-310 is met in at least eleven of the twelve previous calendar months the system served water to the public.

(ii) A system failing to meet the criteria in (i) of this subsection, may remain unfiltered, if the purveyor demonstrates to the department's satisfaction that the ((~~total coliform~~)) *E. coli* MCL violations were not caused by a deficiency in source water treatment.

(iii) The department shall determine the adequacy of source water treatment based on results of total coliform monitoring at the entry to the distribution system in accordance with WAC 246-290-694(3).

(i) Disinfectant residuals MRDL and disinfection ((~~by-products~~)) byproducts MCLs - Monitoring and compliance.

For a system to remain unfiltered, the purveyor shall comply with the monitoring and MCL requirements under WAC 246-290-300(6) and 246-290-310 (5) and (6), respectively.

(j) Laboratory services.

(i) For a system to remain unfiltered, the purveyor shall retain the services of the public health laboratory or another laboratory certified by the department to analyze samples for total and fecal coliform. Laboratory services shall be available on an as needed basis, seven days a week, including holidays. The purveyor shall identify in the annual comprehensive report required under WAC 246-290-696 the certified laboratory providing these services.

(ii) The department may waive this requirement, if the purveyor demonstrates to the department's satisfaction that an alternate, department-approved source is used when the turbidity of the surface or GWI source exceeds 1.0 NTU.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-692 Disinfection for unfiltered systems. (1) General requirements.

(a) The purveyor without a limited alternative to filtration shall:

(i) Provide continuous disinfection treatment to ensure at least 99.9 percent (3-log) inactivation of *Giardia lamblia* cysts and 99.99 percent (4-log) inactivation of viruses at all times the system serves water to the public.

(ii) Failure to provide the required inactivation level on more than one day in any calendar month shall be considered a treatment technique violation.

(b) The purveyor with a limited alternative to filtration shall meet the treatment requirements in WAC 246-290-630(11) at all times the system serves water to the public.

(c) The purveyor may be required to provide greater levels of inactivation of *Giardia lamblia* cysts, other pathogenic microorganisms of public health concern, and viruses to protect the health of consumers.

(2) Determining the level of inactivation.

(a) Each day the system without a limited alternative to filtration serves water to the public, the purveyor, using procedures and $CT_{99.9}$ values specified in 40 C.F.R. 141.74, Vol. 54, No. 124, (published June 29, 1989), shall determine:

(i) CT values using the system's treatment parameters and calculate the total inactivation ratio achieved by disinfection; and

(ii) Whether the system's disinfection treatment process is achieving the minimum levels of inactivation of *Giardia lamblia* cysts and viruses required by the department. For purposes of determining compliance with the inactivation requirements specified in subsection (1) of this section, no credit shall be granted for disinfection applied to a source water with a turbidity greater than 5.0 NTU.

(b) Each day the system with a limited alternative to filtration serves water to the public, the purveyor, using appropriate guidance, shall determine:

(i) CT values using the system's treatment parameters and calculate the total inactivation ratio achieved by disinfection; and

(ii) Whether the system's treatment process is achieving the minimum levels of inactivation of *Giardia lamblia* cysts, viruses, or other pathogenic organisms of health concern including *Cryptosporidium* oocysts that would be greater than what would be expected from the combination of filtration plus chlorine disinfection.

(c) The purveyor shall be considered in compliance with the daily inactivation requirement when a total inactivation ratio equal to or greater than 1.0 is achieved.

(d) The purveyor of a system using a disinfectant or combination of disinfectants may use CT values lower than those specified in (a) of this subsection, if the purveyor demonstrates to the department's satisfaction that the required levels of inactivation of *Giardia lamblia* cysts, viruses, and, if providing a limited alternative to filtration,

any other pathogenic organisms of public health concern including *Cryptosporidium* oocysts, can be achieved using the lower CT values.

(e) The purveyor of a system using preformed chloramines or adding ammonia to the water before chlorine shall demonstrate to the department's satisfaction that the system achieves at least 99.99 percent (4-log) inactivation of viruses.

(3) The purveyor using either unfiltered or "limited alternative to filtration" treated sources shall ensure that disinfection facilities provide either:

(a) Redundant components, including an auxiliary power supply with automatic start up and alarm, to ensure continuous disinfection. Redundancy shall ensure that both the minimum inactivation requirements and the requirement for a 0.2 mg/L residual disinfectant concentration at entry to the distribution system are met at all times water is delivered to the distribution system; or

(b) Automatic shutoff of delivery of water to the distribution system when the residual disinfectant concentration in the water is less than 0.2 mg/L. Automatic shutoff shall be allowed only in systems where the purveyor demonstrates to the department's satisfaction that automatic shutoff will not endanger health or interfere with fire protection.

(4) Disinfectant residual entering the distribution system.

(a) The purveyor shall ensure that water entering the distribution system contains a residual disinfectant concentration, measured as free or combined chlorine, of at least 0.2 mg/L at all times the system serves water to the public; and

(b) Failure to provide a 0.2 mg/L residual at entry to distribution for more than four hours on any day shall be considered a treatment technique violation.

(5) Disinfectant residuals within the distribution system.

(a) The purveyor shall ensure that the residual disinfectant concentration in the distribution system, measured as total chlorine, free chlorine, combined chlorine, or chlorine dioxide, is detectable in at least ninety-five percent of the samples taken each calendar month. The department may approve a written request to use a lower value. At a minimum, the request to use a lower value must identify the instrument used to measure the residual disinfectant concentration and include the manufacturer's documentation on the instrument's accuracy to measure the lower value.

(b) The purveyor of a system that purchases completely treated surface or GWI water as determined by the department shall comply with the requirements specified in (a) of this subsection.

(c) Water in the distribution system with an HPC level less than or equal to 500 organisms/ml is considered to have a detectable residual disinfectant concentration.

AMENDATORY SECTION (Amending WSR 09-21-045, filed 10/13/09, effective 1/4/10)

WAC 246-290-694 Monitoring for unfiltered systems. (1) Source coliform monitoring for systems without a limited alternative to filtration.

(a) The purveyor shall ensure that source water samples of each surface or GWI source are representative and:

(i) Collected before the first point of disinfectant application; and

(ii) Analyzed for fecal coliform density in accordance with methods acceptable to the department.

(b) The purveyor shall ensure source samples are collected for fecal coliform analysis each week the system serves water to the public based on the following schedule:

Population Served	Minimum Number/week*
25 - 500	1
501 - 3,300	2
3,301 - 10,000	3
10,001 - 25,000	4
>25,000	5

*Must be taken on separate days.

(c) Each day the system serves water to the public and the turbidity of the source water exceeds 1.0 NTU, the purveyor shall ensure one representative source water sample is collected before the first point of disinfectant application and analyzed for fecal coliform density. This sample shall count toward the weekly source coliform sampling requirement.

(d) The purveyor using a surface water or GWI source and that meets the criteria to remain unfiltered under WAC 246-290-690, shall collect at least one routine sample near the first service connection each day the turbidity level of the source water, measured as specified under WAC 246-290-694, exceeds 1 NTU. This sample must be analyzed for the presence of total coliform. When one or more turbidity measurements in any day exceed 1 NTU, the system must collect this coliform sample within twenty-four hours of the first exceedance, unless the department determines that the system, for logistical reasons outside the system's control, cannot have the sample analyzed within thirty hours of collection. Sample results from this coliform monitoring must be included in determining compliance with the *E. coli* MCL ((~~for total coliforms~~)) under WAC 246-290-310 (2)(b) and exceeding treatment technique triggers under WAC 246-290-320 (2)(a).

(e) A purveyor shall not be considered in violation of (c) of this subsection, if the purveyor demonstrates to the department's satisfaction that, for valid logistical reasons outside the purveyor's control, the additional fecal coliform sample could not be analyzed within a time frame acceptable to the department.

(2) Source coliform monitoring for systems with a limited alternative to filtration.

(a) The purveyor shall ensure that source water samples of each surface or GWI source are:

(i) Collected before the first point of primary disinfection; and

(ii) Analyzed for fecal coliform density in accordance with methods acceptable to the department.

(b) At a minimum, the purveyor shall ensure source samples are collected for fecal coliform analysis at a frequency equal to ten percent the number of routine coliform samples collected within the distribution system each month under

WAC 246-290-300, or once per calendar month, whichever is greater, up to a maximum of one sample per day.

(3) Coliform monitoring at entry to distribution for systems without a limited alternative to filtration.

(a) The purveyor shall collect and have analyzed one coliform sample at the entry point to the distribution system each day that a routine or repeat coliform sample is collected within the distribution system under WAC ((~~246-290-300(3) or 246-290-320(2), respectively~~)) 246-290-300 (3)(e) through (g).

(b) The purveyor shall use the results of the coliform monitoring at entry to distribution along with inactivation ratio monitoring results to demonstrate the adequacy of source treatment.

(4) Source turbidity monitoring for systems without a limited alternative to filtration.

(a) The purveyor shall continuously monitor and record turbidity:

(i) On representative source water samples before the first point of primary disinfectant application; and

(ii) In accordance with the analytical techniques in WAC 246-290-638.

(b) If source water turbidity is not the same as the turbidity of water delivered to consumers, the purveyor shall continuously monitor and record turbidity of water delivered.

(5) Source turbidity monitoring for systems with a limited alternative to filtration. The purveyor shall:

(a) Continuously monitor turbidity on representative source samples before the first point of primary disinfection application;

(b) Record continuous turbidity measurements at equal intervals, of at least four hours, in accordance with a department-approved sampling schedule; and

(c) Conduct monitoring in accordance with the analytical techniques under WAC 246-290-638.

(6) Monitoring the level of inactivation.

(a) Each day the system is in operation, the purveyor shall determine the total level of inactivation of *Giardia lamblia* cysts, viruses, and, if providing a limited alternative to filtration, any other pathogenic organisms of health concern including *Cryptosporidium* oocysts, achieved through disinfection.

(b) At least once per day, the purveyor shall monitor the following parameters to determine the total inactivation ratio achieved through disinfection:

(i) Temperature of the disinfected water at each residual disinfectant concentration sampling point used for CT calculations; and

(ii) If using chlorine, pH of the disinfected water at each chlorine residual disinfectant concentration sampling point used for CT calculations.

(c) Each day during peak hourly flow, the purveyor shall:

(i) Determine disinfectant contact time, T, to the point at which C is measured; and

(ii) Measure the residual disinfectant concentration, C, of the water at the point for which T is calculated. The C measurement point must be before or at the first consumer.

(7) Monitoring the residual disinfectant concentration entering the distribution system for either unfiltered systems, or systems using a limited alternative to filtration.

(a) Systems serving more than thirty-three hundred people.

(i) The purveyor shall continuously monitor and record the residual disinfectant concentration of water entering the distribution system and report the lowest value each day.

(ii) If the continuous monitoring equipment fails, the purveyor shall measure the residual disinfectant concentration on grab samples collected at least every four hours at the entry to the distribution system while the equipment is being repaired or replaced. The purveyor shall have continuous monitoring equipment back online within five working days following failure.

(b) Systems serving thirty-three hundred or less people.

(i) The purveyor shall collect grab samples or use continuous monitoring and recording to measure the residual disinfectant concentration entering the distribution system.

(ii) A purveyor choosing to take grab samples shall collect:

(A) Samples at the following minimum frequencies:

Population Served	Number/day
25 - 500	1
501 - 1,000	2
1,001 - 2,500	3
2,501 - 3,300	4

(B) At least one of the grab samples at peak hourly flow based on historical flows for the system; and

(C) The remaining sample or samples at intervals evenly spaced over the time the system is disinfecting water that will be delivered to the public.

(iii) When grab samples are collected and the residual disinfectant concentration at the entry to distribution falls below 0.2 mg/L, the purveyor shall collect a grab sample every four hours until the residual disinfectant concentration is 0.2 mg/L or more.

(8) Monitoring residual disinfectant concentration within the distribution system for either unfiltered systems, or systems using a limited alternative to filtration.

(a) The purveyor shall measure the residual disinfectant concentration within the distribution system at the same time and location that a routine or repeat coliform sample is collected under WAC ((~~246-290-300(3) or 246-290-320(2)~~)) 246-290-300 (3)(e) through (g) or once per day, whichever is greater.

(b) The purveyor of a system that purchases completely treated surface or GWI water as determined by the department shall comply with the requirements of (a) of this subsection or as otherwise directed by the department under WAC 246-290-300(2). At a minimum, the purveyor shall measure the residual disinfectant concentration within the distribution system at the same time and location that a routine or repeat coliform sample is collected under WAC ((~~246-290-300(3) or 246-290-320(2)~~)) 246-290-300 (3)(e) through (g).

(c) The purveyor may measure HPC within the distribution system in lieu of measuring the residual disinfectant concentration under this subsection.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-71001 Public notification. (1) The purveyor shall notify the water system users and the owner or operator of any consecutive water system served in accordance with 40 C.F.R. 141.201 through 208. Notice is to be provided when the system violates a National Primary Drinking Water Regulation and when any of the situations listed in Table 1 of 40 C.F.R. 141.201 occur, except for (a)(3)(ii). Public notifications for violations and other situations are categorized into the following Tiers:

(a) Tier 1 as described in Table 1 of 40 C.F.R. 141.202 (a);

(b) Tier 2 as described in Table 1 of 40 C.F.R. 141.203 (a); or

(c) Tier 3 as described in Table 1 of 40 C.F.R. 141.204 (a).

(2) The purveyor shall initiate consultation with the department as soon as possible, but no later than twenty-four hours after they learn their system has a Tier 1 violation or situation in order to determine if additional public notice is required. The purveyor shall comply with any additional public notification requirements established as a result of the consultation.

(3) The purveyor shall notify the water system users when the system:

(a) Is issued a department order;

(b) Fails to comply with a department order; or

(c) Is issued a category red operating permit.

AMENDATORY SECTION (Amending WSR 09-21-045, filed 10/13/09, effective 1/4/10)

WAC 246-290-72001 Purpose and applicability of the consumer confidence report requirements. WAC 246-290-72001 through 246-290-72012 establishes minimum requirements for the content of annual reports that community water systems must deliver to their customers. WAC 246-290-72013 establishes additional requirements for the content of annual reports that community water systems using groundwater must deliver to their customers. These reports must contain information on the quality of the water delivered by the systems and characterize the risks (if any) from exposure to contaminants detected in the drinking water in an accurate and understandable manner.

(1) This section applies only to community water systems.

(2) For the purpose of WAC 246-290-72001 through ((~~246-290-72012~~)) 246-290-72013:

(a) "Customers" means billing units or service connections to which water is delivered by a community water system.

(b) "Detected" means at or above the levels prescribed by WAC 246-290-300(4) for inorganic contaminants, at or above the levels prescribed by WAC 246-290-300(7) for organic contaminants, at or above the levels prescribed by 40 C.F.R. 141.131 (b)(2)(iv) for disinfection byproducts, and at or above the levels prescribed by 40 C.F.R. 141.25(c) for radioactive contaminants.

AMENDATORY SECTION (Amending WSR 00-15-080, filed 7/19/00, effective 8/19/00)

WAC 246-290-72004 Report contents—Definitions. (1) Each report must include the following definitions:

(a) Maximum contaminant level goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

(b) Maximum contaminant level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

(2) A report for a community water system operating under a variance or an exemption issued under WAC 246-290-060 must include the following definition: Variances and exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

(3) A report that contains data on contaminants that the Environmental Protection Agency regulates using any of the following terms must include the applicable definitions:

(a) Treatment technique: A required process intended to reduce the level of a contaminant in drinking water.

(b) Action level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

(c) Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

(d) Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

(4) A report that contains level 1 or level 2 assessment information must include the applicable definitions:

(a) Level 1 assessment: A level 1 assessment is a study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.

(b) Level 2 assessment: A level 2 assessment is a very detailed study of the water system to identify potential problems and determine, if possible, why an *E. coli* MCL violation has occurred and, if applicable, why total coliform bacteria have been found in our water system on multiple occasions.

AMENDATORY SECTION (Amending WSR 09-21-045, filed 10/13/09, effective 1/4/10)

WAC 246-290-72005 Report contents—Information on detected contaminants. (1) This section specifies the requirements for information to be included in each report for contaminants subject to mandatory monitoring. It applies to:

(a) Contaminants subject to an MCL, action level, maximum residual disinfectant level or treatment technique (regulated contaminants);

(b) Detected unregulated contaminants for which monitoring is required under WAC 246-290-300(10) and 40 C.F.R. 140.40; and

(c) Disinfection byproducts for which monitoring is required by WAC 246-290-300(6) and 40 C.F.R. 141.142 or microbial contaminants for which monitoring is required by WAC 246-290-300(3) and 40 C.F.R. 141.143, except as provided under WAC 246-290-72006(1), and which are detected in the finished water.

(2) The data relating to these contaminants must be displayed in one table or in several adjacent tables. Any additional monitoring results which a community water system chooses to include in its report must be displayed separately.

(3) The data must be derived from data collected to comply with EPA and state monitoring and analytical requirements during the previous calendar year except that:

(a) Where a system is allowed to monitor for regulated contaminants less than once a year, the table(s) must include the date and results of the most recent sampling and the report must include a brief statement indicating that the data presented in the report are from the most recent testing done in accordance with the regulations. No data older than five years need be included.

(b) Results of monitoring in compliance with 40 C.F.R. 141.142 and 40 C.F.R. 141.143 need only be included for five years from the date of last sample or until any of the detected contaminants becomes regulated and subject to routine monitoring requirements, whichever comes first.

(4) For detected regulated contaminants listed in WAC 246-290-72012, the table(s) must contain:

(a) The MCL for that contaminant expressed as a number equal to or greater than 1.0 (as provided in WAC 246-290-72012);

(b) The MCLG for that contaminant expressed in the same units as the MCL;

(c) If there is no MCL for a detected contaminant, the table must indicate that there is a treatment technique, or specify the action level, applicable to that contaminant, and the report must include the definitions for treatment technique and/or action level, as appropriate, specified in WAC 246-290-72004;

(d) For contaminants subject to an MCL, except turbidity ((~~and~~)), total coliform((~~s~~)), and *E. coli*, the highest contaminant level used to determine compliance with a National Primary Drinking Water Regulation and the range of ((~~detected levels~~)) results, as follows:

(i) When compliance with the MCL is determined annually or less frequently: The highest detected level at any sampling point and the range of ((~~detected levels~~)) results expressed in the same units as the MCL.

(ii) When compliance with the MCL is determined by calculating a running annual average of all samples taken at a sampling point: The highest average of any of the sampling points and the range of all sampling points expressed in the same units as the MCL. For the TTHM and HAA5 MCLs determined on the basis of the LRAA, systems must include the highest LRAA for TTHM and HAA5 and the range of individual sample results for all monitoring locations expressed in the same units as the MCL. If more than one location exceeds the TTHM or HAA5 MCL, the system must include the LRAA for all locations that exceed the MCL.

(iii) When compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all samples at all sampling points: The average and range of detection expressed in the same units as the MCL. The system is required to include individual sample results for the IDSE conducted under WAC 246-290-300 (6)(b)(i)(F) when determining the range of TTHM and HAA5 results to be reported in the annual consumer confidence report for the calendar year that the IDSE samples were taken.

(iv) Note to WAC 246-290-72005 (4)(d): When rounding of results to determine compliance with the MCL is allowed by the regulations, rounding should be done prior to multiplying the results by the factor listed in WAC 246-290-72012;

(e) For turbidity.

(i) When it is reported under chapter 246-290 WAC Part 6, Subpart C: The highest average monthly value.

(ii) When it is reported under the requirements of chapter 246-290 WAC Part 6, Subpart D: The highest monthly value. The report should include an explanation of the reasons for measuring turbidity.

(iii) When it is reported under chapter 246-290 WAC Part 6, Subpart B: The highest single measurement and the lowest monthly percentage of samples meeting the turbidity limits specified in chapter 246-290 WAC Part 6, Subpart B for the filtration technology being used. The report should include an explanation of the reasons for measuring turbidity;

(f) For lead and copper: The 90th percentile value of the most recent round of sampling and the number of sampling sites exceeding the action level;

(g) For ((~~total coliform:~~

~~(i) The highest monthly number of positive samples for systems collecting fewer than 40 samples per month; or~~

~~(ii) The highest monthly percentage of positive samples for systems collecting at least 40 samples per month;~~

~~(h) For fecal coliform~~)) *E. coli* analytical results under WAC 246-290-300 (3)(e) through (g): The total number of positive samples; and

(((~~(i)~~))) (h) The likely source(s) of detected contaminants to the best of the purveyor's knowledge. Specific information regarding contaminants may be available in sanitary surveys and source water assessments, and should be used when available to the purveyor. If the purveyor lacks specific information on the likely source, the report must include one or more of the typical sources for that contaminant listed in WAC 246-290-72012 which are most applicable to the system.

(5) If a community water system distributes water to its customers from multiple hydraulically independent distribution systems that are fed by different raw water sources, the table should contain a separate column for each service area and the report should identify each separate distribution system. Alternatively, systems could produce separate reports tailored to include data for each service area.

(6) The table(s) must clearly identify any data indicating violations of MCLs, MRDLs, or treatment techniques and the report must contain a clear and readily understandable explanation of the violation including: The length of the violation, the potential adverse health effects, and actions taken by the system to address the violation. To describe the potential health effects, the system must use the relevant language of WAC 246-290-72012.

(7) For detected unregulated contaminants for which monitoring is required, the table(s) must contain the average and range at which the contaminant was detected. The report may include a brief explanation of the reasons for monitoring for unregulated contaminants.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-72007 Report contents—Compliance with National Primary Drinking Water Regulations. In addition to the requirements of WAC 246-290-72005(6), the report must note any violation that occurred during the year covered by the report of a requirement listed below, and include a clear and readily understandable explanation of the violation, any potential adverse health effects, and the steps the system has taken to correct the violation.

(1) Monitoring and reporting of compliance data;

(2) Filtration and disinfection prescribed by chapter 246-290 WAC, Part 6. For systems which have failed to install adequate filtration or disinfection equipment or processes, or have had a failure of the equipment or processes which constitutes a violation, the report must include the following language as part of the explanation of potential adverse health effects: Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

(3) Lead and copper control requirements prescribed by WAC 246-290-025, specifically 40 C.F.R. 141.80 through 141.91: For systems which fail to take one or more actions prescribed by WAC 246-290-025, specifically 40 C.F.R. 141.80 through 141.84, the report must include the applicable language of WAC 246-290-72012 for lead, copper, or both.

(4) Treatment techniques for Acrylamide and Epichlorohydrin prescribed by WAC 246-290-480 (2)(k). For systems which violate the requirements of WAC 246-290-480 (2)(k), the report must include the relevant language from WAC 246-290-72012.

(5) Recordkeeping of compliance data.

(6) Special monitoring requirements prescribed under WAC 246-290-310(3); and

(7) Violation of the terms of a variance, an exemption, or an administrative or judicial order.

AMENDATORY SECTION (Amending WSR 10-20-068, filed 9/29/10, effective 11/1/10)

WAC 246-290-72012 Regulated contaminants.

Contaminant (units)	traditional MCL in mg/L	to convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water	Health Effects Language
Microbiological Contaminants						
Total Coliform Bacteria	((~~MCL: (systems that collect ≥ 40 samples/ month) more than 5% of monthly samples are positive; (systems that collect < 40 samples/ month) 2 or more positive samples per monthly sampling period~~)) TT	-	((~~MCL: (systems that collect ≥ 40 samples/ month) more than 5% of monthly samples are positive; (systems that collect < 40 samples/ month) 2 or more positive samples per monthly sampling period~~)) TT	((θ)) N/A	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially((-)) harmful, ((~~bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems~~)) waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.
((~~Fecal coliform and~~)) *E. coli*	((θ)) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or sys-	-	((θ)) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E.*	0	Human and animal fecal waste	((~~Fecal coliforms and~~)) *E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. ((~~Microbes~~)) Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a ((~~special~~)) greater health risk for infants, young children, ((~~some of~~)) the elderly, and people with severely-compromised immune systems.

Contaminant (units)	traditional MCL in mg/L	to convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water	Health Effects Language
	tem fails to analyze total coliform-positive repeat sample for *E. coli*.		*coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.			
Fecal indicators (*E. coli*)	TT	-	TT	N/A	Human and animal fecal waste	Fecal indicators are microbes whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term health effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, some of the elderly, and people with severely compromised immune systems.
Total organic carbon (ppm)	TT	-	TT	N/A	Naturally present in the environment	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection ((~~by-products~~)) byproducts. These ((~~by-products~~)) byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these ((~~by-products~~)) byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
Turbidity (NTU)	TT	-	TT	N/A	Soil runoff	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.
Giardia lamblia Viruses *Cryptosporidium*	TT	-	TT	N/A	Human and animal fecal waste	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
Heterotrophic plate count (HPC) bacteria	TT	-	TT	N/A	HPC measures a range of bacteria that are naturally present in the environment	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
Legionella	TT	-	TT	N/A	Found naturally in water; multiplies in heating systems	Inadequately treated water may contain disease-causing organisms. These organisms include bacteria viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Contaminant (units)	traditional MCL in mg/L	to convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water	Health Effects Language
Radioactive Contaminants						
Beta/photon emitters (mrem/yr)	4 mrem/yr	-	4	N/A 0	Decay of natural and man-made deposits	Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Alpha emitters (pCi/l)	15 pCi/l	-	15	N/A 0	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Combined radium (pCi/l)	5 pCi/l	-	5	N/A 0	Erosion of natural deposits	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
Uranium (pCi/l)	30 micro g/l	-	30	0	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.
Inorganic Contaminants						
Antimony (ppb)	.006	1000	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.
Arsenic (ppb) ((~~*Effective 1/23/06~~))	((~~.05~~)) .010 ((~~0.010~~))	1000 ((~~1000~~))	((~~50~~)) 10 ((~~10~~))	((~~N/A~~)) 0 ((~~0~~))	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
Asbestos (MFL)	7 MFL	-	7	7	Decay of asbestos cement water mains; Erosion of natural deposits	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
Barium (ppm)	2	-	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Beryllium (ppb)	.004	1000	4	4	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries	Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
Cadmium (ppb)	.005	1000	5	5	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.

Contaminant (units)	traditional MCL in mg/L	to convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water	Health Effects Language
Chromium (ppb)	.1	1000	100	100	Discharge from steel and pulp mills; Erosion of natural deposits	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
Copper (ppm)	AL = 1.3	-	AL = 1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Cyanide (ppb)	.2	1000	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories	Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.
Fluoride (ppm)	4	-	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Lead (ppb)	AL = .015	1000	AL = 15	0	Corrosion of household plumbing systems; Erosion of natural deposits	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
Mercury [inorganic] (ppb)	.002	1000	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
Nitrate (ppm)	10	-	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Nitrite (ppm)	1	-	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.

Contaminant (units)	traditional MCL in mg/L	to convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water	Health Effects Language
Selenium (ppb)	.05	1000	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.
Thallium (ppb)	.002	1000	2	0.5	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories	Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.
Synthetic Organic Contaminants including Pesticides and Herbicides						
2,4-D (ppb)	.07	1000	70	70	Runoff from herbicide used on row crops	Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.
2,4,5-TP [Silvex](ppb)	.05	1000	50	50	Residue of banned herbicide	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.
Acrylamide	TT	-	TT	0	Added to water during sewage/ wastewater treatment	Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.
Alachlor (ppb)	.002	1000	2	0	Runoff from herbicide used on row crops	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.
Atrazine (ppb)	.003	1000	3	3	Runoff from herbicide used on row crops	Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.
Benzo(a)pyrene [PAH] (nanograms/l)	.0002	1,000,000	200	0	Leaching from linings of water storage tanks and distribution lines	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.
Carbofuran (ppb)	.04	1000	40	40	Leaching of soil fumigant used on rice and alfalfa	Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.
Chlordane (ppb)	.002	1000	2	0	Residue of banned termiticide	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.
Dalapon (ppb)	.2	1000	200	200	Runoff from herbicide used on rights of way	Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.

Contaminant (units)	traditional MCL in mg/L	to convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water	Health Effects Language
Di(2-ethylhexyl) adipate (ppb)	.4	1000	400	400	Discharge from chemical factories	Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience toxic effects or reproductive difficulties.
Di(2-ethylhexyl) phthalate (ppb)	.006	1000	6	0	Discharge from rubber and chemical factories	Some people who drink water containing di (2-ethylhexyl) phthalate well in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.
Dibromochloropropane (ppt)	.0002	1,000,000	200	0	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards	Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive problems and may have an increased risk of getting cancer.
Dinoseb (ppb)	.007	1000	7	7	Runoff from herbicide used on soybeans and vegetables	Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.
Diquat (ppb)	.02	1000	20	20	Runoff from herbicide use	Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
Dioxin [2,3,7,8-TCDD] (ppq)	.00000003	1,000,000,000	30	0	Emissions from waste incineration and other combustion; Discharge from chemical factories	Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
Endothall (ppb)	.1	1000	100	100	Runoff from herbicide use	Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.
Endrin (ppb)	.002	1000	2	2	Residue of banned insecticide	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.
Epichlorohydrin	TT	-	TT	0	Discharge from industrial chemical factories; An impurity of some water treatment chemicals	Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.
Ethylene dibromide (ppt)	.00005	1,000,000	50	0	Discharge from petroleum refineries	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.
Glyphosate (ppb)	.7	1000	700	700	Runoff from herbicide use	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.
Heptachlor (ppt)	.0004	1,000,000	400	0	Residue of banned pesticide	Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.

Contaminant (units)	traditional MCL in mg/L	to convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water	Health Effects Language
Heptachlor epoxide (ppt)	.0002	1,000,000	200	0	Breakdown of heptachlor	Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.
Hexachlorobenzene (ppb)	.001	1000	1	0	Discharge from metal refineries and agricultural chemical factories	Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.
Hexachlorocyclo-pentadiene (ppb)	.05	1000	50	50	Discharge from chemical factories	Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.
Lindane (ppt)	.0002	1,000,000	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens	Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.
Methoxychlor (ppb)	.04	1000	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock	Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.
Oxamyl [Vydate] (ppb)	.2	1000	200	200	Runoff/leaching from insecticide used on apples, potatoes and tomatoes	Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.
PCBs [Polychlorinated biphenyls] (ppt)	.0005	1,000,000	500	0	Runoff from landfills; Discharge of waste chemicals	Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.
Pentachlorophenol (ppb)	.001	1000	1	0	Discharge from wood preserving factories	Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.
Picloram (ppb)	.5	1000	500	500	Herbicide runoff	Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.
Simazine (ppb)	.004	1000	4	4	Herbicide runoff	Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.
Toxaphene (ppb)	.003	1000	3	0	Runoff/leaching from insecticide used on cotton and cattle	Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.

Contaminant (units)	traditional MCL in mg/L	to convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water	Health Effects Language
Volatile Organic Contaminants						
Benzene (ppb)	.005	1000	5	0	Discharge from factories; Leaching from gas storage tanks and landfills	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
Bromate (ppb)	.010	1000	10	0	((~~By-product~~)) Byproduct of drinking water disinfection	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.
Carbon tetrachloride (ppb)	.005	1000	5	0	Discharge from chemical plants and other industrial activities	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
Chloramines (ppm)	MRDL = 4	-	MRDL = 4	MRDLG = 4	Water additive used to control microbes	Some people who use drinking water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.
Chlorine (ppm)	MRDL = 4	-	MRDL = 4	MRDLG = 4	Water additive used to control microbes	Some people who use drinking water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Chlorite (ppm)	1	-	1	0.8	((~~By-product~~)) Byproduct of drinking water disinfection	Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant mothers who drink water containing chlorite in excess of the MCL. Some people may experience anemia.
Chlorine dioxide (ppb)	MRDL = .8	1000	MRDL = 800	MRDLG = 800	Water additive used to control microbes	Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant mothers who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.
Chlorobenzene (ppb)	.1	1000	100	100	Discharge from chemical and agricultural chemical factories	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.
o-Dichlorobenzene (ppb)	.6	1000	600	600	Discharge from industrial chemical factories	Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.
p-Dichlorobenzene (ppb)	.075	1000	75	75	Discharge from industrial chemical factories	Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.

Contaminant (units)	traditional MCL in mg/L	to convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water	Health Effects Language
1,2-Dichloroethane (ppb)	.005	1000	5	0	Discharge from industrial chemical factories	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
1,1-Dichloroethylene (ppb)	.007	1000	7	7	Discharge from industrial chemical factories	Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
cis-1,2-Dichloroethylene (ppb)	.07	1000	70	70	Discharge from industrial chemical factories	Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
trans-1,2-Dichloroethylene (ppb)	.1	1000	100	100	Discharge from industrial chemical factories	Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.
Dichloromethane (ppb)	.005	1000	5	0	Discharge from pharmaceutical and chemical factories	Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
1,2-Dichloropropane (ppb)	.005	1000	5	0	Discharge from industrial chemical factories	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
Ethylbenzene (ppb)	.7	1000	700	700	Discharge from petroleum refineries	Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.
Haloacetic Acids (HAA) (ppb)	.060	1000	60	n/a	((~~By-product~~)) Byproduct of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Styrene (ppb)	.1	1000	100	100	Discharge from rubber and plastic factories; Leaching from landfills	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.
Tetrachloroethylene (ppb)	.005	1000	5	0	Discharge from factories and dry cleaners	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.
1,2,4-Trichlorobenzene (ppb)	.07	1000	70	70	Discharge from textile-finishing factories	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
1,1,1-Trichloroethane (ppb)	.2	1000	200	200	Discharge from metal degreasing sites and other factories	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.
1,1,2-Trichloroethane (ppb)	.005	1000	5	3	Discharge from industrial chemical factories	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.

Contaminant (units)	traditional MCL in mg/L	to convert for CCR, multiply by	MCL in CCR units	MCLG	Major Sources in Drinking Water	Health Effects Language
Trichloroethylene (ppb)	.005	1000	5	0	Discharge from metal degreasing sites and other factories	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
TTHMs [Total trihalomethanes] (ppb)	.080	1000	80	N/A	((~~By product~~)) Byproduct of drinking water disinfection	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
Toluene (ppm)	1	-	1	1	Discharge from petroleum factories	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
Vinyl Chloride (ppb)	.002	1000	2	0	Leaching from PVC piping: Discharge from plastics factories	Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.
Xylenes (ppm)	10	-	10	10	Discharge from petroleum factories; Discharge from chemical factories	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.
Treatment Technique Violations						
Groundwater rule TT violations	TT	-	TT	N/A	-	Inadequately treated or inadequately protected water may contain disease-causing organisms. These organisms can cause symptoms such as diarrhea, nausea, cramps, and associated headaches.

Key

AL = Action Level

MCL = Maximum Contaminant Level

MCLG = Maximum Contaminant Level Goal

MFL = million fibers per liter

MRDL = Maximum Residual Disinfectant Level

MRDLG = Maximum Residual Disinfectant Level Goal

mrem/year = millirems per year (a measure of radiation absorbed by the body)

N/A = Not Applicable

NTU = Nephelometric Turbidity Units (a measure of water clarity)

pCi/1 = picocuries per liter (a measure of radioactivity)

ppm = parts per million, or milligrams per liter (mg/1)

ppb = parts per billion, or micrograms per liter ((~~(g/1)~~)) (ug/L)

ppt = parts per trillion, or nanograms per liter

ppq = parts per quadrillion, or picograms per liter

TT = Treatment Technique

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency and appear in the Register pursuant to the requirements of RCW 34.08.040.

AMENDATORY SECTION (Amending WSR 07-02-025B, filed 12/22/06, effective 1/22/07)

WAC 246-290-810 Water use efficiency program. (1) Water system plans and small water system management programs submitted for approval for the first year after the effective date of this rule, must describe the municipal water supplier's existing water use efficiency program. The municipal water supplier must continue existing levels of water use efficiency.

(2) Subsections (3) and (4) of this section apply to:

(a) Water system plans submitted to the department for approval under WAC 246-290-100 one year after the effective date of this rule.

(b) Small water system management programs developed and implemented or submitted to the department for approval one year after the effective date of this rule.

(3) Municipal water suppliers shall develop and implement a water use efficiency program which includes sufficient cost-effective water use efficiency measures to meet the water use efficiency goals developed under WAC 246-290-830.

(4) Municipal water suppliers shall complete the following items in the water use efficiency program:

(a) Describe the current water use efficiency program;

(b) For systems serving one thousand or more total connections, estimate the amount of water saved through implementation of the water use efficiency program over the ((~~last~~)) prior six or more years; the estimate may include the entire approval period of the most recent water system plan required under WAC 246-290-100;

(c) Describe the chosen water use efficiency goals and document the goals were established in accordance with WAC 246-290-830;

(d) Evaluate water use efficiency measures to determine if they are cost-effective as follows:

(i) Evaluate or implement, at a minimum, the number of water use efficiency measures specified in Table ((~~1~~)) 13 based on the system's total number of connections.

(ii) Evaluate or implement water use efficiency measures from the following categories of measures if they are applicable: Indoor residential, outdoor, and industrial/commercial/institutional.

(iii) For systems serving less than one thousand total connections, describe the evaluation process used to select water use efficiency measures.

(iv) For systems serving one thousand or more total connections, include the following criteria when evaluating water use efficiency measures:

(A) Quantitatively evaluate water use efficiency measures to determine if they are cost-effective from the system's perspective including the marginal costs of producing water.

(B) Address whether the water use efficiency measures are cost-effective if the costs are shared with other entities.

(C) Quantitatively or qualitatively evaluate water use efficiency measures to determine if they are cost-effective from the societal perspective.

Table ((~~1~~)) 13

Number of connections	Less than 500	500-999	1,000-2,499	2,500-9,999	10,000-49,999	50,000 or more
Water use efficiency measures	1	4	5	6	9	12

(e) Describe all water use efficiency measures to be implemented ((~~within~~)) over the next six or more years, including a schedule and a budget that demonstrates how the water use efficiency measures will be funded. Purveyors may submit a schedule and budget for the entire water system plan approval period, if the approval period is longer than six years;

(f) Describe how consumers will be educated on water use efficiency practices;

(g) Estimate projected water savings from selected water use efficiency measures;

(h) Describe how the water use efficiency program will be evaluated for effectiveness;

(i) Evaluate water distribution system leakage as follows:

(i) Include distribution system leakage annual totals in accordance with WAC 246-290-820 for each of the past six or more years. Purveyors shall submit distribution system leakage annual totals for the entire water system plan approval period if the approval period was longer than six years.

(ii) If necessary, include a copy of the water loss control action plan in accordance with WAC 246-290-820(4).

(iii) If all or portions of transmission lines are excluded when determining distribution system leakage, estimate the amount of leakage from the excluded portion of the transmission mains and describe how it is maintained to minimize leakage.

AMENDATORY SECTION (Amending WSR 08-03-061, filed 1/14/08, effective 2/14/08)

WAC 246-290-820 Distribution system leakage standard. (1) Municipal water suppliers shall determine distribution system leakage annually under subsection (2) of this section or an alternative methodology under subsection (3) of this section.

(a) Municipal water suppliers shall include (i), (ii), or (iii) of this subsection in water use efficiency performance reports developed under WAC 246-290-840 and water use efficiency programs developed under WAC 246-290-810:

(i) Distribution system leakage totals calculated under subsection (2) of this section shall be recorded in annual percent and volume;

(ii) Distribution system leakage totals calculated under subsection (3) of this section shall include annual figures and the approved alternative methodology's numerical standard(s); and

(iii) For systems not fully metered, the status of meter installation and any actions taken to minimize leakage.

(b) Municipal water suppliers will be considered in compliance with this section if any of the following conditions are satisfied:

(i) Distribution system leakage calculated in accordance with subsection (2) of this section is ten percent or less for the last three-year average;

(ii) Distribution system leakage calculated under subsection (3) of this section meets the numerical standards for the approved alternative methodology for the last three-year average;

(iii) For systems serving less than five hundred total connections, distribution system leakage calculated in accordance with subsection (2) of this section is twenty percent or less for the last three-year average and the steps outlined in subsection (5) of this section are completed; or

(iv) A water loss control action plan has been developed and implemented under subsection (4) of this section and the system is meeting the implementation schedule.

(2) Calculate the percent of distribution system leakage annually using the following equation:

$$DSL = [(TP - AC)/(TP)] \times 100$$

Where:

DSL	=	Percent of Distribution System Leakage (%)
TP	=	Total Water Produced and Purchased
AC	=	Authorized Consumption

(a) Total water produced and purchased, and authorized consumption must be calculated using data from meters installed under WAC 246-290-496. Elements of authorized consumption that cannot be metered, such as fire flow, must be estimated.

(b) All or portions of transmission lines may be excluded when determining distribution system leakage.

(c) Any water that cannot be accounted for shall be considered distribution system leakage.

(3) Municipal water suppliers may use an alternative methodology to calculate distribution system leakage if both (a) and (b) of this subsection are satisfied.

(a) The alternative methodology is contained in published standards or specifications of the department, Environmental Protection Agency, American Water Works Association, American Public Works Association, or American Society of Civil Engineers.

(b) The alternative methodology is approved for statewide use by the department, to provide a better evaluation of distribution system leakage than percent of total water produced and purchased, is appropriate for the system requesting to use it, and uses numerical standards so that compliance and action levels can be determined.

(4) If the average distribution system leakage for the last three years does not meet the standard calculated under subsection (1)(b)(i), (ii), or (iii) of this section, the municipal water supplier shall develop and implement a water loss control action plan. Municipal water suppliers shall submit the water loss control action plan to the department as part of a water use efficiency program under WAC 246-290-810 and upon request by the department. The control methods described in a water loss control action plan shall be commensurate with the level of leakage reported. The following items shall be included in the water loss control action plan:

(a) The control methods necessary to achieve compliance with the distribution system leakage standard;

(b) An implementation schedule;

(c) A budget that demonstrates how the control methods will be funded;

(d) Any technical or economic concerns which may affect the system's ability to implement a program or comply with the standard including past efforts and investments to minimize leakage;

(e) If the average distribution system leakage calculated under subsection (2) of this section is greater than ten and less than twenty percent of total water produced and purchased, the water loss control action plan must assess data accuracy and data collection;

(f) If the average distribution system leakage calculated under subsection (2) of this section is between twenty and twenty-nine percent of total water produced and purchased, the water loss control action plan must include elements listed under (e) of this subsection and implementation of field activities such as actively repairing leaks or maintaining meters within twelve months of determining standard exceedance;

(g) If the average distribution system leakage calculated under subsection (2) of this section is at thirty percent or above the total water produced and purchased, the water loss control action plan must include elements listed under (e) and (f) of this subsection and include implementation of additional control methods to reduce leakage within six months of determining standard exceedance; and

(h) If the average distribution system leakage calculated under subsection (3) of this section is over the approved alternative methodology's numerical standard, the department will take appropriate compliance actions and work collaboratively with the municipal water supplier to ensure the control methods and level of activity are commensurate with the level of leakage.

(5) Systems serving less than five hundred total connections may submit a request to the department for approval of an average distribution system leakage up to twenty percent. The following information must be submitted to the department with the request:

(a) Production volume;

(b) Distribution system leakage volume;

(c) Evidence documenting that:

(i) A leak detection survey using best available technologies has been completed on the system within the past six years for purveyors required to develop a small water system management program under WAC 246-290-105 or within the approval period of the most recent water system plan for purveyors required to submit a water system plan under WAC 246-290-100;

(ii) All leaks found have been repaired;

(iii) The system is unable to locate additional leaks; and

(iv) Ongoing efforts to minimize leakage are included as part of the system's water use efficiency program; and

(d) Any technical concerns or economic concerns, or other system characteristics justifying the higher distribution system leakage.

Reviser's note: The brackets and enclosed material in the text of the above section occurred in the copy filed by the agency and appear in the Register pursuant to the requirements of RCW 34.08.040.

AMENDATORY SECTION (Amending WSR 08-12-019, filed 5/28/08, effective 7/1/08)

WAC 246-290-830 Water use efficiency goal setting. (1) The elected governing board or governing body of the public water system shall establish water use efficiency goals within one year of the effective date of this rule for systems serving one thousand or more total connections, and within two years of the effective date of this rule for systems serving less than one thousand total connections.

(2) Water use efficiency goals must be designed to enhance the efficient use of water by the water system's consumers.

(3) If a municipal water supplier determines that further reductions over current consumption levels are not reasonably achievable, the municipal water supplier shall provide justification that considers historic water use efficiency performance and investment and any other factors that support that determination. Justification must be provided in water use efficiency programs developed under WAC 246-290-810 and in water use efficiency performance reports developed under WAC 246-290-840.

(4) Municipal water suppliers must provide documentation when requested by the department and in water use efficiency programs developed under WAC 246-290-810 that demonstrates the following goal setting requirements have been met:

(a) Goals shall be set in a public forum that provides opportunity for consumers and the public to participate and comment on the water use efficiency goals;

(b) Public notice must occur at least two weeks prior to the public forum. Public notice must include the purpose, date, time, and place of the forum, and where materials supporting the rationale for the proposed goals can be reviewed;

(c) The elected governing board or governing body of the public water system shall review and consider all comments received;

(d) The following must be made available to the public for the purpose of fully documenting the basis for each goal:

(i) The information listed under WAC 246-290-810(4);

(ii) Annual water use efficiency performance reports prepared under WAC 246-290-840;

(iii) Water supply characteristics description in accordance with WAC 246-290-100 (4)(f)(iii)(B) or source description in accordance with WAC 246-290-105 (4)(f); and

(iv) A summary of the comments received and how they were considered.

(5) Existing public processes may be used if all requirements listed under subsection (4) of this section are met.

(6) Water use efficiency goals must include:

(a) Consideration of the system's forecasted demand and water supply characteristics;

(b) Measurable outcomes in terms of reduced or maintained water production or usage. Outcomes may be expressed on a per capita, per connection, total system, or other basis as deemed appropriate by the municipal water supplier;

(c) A schedule for achieving the water use efficiency goals; and

(d) Implementation schedule for each water use efficiency measure selected under WAC 246-290-810(4).

(7) The elected governing board or governing body of the public water system shall evaluate and reestablish water use efficiency goals following the process identified in subsection (4) of this section at least every six years ((~~and as part of a water system plan approval under WAC 246-290-100 or~~)) for purveyors required to develop a small water system management program ((~~approval~~)) under WAC 246-290-105 or as part of developing or updating a water system plan for purveyors required to submit a water system plan under WAC 246-290-100.

(8) Water use efficiency goals may be changed at any time in accordance with subsection (4) of this section. Changes to goals must be identified in the next performance report.

(9) Water use efficiency programs must be modified if any water use efficiency goal is not met. Program modifications must be designed to achieve the system's water use efficiency goals.

WSR 17-01-071
PERMANENT RULES
OLYMPIC REGION CLEAN AIR AGENCY

[Filed December 15, 2016, 1:27 p.m., effective January 15, 2017]

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

Purpose: This revision changes the wording in Rule 3.5 Asbestos and Demolition Fees to coincide with the terminology found in Rule 6.3 Asbestos.

Citation of Existing Rules Affected by this Order: Amending ORCAA Regulations Rule 3.5.

Statutory Authority for Adoption: Chapter 70.94 RCW.

Adopted under notice filed as WSR 16-22-078 on November 1, 2016.

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 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: December 14, 2016.

Francea L. McNair
Executive Director

AMENDED SECTION

Rule 3.5 Asbestos and Demolition Fees

The applicable fee(s) for Asbestos and Demolition Notifications shall be established in the current fee schedule adopted by Resolution of the Board of Directors of ORCAA.

The fees shall be sufficient to cover the direct and indirect cost of the asbestos program and shall be determined through a workload-driven process.

((~~(a) Any permit required by Rule 6.3.2(a) shall be considered incomplete until all the information required by Rule 6.3.2(a) is received by ORCAA and accompanied by the~~

~~appropriate, nonrefundable fee. The fee is specified in the Asbestos Fee Schedule.~~

~~(b) The applicable fee(s) shall be established in the current fee schedule adopted by Resolution of the Board of Directors of ORCAA.~~

~~(c) The fees shall be sufficient to cover the direct and indirect cost of the asbestos program and shall be determined through a workload-driven process.~~))

WSR 17-01-083
PERMANENT RULES
DEPARTMENT OF EARLY LEARNING

[Filed December 16, 2016, 8:50 a.m., effective January 16, 2017]

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

Purpose: Better clarify early childhood education and assistance program contractors' background check requirements. Specifically, the amendment explains who must undergo a fingerprint background check and the conditions that require a background check. The amendment also confirms it is the contractor's responsibility to ensure that background checks are completed when required.

Citation of Existing Rules Affected by this Order: Amending WAC 170-100-090.

Statutory Authority for Adoption: RCW 43.215.070, chapter 43.215 RCW.

Adopted under notice filed as WSR 16-14-099 on July 5, 2016.

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 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 0, Repealed 0.

Date Adopted: September 20, 2016.

Ross Hunter
Director

AMENDATORY SECTION (Amending WSR 15-24-040, filed 11/20/15, effective 1/1/16)

WAC 170-100-090 Staff qualifications. (1) Contractors must provide adequate staff to comply with all ECEAP performance standards.

(2) Contractors must ((~~ensure that all ECEAP~~)) require their staff and other persons associated with the contractor that are considered to be a "subject individual" as defined in WAC 170-06-0020, and who may have unsupervised access to children ((~~comply~~)), to obtain a fingerprint background check in compliance with the ((~~background check procedures in~~)) requirements of RCW 43.215.215, 43.215.425 and chapter 170-06 WAC.

(3) All persons serving in the role of ECEAP lead teacher must meet one of the following qualifications:

(a) An associate or higher degree with the equivalent of thirty college quarter credits of early childhood education. These thirty credits may be included in the degree or in addition to the degree; or

(b) A valid Washington state teaching certificate with an endorsement in early childhood education (pre-K - grade 3) or early childhood special education.

(4) All persons serving in the role of ECEAP assistant teacher must meet one of the following qualifications:

(a) Employment as an early childhood education and assistance program assistant teacher in the same agency before July 1, 1999;

(b) The equivalent of twelve college quarter credits in early childhood education;

(c) Initial or higher Washington state early childhood education certificate; or

(d) A current Child Development Associate (CDA) credential awarded by the Council for Early Childhood Professional Recognition.

(5) All persons serving in the role of ECEAP family support staff must meet one of the following qualifications:

(a) Employment as an early childhood education and assistance program family support staff in the same agency before July 1, 1999;

(b) An associate's or higher degree with the equivalent of thirty college quarter credits of adult education, human development, human services, family support, social work, early childhood education, child development, psychology, or another field directly related to their job responsibilities. These thirty credits may be included in the degree or in addition to the degree; or

(c) A degree, credential or certificate from a comprehensive and competency-based program that increases knowledge and skills in providing direct family support services to families.

(6) All persons serving in the role of ECEAP health advocate must meet one of the following qualifications:

(a) Employment as an early childhood education and assistance program family support aide or health aide in the same agency before July 1, 2014; or

(b) The equivalent of twelve college quarter credits in family support, public health, health education, nursing, or another field directly related to their job responsibilities.

(7) The early childhood education and assistance program health consultant must meet one of the following qualifications:

(a) Licensed in Washington state as a registered nurse (R.N.) or physician (M.D., N.D., D.O.); or

(b) A bachelor's or higher degree in public health, nursing, health education, health sciences, medicine, or related field.

(8) The early childhood education and assistance program nutrition consultant must meet one of the following qualifications:

(a) Registered dietitian (RD) credentialed through the Commission on Dietetic Registration (CDR), the credentialing agency for the Academy of Nutrition and Dietetics (formerly the American Dietetic Association); or

(b) Washington state certified nutritionist under chapter 18.138 RCW.

(9) The early childhood education and assistance program mental health consultant must meet one of the following qualifications:

(a) Licensed by the Washington state department of health as a mental health counselor, marriage and family therapist, social worker, psychologist, psychiatrist, or psychiatric nurse;

(b) Approved by the Washington state department of health as an agency affiliated or certified counselor, with a master's degree in counseling, social work or related field; or

(c) Credentialed by the Washington state office of the superintendent of public instruction as a school counselor, social worker, or psychologist.

(10) Contractors must hire and employ staff who meet the qualifications for their position.

(a) If the best candidate for the position is not fully qualified, the contractor must ensure the newly hired staff person is on a professional development plan (PDP) to fully meet the qualifications of their role within five years from the date of hire.

(b) Contractors must monitor progress on all PDPs and ensure staff make adequate yearly progress to meet the required qualifications.

(11) Equivalent degrees and certificates from other states and countries are accepted for ECEAP staff qualifications.

WSR 17-01-084
PERMANENT RULES
DEPARTMENT OF HEALTH

[Filed December 16, 2016, 9:01 a.m., effective January 16, 2017]

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

Purpose: The radioactive materials program (program) is a fee-supported program that licenses and inspects approximately three hundred eighty-four facilities in Washington state. This proposed rule change increases fees for those facilities by seventeen percent to offset the increased cost of administering the program.

Citation of Existing Rules Affected by this Order: Amending WAC 246-254-070, 246-254-080, 246-254-090, 246-254-100, and 246-254-120.

Statutory Authority for Adoption: RCW 70.98.080, 43.20B.020, 43.70.110, 43.70.250.

Adopted under notice filed as WSR 16-21-054 on October 13, 2016.

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 Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 5, 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 5, Repealed 0.

Date Adopted: December 15, 2016.

Clark Halvorson
Assistant Secretary
Division of Environmental Public Health

AMENDATORY SECTION (Amending WSR 08-14-075, filed 6/26/08, effective 7/27/08)

WAC 246-254-070 Fees for specialized radioactive material licenses. (1) Persons licensed or authorized to possess or use radioactive material in the following special categories shall forward annual fees to the department as follows:

(a) $((~~9,164~~)) 10,721 for operation of a single nuclear pharmacy.

(b) $((~~15,628~~)) 18,284 for operation of a single nuclear laundry.

(c) $((~~15,628~~)) 18,284 for a license authorizing a single facility to use more than one curie of unsealed radioactive material in the manufacture and distribution of radioactive products or devices containing radioactive material.

(d) $((~~5,476~~)) 6,406 for a license authorizing a single facility to use less than or equal to one curie of unsealed radioactive material or any quantity of previously sealed sources in the manufacture and distribution of products or devices containing radioactive material.

(e) $((~~1,408~~)) 1,647 for a license authorizing the receipt and redistribution from a single facility of manufactured products or devices containing radioactive material.

(f) $((~~10,484~~)) 12,266 for a license authorizing decontamination services operating from a single facility.

(g) $((~~4,956~~)) 5,798 for a license authorizing waste brokerage including the possession, temporary storage at a single facility, and over-packing only of radioactive waste.

(h) $((~~2,208~~)) 2,583 for a license authorizing health physics services, leak testing, calibration services, equipment servicing, or possession of sealed sources for purpose of sales demonstration only.

(i) $((~~2,592~~)) 3,032 for a civil defense license.

(j) $((~~780~~)) 912 for a license authorizing possession of special nuclear material as pacemakers or depleted uranium as shielding.

(2) Persons licensed or authorized to possess and use radioactive material in the following broad scope categories shall forward annual fees to the department as follows:

(a) $((~~31,016~~)) 36,288 for a license authorizing possession of atomic numbers three through eighty-three with maximum authorized possession of any single isotope greater than one curie.

(b) $((~~14,336~~)) 16,773 for a license authorizing possession of atomic numbers three through eighty-three with maximum authorized possession of any single isotope greater than 0.1 curie but less than or equal to one curie.

(c) $((~~11,520~~)) 13,478 for a license authorizing possession of atomic numbers three through eighty-three with maximum authorized possession less than or equal to 0.1 curie.

(3) Persons licensed or authorized to possess or use radioactive material which are not covered by any of the annual license fees described in WAC 246-254-070 through 246-254-100, shall pay fees as follows:

(a) An initial application fee of ((~~one thousand dollars~~)) $1,170;

(b) Billing at the rate of $((~~162~~)) 189 for each hour of direct staff time associated with issuing and maintaining the license and for the inspection of the license; and

(c) Any fees for additional services as described in WAC 246-254-120.

(d) The initial application fee will be considered a credit against billings for direct staff charges but is otherwise nonrefundable.

(4) Persons licensed or authorized to possess or use radioactive material in a facility for radioactive waste processing, including resource recovery, volume reduction, decontamination activities, or other waste treatment, but not permitting commercial on-site disposal, shall pay fees as follows:

(a) A nonrefundable initial application fee for a new license of ((~~sixteen thousand dollars~~)) $18,720 which shall be credited to the applicant's quarterly billing described in (b) of this subsection; and

(b) Quarterly billings for actual direct and indirect costs incurred by the department including, but not limited to, license renewal, license amendments, compliance inspections, a resident inspector for time spent on the licensee's premises as deemed necessary by the department, laboratory and other support services, and travel costs associated with staff involved in the foregoing.

AMENDATORY SECTION (Amending WSR 08-14-075, filed 6/26/08, effective 7/27/08)

WAC 246-254-080 Fees for medical and veterinary radioactive material use. (1) Licensees authorized possession or use of radioactive material in the following medical or veterinary categories shall forward annual fees to the department as follows:

(a) $((~~7,748~~)) 9,065 for operation of a mobile nuclear medicine program from a single base of operation;

(b) $((~~5,648~~)) 6,608 for the use of unsealed radioactive material for imaging and localization studies for which a written directive is not required as defined in WAC 246-240-157, at a single facility (diagnostic imaging and localization nuclear medicine);

(c) $((~~4,892~~)) 5,723 for the use of unsealed radioactive material for which a written directive is required as defined in WAC 246-240-201 at a single facility (radiopharmaceutical therapy);

(d) $((~~7,800~~)) 9,126 for the use of unsealed radioactive material for imaging and localization studies for which a written directive is not required as defined in WAC 246-240-157, the use of unsealed radioactive material for which a written directive is required as defined in WAC 246-240-201, and/or the use of sealed sources for manual brachytherapy as defined in WAC 246-240-251 at a single facility (combination diagnostic nuclear medicine and/or radiopharmaceutical therapy), and/or sealed source (manual or machine) therapy;

(e) $((~~4,192~~)) 4,904 for the use of sealed sources for manual brachytherapy as defined in WAC 246-240-251 at a single facility (manual brachytherapy);

(f) $((~~2,592~~)) 3,032 for the use of sealed sources in a remote afterloader unit, teletherapy unit, or gamma stereotactic radiosurgery unit, as defined in WAC 246-240-351, at a single facility (machine brachytherapy);

(g) $((~~3,936~~)) 4,605 for a license authorizing medical or veterinary possession of greater than two hundred millicuries total possession of radioactive material at a single facility;

(h) $((~~3,132~~)) 3,664 for a license authorizing medical or veterinary possession of greater than thirty millicuries but less than or equal to two hundred millicuries total possession of radioactive material at a single facility;

(i) $((~~2,292~~)) 2,681 for a license authorizing medical or veterinary possession of less than or equal to thirty millicuries total possession of radioactive material at a single facility;

(j) $((~~2,020~~)) 2,363 for the use of unsealed radioactive material for uptake, dilution and/or excretion studies for which a written directive is not required, as defined in WAC 246-240-151, at a single facility (diagnostic uptake, dilution, and excretion nuclear medicine);

(k) $((~~1,260~~)) 1,474 for a license authorizing medical or veterinary possession of a sealed source for diagnostic use at a single facility.

(2) The fee for a license authorizing multiple locations shall be increased by fifty percent of the annual fee for each additional location.

AMENDATORY SECTION (Amending WSR 08-14-075, filed 6/26/08, effective 7/27/08)

WAC 246-254-090 Fees for industrial radioactive material licenses. (1) Persons licensed or authorized to possess or use radioactive material in the following industrial categories shall forward annual fees to the department as follows:

(a) $((~~9,124~~)) 10,675 for a license authorizing the use of radiographic exposure devices in one or more permanent radiographic vaults in a single facility.

(b) $((~~12,232~~)) 14,311 for a license authorizing the use of radiographic exposure devices at temporary job sites but operating from a single storage facility.

(c) $((~~5,992~~)) 7,010 for a license authorizing well-logging activities including the use of radioactive tracers operating from a single storage facility.

(d) $((~~1,292~~)) 1,511 for a license authorizing possession of portable sealed sources including moisture/density gauges and excluding radiographic exposure devices operating from a single storage facility.

(e) $((~~1,408~~)) 1,647 for a license authorizing possession of any nonportable sealed source, including special nuclear

material and excluding radioactive material used in a gas chromatograph at a single facility.

(f) $((~~888~~)) 1,038 for a license authorizing possession of gas chromatograph units containing radioactive material at a single facility.

(g) $((~~2,460~~)) 2,878 for a license authorizing possession of any self-shielded or pool type irradiator with sealed source total quantity greater than one hundred curies at a single facility.

(h) $((~~13,076~~)) 15,298 for a license authorizing possession of sealed sources for a walk-in type irradiator at a single facility.

(i) $((~~11,388~~)) 13,323 for a license authorizing possession of greater than one gram of unsealed special nuclear material or greater than five hundred kilograms of source material at a single facility.

(j) $((~~3,644~~)) 4,263 for a license authorizing possession of less than or equal to one gram of unsealed special nuclear material or five hundred kilograms of source material at a single facility.

(k) $((~~576~~)) 673 for a license authorizing possession of static elimination devices not covered by a general license.

(2) Persons with licenses authorizing multiple locations of permanent storage shall increase the annual fee by fifty percent for each additional location.

(3) Depleted uranium registrants required to file Form RHF-20 shall forward an annual fee of $((~~116~~)) 135 to the department.

(4) General licensees required to register in accordance with WAC 246-233-020 (3)(k) shall forward an annual fee of $((~~344~~)) 402 to the department.

AMENDATORY SECTION (Amending WSR 08-14-075, filed 6/26/08, effective 7/27/08)

WAC 246-254-100 Fees for laboratory radioactive material licenses. (1) Persons licensed or authorized to possess or use unsealed radioactive material in the following laboratory categories shall forward annual fees to the department as follows:

(a) $((~~6,240~~)) 7,300 for a license authorizing possession at a single facility of unsealed sources in amounts greater than:

(i) One millicurie of I-125 or I-131; or

(ii) One hundred millicuries of H-3 or C-14; or

(iii) Ten millicuries of any single isotope.

(b) $((~~3,080~~)) 3,603 for a license authorizing possession at a single facility of unsealed sources in amounts:

(i) Greater than 0.1 millicurie and less than or equal to one millicurie of I-125 or I-131; or

(ii) Greater than ten millicuries and less than or equal to one hundred millicuries of H-3 or C-14; or

(iii) Greater than one millicurie and less than or equal to ten millicuries of any single isotope.

(c) $((~~2,592~~)) 3,032 for a license authorizing possession at a single facility of unsealed sources in amounts:

(i) Greater than 0.01 millicurie and less than or equal to 0.1 millicurie of I-125 or I-131; or

(ii) Greater than one millicurie and less than or equal to ten millicuries of H-3 or C-14; or

(iii) Greater than 0.1 millicurie and less than or equal to one millicurie of any other single isotope.

(d) $((~~888~~)) 1,038 for a license authorizing possession at a single facility of unsealed or sealed sources in amounts:

(i) Less than or equal to 0.01 millicurie of I-125 or I-131; or

(ii) Less than or equal to one millicurie of H-3 or C-14; or

(iii) Less than or equal to 0.1 millicurie of any other single isotope.

(e) $((~~1,196~~)) 1,399 for a license authorizing possession at a single facility of large quantities of naturally occurring radioactive material in total concentration not exceeding 0.002 microcurie per gram.

(2) Persons with licenses authorizing multiple locations of use shall increase the annual fee by fifty percent for each additional location.

(3) Persons registered to perform in vitro testing pursuant to Form RHF-15 shall forward an annual fee of $((~~116~~)) 135 to the department.

AMENDATORY SECTION (Amending WSR 08-14-075, filed 6/26/08, effective 7/27/08)

WAC 246-254-120 Fees for licensing and compliance actions. (1) In addition to the fee for each radioactive material license as described under WAC 246-254-070, 246-254-080, 246-254-090, and 246-254-100, a licensee shall pay a service fee for each additional licensing and compliance action as follows:

(a) For a second follow-up inspection, and each follow-up inspection thereafter, a fee of $((~~162~~)) 189 per hour of direct staff time associated with the follow-up inspection, not to exceed $((~~1,625~~)) 1,901 per follow-up inspection. Hours are calculated in half-hour increments.

(b) For each environmental cleanup monitoring visit, a fee of $((~~162~~)) 189 per hour of direct staff time associated with the environmental cleanup monitoring visit, not to exceed $((~~4,063~~)) 4,753 per visit. Hours are calculated in half-hour increments.

(c) For each new license application, the fee of $((~~260~~)) 304 in addition to the required annual fee.

(d) For each sealed source and device evaluation, a fee of $((~~162~~)) 189 per hour of direct staff time associated with each sealed source and device evaluation, not to exceed $((~~4,875~~)) 5,703 per evaluation.

(e) For review of air emission and environmental programs and data collection and analysis of samples, and review of decommissioning activities by qualified staff in those work units, a fee of $((~~162~~)) 189 per hour of direct staff time associated with the review. The fee does not apply to reviews conducted by the radioactive materials section staff and does not apply unless the review time would result in a special service charge exceeding ten percent of the licensee's annual fee.

(f) For expedited licensing review, a fee of $((~~162~~)) 189 per hour of direct staff time associated with the review. This fee only applies when, by the mutual consent of licensee and affected staff, a licensing request is taken out of date order

and processed by staff during nonwork hours and for which staff is paid overtime.

(2) The licensee or applicant shall pay any additional service fees at the time of application for a new license or within thirty days of the date of the billing for all other licensing and compliance actions.

(3) The department shall process an application only upon receipt of the new application fee and the annual fee.

(4) The department may take action to modify, suspend, or terminate the license or sealed source and device registration if the licensee fails to pay the fee for additional licensing and compliance actions billed by the department.

WSR 17-01-085
PERMANENT RULES
DEPARTMENT OF FISH AND WILDLIFE

[Order 16-322—Filed December 16, 2016, 9:28 a.m., effective January 16, 2017]

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

Purpose: The department has adopted recreational fishing rules in saltwater areas of Washington state to meet conservation objectives and provide fishing opportunity within those conservation objectives.

Citation of Existing Rules Affected by this Order: Repealing WAC 220-56-312, 220-56-340, 220-56-385, 220-56-400, 220-56-405, 220-56-410 and 220-56-415; and amending WAC 220-12-010, 220-16-265, 220-56-115, 220-56-310, 220-56-315, 220-56-317, 220-56-325, 220-56-330, 220-56-335, 220-56-336, 220-56-355 and 220-56-390; and new WAC 220-20-011.

Statutory Authority for Adoption: RCW 77.04.012, 77.04.020, and 77.12.047.

Adopted under notice filed as WSR 16-19-059 on September 19, 2016.

Changes Other than Editing from Proposed to Adopted Version: WAC 220-56-320 was withdrawn on December 13, 2016, and filed as WSR 17-01-040.

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 Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 13, Amended 0, Repealed 7.

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: December 9, 2016

Brad Smith, Chair
Fish and Wildlife Commission

AMENDATORY SECTION (Amending WSR 12-09-046, filed 4/13/12, effective 5/14/12)

WAC 220-12-010 Food fish—Classification. The following species are classified as food fish under RCW 77.12.047 and are subject to the provisions of this title:

Barracuda	
Pacific barracuda	*Sphyraena argentea*
Cyprinids	
Carp	*Cyprinus carpio*
Cods and hake	
Pacific hake or whiting	*Merluccius productus*
Walleye pollock	*((~~Theragra chalcogrammus~~))* *Gadus chalcogrammus*
Pacific Tomcod	*Microgadus proximus*
Pacific Cod or true cod	((~~*Gadusmacrocephalus*~~)) *Gadus macrocephalus*
Flounder, sole and halibut	
Butter sole or Bellingham sole	*Isopsetta isolepis*
C-O sole	*Pleuronichtys coenosus*
Dover sole	*Microstomus pacificus*
English sole	*Parophrys vetulus*
Flathead sole	*Hippoglossoides elassodon*
Pacific halibut	*Hippoglossus stenolepis*
Petrale sole	*Eopsetta jordani*
Rex sole	*Glyptocephalus zachirus*
Northern rock sole	*Lepidopsetta polyxystra*
Southern rock sole	*Lepidopsetta bilineata*
Pacific sand dab	*Citharichthys sordidus*
Sand sole	*Psettichthys melanostictus*
Slender sole	*Lyopsetta exilis*
Speckled sand dab	*Citharichthys stigmaeus*
Starry flounder	*Platichthys stellatus*
Turbot or Arrowtooth flounder	*Atheresthes stomias*
All other species of sole and flounder	(Pleuronectiformes)
Giant wrymouth	*Delolepsis gigantea*
Greenling	
Lingcod	*Ophiodon elongatus*
Rock greenling	*Hexagrammos superciliosus*
Kelp greenling	*Hexagrammos decagrammus*
All other species of greenling	(Hexagrammidae)

Herring and herring-like fishes	
Northern anchovy	*Engraulis mordax*
Pacific sand lance or candlefish	*Ammodytes ((~~hexapterus~~)) personatus*
Pacific herring	*Clupea ((~~harengus pallasi~~)) pallasii*
Pacific sardine or pilchard	*Sardinops sagax*
American shad	*Alosa sapidissima*
Mackerels, tunas and jacks (carangids)	
Pacific bonito	*Sarda chiliensis*
Pacific mackerel	*Scomber japonicus*
Jack mackerel	*Trachurus symmetricus*
Monterey Spanish mackerel	*Scomberomorus concolor*
Spanish mackerel	*Scomberomorus maculatus*
Yellowtail	*Seriola dorsalis*
Albacore	*Thunnus alalunga*
Bluefin tuna	*Thunnus thynnus*
Skipjack tuna	*Euthynnus pelamis*
Yellowfin tuna	*Thunnus albacares*
All other species of tunas and mackerels	(Scombridae)
Pacific pomfret	*Brama japonica*
Pacific pompano	*Peprilus simillimus*
Plainfin midshipman	*Parichthys notatus*
Ratfish	*Hydrolagus colliei*
Rattails, all species	(Coryphaenoididae)
Skates	
Longnose skate	*Raja rhina*
Big skate	*Raja binoculata*
All other species of skates	(((~~Rajidae~~))) (Rajiformes)
Rockfish	
Bocaccio	*Sebastes paucispinis*
Black rockfish	*Sebastes melanops*
Brown rockfish	*Sebastes auriculatus*
Copper rockfish	*Sebastes caurinus*
Greenstriped rockfish	*Sebastes elongatus*
Canary rockfish	*Sebastes pinniger*
Pacific Ocean perch	*Sebastes alutus*
Yelloweye or rasphead rockfish	*Sebastes ruberrimus*
Rosefish or splitnose rockfish	*Sebastes diploproa* *Sebastes brevispinis*
Silvergray rockfish	*Sebastes maliger*
Quillback rockfish	*Sebastes flavidus*
Yellowtail rockfish	(Scorpaenidae)
All other species of rockfish Sablefish	*Anoplopoma fimbria*
Salmon	
Chinook or King salmon (except in its landlocked form as defined in WAC 232-12-018)	*Oncorhynchus tshawytscha*
Chum or dog salmon	*Oncorhynchus keta*
Pink or humpback	*Oncorhynchus gorbuscha*
Coho or silver (except in its landlocked form as defined in WAC 232-12-018)	*Oncorhynchus kisutch*
Sockeye or blue back	*Oncorhynchus nerka*
Masu	*Oncorhynchus masu*
Atlantic salmon (except in its landlocked form)	*Salmo salar*
Sculpins	
Brown Irish lord	*Hemilepidotus spinosus*
Buffalo sculpin	*Enophrys bison*
Cabezon	*Scorpaenichthys marmoratus*
Great sculpin	*Myoxocephalus polyacanthocephalus*
Pacific Staghorn sculpin	*Leptocottus armatus*
Red Irish lord	*Hemilepidotus hemilepidotus*
Seabass and drums	
White seabass	*Cynoscion nobilis*
All other seabass and drums	(Sciaenidae and Serranidae)
Sharks	
Sixgill shark	*Hexanchus griseus*
Soupfin or tope shark	*Galeorhinus ((~~zyopterus~~)) galeus*
Dogfish or spiny dogfish	*Squalus ((~~acanthias~~)) suckleyi*
All other species of sharks	(((~~Squaliformes and Hexanchiformes~~))) (Selachimorpha)
Smelts	
Eulachon or Columbia River smelt	*Thaleichthys pacificus*
Longfin smelt	*Spirinchus ((~~dilatus~~)) thaleichthys*
Surf smelt	*Hypomesus pretiosus*
All other species of smelt	(Osmeridae)

Sturgeons	
Green sturgeon	*Acipenser medirostris*
White sturgeon	*Acipenser transmontanus*
Surfperches	
Blue perch or striped seaperch	*Embiotoca lateralis*
Kelp perch	*Brachyistius frenatus*
Redtail surfperch	*Amphistichus rhodoterus*
Shiner perch	*Cymatogaster aggregata*
Pile perch	*Rhacochilus vacca*
Walleye surfperch	*Hyperprosopon argenteum*
White seaperch	*Phanerodon furcatus*
All other species of perch	(Embiotocidae)
Wolf-eel	Anarrhichthys ocellatus
Hagfishes	
Pacific hagfish	*Eptatretus stouti*
Black hagfish	*Eptatretus deani*
Other	
Opah	*Lampris guttatus*
Swordfish	*Xiphias gladius*
Striped marlin	*Kajikia audax*
Dolphinfish	*Coryphaena hippurus*

AMENDATORY SECTION (Amending Order 817, filed 5/29/69)

WAC 220-16-265 Geographical definitions—((~~Lopez Island shrimp fishing area~~)) Marine Area 7 shrimp fishing subareas. ((~~"Lopez Island shrimp fish area" shall include those waters of Puget Sound lying inside and southerly of a line projected from Spencer Spit on Lopez Island to Fauntleroy Point on Decatur Island and a line projected from Decatur Light across Lopez Pass to the nearest point of Lopez Island.~~)) (1) Marine Area 7 South: The portion of Marine Area 7 south of a line from Biz Point on Fidalgo Island to Cape Saint Mary on Lopez Island, then south of a line from Davis Point on Lopez Island to Cattle Point on San Juan Island, then south of a line projected due west from Lime Kiln Point light to the international boundary.

(2) Marine Area 7 West: The portion of Marine Area 7 north of a line from Davis Point on Lopez Island to Cattle Point on San Juan Island, then north of a line due west from Lime Kiln Point light to the international boundary, then west of a line from the bell buoy at the international boundary to Point Doughty on Orcas Island, then west of a line projected true north and south from the western tip of Crane Island, then west of a line projected from the southern tip of Shaw Island to the number 2 buoy at the entrance to Fisherman Bay.

(3) Marine Area 7 East: The portion of Marine Area 7 north of a line from Biz Point on Fidalgo Island to Cape Saint Mary on Lopez Island, then east of a line projected from the number 2 buoy at the entrance to Fisherman Bay to the southern tip of Shaw Island, then east of a line projected true north and south from the western tip of Crane Island, then east of a line from Point Doughty on Orcas Island to the bell buoy at the international boundary.

NEW SECTION

WAC 220-20-011 Food fish and shellfish taken by another. It is unlawful to possess food fish or shellfish taken during the open season by another fisher unless it is accompanied by a statement which shows the name, address, fishing license or document number and signature of the taker, and the date, county or marine area where taken.

AMENDATORY SECTION (Amending WSR 15-11-042, filed 5/14/15, effective 6/14/15)

WAC 220-56-115 Angling gear—Lawful and unlawful acts. (1) It is unlawful for any person to use more than one line while angling for personal use, except:

(a) Anglers in possession of a valid two-pole endorsement may use up to two lines while fishing in lakes, ponds, and reservoirs open to fishing unless listed as an exception in WAC 220-55-220. Anglers in possession of a valid two-pole endorsement may use up to two lines while fishing in rivers and marine areas as noted in WAC 220-55-220 and 220-310-175 through 220-310-200.

(b) A second line using forage fish jigger gear is permissible while fishing in Catch Record Card Areas 5, 6, 7, 8-1, 8-2, 9, 10, 11, ((~~12,~~)) and 13.

(c) When fishing outside 3 miles from shore in Pacific Ocean waters for tuna species, anglers are not restricted on the number of rods or lines fished per angler, provided that no other species are possessed onboard the vessel. A violation of this subsection is an infraction, punishable under RCW 77.15.160, Infractions.

(2) It is unlawful for any person to take, fish for, or possess fish taken for personal use by any means other than angling with a line attached to a pole held in hand while landing the fish or with a hand-operated line without rod or reel, except:

(a) It is unlawful to fish for or possess salmon taken for personal use with hand lines in marine waters of Puget Sound east of the mouth of the Sekiu River and in Washington waters at the mouth of the Columbia River east of a line projected true north and south through Buoy 10, Grays Harbor, and Willapa Bay.

(b) It is permissible to leave a pole in a pole holder while playing or landing the fish if the pole is capable of being readily removed from the pole holder.

(c) It is permissible to use an electric power-operated reel designed for sport fishing attached to a pole.

(3) It is unlawful for any person while angling to fail to keep his angling gear under his or her direct and immediate physical control.

(4) In areas where a saltwater license is valid, each fisher aboard a vessel may continue to deploy angling gear or shellfish gear until the daily limit of food fish or shellfish for all licensed anglers and juvenile anglers aboard has been retained.

(5) In Catch Record Card Area 4 east of the Bonilla-Tatoosh line and Areas 5 through 13: It is unlawful for any person to take, fish for, or possess bottomfish or halibut taken for personal use, to fail to have onboard the vessel a fish descending or fish recompression device, rigged for immediate use, and capable of rapidly returning fish to depth of capture.

(6) A violation of this section is an infraction, punishable under RCW 77.15.160, unless the person has harvested fish or shellfish. If the person has harvested fish or shellfish, the violation is punishable under RCW 77.15.380, Unlawful recreational fishing in the second degree—Penalty, unless the fish or shellfish are taken in the amounts or manner to constitute a violation of RCW 77.15.370, Unlawful recreational fishing in the first degree—Penalty.

((~~(6)~~)) (7) It is unlawful to possess fish or shellfish taken with gear in violation of the provisions of this section. Possession of fish or shellfish while using gear in violation of the provisions of this section is a rebuttable presumption that the fish or shellfish were taken with such gear. Possession of such fish or shellfish is punishable under RCW 77.15.380, Unlawful recreational fishing in the second degree—Penalty, unless the fish or shellfish are taken in the amounts or manner to constitute a violation of RCW 77.15.370, Unlawful recreational fishing in the first degree—Penalty.

AMENDATORY SECTION (Amending WSR 13-19-007, filed 9/5/13, effective 10/6/13)

WAC 220-56-310 Shellfish—Daily limits. It is unlawful for any one person to possess at any time more than one daily limit of fresh shellfish. Additional shellfish may be possessed in a frozen or processed form. It is unlawful for any one person to take more than the following quantities and sizes of shellfish for personal use in any one day:

(1) Cockles, borers and clams in the shell, other than razor clams, geoduck clams and horse clams, 40 clams total, or 10 pounds, whichever is achieved first ((~~except:~~

~~(a) In Skagit Bay, east of a line projected from Browns Point to Swinomish Slough entrance: Diggers may additionally retain up to 20 pounds of eastern softshell clams in the shell.~~

~~(b) In Willapa Bay: Diggers may additionally retain up to 24 cockles~~)).

(2) Razor clams: 15 clams.

(3) Geoduck clams: 3 clams.

(4) Horse clams: 7 clams.

(5) Oysters: 18 oysters((~~, shucked and the shells left on the beach~~)). Minimum size before shucking two and one-half inches along the longest dimension of the shell.

(6) Rock scallops: 6 scallops.

(7) Weathervane scallops: 12 scallops (over 4 inches).

(8) Spiny and pink scallops: 10 pounds or 5 quarts in the shell, in the aggregate.

(9) Shrimp:

(a) In Areas 1 through 3 and Area 4 west of the Bonilla-Tatoosh line: Total weight 25 pounds, maximum 200 spot shrimp as part of the 25-pound limit.

(b) In Area 4 east of the Bonilla-Tatoosh line and Areas 5 through 13: First Saturday in May through May 31, daily limit 80 shrimp; during all other open periods total weight 10 pounds, maximum 80 spot shrimp as part of the 10-pound limit.

(10) Pinto abalone: Closed statewide.

(11) Crawfish: 10 pounds in the shell. Minimum size 3 1/4 inches from tip of rostrum to tip of tail. Female crawfish with eggs or young attached to the abdomen must be released immediately.

(12) Sea cucumbers: 25 sea cucumbers.

(13) Red sea urchins: 18 sea urchins.

(14) Purple sea urchins: 18 sea urchins.

(15) Green sea urchins: 36 sea urchins.

(16) Dungeness crab:

(a) In Area 1 except when fishing from the north jetty of the Columbia River and Areas 2, 3, and 4 west of the Bonilla-Tatoosh line - 6 male crab.

(b) In Area 4 east of the Bonilla-Tatoosh line, and Areas 5, 6, 7, 8-1, 8-2, 9, 10, 11, 12 and 13 - 5 male crabs.

(c) In the Columbia River upstream of a line from the outermost end of the north jetty to the exposed end of the south jetty, or when fishing from the north jetty of the Columbia River - 12 male crab.

(17) Red rock crab: 6 crab.

(18) Mussels: 10 pounds in the shell, in the aggregate.

(19) Goose barnacles: 10 pounds of whole barnacles or 5 pounds of barnacle stalks.

(20) Ghost and mud shrimp: 10 dozen.

(21) King and box crab: Closed statewide.

(22) Tanner crab: 6 crab.

AMENDATORY SECTION (Amending WSR 14-01-056, filed 12/12/13, effective 1/12/14)

WAC 220-56-315 Personal use crab, shrimp, crawfish—Unlawful acts. (1) It is unlawful to take and possess crab, shrimp, and crawfish taken for personal use except by hand or with hand dip nets, ring nets, shellfish pots, or any hand-operated instrument that will not penetrate the shell. A violation of this subsection is a misdemeanor, punishable under RCW 77.15.380 or 77.15.382 depending on the circumstances of the violation.

(2) It is unlawful to set, fish, or pull more than 2 units of gear per person at any one time, unless otherwise provided in this subsection. A unit of gear is defined as a hand dip net, shellfish pot, ring net or any other instrument used to capture crab, shrimp, or crawfish. A violation of this subsection is punishable under RCW 77.15.160, Infractions, or RCW 77.15.380, Unlawful recreational fishing in the second degree—Penalty, depending on the circumstances of the violation.

(a) In Puget Sound waters, it is unlawful to set, fish, or pull at any one time more than 2 units of crab gear and 2 additional units of shrimp gear per person.

(b) In Catch Record Card Areas 4 through 13, it is unlawful for the operator of any boat from which shrimp pots are set, fished, or pulled to have on board or to fish more than 4 shrimp pots.

(c) In the Columbia River, it is unlawful to set, fish, or pull more than 3 units of crab gear per person.

(d) In fresh water, it is permissible to use up to 5 units of gear per person to fish for crawfish.

(3) It is unlawful for any person to operate a shellfish pot not attached to a buoy bearing that person's name, except that a second person may assist the pot owner in operation of the gear. A violation of this subsection is a misdemeanor, punishable under RCW 77.15.382, Unlawful use of shellfish gear for personal use purposes—Penalty.

(4) It is unlawful to salvage or attempt to salvage shellfish pot gear from Hood Canal that has been lost, unless the person first obtains a permit issued by the director, authorizing that activity. A violation is punishable under RCW 77.15.180, Unlawful interference with fishing or hunting gear—Penalty. It is unlawful to fail to comply with all provisions of a permit authorizing the salvage of gear from Hood Canal. A violation of this subsection is RCW 77.15.750, Unlawful use of a department permit—Penalty.

(5) It is unlawful to dig for or possess ghost or mud shrimp taken for personal use by any method except hand operated suction devices or dug by hand. A violation of this subsection is punishable under RCW 77.15.160, Infractions, or RCW 77.15.380, Unlawful recreational fishing in the second degree—Penalty, depending on the circumstances of the violation.

(6) It is unlawful to have more than one unit of unattended gear attached to a buoy line or to fail to have a separate buoy for each unit of gear. "One unit of gear" means one ring net or one shellfish pot. A violation of this subsection is a misdemeanor, punishable under RCW 77.15.382, Unlawful use of shellfish gear for personal use purposes—Penalty.

(7) In waters open only on certain days or certain hours during the day, except for those waters affected by the night closure set out in subsection (8) of this section, it is unlawful to fail to remove gear from the water if fishing for shellfish is not allowed. It is also unlawful to fail to remove gear from the water within one hour after sunset if fishing is not allowed on the next calendar day. In waters that are open continuously, except for those waters affected by the night closure set out in subsection (8) of this section, gear may be left in the water during a night closure. A violation of this subsection is punishable under RCW 77.15.160, Infractions, or RCW 77.15.380, Unlawful recreational fishing in the second degree—Penalty, depending on the circumstances of the violation.

(8) It is unlawful to set or pull shellfish pots, ring nets or star traps from a vessel in Catch Record Card Areas 1-13 from one hour after official sunset to one hour before official sunrise. A violation of this subsection is punishable under RCW 77.15.160, Infractions, or RCW 77.15.380, Unlawful recreational fishing in the second degree—Penalty, depending on the circumstances of the violation.

AMENDATORY SECTION (Amending WSR 12-23-016, filed 11/9/12, effective 12/10/12)

WAC 220-56-317 Personal use shrimp pot gear requirements. (1) All buoys attached to shrimp gear must be yellow or fluorescent yellow in color. Flags and staff, if attached, may be any color.

(2) It is unlawful to take, fish for, or possess shrimp taken for personal use with shellfish pot gear unless the gear meets the following requirements:

(a) A shrimp pot may not exceed 10 feet in perimeter and 1-1/2 feet in height.

(b) The entire top, bottom, and sides of the shrimp pot must be constructed of mesh material (no liners allowed), except the entrance tunnels must have the minimum mesh opening size specified in subsection (2)((~~(c)~~)) (g) of this section.

(c) ((~~The minimum mesh size for shrimp pots is one inch, defined as a mesh that a 7/8 inch square peg will pass through each mesh opening. Flexible (web) mesh pots must have an opening with a mesh size of a minimum of 1-3/4 inch stretch measure.~~

~~June 1 through October 15, Area 4 east of the Bonilla-Tatoosh line, and Areas 5 through 13:~~

~~(i) In any Marine Area or portion thereof that is closed for spot shrimp but open for coonstripe and pink shrimp, the minimum mesh size for shrimp pots is 1/2 inch.~~

~~(ii) 1/2-inch mesh is defined as mesh that a 3/8-inch square peg will pass through each mesh opening, except for flexible (web) mesh pots where the opening must be a minimum of 1-1/8 inch stretch measure.~~

~~(d) All entrance tunnels must open into the pot from the side.~~

~~(e) The sum of the maximum widths of all entrance tunnels must not exceed half of the perimeter of the bottom of the pot.~~)) All entrance tunnels must open into the pot from the side.

(d) The sum of the maximum widths of all entrance tunnels must not exceed half of the perimeter of the bottom of the pot.

(e) Half-inch mesh is defined as mesh that a 3/8-inch square peg will pass through each mesh opening (except for the entrance tunnels which can be any size mesh material); flexible (web) mesh pots must have mesh size openings that are a minimum of 1-1/8 inch stretch measure.

(f) One inch mesh is defined as a mesh that a 7/8-inch square peg will pass through each mesh opening (except for the entrance tunnels which can be any size mesh material); flexible (web) mesh pots must have mesh size openings that are a minimum of 1-3/4 inch stretch measure.

(g) The minimum mesh size for shrimp pots is:

(i) Year-round, Marine Areas 1-3 and 4 west of the Bonilla-Tatoosh line:

(A) Shoreward of 20 fathoms, the minimum mesh size for shrimp pots is 1/2-inch.

(B) Seaward of 20 fathoms, the minimum mesh size for shrimp pots is 1 inch.

(ii) May 1 through October 15, Area 4 east of the Bonilla-Tatoosh line, and Areas 5 through 13, the minimum mesh size for shrimp pots is 1 inch, with the following exception: June 1 through October 15, in any Marine Area or portion thereof that is closed for spot shrimp but open for coonstripe and pink shrimp, the minimum mesh size for shrimp pots is 1/2-inch.

AMENDATORY SECTION (Amending WSR 07-05-051, filed 2/16/07, effective 3/19/07)

WAC 220-56-325 Shrimp—Areas and seasons. It is unlawful to fish for or possess shrimp taken for personal use from the following areas, except as otherwise provided in this section:

(1) ((~~Discovery Bay Shrimp District and Marine Areas 8, 9, 10 and 11 - Open 7:00 a.m. through 3:00 p.m., beginning the first Saturday in May through May 31 and open only on Wednesday and Saturday of each week except it is lawful for divers to take shrimp by hand or hand held device from 7:00 p.m. until midnight on any open day in May in Marine Area 8-2;~~

~~(2) Hood Canal Shrimp District - Open 9:00 a.m. through 1:00 p.m., the first Saturday in May through May 31 and open only on Wednesday and Saturday of each week;~~

~~(3) Marine Area 4 east of the Bonilla-Tatoosh line and Marine Areas 5, 6, 7 and 13, except for Shrimp Districts - Open 7:00 a.m. the first Saturday in May through May 31 and open daily except open only Wednesday through Saturday in Marine Area 7.~~

~~(4) Beginning June 1 through October 15 in Marine Area 4 east of the Bonilla-Tatoosh line and Areas 5 through 13, shrimp fishing is open daily except closed in Area 10 and the shrimp districts at all times. Unlawful to retain spot shrimp.~~

~~(5)~~)) It is unlawful to fish for or possess shrimp taken for personal use in Marine Area 4 east of the Bonilla-Tatoosh line and Marine Areas 5, 6, 7, 8-1, 8-2, 9, 10, 11, 12, and 13 except as provided by emergency rule.

(2) Marine Areas 1 through 3 and Marine Area 4 west of the Bonilla-Tatoosh line - Open year-round.

AMENDATORY SECTION (Amending WSR 12-23-016, filed 11/9/12, effective 12/10/12)

WAC 220-56-330 Crab—Areas and seasons—Personal use. (1) It is unlawful to fish for or possess crab taken for personal use from Puget Sound except during the following seasons:

(a) Marine Area 4 east of the Bonilla-Tatoosh line, and Areas 5, 6, 8-1, 8-2, 9, 10, 11, 12, and 13: Open 7:00 a.m., July 1 through Labor Day, Thursday through Monday of each week.

(b) Those waters of Marine Area 7 south and west of a line projected from Village Point, Lummi Island, through the navigation buoy just east of Matia Island, thence to the buoy at Clements Reef, thence to the easternmost point of Patos Island, thence running along the northern shore of Patos Island to the westernmost point of Patos Island, thence ((~~due~~)) true west to the international boundary and south of a line that extends from Point Francis on Portage Island, through the marker just north of Inati Bay on Lummi Island to Lummi Island: Open 7:00 a.m., July 15 through September 30, Thursday through Monday of each week.

(c) Those waters of Marine Area 7 north and east of a line projected from Village Point, Lummi Island through the navigation buoy just east of Matia Island thence to the buoy at Clements Reef thence to the easternmost point of Patos Island, running along the northern shoreline of Patos Island and from the westernmost point of Patos Island ((~~due~~)) true west to the international boundary and north of a line that extends from Point Francis on Portage Island, through the marker just north of Inati Bay on Lummi Island to Lummi Island: Open 7:00 a.m. August 15 through September 30, Thursday through Monday of each week.

(2) It is unlawful to fish for or possess crab taken for personal use with shellfish pot gear from Marine Areas 1, 2, 3, and Area 4 west of the Bonilla-Tatoosh line except during the period from December 1 through September 15. Open to gear other than shellfish pot gear year-round.

(3) The Columbia River upstream from a line projected from the outermost end of the north jetty to the exposed end of the south jetty is open to crab fishing for personal use year-round.

(4) It is unlawful to fish for or possess crab taken for personal use with shellfish pot or ring net gear from the waters of Padilla Bay or Swinomish Slough within 25 yards of the Burlington Northern Railroad crossing the northern end of Swinomish Slough except from one hour before official sunrise to one hour after official sunset.

(5) Violation of this section is a misdemeanor, punishable under RCW 77.15.380, Unlawful recreational fishing in the second degree—Penalty.

AMENDATORY SECTION (Amending WSR 12-23-016, filed 11/9/12, effective 12/10/12)

WAC 220-56-335 Crab—Unlawful acts—Personal use. (1) It is unlawful for any person to take or possess any female Dungeness crab for personal use.

(2) It is unlawful to take or possess any male Dungeness crabs taken for personal use measuring less than the following caliper measurements:

(a) In Puget Sound (all contiguous waters east of the Bonilla-Tatoosh Line) - 6 1/4 inch minimum size.

(b) In coastal waters west of the Bonilla-Tatoosh Line, Pacific Ocean waters except when fishing from the north jetty of the Columbia River, Grays Harbor, Willapa Bay - 6 inch minimum size.

(c) In the Columbia River upstream of a line from the outermost end of the north jetty to the exposed end of the south jetty, and when fishing from the north jetty of the Columbia River - 5 3/4 inch minimum size.

(3) It is unlawful to take or possess any red rock crab taken for personal use that measure less than 5 inches. Either sex may be retained.

(4) It is unlawful to take or possess any tanner crab taken for personal use that measure less than 4 1/2 inches. Either sex may be retained.

(5) All crab measurements must be made at the widest part of the shell (caliper measurement) immediately in front of the points (tips).

((~~(5)~~)) (6) It is unlawful to possess in the field any crab or crab parts without also retaining the back shell.

((~~(6)~~)) (7) It is unlawful to possess soft-shelled crab for any personal use purpose. Violation of this subsection is an infraction, punishable under RCW 77.15.160.

AMENDATORY SECTION (Amending WSR 97-07-078, filed 3/19/97, effective 5/1/97)

WAC 220-56-336 Crawfish, abalone, sea urchins, sea cucumbers, goose barnacles—Areas and seasons, personal use fishery. ((~~The open season for crawfish is the first Monday in May through October 31.~~)) (1) Crawfish: The open season for crawfish is the first Monday in May through October 31.

(2) Abalone: It is unlawful to fish for or possess abalone taken for personal use the entire year.

(3) Sea urchins: It is lawful to fish for sea urchins for personal use the entire year. It shall be lawful to take, fish for and possess sea urchins for personal use with any hand-operated instrument which does not penetrate the shell.

(4) Sea cucumbers: It is lawful to fish for sea cucumbers for personal use the entire year except closed year-round in Marine Area 12. It shall be lawful to take, fish for and possess sea cucumbers for personal use with any hand-operated instrument which does not penetrate the animal.

(5) Goose barnacles: It is lawful to take goose barnacles for personal use the entire year.

AMENDATORY SECTION (Amending WSR 02-17-019, filed 8/9/02, effective 9/9/02)

WAC 220-56-355 Clams, oysters, mussels—Unlawful acts. (1) It is unlawful to take, dig for and possess clams (excluding razor clams), cockles, and mussels taken for personal use except by hand or with hand-operated forks, picks, mattocks, rakes and shovels. Violation of this subsection is an infraction, punishable under RCW 77.15.160.

(2) It is unlawful to take, dig for and possess razor clams taken for personal use except by hand, shovels or with cylindrical cans, tubes or hinged digging devices. The opening of tubes or cans must be either circular or elliptical with the circular can/tube having a minimum outside diameter of 4 inches and the elliptical can/tube having a minimum dimension of 4 inches long and 3 inches wide outside diameter. The hinged digging device when opened in a cylindrical position, must have a minimum outside diameter of 4 inches at the bottom. Violation of this subsection is an infraction, punishable under RCW 77.15.160.

(3) Any newly designed or modified digging device intended for the recreational use of razor clams must receive the specific approval of the director of fish and wildlife.

(4) In the field each digger, including holders of razor clam disability permits, must have his or her daily limit in a separate container. Violation of this subsection is an infraction, punishable under RCW 77.15.160.

(5) It is unlawful to possess shellfish taken with gear that violates the provisions of this section. Possession of shellfish while using gear in violation of the provisions of this section is a rebuttable presumption that the shellfish were taken with such gear. Possession of such shellfish is punishable under RCW 77.15.380 Unlawful recreational fishing in the second degree—Penalty, unless the shellfish are taken in the amounts or manner to constitute a violation of RCW 77.15.370 Unlawful recreational fishing in the first degree—Penalty.

(6) It shall be unlawful for any person digging clams other than razor clams for personal use to fail to fill in holes created during the digging operation. Beach terrain must be returned to approximately its original condition by clam diggers before leaving the scene.

(((~~(2)~~))) (7) It shall be unlawful to maim, injure or attempt to capture a geoduck by thrusting any instrument through its siphon or to possess only the siphon or neck portion of a geoduck.

(((~~(3)~~))) (8) Oysters taken for personal use must be shucked before removing oysters from the intertidal zone and the shells replaced on the tidelands at the approximate tide level from which originally taken and it shall be unlawful for any person to fail to do so.

(9) It is unlawful to possess Manila, native littleneck, cockle, or butter clams taken for personal use which measure less than 1-1/2 inches across the longest dimension of the shell except minimum size 1-1/4 inches if taken from public tidelands on the west side of Quilcene Bay north of the county boat ramp.

(((~~(4)~~))) (10) It is unlawful to return any eastern softshells, horse clams, or geoducks to the beach or water regardless of size or condition. All such clams taken for personal use must be retained by the digger as part of the daily limit.

(((~~(5)~~))) (11) Violation of the provisions of this section shall be an infraction, punishable under RCW 77.15.160.

AMENDATORY SECTION (Amending WSR 13-19-007, filed 9/5/13, effective 10/6/13)

WAC 220-56-390 Squid, octopus. (1)(a) Squid daily limit: For squid other than Humboldt squid, the daily limit is 10 pounds or 5 quarts. For Humboldt squid, the daily limit is 5 squid.

(b) It is unlawful to take, fish for or possess squid taken for personal use with more than one line. A maximum of four squid lures may be used. If gear utilizes conventional hooks, it shall not exceed a total of nine points. Herring rakes and hand dip net gear may be used to take squid. In the field each person taking squid must use a separate container to hold their catch.

(c) It is permissible to take, fish for or possess squid the entire year((~~, except closed year-round in Catch Record Card Area 12~~)).

(2)(a) The octopus daily limit is 1.

(b) It is unlawful to take octopus except by hand or by any instrument which will not penetrate or mutilate the body, except that it is permissible to retain octopus taken while angling with hook and line gear.

(c) It is unlawful to take octopus in the following areas:

(i) Marine Area 12;

(ii) **Redondo Beach.** Redondo Beach is defined as the waters, bed lands, and tidelands within the area described by a line starting from shore at 122°19'27.69"W, 47°20'55.64"N; then northwesterly to 122°19'30.77"W, 47°20'56.82"N; then to 122°19'33.84"W, 47°20'57.31"N; then northeasterly to 122°19'29.78"W, 47°21'02.32"N; then returning to shore at 122°19'25.27"W, 47°21'00.64"N.

(iii) **Three Tree Point.** Three Tree Point is defined as the waters, bed lands, and tidelands within the area described

by a line starting from shore at 122°22'48.68"W, 47°27'06.46"N; then northwesterly to 122°22'58.06"W, 47°27'15.30"N; then northeasterly to 122°22'36.99"W, 47°27'25.51"N; then returning to shore at 122°22'27.63"W, 47°27'16.67"N.

(iv) **Alki Beach Seacrest Coves 1, 2 and 3.** Alki Beach Seacrest Coves 1, 2, and 3 are defined as the waters, bed lands, and tidelands within the area described by a line starting from shore at 122°22'37.34"W, 47°35'12.98"N; then northeasterly and offshore to 122°22'33.61"W, 47°35'16.10"N; then northwesterly to 122°23'51.20"W, 47°35'29.51"N; then returning to shore at 122°23'54.31"W, 47°35'28.81"N. This area does not include waters within 150 feet of the Seacrest Public Fishing Pier, as demarcated at the surface with buoys and on the sea floor by a perimeter line.

(v) **Les Davis.** Les Davis is defined as the waters, bed lands, and tidelands within the area described by a line starting from shore at 122°29'07.21"W, 47°17'05.15"N; the northeasterly to 122°29'0.97"W, 47°17'10.57"N; then southeasterly to 122°31'05.91"W, 47°17'06.91"N; then returning to shore at 122°30'59.80"W, 47°17'01.48"N.

(vi) **Alki Beach Junk Yard.** Alki Beach Junk Yard is defined as the waters, bed lands, and tidelands within the area described by a line starting from shore at 122°24'57.17"W, 47°34'40.64"N; then northwesterly to 122°25'03.25"W, 47°34'50.03"N; then northeasterly to 122°24'40.68"W, 47°34'56.75"N; then returning to shore at 122°24'34.48"W, 47°34'47.34"N.

(vii) **Days Island.** Days Island is defined as the waters, bed lands, and tidelands within the area described by a line starting from shore at 122°33'49.16"W, 47°14'07.49"N; then west to 122°34'01.41"W, 47°14'07.58"N; then north to 122°34'0.78"W, 47°14'41.73"N; then returning to shore at 122°34'40.74"W, 47°14'41.73"N.

(viii) **Deception Pass.** Deception Pass is defined as the waters, bed lands, and tidelands east of a line starting at 122°39'48.07"W, 48°24'08.05"N; and north to 122°40'20.57"W, 48°25'10.16"N; then east to 122°40'09.63"W, 48°25'16.15"N proceeding to 122°39'50.68"W, 48°24'55.51"N; and west of a line starting at 122°36'54.24"W, 48°24'29.52"N; and north to 122°36'54.73"W, 48°24'48.92"N.

(3) It is unlawful to possess squid or octopus taken with gear that violates the provisions of this section. If a person violates any provision of this section but has not yet harvested squid or octopus, the violation is an infraction punishable under RCW 77.15.160. Possession of squid or octopus while using gear in violation of the provisions of this section is a rebuttable presumption that the squid or octopus were taken with such gear. Possession of such squid or octopus is punishable under RCW 77.15.380 Unlawful recreational fishing in the second degree—Penalty, unless the squid or octopus are taken in the amounts or manner to constitute a violation of RCW 77.15.370 Unlawful recreational fishing in the first degree—Penalty.

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 220-56-312	Shellfish—Possession limits.
WAC 220-56-340	General provisions—Clams, cockles, mussels—Gear.
WAC 220-56-385	Oysters—Unlawful acts.
WAC 220-56-400	Abalone.
WAC 220-56-405	Sea urchins.
WAC 220-56-410	Sea cucumbers.
WAC 220-56-415	Goose barnacles.

WSR 17-01-098
PERMANENT RULES
PUGET SOUND CLEAN AIR AGENCY

[Filed December 16, 2016, 4:19 p.m., effective February 1, 2017]

Effective Date of Rule: February 1, 2017.

Purpose: This technical amendment is being proposed to update the air dispersion screening model(s) the agency would allow to be used to show whether ambient concentrations of toxic air contaminants from new, modified or existing sources are acceptable. Regulation III, Section 2.07 specifies the process that the agency and sources will use when reviewing new, modified or existing sources both during the new source review permitting process and outside this permitting process. In order to show whether the impact from toxic air contaminants for the source will be acceptable, a computer model is used that predicts the ambient concentrations based on the predicted (or known) emissions from the source. The United States Environmental Protection Agency (EPA) develops the models for use by other agencies and sources. There are various types of models, including screening models and more in-depth models. The agency rule currently requires a screening model called TSCREEN to be used. This model is outdated, no longer supported by EPA, difficult to obtain, and does not function on modern day computers. The proposed rule revisions would eliminate the requirement to use TSCREEN and instead would allow any screening model recommended by EPA to be used. This would allow flexibility to accommodate new models when EPA adopts them as their recommended model(s).

Citation of Existing Rules Affected by this Order: Amending Regulation III, Section 2.07.

Statutory Authority for Adoption: Chapter 70.94 RCW.

Adopted under notice filed as WSR 16-22-084 on November 2, 2016.

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 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: December 15, 2016.

Craig Kenworthy
Executive Director

AMENDATORY SECTION

REGULATION III, SECTION 2.07 EVALUATING THE IMPACTS OF TOXIC AIR CONTAMINANTS

(a) Applicability. This section describes the procedures that shall be used for quantifying emissions and analyzing impacts of toxic air contaminants in order to meet the requirements for new or modified toxic air contaminant sources (see Article 6 of Regulation I) and for existing toxic air contaminant sources (see Section 2.05 of this regulation). In addition, definitions and procedures contained in chapter 173-460 WAC and adopted by reference in Regulation I, Section 6.01(a) apply to this section.

(b) Quantifying Emissions of Toxic Air Contaminants.

(1) The owner or operator of a new or modified toxic air contaminant source subject to Article 6 of Regulation I shall quantify toxic air contaminant emissions that may be discharged to the atmosphere after applying the required control technology, and shall submit this information as part of a Notice of Construction and Application for Approval.

(2) The owner or operator of an existing toxic air contaminant source subject to Section 2.05 of this regulation shall, upon request by the Agency, quantify toxic air contaminant emissions emitted by the facility and submit that information within 30 days.

(3) When quantifying toxic air contaminant emissions, the owner or operator shall assume that each toxic air contaminant is introduced into the atmosphere in an unaltered form continuously, at the maximum concentration known to exist at the source unless there is reliable data to the contrary or there is a physical or legal restriction.

(c) Analyzing Impacts of Toxic Air Contaminants. The air quality impact analysis for toxic air contaminant sources shall be performed using one of the following procedures:

(1) First Tier Review.

(A) Emissions of each toxic air contaminant discharged to the atmosphere shall be shown to be below the corresponding SQER listed in WAC 173-460-150; or

(B) ((~~The~~)) An EPA ((~~guideline~~)) recommended screening dispersion model((~~, TSCREEN,~~)) shall be used to demonstrate that the predicted concentration of each contaminant is below the corresponding ASIL listed in WAC 173-460-150. Stack parameters shall be submitted with the notice of construction application, or, for existing sources, within 30 days after the Agency requests the information. The maximum 1-hour concentration calculated by the model shall be converted with a persistence factor of 0.4 to a 24-hour average concentration or 0.08 to an annual average concentration; or

(C) The owner or operator shall submit a more comprehensive evaluation including the use of other EPA guideline models and more accurate emission estimation techniques to demonstrate that the predicted concentration of each contaminant is below the corresponding ASIL listed in WAC 173-460-150 in all areas where the general public has access; or

(2) Second and Third Tier Reviews. If predicted ambient concentrations from the first tier review are not below the ASILs listed in WAC 173-460-150, the owner or operator shall submit a petition to the Department of Ecology requesting a second tier or third tier review, and must receive Ecology's recommendation of approval for either the second or third tier petition. Second tier petitions shall follow the procedures in WAC 173-460-090. Third tier petitions shall follow the procedures in WAC 173-460-100.

WSR 17-01-099
PERMANENT RULES
PUGET SOUND CLEAN AIR AGENCY

[Filed December 16, 2016, 4:20 p.m., effective February 1, 2017]

Effective Date of Rule: February 1, 2017.

Purpose: This technical amendment is being proposed to address changes to the federal Air Emissions Reporting Rule (AERR). More specifically, this amendment pertains to reporting requirements for lead (Pb) emissions. Every three years the agency reports to the United States Environmental Protection Agency (EPA), the amount of lead and/or lead compounds that stationary sources emitted, but only if they are above the reporting threshold specified by EPA. EPA's thresholds and other reporting requirements are in the federal AERR rule found at 40 C.F.R. Part 51. Currently, the agency has in place reporting thresholds for lead of 2.5 tons per year for smaller sources (Regulation I, Section 5.05) and 2 tons per year of "lead and lead compounds" for larger sources (Regulation I, Section 7.09). In an update to the AERR (finalized in the Federal Register on February 19, 2015), EPA lowered their lead reporting threshold from 5 tons per year to 0.5 tons per year, making the agency's regulations out of sync with federal requirements. To address this discrepancy between EPA's and the agency's lead reporting thresholds, we are proposing that Regulation I, Sections 5.05 and 7.09 both explicitly include a lead reporting threshold and reduce the reporting threshold to 0.5 ton/year for all sources.

Citation of Existing Rules Affected by this Order: Amending Regulation I, Sections 5.05 and 7.09.

Statutory Authority for Adoption: Chapter 70.94 RCW.

Adopted under notice filed as WSR 16-22-085 on November 2, 2016.

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 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: December 15, 2016.

Craig Kenworthy
Executive Director

AMENDATORY SECTION

REGULATION I, SECTION 5.05 REGISTRATION REQUIREMENTS

(a) The owner or operator of a source requiring registration under Section 5.03 of this regulation shall make reports containing information as required by the Agency concerning location, size, and height of contaminant outlets, processes employed, nature and quantity of the air contaminant emission, and such other information as is relevant to air pollution and available or reasonably capable of being assembled. The owner or operator shall be responsible for obtaining the proper forms from the Agency, notifying the Agency of its existence (including changes in its ownership or name), and for the accuracy, completeness, and timely submittal of all registration reports and fees.

(b) The owner or operator of a source requiring registration under Section 5.03 of this regulation shall submit a report by June 30th of each year, listing the emissions of those air contaminants emitted during the previous calendar year that equaled or exceeded:

(1) 2.50 tons of any single hazardous air pollutant (HAP);

(2) 6.25 tons of total hazardous air pollutants (HAP); ((~~or~~))

(3) 25.0 tons of carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM2.5 or PM10), sulfur oxides (SOx), or volatile organic compounds (VOC)((~~,~~)); or

(4) 0.5 tons of lead.

(c) The owner or operator of a registered source shall develop and implement an operation and maintenance plan to ensure continuous compliance with Regulations I, II, and III. A copy of the plan shall be filed with the Control Officer upon request. The plan shall reflect good industrial practice and shall include, but not be limited to, the following:

(1) Periodic inspection of all equipment and control equipment;

(2) Monitoring and recording of equipment and control equipment performance;

(3) Prompt repair of any defective equipment or control equipment;

(4) Procedures for start up, shut down, and normal operation;

(5) The control measures to be employed to ensure compliance with Section 9.15 of this regulation; and

(6) A record of all actions required by the plan.

The plan shall be reviewed by the source owner or operator at least annually and updated to reflect any changes in good industrial practice.

AMENDATORY SECTION

REGULATION I, SECTION 7.09 GENERAL REPORTING REQUIREMENTS FOR OPERATING PERMITS

(a) **Emission Reporting.** An emission report shall be required from each owner or operator of an operating permit source, listing those air contaminants emitted during the previous calendar year that equal or exceed the following (tons/year):

carbon monoxide (CO) emissions	25
facility combined total of all toxic air contaminant (TAC) emissions	6
any single toxic air contaminant (TAC) emissions (excluding lead, but including lead compounds)	2
nitrogen oxide (NOx) emissions	25
particulate matter (PM10) emissions	25
particulate matter (PM2.5) emissions	25
sulfur oxide (SOx) emissions	25
volatile organic compounds (VOC) emissions	25
lead	0.5

Annual emission rates shall be reported to the nearest whole tons per year for only those air contaminants that equal or exceed the thresholds above, except lead which must be reported to the nearest tenth of a ton. The owner or operator of a source requiring a Title V operating permit under this Article shall maintain records of information necessary to document any reported emissions or to demonstrate that the emissions were less than the above amounts.

(b) **Operation and Maintenance Plan.** Owners or operators of air contaminant sources subject to Article 7 of this regulation shall develop and implement an operation and maintenance plan to assure continuous compliance with Regulations I, II, and III. A copy of the plan shall be filed with the Control Officer upon request. The plan shall reflect good industrial practice and shall include, but not be limited to, the following:

(1) Periodic inspection of all equipment and control equipment;

(2) Monitoring and recording of equipment and control equipment performance;

(3) Prompt repair of any defective equipment or control equipment;

(4) Procedures for start up, shut down, and normal operation;

(5) The control measures to be employed to assure compliance with Section 9.15 of this regulation; and

(6) A record of all actions required by the plan.

The plan shall be reviewed by the source owner or operator at least annually and updated to reflect any changes in good industrial practice.

(c) **Compliance Reports.** After June 30, 2009, owners or operators of air contaminant sources subject to Article 7 of

this regulation shall submit complete copies of all required compliance reports to this Agency in electronic format as an attachment to an e-mail message. The date the document is received by the Agency e-mail system shall be considered the submitted date of the report. Original written documents shall also be submitted for record purposes. Nothing in this section waives or modifies any requirements established under other applicable regulations.

WSR 17-01-100

PERMANENT RULES

PUGET SOUND CLEAN AIR AGENCY

[Filed December 16, 2016, 4:20 p.m., effective February 1, 2017]

Effective Date of Rule: February 1, 2017.

Purpose: The agency is proposing amendments to Regulation I, Section 14.02 to remove the name of a retiring staff person and to make the language regarding the identity of the public records officer at the agency not name specific.

The agency is proposing amendments to Regulation I, Section 14.08 to remove reference to a position no longer at the agency and to identify the agency executive director as the person at the agency who will consider a petition for internal administrative review a denial, or partial denial, of a public records request. The proposed amendments also expand the time period for the executive director to consider a petition from two to five business days, and modify a corresponding provision regarding judicial appeals with the same time frame (from two to five business days).

Citation of Existing Rules Affected by this Order: Amending Regulation I, Sections 14.02 and 14.08.

Statutory Authority for Adoption: Chapter 70.94 RCW.

Adopted under notice filed as WSR 16-22-086 on November 2, 2016.

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 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: December 15, 2016.

Craig Kenworthy
Executive Director

AMENDATORY SECTION

REGULATION I, SECTION 14.02 AGENCY DESCRIPTION, CONTACT INFORMATION, PUBLIC RECORDS OFFICER

(a) **Location of Agency's offices.** The Agency's offices are located at 1904 3rd Avenue, Suite 105, Seattle, WA 98101-3317.

(b) **Identification of and contact information for Agency's public records officer.** Any person wishing to request access to public records of the Agency, or seeking assistance in making such a request should contact the Agency((~~'s~~)) and request assistance from the Agency's ((~~public records officer~~)) Public Records Officer:

((~~Stella Nehen,~~)) Public Records Officer
1904 3rd Avenue, Suite 105
Seattle, WA 98101-3317
(206) 689-((~~4011~~)) 4030 (phone) or (800) 552-3565, Ext. ((~~4011~~)) 4030 (toll free phone)
(206) 343-7522 (facsimile)
recordsrequest@pscleanair.org

Information is also available on the Agency's website at: http://www.pscleanair.org.

(c) **Duties of public records officer.** The public records officer oversees compliance with the Act but another Agency staff member may process the request. Therefore, any reference to the public records officer in these rules may refer to the officer or a designee. The public records officer and the Agency will provide the "fullest assistance" to requesters as required by the Act; will ensure that public records are protected from damage or disorganization; and will prevent fulfilling public records requests from causing excessive interference with essential functions of the Agency.

AMENDATORY SECTION

REGULATION I, SECTION 14.08 REVIEW OF DENIALS OF PUBLIC RECORDS

(a) **Petition for internal administrative review of denial of access.** Any person who objects to the initial denial or partial denial of a public records request may petition in writing (including by e-mail) to the public records officer for a review of that decision. The petition shall include a copy of or reasonably identify the written statement by the public records officer denying the request.

(b) **Consideration of petition for review.** The public records officer shall promptly provide the petition and any other relevant information to the ((~~Director of Compliance and Legal~~)) Executive Director. The ((~~Director of Compliance and Legal~~)) Executive Director will immediately consider the petition; will either affirm or reverse the denial within ((~~two~~)) five business days following the Agency's receipt of the petition, or within such other time period to which the Agency and the petitioner mutually agree; and will promptly inform the petitioner of the decision made.

(c) **Judicial review.** Any person may obtain court review of denials of public records requests pursuant to RCW 42.56.550 at the conclusion of ((~~two~~)) five business days

after the initial denial regardless of any internal administrative appeal.

WSR 17-01-108
PERMANENT RULES
DEPARTMENT OF HEALTH
(Pharmacy Quality Assurance Commission)

[Filed December 19, 2016, 2:04 p.m., effective January 19, 2017]

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

Purpose: WAC 246-873-060 Emergency outpatient medication, RCW 70.41.480 enacted in 2015, created an inconsistency with WAC 246-873-060. The adopted rule will align with and implement the statute. Adopting the rule will improve public health by removing barriers and facilitating patient's access to appropriate medication therapy when pharmacy services are not available.

Citation of Existing Rules Affected by this Order: Amending WAC 246-873-060.

Statutory Authority for Adoption: RCW 18.64.005.

Other Authority: RCW 70.41.480.

Adopted under notice filed as WSR 16-20-074 on October 3, 2016.

Changes Other than Editing from Proposed to Adopted Version: No changes were applied to rule language beyond editing.

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 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: November 10, 2016.

Tim Lynch, PharmD, MS, Chair
Pharmacy Quality Assurance Commission

AMENDATORY SECTION (Amending WSR 92-12-035, filed 5/28/92, effective 6/28/92)

WAC 246-873-060 Provision of emergency ((~~outpatient~~)) department discharge medications when pharmacy services are unavailable. The ((~~director of pharmacy~~)) responsible manager, as defined in WAC 246-869-070, of a hospital ((~~shall~~)) or free standing emergency department may, in ((~~concert~~)) collaboration with the appropriate medical staff committee of the hospital ((~~medical staff~~)), develop policies and procedures((~~,~~)) in compliance with RCW 70.41.480 which ((~~shall~~)) must be implemented((~~,~~)) to provide ((~~emergency pharmaceuticals to outpatients~~)) discharge medications to patients released from hospital emergency departments during hours when ((~~normal~~)) community or outpatient hospital pharmacy services are not available. The delivery of a single dose for immediate administration to the patient ((~~shall not be~~)) is not subject to this regulation. Such policies shall allow the ((~~designated~~)) practitioner or registered ((~~nurse(s) to deliver~~)) nurse to distribute medications ((~~other than controlled substances~~)), pursuant to the policies and procedures ((~~which shall require that~~)), as specified in RCW 70.41.480 and the following:

(1) An order of a practitioner authorized to prescribe a drug is presented. Oral or electronically transmitted orders must be verified by the ((~~prescriber~~)) practitioner in writing within ((~~72~~)) seventy-two hours.

(2) ((~~The~~)) A department credentialed pharmacy technician or a licensed pharmacist shall prepackage the medication. Medication ((~~is~~)) prepackaged by a ((~~pharmacist and has a label~~)) department credentialed pharmacy technician must be checked by a licensed pharmacist. The prepackaged medication must contain any supplemental material provided and an affixed label that contains:

(a) Name, address, and telephone number of the hospital.

(b) The name of the drug (as required by chapter 246-899 WAC), strength and number of units.

(c) Cautionary information as required for patient safety and information on use is provided.

(d) An expiration date after which the patient should not use the medication.

(e) Directions for use.

(3) No more than a ((~~24-hour~~)) forty-eight hour supply is provided to the patient except when the pharmacist has informed appropriate hospital personnel that normal services will not be available within ((~~24~~)) forty-eight hours. A final quantity of medication supply shall not exceed ninety-six hours.

(4) The ((~~container is labeled by the designated~~)) practitioner or registered ((~~nurse(s)~~)) nurse will ensure the container is labeled before presenting to the patient and shows the following:

(a) Name of patient;

(b) ((~~Directions for use by the patient;~~)) Complete directions for use, which should include at a minimum the number of units distributed, frequency, and route of administration;

(c) Date of distribution;

(d) Identifying number (i.e., RX number or similar indicator);

(e) Name of prescribing practitioner;

(f) Initials of the practitioner or registered nurse((~~;~~)) who distributed the medication.

(5) A registered nurse or practitioner will distribute prepackaged emergency medications to patients only after a practitioner has counseled the patient on the medication.

(6) The original ((~~or a direct copy of the~~)) hard copy or electronically transmitted order by the ((~~prescriber~~)) practitioner is retained for verification by the pharmacist after completion by the ((~~designated~~)) practitioner or registered ((~~nurse(s)~~)) nurse and shall ((~~bear~~)) contain:

(a) Name and address of patient if not already listed in the medical record;

(b) Date of issuance;

(c) Units issued;

(d) Initials of ((~~designated~~)) practitioner or registered nurse.

(((~~(6)~~))) (7) The medications ((~~to be delivered as emergency pharmaceuticals shall be kept in a secure place~~)) distributed as discharge medications must be stored in compliance with the laws concerning security and access. They must be stored in or near the emergency ((~~room~~)) department in such a manner as to preclude the necessity for entry into the pharmacy when pharmacy services are not available.

(((~~(7) The procedures outlined in this rule may not be used for controlled substances except at the following rural hospitals which met all three of the rural access project criteria on May 17, 1989:~~

	~~Hospital~~	~~City~~
~~1.~~	~~Lake Chelan Community Hospital~~	~~Chelan~~
~~2.~~	~~St. Joseph's Hospital~~	~~Chewelah~~
~~3.~~	~~Whitman Community Hospital~~	~~Colfax~~
~~4.~~	~~Lincoln Hospital~~	~~Davenport~~
~~5.~~	~~Dayton General Hospital~~	~~Dayton~~
~~6.~~	~~Ocean Beach Hospital~~	~~Ilwaco~~
~~7.~~	~~Newport Community Hospital~~	~~Newport~~
~~8.~~	~~Jefferson General Hospital~~	~~Port Townsend~~
~~9.~~	~~Ritzville Memorial Hospital~~	~~Ritzville~~
~~10.~~	~~Willapa Harbor Hospital~~	~~South Bend~~))

WSR 17-01-119
PERMANENT RULES
DEPARTMENT OF LABOR AND INDUSTRIES

[Filed December 20, 2016, 9:37 a.m., effective January 20, 2017]

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

Purpose: The purpose of this rule making was to fix any outstanding issues that were on the department of labor and industries, division of occupational safety and health's (DOSH) change log for chapter 296-823 WAC, Occupational exposure to bloodborne pathogens; chapter 296-869 WAC, Elevating work platforms; chapter 296-870 WAC, Powered platforms; and chapter 296-874 WAC, Scaffolds.

WAC 296-823-16015 Provide the results of the source person's blood test to the exposed employee.

- Corrected the terms item 3 of the Note from "rules" to "statutes" for references to the Revised Code of Washington.
- Corrected the web site link to the direct readers to the Revised Code of Washington web page (http://app.leg.wa.gov/rcw) and not the Washington Administrative Code web page (http://www.leg.wa.gov/wac).

WAC 296-869-60040 Working from the platform.

- Added "self-propelled elevating work platforms" to the Note to clarify that guardrails are the primary means of fall protection for both manually propelled and self-propelled elevating work platforms.

WAC 296-870-099 Definitions.

- Updated bullets to letters throughout section.
- Added the definition for "Verified" that had been accidentally deleted when the requirements for powered platforms where [were] moved from chapter 296-24 WAC, Part Y-3 to chapter 296-870 WAC in 2006. Federal OSHA's rules also have the term "verified" defined under 29 C.F.R. 1910.66(d).

WAC 296-870-20010 Personnel requirements.

- Clarified number 2 in Reference by changing the term "using" to "operate and inspect" as follows - "Training requirements for persons who operate and inspect powered platforms are found in WAC 296-870-400."

WAC 296-870-50010 Fall protection.

- Corrected the term "that" to "than" in subsection (2)(a).

WAC 296-870-60005 Design.

- Added language that was left out of final version when the requirements for powered platforms where [were] moved from chapter 296-24 WAC, Part Y-3 to chapter 296-870 WAC in 2006. Language in new (5) now reads: "You must make sure the building design and installation provides:

  (a) Safe access to and egress from the equipment; and

  (b) Sufficient space to conduct maintenance of the equipment."

  Federal OSHA rule also has these requirements under 29 C.F.R. 1910.66 (e)(1)(iii).

WAC 296-870-70050 Suspended working platforms and manned platforms used on supported equipment.

- Updated (3) in Reference to include fixed ladders as follows - Ladders, portable and fixed, chapter 296-876 WAC.

WAC 296-874-40006 Make sure supported scaffolds are properly supported.

- Corrected the forklift and other powered industrial trucks chapter number in Reference to "chapter 296-863 WAC."

WAC 296-874-40030 Meet these requirements when using pole scaffolds.

- Corrected the conversation [conversion] of pounds to kilograms, replacing "222 kg" with "22.7 kg" in subsection (3)(c).

Citation of Existing Rules Affected by this Order: See Purpose above.

Statutory Authority for Adoption: RCW 49.17.010, 49.17.040, 49.17.050, 49.17.060.

Adopted under notice filed as WSR 16-20-084 on October 4, 2016.

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 Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 9, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 9, 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: December 20, 2016.

Joel Sacks
Director

AMENDATORY SECTION (Amending WSR 15-23-086, filed 11/17/15, effective 12/18/15)

WAC 296-823-16015 Provide the results of the source person's blood test to the exposed employee. (1) You must make sure the results of the source person's blood test are provided to the exposed employee, if possible.

(2) You must make sure the exposed employee is informed of applicable laws and regulations regarding disclosure of the identity and infection status of the source person.

Note: Law and regulations that currently apply are:
1. Chapter 70.02 RCW, Medical records—Health care information access and disclosure.
2. Chapter 70.24 RCW, Control and treatment of sexually transmitted diseases.
3. Both ((~~rules~~)) statutes can be found at ((~~http://www.leg.wa.gov/wac~~)) http://app.leg.wa.gov/rcw/ and click on Title 70 RCW to find these ((~~rules~~)) statutes.

AMENDATORY SECTION (Amending WSR 15-23-086, filed 11/17/15, effective 12/18/15)

WAC 296-869-60040 Working from the platform. (1) You must make sure persons working from the platform:

(a) Keep a firm footing on the platform; and

(b) Do not use guardrails, planks, ladders, or any other device to gain additional height or reach.

(2) You must make sure all persons on the platform of boom-supported elevating work platforms wear a full body harness and lanyard fixed to manufacturer provided and approved attachment points.

(3) You must make sure the rated capacities of the platform are not exceeded when transferring loads to the platform at any height.

Note: Guardrails are the primary means of fall protection for manually propelled elevating work platforms and self-propelled elevating work platforms.

AMENDATORY SECTION (Amending WSR 15-23-086, filed 11/17/15, effective 12/18/15)

WAC 296-870-099 Definitions.

Anemometer. An instrument for measuring wind velocity.

Angulated roping. A suspension method where the upper point of suspension is inboard from the attachments on the suspended unit, thus causing the suspended unit to bear against the face of the building.

Building face rollers. A specialized form of guide roller designed to ride on the face of the building wall to prevent the platform from abrading the face of the building and to assist in stabilizing the platform.

Building maintenance. Operations such as window cleaning, caulking, metal polishing, reglazing, and general maintenance on building surfaces.

Cable. A conductor, or group of conductors, enclosed in a weatherproof sheath, that may be used to:

((~~•~~)) (a) Supply electrical power or control current for equipment; or

((~~•~~)) (b) Provide voice communication circuits.

Carriage. A wheeled vehicle used for the horizontal movement and support of other equipment.

Certification. A written, signed, and dated statement confirming the performance of a requirement.

Combination cable. A cable having both steel structural members capable of supporting the platform, and copper or other electrical conductors insulated from each other and the structural members by nonconductive barriers.

Competent person. Someone who:

((~~•~~)) (a) Is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees; and

((~~•~~)) (b) Has the authority to take prompt corrective measures to eliminate them.

Continuous pressure. Operation of a control by requiring constant manual actuation for the control to function.

Control. A system or mechanism used to regulate or guide the operation of equipment.

Davit. A device, used singly or in pairs, for suspending a powered platform from work, storage and rigging locations on the building being serviced. Unlike outriggers, a davit reacts its operating load into a single roof socket or carriage attachment.

Design factor. The ratio of the rated strength of the suspension wire rope to the rated working load. It is calculated using the following formula:

$F = (S \times N)/W$

Where:

F = Design factor

S = Manufacturer's rated strength of one suspension rope

N = Number of suspension ropes under load

W = Rated working load on all ropes at any point of travel.

Equivalent. Alternative design, material or method to protect against a hazard. You have to demonstrate it provides an equal or greater degree of safety for employees than the method, material or design specified in the rule.

Existing installation. A permanent powered platform installation that:

((•)) (a) Was completed before July 23, 1990; and

((•)) (b) Has had no major modification done after July 23, 1990.

Ground rigged davit. A davit which cannot be used to raise a suspended working platform above the building face being serviced.

Ground rigging. A method of suspending a working platform starting from a safe surface to a point of suspension above the safe surface.

Guide button. A building face anchor designed to engage a guide track mounted on a platform.

Guide roller. A rotating cylindrical member that provides continuous engagement between the suspended or supported equipment and the building guides. It may operate separately or as part of a guide assembly.

Guide shoe. A device that is similar to a guide roller but is designed to provide a sliding contact between the shoe and the building guides.

Hoisting machine. A device intended to raise and lower a suspended or supported unit.

Installation. A powered platform installation consists of all the equipment and the parts of the building involved with using the powered platform for building maintenance.

Interlock. A device designed to ensure that operations or motions occur in proper sequence.

Intermittent stabilization. A method of platform stabilization in which the angulated suspension wire ropes are secured to regularly spaced building anchors.

Lanyard. A flexible line of rope, wire rope or strap which is used to secure the body harness to a deceleration device, lifeline or anchorage.

Lifeline. A component consisting of a flexible line that connects to an anchorage at one end to hang vertically (vertical lifeline), or that connects to anchorages at both ends to stretch horizontally (horizontal lifeline). It serves as a means for connecting other components of a personal fall arrest system to the anchorage.

Live load. The total static weight of workers, tools, parts, and supplies that the equipment is designed to support.

New installation. A permanent powered platform installation that was completed, or an existing installation that has had major modifications done, after July 23, 1990.

Operating control. A mechanism regulating or guiding the operation of equipment that makes sure the equipment operates in a specific mode.

Operating device. A push button, lever, or other manual device used to actuate a control.

Outrigger. A device, used singly or in pairs, for suspending a working platform from work, storage, and rigging locations on the building being serviced. Unlike davits, an outrigger reacts its operating moment load as at least two opposing vertical components acting into two or more distinct roof points and/or attachments.

Poured socket. A method of providing wire rope termination in which the ends of the rope are held in a tapered socket by means of poured spelter or resins.

Primary brake. A brake designed to be applied automatically whenever power to the prime mover is interrupted or discontinued.

Prime mover. The source of mechanical power for a machine.

Rated load. The manufacturer's specified maximum load.

Rated strength. The strength of wire rope, as designated by its manufacturer or vendor, based on standard testing procedures or acceptable engineering design practices.

Rated working load. The combined static weight of workers, materials, and suspended or supported equipment.

Registered professional engineer. A person who has been duly and currently registered and licensed by an authority within the United States or its territories to practice the profession of engineering.

Roof-powered platform. A powered platform having the raising and lowering mechanism located on the roof.

Roof-rigged davit. A davit used to raise the suspended working platform above the building face being serviced. This type of davit can also be used to raise a suspended working platform which has been ground rigged.

Rope. The equipment, such as wire rope, that is used to suspend a component of an equipment installation.

Safe surface. A horizontal surface that provides reasonable assurance that personnel occupying the surface will be protected from falls. This protection can be provided by location, a fall protection system, or other equivalent method.

Secondary brake. A brake designed to arrest the descent of the suspended or supported equipment in the event of an overspeed condition.

Stability factor. The ratio of the stabilizing moment to the overturning moment.

Stabilizer tie. A flexible line connecting the building anchor and the suspension wire rope supporting the platform.

Supported equipment. Building maintenance equipment that is held in or moved to its working position by means of attachment directly to the building or extensions of the building being maintained.

Suspended equipment. Building maintenance equipment that is suspended and raised or lowered to its working position by means of ropes or combination cables attached to some anchorage above the equipment.

Tie-in guides. The portion of a building that provides continuous positive engagement between the building and a suspended or supported unit during its vertical travel on the face of the building.

Transportable outriggers. Outriggers designed to be moved from one work location to another.

Type F powered platform. A powered platform that has both of the following characteristics:

((•)) (a) The working platform is suspended by at least four wire ropes and designed so that failure of any one wire rope will not substantially alter the normal position of the working platform; and

((•)) (b) Only one layer of hoisting rope is permitted on the winding drums.

Type T powered platform. A powered platform installation that has a working platform suspended by at least two wire ropes. The platform will not fall to the ground if a wire rope fails, but the working platform's normal position would be upset.

Verified. Accepted by design, evaluation, or inspection by a registered professional engineer.

Weatherproof. Constructed or protected so that exposure to the weather will not interfere with successful operation.

Winding drum hoist. A type of hoisting machine that accumulates the suspension wire rope on the hoisting drum.

Working platform. The suspended or supported equipment intended to provide access to the face of the building and manned by persons engaged in building maintenance.

Wrap. One complete turn of the suspension wire rope around the surface of a hoist drum.

AMENDATORY SECTION (Amending WSR 15-23-086, filed 11/17/15, effective 12/18/15)

WAC 296-870-20010 Personnel requirements. (1) You must prohibit employees from using the installation until the building owner has provided the required written certifications.

(2) You must make sure working platforms are operated only by persons proficient in the operation, safe use and inspection of the particular working platform.

References: 1. Building owner certification requirements are found in Building owner certifications, WAC 296-870-20005.
2. Training requirements for persons ((~~using~~)) who operate and inspect powered platforms are found in ((~~Existing installations,~~)) WAC 296-870-400.

AMENDATORY SECTION (Amending WSR 15-23-086, filed 11/17/15, effective 12/18/15)

WAC 296-870-50010 Fall protection. (1) You must make sure the fall protection system of both Type F and Type T powered platforms meet the requirements of Appendix C—Personal fall arrest system, WAC 296-24-88050, found in the General safety and health standards, chapter 296-24 WAC.

(2) You must make sure working platforms have permanent guardrails that meet all of the following requirements:

(a) Guardrails on the building side (front) of the platform have a top rail that is not less ((~~that~~)) than thirty-eight inches and not more than forty-five inches high.

(b) Guardrails on the other three sides have a top rail that is not less than forty-five inches high.

(c) Top rails are able to withstand a force of at least two hundred pounds.

(d) Guardrails have a midrail around the entire platform between the top rail and the toeboard.

Reference: Ramps and walkways that are four feet (1.2 m) or more above a lower level need to have a guardrail system. These requirements are found in Working Surfaces, Guarding Floors and Wall Openings, Ladders, Part J-1, in the General safety and health standards, chapter 296-24 WAC.

AMENDATORY SECTION (Amending WSR 15-23-086, filed 11/17/15, effective 12/18/15)

WAC 296-870-60005 Design. (1) You must make sure structural supports, tie-downs, tie-in guides, anchoring devices and any affected parts of the building included in the installation are designed by, or under the direction of, a registered professional engineer experienced in such design.

(2) You must make sure affected parts of the building are capable of sustaining all the loads imposed by the equipment.

(3) You must make sure exterior installations are capable of withstanding prevailing climatic conditions.

(4) You must make sure the affected parts of the building allow employees to use the equipment without being exposed to a hazardous condition.

(5) You must make sure the building design and installation provides:

(a) Safe access to and egress from the equipment; and

(b) Sufficient space to conduct maintenance of the equipment.

AMENDATORY SECTION (Amending WSR 15-23-086, filed 11/17/15, effective 12/18/15)

WAC 296-870-70050 Suspended working platforms and manned platforms used on supported equipment. (1) You must make sure the width of the working platform is:

(a) At least twenty-four inches (610 mm); and

(b) Allows a minimum of a twelve-inch (305 mm) wide passage at or past any obstruction on the platform.

(2) You must make sure the platform has slip-resistant flooring.

(3) You must make sure any opening in the platform is either:

(a) Small enough to prevent passage of life lines, cables, and other potential falling objects; or

(b) Protected by material under the opening which prevents the passage of life lines, cables, and potential falling objects.

(4) You must make sure means are provided to store any cable suspended from above the platform to keep it from accumulating on the floor of the platform.

(5) You must make sure means are provided to secure all tools, water tanks, and other accessories to keep them from moving or accumulating on the floor of the platform.

(6) You must make sure flammable liquids are not carried on the working platform.

(7) You must make sure a type B-C portable fire extinguisher is provided and securely attached on all working platforms.

(8) You must make sure operating controls for vertical travel of the platform are:

(a) Continuous-pressure type; and

(b) Located on the platform.

(9) You must make sure the maximum rated speed of the platform is limited to:

(a) Fifty feet per minute (0.3 ms) for single speed hoists; and

(b) Seventy-five feet per minute (0.4 ms) for multispeed hoists.

(10) You must make sure access to and egress from a working platform, except for those that land directly on a safe surface, is provided by stairs, ladders, platforms or runways.

(11) You must make sure access gates are self-closing and self-latching.

Reference: Requirements for stairs, ladders, platforms and runways are found in other chapters:
1. Working Surfaces, Guarding Floors and Wall Openings, Ladders, Part J-1 in the General safety and health standards, chapter 296-24 WAC.
2. Scaffolds, chapter 296-874 WAC.
3. Ladders, portable and fixed, chapter 296-876 WAC.

(12) You must make sure a suspended platform's suspension system restricts the platform inboard to outboard roll around its longitudinal axis to not more than fifteen degrees from the horizontal when moving the live load from the inboard to the outboard side of the platform.

Note: The roll limitation does not apply to supported equipment.

AMENDATORY SECTION (Amending WSR 15-23-086, filed 11/17/15, effective 12/18/15)

WAC 296-874-40006 Make sure supported scaffolds are properly supported. (1) You must make sure supported scaffold poles, legs, posts, frames, and uprights are:

(a) Plumb; and

(b) Braced to prevent swaying or displacement.

(2) You must make sure supported scaffold poles, legs, posts, frames, and uprights, bear on base plates that rest on:

(a) Mudsills; or

(b) Other firm foundations such as concrete or dry, compacted soil.

(3) You must make sure foundations are all of the following:

(a) Level;

(b) Sound;

(c) Rigid;

(d) Capable of supporting the loaded scaffold without settling or displacement.

Note: The condition of the foundation may change due to weather or other factors. If changes occur, the foundation needs to be evaluated by a competent person to make sure it will safely support the scaffold.

(4) You must make sure unstable objects are not used:

(a) To support scaffolds or platform units; or

(b) As working platforms.

(5) You must make sure mobile scaffolds meet these additional requirements:

(a) Wheel and caster stems are pinned or otherwise secured in the scaffold legs or adjustment screws;

(b) Wheels and casters are locked, or equivalent means are used, to prevent movement when the scaffold is being used;

(c) Screw jacks or other equivalent means are used if it's necessary to level the work platform.

(6) You must make sure front-end loaders and similar equipment used to support scaffold platforms have been specifically designed for such use by the manufacturer.

Reference: When forklifts or other powered industrial trucks are used for personnel lifting on support scaffold platforms, follow the requirements found in Forklifts and other powered industrial trucks, chapter ((~~296-868~~)) 296-863 WAC.

AMENDATORY SECTION (Amending WSR 15-23-086, filed 11/17/15, effective 12/18/15)

WAC 296-874-40030 Meet these requirements when using pole scaffolds. (1) You must make sure pole scaffolds over sixty feet high are:

(a) Designed by a registered professional engineer; and

(b) Constructed and loaded as specified in the design.

(2) You must leave existing platforms undisturbed until new bearers have been set in place and braced before moving the platforms to the new level.

(3) You must install bracing on double-pole scaffolds as follows:

(a) Crossbracing between the inner and outer sets of poles;

(b) Diagonal bracing in both directions across the entire outside face of the scaffold;

(c) Diagonal bracing in both directions across the entire inside face of scaffolds that are used to support loads equivalent to a uniformly distributed load of fifty pounds (((~~222~~)) 22.7 kg) or more per square foot (929 square cm).

(4) You must install diagonal bracing on single pole scaffolds in both directions across the entire outside face of the scaffold.

(5) You must make sure runners meet all of the following:

(a) Are installed on edge;

(b) Extend over a minimum of two poles;

(c) Are supported by bearing blocks securely attached to the poles.

(6) You must make sure bearers are:

(a) Installed on edge; and

(b) Extend a minimum of three inches (7.6 cm) over the outside edges of runners.

(7) You must make sure runners, bearers, and braces are not spliced between poles.

(8) You must make sure wood poles that are spliced together meet both of the following:

(a) The ends of the poles at the splice:

(i) Are square; and

(ii) The upper section rests squarely on the lower section.

(b) Wood splice plates are provided that meet all of the following:

(i) Are installed on at least two adjacent sides;

(ii) Extend at least two feet (0.6 m) on either side of the splice;

(iii) Overlap the abutted ends equally;

(iv) Have the same cross-sectional areas as the pole.

Note: Splice plates of material other than wood may be used if they are of equivalent strength.

WSR 17-01-124
PERMANENT RULES
DEPARTMENT OF FINANCIAL INSTITUTIONS
(Consumer Services Division)

[Filed December 20, 2016, 10:20 a.m., effective January 1, 2018]

Effective Date of Rule: January 1, 2018.

Purpose: The rules must be amended to implement changes to the state law. The rules will provide additional detail to industry to help them comply with the law.

Citation of Existing Rules Affected by this Order: Repealing WAC 208-620-325; and amending WAC 208-620-320.

Statutory Authority for Adoption: Chapter 43.320 RCW, RCW 31.04.165.

Other Authority: RCW 31.04.300.

Adopted under notice filed as WSR 16-19-070 on September 20, 2016.

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 2, Amended 1, Repealed 0.

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

Number of Sections Adopted on the Agency's Own Initiative: New 2, Amended 1, Repealed 1.

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

Number of Sections Adopted Using Negotiated Rule Making: New 2, Amended 1, Repealed 1; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: December 20, 2016.

Charles Clark, Director
Division of Consumer Services

AMENDATORY SECTION (Amending WSR 13-24-024, filed 11/22/13, effective 1/1/14)

WAC 208-620-320 What is the amount of the surety bond required for my consumer loan license? (1) Surety bond amounts are based on loan origination volume from prior years. If there is no prior year volume, the surety bond amount required at application is thirty thousand dollars. For purposes of this section, "loan origination volume" means a volume of closed loans.

(2) Nonresidential loan origination. If you originate nonresidential loans the surety bond amount is based on the annual dollar amount of loans you originate. See the following chart:

1.	Zero to twenty million in loans originated:	$30,000
2.	Twenty million to forty million:	$50,000
3.	Forty million to fifty million:	$100,000
4.	Fifty million and above:	$150,000

((~~(2)~~)) (3) Residential mortgage loan origination.

(a) Origination. If you only originate residential mortgage loans, the surety bond amount is based on the annual dollar amount of residential mortgage loans you originate. Use the chart in subsection ((~~(1)~~)) (2) of this section for the bond amount.

(b) Servicing. If you only service residential mortgage loans, ((~~your bond amount at application is thirty thousand dollars. Thereafter and subject to annual adjustment, your bond amount is based on the annual dollar amount of the residential mortgage loans serviced pursuant to the following schedule (see RCW 31.04.045(6)):~~

~~1.~~	~~Zero to fifty million in loan principal:~~	~~$30,000~~
~~2.~~	~~Fifty million and above:~~	~~$50,000~~))

a bond requirement may only arise if you elect a surety bond in lieu of the required net worth in WAC 208-620-322.

(c) Origination and servicing. If you originate and service residential mortgage loans, your surety bond amount will be based on your origination ((~~activity~~)) volumes. See the table in subsection (2) of this section.

(d) Brokering. If you only broker residential mortgage loans, your surety bond amount at application is thirty thousand dollars. There after subject to annual adjustment the surety bond amount will be based on the total annual principal amount of the loans brokered. See the table in subsection (2) of this section.

((~~(3)~~)) (4) Combined nonresidential and residential loan origination. If you originate both nonresidential and residential loans, your bond amount will be based on the combined origination volume.

(5) Third-party loan modification services. If you only offer third-party residential mortgage loan modification services, your bond amount is thirty thousand dollars.

NEW SECTION

WAC 208-620-321 What are the capital requirements for a nondepository residential mortgage loan servicer applicant and licensee servicing loans guaranteed by one or more government sponsored entity (GSE) and/or government corporation? (1)(a) An applicant or licensee operating as an approved servicer by one or more government sponsored or government corporation entities must maintain liquidity (to include operating reserves) and tangible net worth that meet the standards set by the entity. If approved by more than one entity, the applicant or licensee must meet the highest standard of the entities for which they are approved. Tangible net worth does not include money held in borrower escrow accounts.

Examples of government sponsored entities are Freddie Mac, Fannie Mae, the Federal Home Loan Bank System, and the Federal Agricultural Mortgage Corporation. Ginnie Mae is an example of a government corporation.

(b) Applicants or licensees with a combined portfolio will be subject to the standards in (a) of this subsection.

For example, if your portfolio contains loans from one or more GSE or government corporations and loans not insured by any GSE or government corporation, your capital require-

ments must meet the highest standard of the GSE or government corporations.

(c) An applicant or licensee with a portfolio of loans not subject to any government sponsored or government corporation entity must comply with WAC 208-620-322.

(2) The standards described in subsection (1)(a) of this section are set by the GSE and/or government corporation financial eligibility requirements for servicing residential mortgage loans.

NEW SECTION

WAC 208-620-322 What are the capital requirements for a nondepository residential mortgage loan servicer applicant and licensee servicing loans not guaranteed by a government sponsored entity (GSE) and/or government corporation? (1)(a) An applicant or licensee servicing residential mortgage loans not including any GSE or government corporation loans must maintain a minimum tangible net worth as follows:

0-199 loans	$100,000
200-299 loans	$200,000
300-399 loans	$300,000
400-499 loans	$400,000
500-599 loans	$500,000
600-699 loans	$600,000
700-799 loans	$700,000
800-899 loans	$800,000
900-999 loans	$900,000
1,000 plus loans	$1,000,000

(b) Alternatively the applicant or licensee may maintain a one million dollar surety bond in lieu of tangible net worth.

(c) In addition, the applicant or licensee must maintain liquidity (to include operating reserves) of .00035 times the unpaid principal balance of the portfolio.

(2) An applicant or licensee with twenty-five or fewer loans may apply to the director to waive or adjust one or more of these capital requirements. In considering such a request the director will consider whether the licensee has a positive net worth and adequate operating reserves. For purposes of this section, "operating reserves" are funds set aside in anticipation of future payments or obligations and are included in liquidity.

(3) Licensees must annually or more frequently report, as prescribed by the director, on liquidity (including operating reserves) and tangible net worth.

(4) Any licensee that does not maintain the standards in this section is subject to action by the director including that authority in RCW 31.04.165(4).

(5) The following definitions apply to this section:

(a) Tangible net worth means total equity minus receivables due from affiliated entities, minus goodwill and other intangible assets, and minus the carrying value of pledged assets net of the associated liabilities of the pledged assets.

(b) Liquidity means unrestricted cash and cash equivalents, investment grade securities that are available for sale or held for trade, and unused/available portion of committed servicing advance lines.

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 208-620-325 What will my bond amount be in the first year of licensing?

WSR 17-01-125

PERMANENT RULES

SUPERINTENDENT OF PUBLIC INSTRUCTION

[Filed December 20, 2016, 11:00 a.m., effective January 20, 2017]

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

Purpose: This permanent rule updates chapter 392-700 WAC for the purpose of clarifying student eligibility, program requirements, and reporting processes for state-funded dropout reengagement programs. Specifically, the rule removes prior language that prohibited students who have been expelled or long-term suspended from being counted for state funding, it provided an additional month of state funding for programs operating during the fall quarter, and it makes additional housekeeping changes.

Citation of Existing Rules Affected by this Order: Amending chapter 392-700 WAC.

Statutory Authority for Adoption: RCW 28A.175.010, 28A.175.115.

Adopted under notice filed as WSR 16-16-098 on August 1, 2016.

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 12, Amended 0, Repealed 0.

Number of Sections Adopted at 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 20, 2016.

Randy Dorn
Superintendent of
Public Instruction

AMENDATORY SECTION (Amending WSR 15-15-115, filed 7/16/15, effective 8/16/15)

WAC 392-700-015 Definitions. The following definitions in this section apply throughout this chapter:

(1) **"Agency"** means an educational service district, nonprofit community-based organization, or public entity other than a college.

(2) **"Annual average full-time equivalent (AAFTE)"** means the total monthly full-time equivalent (FTE) reported for each enrolled student in a school year divided by ten.

(3) **"Attendance period requirement"** is defined as, at minimum, two hours of face-to-face interaction with a designated program staff for the purpose of instruction, academic counseling, career counseling, or case management contact aggregated over the prior month.

(4) **"CEDARS"** refers to comprehensive educational data and research system, the statewide longitudinal data system of educational data for K-12 student information.

(5) **"College"** means college or technical college pursuant to chapters 28B.20 through 28B.50 RCW.

(6) **"College level class"** is a class provided by a college that is one hundred level or above.

(7) **"Consortium"** means a regional group of organizations that ((~~will~~)) consist of districts, tribal compact schools, charter schools and agencies and/or colleges who agree to work together to create and operate a program that will serve students from multiple districts, tribal compact schools, and charter schools and reduce the administrative burden ((~~on districts~~)).

(8) **"Consortium agreement"** means the agreement that is signed by the authorized consortium lead and all district, tribal compact school, and charter school superintendents or their authorized officials which are part of the consortium and agree to refer eligible students to the consortium's program. This agreement will clearly outline the responsibilities of the consortium lead and those of the referring districts, tribal compact schools, and charter schools.

(9) **"Consortium lead"** means the lead organization in a consortium that will assume the responsibilities outlined in WAC 392-700-042(3).

(10) **"Count day"** is the instructional day that is used to claim a program's enrollment for state funding pursuant to WAC 392-121-033. For September, the count day is the fourth instructional day. For the remaining months, the count day is the first instructional day.

(11) **"Credential"** is identified as one of the following:

(a) ((~~High school equivalency certificate;~~

~~(b)~~)) High school diploma; (((~~(c) College certificate received after completion of a college program requiring at least forty hours of instruction;~~

~~(d) College degree; or~~

~~(e) Industry recognized certificate of completion of training or licensing received after completion of a program requiring at least forty hours of instruction.~~)) or

(b) Associate degree.

(12) **"Enrolled student"** is an eligible student whose enrollment and attendance meets the criteria outlined in WAC 392-700-035 and 392-700-160, and is reported as an FTE for state funding. An enrolled student can be further defined as one of the following:

(a) **New student** is an enrolled student who is being claimed for state funding for the first time by the program.

(b) **Continuing student** is an enrolled student who has continuously been enrolled in the program and claimed for state funding on at least one count day.

(c) **Returning student** is an enrolled student who has returned to the program after not receiving program services for a period of at least one count day and not more than ten count days.

(d) **Reenrolling student** is an enrolled student who has reenrolled in the program after not receiving program services for a period of eleven count days or more.

(13) **"ERDC"** refers to education research and data center, which conducts analyses of early learning, K-12, and higher education programs and education issues across the P-20 system that collaborates with legislative evaluation and accountability program and other statutory partner agencies.

(14) **"Full-time equivalent (FTE)"** is the measurement of enrollment that an enrolled student can be claimed on a monthly basis with the maximum being 1.0 FTE per month for each student enrolled in a program.

(15) **"Indicator of academic progress"** means a standard academic benchmark that demonstrates academic performance which is attained by a reengagement student. These indicators will be tracked and reported by the program and district, tribal compact school, or charter school for each student and for programs as a whole using definitions and procedures outlined by OSPI. Indicators of academic progress will be reported when a student does one of the following:

(a) Earns at minimum a 0.25 high school ((~~or~~)) credit;

(b) Earns at minimum a whole college credit;

(c) Receives a college certificate after completion of a college program requiring at least forty hours of instruction;

(d) Receives an industry recognized certificate of completion of training or licensing received after completion of a program requiring at least forty hours of instruction;

(e) Passes one or more tests or benchmarks that would satisfy the state board of education's graduation requirements as provided in chapter 180-51 WAC;

(((~~c~~))) (f) Passes one or more high school equivalency certificate measures (each measure may only be claimed once per enrolled student), or other state assessment;

(((~~d~~))) (g) Makes a significant gain in a core academic subject based on the assessment tool's determination of significant gain (may be claimed multiple times in a year per enrolled student);

(((~~e~~))) (h) Successfully completes a grade level curriculum in a core academic subject that does not earn high school or college credit;

(((~~f~~))) (i) Successfully completes ((~~approved~~)) college readiness course work with documentation of competency attainment;

(((~~g~~))) (j) Successfully completes job search and job retention course work with documentation of competency attainment;

(((~~h~~))) (k) Successfully completes a paid or unpaid cooperative work based learning experience of at least forty-five hours. This experience must meet the requirements of WAC 392-410-315(2);

((~~(i)~~)) (l) Enrolls in a college level class for the first time (limited to be claimed once per enrolled student);

((~~(j)~~)) (m) Successfully completes an English as a second language (ESL) class;

((~~(k)~~)) (n) Successfully completes an adult basic education (ABE) class; or

((~~(l)~~)) (o) Successfully completes a series of short-term industry recognized certificates equaling at least forty hours.

(16) **"Instructional staff"** means the following:

(a) For programs operated by a district, tribal compact school, charter school, or agency, the instructional staff is a certificated instructional staff pursuant to WAC 392-121-205; and

(b) For programs operated by a college, the instructional staff is one who is employed or appointed by the college whose required credentials are established by the college.

(17) **"Letter of intent"** means the document signed by the district, tribal compact school, charter school, college or lead agency authorized official that specifically outlines to OSPI the required elements of a program that the district, tribal compact school, charter school, college, or agency agree to implement.

(18) **"Noninstructional staff"** is any person employed in a position that is not an instructional staff as defined under subsection ((~~(13)~~)) (16) of this section.

(19) **"OSPI"** means the office of superintendent of public instruction.

(20) **"Program"** means a statewide dropout reengagement program approved by OSPI, pursuant to RCW 28A.175.105.

(21) **"School year"** is the twelve-month period that begins September 1st and ends August 31st during which instruction is provided and FTE is reported.

(22) **"Scope of work"** means the document signed by district, tribal compact school, or charter school superintendent or their authorized official and the authorized official of a program to be included in a contracted services agreement when the program is operated by a provider on behalf of the district, tribal compact school, or charter school, and will receive compensation in accordance with WAC 392-700-165. The scope of work will specifically outline all the required elements of a program that the provider and the district, tribal compact school, or charter school agree to implement.

(23) **"Resident district"** means the district where the student resides or a district that has accepted full responsibility for a student who lives outside of the district through the choice transfer process pursuant to RCW 28A.225.200 through 28A.225.240. For students enrolled in a tribal compact school or charter school, the tribal compact school or charter school is the student's resident district.

(24) **"Weekly status check"** means individual communication from a designated program staff to a student. Weekly status check:

(a) Can be accomplished in person or through the use of telephone, e-mail, instant messaging, interactive video communication, or other means of digital communication;

(b) Must be for the purposes of instruction, academic counseling, career counseling, or case management;

(c) Must be documented; and

(d) Must occur at least once every week that has at least three days of instruction.

(25) **"Tribal compact school"** means a school that is the subject of a state-tribal education compact operated according to the terms of its compact executed in accordance with RCW 28A.715.010.

(26) **"Charter school"** means a public school that is established in accordance with chapter 28A.710 RCW, governed by a charter school board, and operated according to the terms of a charter contract executed under chapter 28A.710 RCW.

AMENDATORY SECTION (Amending WSR 15-15-115, filed 7/16/15, effective 8/16/15)

WAC 392-700-035 Student eligibility. (1) A student is eligible to enroll in a program when they meet the following criteria:

(a) Under twenty-one years of age((~~, but at least sixteen years of age, as of~~)) at the beginning of the school year but whose sixteenth birthday occurs on or before September 1st;

(b) Has not yet met the high school graduation requirements of either the district, tribal compact school, charter school, or the college under RCW 28B.50.535; and

(c) At the time the student enrolls, is significantly behind in credits based on the student's cohort graduation date. The cohort graduation date is established as the end of the fourth school year after a student first enrolls in the ninth grade.

(i) A student who is more than twenty-four months from their cohort graduation date and has earned less than sixty-five percent of the high school credits expected to be earned by their cohort. A cohort is the group of ((~~district~~)) students that enter the ninth grade in the same school year;

(ii) A student who is between twelve and twenty-four months from their cohort graduation date and has earned less than seventy percent of the high school credits expected to be earned by their cohort;

(iii) A student who is less than twelve months from their cohort graduation date or who has passed their cohort graduation date by less than twelve months and has earned less than seventy-five percent of the high school credits expected to be earned by their cohort;

(iv) A student who is passed their cohort graduation date by twelve months or more and has not met their district, tribal compact school, or charter school graduation requirements; or

(v) A student who has never attended the ninth grade and has earned zero high school credits.

(d) If determined not to be credit deficient as outlined in subsection (1)(c) of this section, has been recommended for enrollment by case managers from the department of social and health services, the juvenile justice system, a district, tribal compact school, or charter school designated school personnel, or staff from community agencies which provide educational advocacy services;

(e) Are not currently enrolled in any high school ((~~or other educational program~~)) classes that receive state basic education funding, excluding an approved skill center program, a Jobs for Washington's Graduates program, or running

start program((~~, receiving state basic education funding~~)); ((~~and~~))

(f) ((~~Released from their district of residence and accepted by the serving district, if the program is operated by a different district.~~)) Students who are claimed for state funding by a district, tribal compact school, or charter school outside the district they live in, must be released by either a choice transfer or interdistrict agreement. When a choice transfer is in place, the student's resident district as defined in WAC 392-700-015(23) becomes the district operating the program.

(2) Once determined eligible for enrolling in the program, a student will retain eligibility, regardless of breaks in enrollment, until the student does one of the following:

(a) Earns a high school diploma;

(b) Earns an associate degree; or

(c) Becomes ineligible because of age which occurs when a student is twenty-one years of age as of September 1st.

(3) A student's eligibility does not guarantee enrollment or continued enrollment in specific programs if the program determines that the student does not meet the program's enrollment criteria or if, after enrollment, a student's academic performance or conduct does not meet established program guidelines.

AMENDATORY SECTION (Amending WSR 15-15-115, filed 7/16/15, effective 8/16/15)

WAC 392-700-042 Program operating agreements and OSPI approval. (1) Districts, tribal compact schools, charter schools, agencies, and colleges are encouraged to work together to design programs and collaborations that will best serve students. Many models of operation are authorized as part of the statewide dropout reengagement system.

(((~~(a) In each of these models, the necessary agreement(s) will address whether the program will only serve students who are residents of the district or whether the program will also serve students who are not residents of the district but who petition for release from the resident district, pursuant to RCW 28A.225.220 through 28A.225.230, in order to attend the program. If the resident district does not participate in an OSPI approved program, another district, agency, or college may petition a district other than the resident district to enroll the eligible students under RCW 28A.225.220 through 28A.225.230 with the petitioning entity to provide a program for the eligible students.~~

~~(b)~~)) Regardless of the model of operation, the state funding is allocated to the district, tribal compact school, charter school, or direct funded technical college that is reporting the student's enrollment for the program.

(2) A district, tribal compact school, or charter school may enter into one of the following models of operations through the OSPI approval process:

(a) Directly operate a program where the services are provided by the district, tribal compact school, or charter school resources; ((~~or~~))

(b) Enter into a partnership with an agency or college that will provide the services through a defined scope of work or contracted services agreement; or

(c) Become part of a consortium with other districts, tribal compact schools, charter schools, colleges, and/or agencies by executing a consortium agreement that is signed by all members ((~~districts~~)).

(3) The purpose of the consortium will be to create and operate a program that will serve students enrolled in multiple districts including tribal compact schools and charter schools, and reduce the administrative burden ((~~on districts~~)). If such a regional reengagement consortium is implemented, a consortium lead agency will be identified and assume the following responsibilities:

(a) Take the lead in organizing and managing the regional consortium;

(b) Provide information and technical assistance to districts, tribal compact schools, and charter schools interested in participating in the consortium and providing the opportunity for their students ((~~from their district~~)) to enroll;

(c) ((~~Advance~~)) Develop scopes of work with agencies and colleges to operate the programs;

(d) Provide oversight and technical assistance to the program to align with all requirements of this chapter and the delivery of quality programming;

(e) Assist the program with the preparation of required reports, enrollment data, and course records needed ((~~by each district~~)) to enroll students, award credit, and report FTE and performance to OSPI;

(f) Facilitate data entry of required student data into each ((~~district's~~)) district, tribal compact school, or charter school's statewide student information system related to enrollment; and

(g) Work with the districts, tribal compact schools, and charter schools to facilitate the provision of special education ((~~and~~)), accommodations under Section 504 of the Rehabilitation Act of 1973, and transitional bilingual instruction pursuant to WAC 392-700-147.

(4) A technical college receiving direct funding and authorized to enroll students under WAC 392-121-187 may directly operate a program and serve students referred from multiple districts. The technical college will assume the responsibilities of operating the program as described in this chapter and will meet all responsibilities outlined in WAC 392-121-187.

(5) All programs must be approved by OSPI as follows:

(a) If the program is run by a district, tribal compact school, charter school, agency or college, the program must be approved.

(b) If the program is run by a consortium, both the program and participating districts, tribal compact school, or charter school must be approved.

(c) Any program which meets the definition of an online school program in RCW 28A.250.010 must be approved as an online provider, pursuant to RCW 28A.250.060(2).

(6) Dependent on the model of operations, OSPI will specify the necessary documentation required for approval.

(7) OSPI will provide model documents that can be modified to include ((~~district/college/agency~~)) district-, tribal compact school-, charter school-, college-, or agency-specific language and will indicate which elements of these standard documents must be submitted to OSPI for review and approval.

(8) Upon initial approval, OSPI will specify the duration of the approval and indicate the necessary criteria to obtain reapproval.

(9) After receiving a notice of approval, OSPI will assign a code to be used when reporting students enrolled in the program.

(10) This chapter does not affect the authority of districts, tribal compact schools, and charter schools under RCW 28A.150.305 ((~~and~~)), 28A.320.035, or any other provision of law to contract for educational services other than reengagement programs as defined by WAC 392-700-015(20).

AMENDATORY SECTION (Amending WSR 15-15-115, filed 7/16/15, effective 8/16/15)

WAC 392-700-065 Instruction. (1) All program instruction will meet the following criteria:

(a) Instruction will be designed to help students acquire high school credits, acquire at least high school level skills, and be academically prepared for success in college and/or work.

(b) Instruction will be provided in accordance with the skills level and learning needs of individual students and not the student's chronological age or associated grade level. Therefore:

(i) Instruction that is at the ninth grade level or higher shall generate credits that can be applied to a high school diploma; and

(ii) Instruction that is below the ninth grade level shall not generate high school credits but will be counted as part of the program's instructional programming for the purposes of calculating FTE and will be designed to prepare students for course work that is at the ninth grade level or higher.

(c) Instruction in which each student is enrolled will not be limited to only those courses or subject areas in which they are deficient in high school credits.

(d) The program will administer standardized tests to new students, as defined in WAC 392-700-015 (12)(a), and reenrolling student, as defined in WAC 392-700-015 (12)(d), within one month of enrollment or secure test results from no more than six months prior to enrollment in order to determine a student's initial math and reading level upon entering the program.

(e) The program will provide all instruction, tuition, and required academic skills assessments at no cost to the students, but may collect mandatory fees as established by each program.

(i) Consumable supplies, textbooks, and other materials that are retained by the student do not constitute tuition or a fee.

(ii) Programs are encouraged to offer a waiver or scholarship process.

(2) Instruction for students enrolled in programs operated by a district, tribal compact school, charter school, or agency will meet the following criteria:

(a) Instruction must include:

(i) Academic skills instruction and high school equivalency certificate preparation course work with curriculum and instruction appropriate to each student's skills levels and academic goals; and

(ii) College readiness and work readiness preparation course work.

(b) Instruction may include:

(i) Competency based vocational training;

(ii) College preparation math or writing instruction;

(iii) Subject specific high school credit recovery instruction;

(iv) English as a second language instruction (ESL); and

(v) Other course work approved by the district, tribal compact school, or charter school including cooperative work experience.

(c) Instruction will be scheduled so that enrolled students have the opportunity to attend and work with instructional staff during the hours of the program's standard instructional day.

(d) The program will maintain an instructor to student ratio as follows:

(i) The scheduled teaching hours of an instructional staff will equal or exceed the hours of the program's standard instructional day plus one additional hour per every five teaching hours for planning, curriculum development, recordkeeping, and required coordination of services with case management staff.

(ii) For any one instructional session, the program will assign instructional staff as needed to maintain an instructional staff to student ratio that does not exceed 1:25.

(iii) For programs that use noninstructional staff as part of the calculated instructional staff to student ratio, the following conditions must be met:

(A) Noninstructional staff may not be a replacement for the instructional staff and must work under the guidance and direct supervision of the instructional staff; and

(B) The ratio of total instructional and noninstructional staff to students may not exceed 2:50.

(3) Instruction for students enrolled in programs operated by a college will meet the following criteria:

(a) Instruction will be provided through courses approved by the college, identifiable by course title, course number, quarter, number of credits, and, for vocational course, the classification of instructional program (CIP) code number assigned by OSPI to the approved career and technical education (CTE) course.

(b) The following instruction will be offered to all students, as appropriate for their goals, skills levels, and completion of prerequisites:

(i) Basic skills remediation courses and high school equivalency certificate preparation courses;

(ii) Courses that will lead to a postsecondary degree or certificate;

(iii) Course work that will lead to a high school diploma; and

(iv) College and work readiness preparation course work.

(c) The program will maintain an instructor to student ratio as follows:

(i) Instructor to student ratio for any course open to both program students and nonprogram students will be determined by the college; and

(ii) Instructor to student ratio for classes designed exclusively for program students will not exceed 1:35.

AMENDATORY SECTION (Amending WSR 15-15-115, filed 7/16/15, effective 8/16/15)

WAC 392-700-137 Award of credit. (1) For programs operated by districts, tribal compact schools, charter schools, and agencies, high school credit will be awarded for all course work in which students are enrolled, including high school equivalency certificate preparation, in accordance with the following:

(a) Determination of credit will take place on a quarterly basis with quarters defined as follows:

(i) September through November;

(ii) December through February;

(iii) March through May; and

(iv) June through August.

(b) Credit will be awarded at the end of each quarter, in accordance with the following guidelines, if the student has been enrolled for at least one month of the quarter:

(i) A maximum of 0.5 high school elective credits will be awarded when a student passes one or more standardized high school equivalency certificate pretests during the quarter and the instructional staff has assessed student learning and determined that a course of study has been successfully completed.

(ii) A 0.5 high school elective credit will be awarded when a student makes a statistically significant standardized assessment post-test gain in a specific subject area during the quarter and the following conditions are met:

(A) The student's standardized skills assessment score at the beginning of the quarter demonstrated high school level skills; and

(B) The instructional staff has assessed student learning and determined that a course of study has been successfully completed. A maximum of 1.0 credit may be awarded for such subject gains in a quarter.

(iii) A minimum of 0.25 high school elective credits ((~~ranging from at least 0.1 credits to no more than 0.25 credits~~)) will be awarded for completion of a work readiness or college readiness curriculum in which the student has demonstrated mastery of specific competencies. ((~~The district and the agency will determine the amount of credit to be awarded for each course of study based on the competencies to be attained.~~))

(iv) For students taking part in district-, tribal compact school-, or charter school-approved subject-specific credit recovery course work, the amount and type of credit to be awarded will be defined by the district, tribal compact school, or charter school.

(v) The district, tribal compact school, or charter school must award credit for other course work provided by the agency with amount of credit to be awarded determined in advance, based on the agency's instructional staff's recommendation and on a district, tribal compact school, or charter school review of the curriculum and intended learning outcomes. Credit will only be awarded when:

(A) The student's standardized skills assessment score at the start of the quarter demonstrates high school level skills; and

(B) The instructional staff has assessed student learning and determined that the course of study has been successfully completed.

(2) For programs operated by colleges, high school credit will be awarded for course work in which students are enrolled, in accordance with the following:

(a) The district, tribal compact school, or charter school, and the college will determine whether the high school diploma will be awarded by the district, tribal compact school, or charter school or by the college as part of the college's high school completion program.

(b) If the college is awarding the diploma:

(i) 1.0 high school credit will be awarded for successful completion of every five quarter or three semester hours of college course work at or above the one hundred level. The college will determine the type of credit;

(ii) 1.0 high school credit will be awarded for successful completion of every five quarter or three semester hours of below one hundred level course work at a college ((~~but has been determined by the college to be at the ninth grade level or higher~~)). The college will determine the type of credit((~~. College based high school equivalency certificate and adult basic education (ABE) classes will not be included in this category~~)); and

(iii) 0.5 ((~~elective~~)) subject-specific credits will be awarded for successful completion of every five quarter or three semester hours of high school equivalency certificate course work((~~; and~~

~~(iv) ABE courses or other college courses that have been determined to be below the ninth grade level that does not generate high school credit will be counted as part of the program's instructional programming for the purposes of calculating FTE~~)) which is aligned to the common core standards.

(c) If the district, tribal compact school, or charter school is awarding the diploma:

(i) 1.0 high school credit will be awarded for successful completion of every five quarter or three semester hours of below one hundred level course work at a college. The district, tribal compact school, or charter school will determine the type of credit based on the articulation agreement between the college and district, tribal compact school, or charter school;

(ii) 0.5 or 1.0 high school credit will be awarded for successful completion of every five quarter or three semester hours of below one hundred level course work at a college ((~~but has been determined by the district to be at the ninth grade level or higher~~)). The district, tribal compact school, or charter school will determine the type and amount of credit for each class((~~. College based high school equivalency certificate and ABE classes will not be included in this category.~~)) based on the articulation agreement between the college and district, tribal compact school, or charter school; and

(iii) 0.5 ((~~elective~~)) subject-specific credits will be awarded for successful completion of every five quarter or three semester hours of high school equivalency certificate course work((~~; and~~

~~(iv) ABE courses or other college courses that have been determined to be below the ninth grade level will not generate high school credit but the college credits associated with these courses will be included in the total credit count used to calculate and report student FTE~~)).

(3) The district, tribal compact school, or charter school is responsible for reporting all high school credits earned by students in accordance with OSPI regulations. College transcripts and other student records requested by the district, tribal compact school, or charter school will be provided by the college or agency as needed to facilitate this process.

(4) The district, tribal compact school, or charter school will ensure that the process for awarding high school credits under this scope of work is implemented as part of ((~~the district's~~)) its policy regarding award of credits per WAC 180-51-050 (5) and (6).

AMENDATORY SECTION (Amending WSR 13-13-005, filed 6/6/13, effective 7/7/13)

WAC 392-700-147 Provision of special education ((~~and~~)), Section 504 of the Rehabilitation Act of 1973 accommodations, and transitional bilingual instructional program. (1) The resident district is responsible for the provision of special education services ((~~to any enrolled reengagement students who qualify for special education in accordance with all~~)) in a properly formulated individualized education program (IEP) for students aged sixteen and older who have been determined eligible for special educational services, and are otherwise qualified for participation in the program. The provision of special education services by the resident district must be consistent with state and federal law ((~~and~~)) pursuant to WAC 392-172A-01190, and includes the identification, evaluation, education, and placement of eligible students consistent with chapter 392-172A WAC.

(2) The resident district is responsible for the provision of accommodations in a properly formulated 504 plan for students who have been determined eligible for services related to Section 504 of the Rehabilitation Act of 1973 ((~~accommodations will be provided to all eligible students served by the agency or college in accordance with all applicable state and federal law~~)), and are otherwise qualified for participation in the program.

(3) The resident district is responsible for the provision of services to students who are eligible for transitional bilingual services, and are otherwise qualified for participation in the program.

AMENDATORY SECTION (Amending WSR 15-15-115, filed 7/16/15, effective 8/16/15)

WAC 392-700-152 Statewide student assessment. (1) All reengagement programs will ensure that students participate in the statewide assessment of student learning to fulfill the minimum requirements for high school graduation and comply with state and federal school ((~~and district~~)) accountability requirements.

(2) A district, tribal compact school, charter school, direct funded technical college, or educational service district that has been assigned a school code by OSPI is required to administer the required statewide assessments for each enrolled student and cohort as defined by WAC 392-700-035 (1)(c).

(3) The program staff is not required to be direct-test administrators ((~~(students can access the tests through the reporting district)~~)) but may act in this capacity with the approval of the ((~~reporting~~)) district, tribal compact school, charter school, direct funded technical college, or educational service district that has been assigned a school code, which will be responsible for the appropriate training of agency or college staff((~~. The reporting district will submit the proposed test site information to OSPI if a program is operating in adult jail, adult institution, hospital care, home care, library, group home, or church~~)).

(((~~(3)~~)) (4) Program students will be included when calculating school and state statistics in relation to the statewide assessments.

AMENDATORY SECTION (Amending WSR 15-15-115, filed 7/16/15, effective 8/16/15)

WAC 392-700-155 Annual reporting calendar. (1) For programs operated by ((~~district and~~)) districts, tribal compact schools, charter schools or agencies and for below one hundred level classes offered in a college-operated program, the following requirements will be met in relation to the school calendar:

(a) A school year begins September 1st and ends August 31st.

(b) The program will provide the reporting district, tribal compact school, or charter school a calendar of the school year prior to the beginning of the program's start date for that school year.

(c) The school year calendar must meet the following criteria:

(i) The specific planned days of instruction will be identified; and

(ii) There must be a minimum of ten instructional months.

(d) The number of hours of instruction as defined in WAC 392-700-065 must meet the following criteria:

(i) The calculation for standard instructional day may not exceed six hours per day even when instruction is provided for more than six hours per day; and

(ii) The standard instructional day may not be less than two hours per day.

(e) The total planned hours of instruction for the school year:

(i) Is the sum of the instructional hours for all instructional months of the school year; and

(ii) Must have at a minimum of nine hundred planned hours of instruction for the school year.

(2) For programs operated by colleges and for college level classes, the school year calendar shall meet the following criteria:

(a) The specific planned days of instruction will be identified; and

(b) There must be a minimum of ten instructional months.

AMENDATORY SECTION (Amending WSR 15-15-115, filed 7/16/15, effective 8/16/15)

WAC 392-700-160 Reporting of student enrollment. (1) For all programs, the following will apply when reporting student enrollment for each monthly count day:

(a) Met all eligibility criteria pursuant to WAC 392-700-035;

(b) Been accepted for enrollment by the reporting district, tribal compact school, charter school, or the direct-funded technical college;

(c) Enrolled in an approved program pursuant to WAC 392-700-042;

(d) For continuing students, met the attendance period requirement pursuant to WAC 392-700-015(3);

(e) For continuing students, met the weekly status check requirement pursuant to WAC 392-700-015((~~(23)~~)) (24);

(f) Has not withdrawn or been dropped ((~~prior to~~)) from the program on or before the monthly count day;

(g) Is not enrolled in course work that has been reported by a college for postsecondary funding;

(h) Is not eligible to be claimed by a state institution pursuant to WAC 392-122-221;

(i) Is not enrolled in a high school ((~~program~~)) class, including alternative learning experience, college in the high school, or another reengagement program, excluding Jobs for Washington's Graduates, special education and/or transitional bilingual instructional program;

(j) If concurrently enrolled in a special education, transitional bilingual instruction, skills center ((~~program~~)), or running start program, does not exceed the FTE limitation pursuant to WAC 392-121-136; and

(k) ((~~Is not suspended pursuant to WAC 392-400-260 or expelled pursuant to WAC 392-400-275 or 392-400-295 by the program; and~~

~~(l)~~)) A student's enrollment in the program is limited to the following:

(i) May not exceed 1.0 FTE in any month (including nonvocational and vocational FTE). If concurrently enrolled in Jobs for Washington's Graduates, special education or transitional bilingual instructional programs, the combined FTE does not exceed 1.0 FTE in any month.

(ii) May not exceed 1.00 AAFTE in any school year as defined in WAC 392-700-015(2). If concurrently enrolled in Jobs for Washington's Graduates, special education or transitional bilingual instructional programs, the combined AAFTE does not exceed 1.0 AAFTE for the school year.

(2) For all below one hundred level classes, the student enrollment is dependent upon attaining satisfactory progress.

(a) Satisfactory progress is defined as the documented attainment ((~~of at least one credential identified in WAC 392-700-015(11) and/or~~)) of at least one indicator of academic progress identified in WAC 392-700-015(15).

(b) ((~~A student who after three months of being claimed for state funding has not attained a credential or~~)) Continuing students and returning students who, after being claimed for state funding for three count days excluding the September count day, have not earned an indicator of academic progress cannot be claimed for state funding until ((~~a credential or~~)) an indicator of academic progress is earned.

(i) During this reporting funding exclusion period, the program may permit the student to continue to attend;

(ii) When the student achieves ((~~a credential or~~)) an indicator of academic progress, the student may be claimed for state funding ((~~for~~)) on the following ((~~month~~)) count day; and

(iii) Rules governing the calculation of the three ((~~months~~)) count day period are:

(A) The September count day is excluded from the three count day period for the indicator of academic attainment. Students whose enrollment spans over the September count day have an additional month to earn an indicator of academic progress.

(B) The three ((~~months~~)) count days may occur in two different school years, if the student is enrolled in consecutive school years; and

((~~(B)~~)) (C) The three ((~~months~~)) count days are not limited to consecutive months, if there is a break in the student being claimed for state funding.

(3) For below one hundred level classes, student enrollment will be reported as ((~~follows:~~

~~(a) When the program's total planned hours of instruction pursuant to WAC 392-700-155 for the school year equals or exceeds nine hundred hours:~~

~~(i) The program is considered a full-time program; and~~

~~(ii) An enrolled student is a full-time student and is reported as~~)) 1.0 FTE on each monthly count day.

((~~(b)~~)) Enrollment in below one hundred level classes is limited to nonvocational funding and the FTE cannot be claimed as vocational.

(4) For college level classes, student enrollment will be reported as follows:

(a) The FTE is determined by the student's enrolled credits on each monthly count day.

(i) Fifteen college credits equal 1.0 FTE;

(ii) A student enrolled in more than fifteen college credits is limited to be reported as 1.0 FTE for that month; and

(iii) If a student is enrolled for less than fifteen college credits, the FTE is calculated by dividing the enrolled college credits by fifteen.

(b) Enrollment in state approved vocational college level classes and taught by a certified vocational instructor can be claimed for enhanced vocational funding as a vocational FTE.

AMENDATORY SECTION (Amending WSR 15-15-115, filed 7/16/15, effective 8/16/15)

WAC 392-700-165 Funding and reimbursement. (1) OSPI shall apportion funding for an approved program to districts, tribal compact schools, charter schools, or direct funded technical colleges based upon the reported nonvocational and vocational FTE enrollment and the standard reimbursement rates. The standard reimbursement rates are the statewide average annual nonvocational and vocational rates as determined by OSPI pursuant to WAC 392-169-095.

(a) The basic education allocation funded to districts, tribal compact schools, and charter schools will be as follows:

(i) Monthly payments for the months September through December are based on estimated student enrollment projected by the district, tribal compact school, or charter school.

(ii) Beginning in January, monthly payments shall be adjusted to reflect actual student enrollment.

(b) Direct funded technical colleges will be paid quarterly pursuant to WAC 392-121-187 (7)(c).

(2) Distribution of state funding for programs is as follows:

(a) For programs directly operated by a district, tribal compact school, or charter school, the district, tribal compact school, or charter school will retain one hundred percent of the basic education allocation.

(b) For programs directly operated by a direct funded technical college pursuant to WAC 392-121-187, the technical college will retain one hundred percent of the basic education allocation.

(c) For programs operated by a college or agency under a scope of work or contracted services agreement with a district, tribal compact school, or charter school:

(i) The district, tribal compact school, or charter school may retain up to seven percent of the basic education allocation; and

(ii) The agency or college will receive the remaining basic education allocation.

(d) For programs operated as part of a consortium with a consortium lead agency:

(i) The district, tribal compact school, or charter school may retain up to five percent of the basic education allocation;

(ii) The consortium lead may retain up to seven percent of the basic education allocation; and

(iii) The operating agency or college will receive the remaining basic education allocation.

(3) Programs and districts, tribal compact school, or charter school may provide transportation for students but additional funds are not generated or provided.

(4) ((~~Reengagement~~)) Students ((~~enrolled in a state-approved K-12 transitional bilingual instructional program pursuant to chapter 392-160 WAC~~)) identified as eligible for K-12 transitional bilingual instruction, enrolled in a state-approved K-12 transitional bilingual instructional program pursuant to chapter 392-160 WAC, and receiving transitional bilingual instruction services on or before the monthly count day but within the last month they were claimed for transitional bilingual instruction program enhanced funding, can be claimed by the district ((~~for bilingual~~)), tribal compact school, or charter school for transitional bilingual instruction program enhanced funding for the months of September through June.

(5) Students identified as eligible for special education services and receiving special education services on or before the monthly count day but within the last month they were claimed for special education funding, can be claimed by the district, tribal compact school, or charter school for special education funding for the months of September through June.

AMENDATORY SECTION (Amending WSR 15-15-115, filed 7/16/15, effective 8/16/15)

WAC 392-700-175 Required documentation and reporting. (1) Student documentation:

(a) The program shall submit to the reporting district, tribal compact school, charter school, or direct funded technical college monthly the program's enrollment and maintain and make available upon request the following documentation to support the monthly enrollment claimed:

(i) Each student's eligibility pursuant to WAC 392-700-035;

(ii) Evidence of each student's enrollment requirements under WAC 392-700-160 to include:

(A) Enrollment in district, tribal compact school, charter school, or direct funded technical college;

(B) Evidence of minimum attendance period; and

(C) Earned ((~~credentials or attained an~~)) indicators of academic progress.

(D) Evidence of weekly status check.

(iii) Case management support pursuant to WAC 392-700-085.

(b) The district, tribal compact school, charter school, agency, or college operating the program shall comply with all state and federal laws related to the privacy, sharing, and retention of student records.

(c) Access to all student records will be provided in accordance with the Family Educational Rights and Privacy Act (FERPA).

(2) ((~~Monthly~~)) CEDARS student reporting. Approved programs are responsible for submitting all required student information to OSPI in accordance with the CEDARS reporting guidance and reengagement operational instructions. ((~~If the program's model of operation is a partnership or consortium, the agreement must identify who is responsible for providing the information.~~))

(3) Annual reporting.

(a) The program will prepare and submit an annual performance report to the district, tribal compact school, charter school, agency, or college under which the program is operating no later than October 1st.

(b) The district, agency, or college will review and submit the program's annual performance report to OSPI no later than November 1st. The annual performance must be completed using the designated OSPI reporting tool.

(c) The annual report will ((~~include the following~~)) provide the previous school year's student level data:

(i) A list of the program's ((~~total number of~~)) enrolled students by:

(A) Gender, age, race/ethnicity((~~, and credential type who earned a~~));

(B) Earned credentials as defined in WAC 392-700-015(11)((~~.~~

~~(ii) Program's total number of students by gender, age, race/ethnicity, and indicator of academic progress types who~~));

(C) Attained ((~~an~~)) indicators of academic progress as defined in WAC 392-700-015(15). For high school and college credit, detail the subject area;

(D) The number of months each enrolled student was claimed for state funding;

(E) The number of months each enrolled student was served;

(F) The status of each enrolled student at the end of the school year (graduated, continuing, exited by student choice, exited by program choice, or turned twenty-one during the school year).

(((~~(iii)~~))) (ii) Total number of instructional staff.

(A) For programs operated by a district, tribal compact school, charter school, or agency, report total number of instructional staff assigned to the program.

(B) For programs operated by a college, report the number of instructional staff teaching students for the program.

AMENDATORY SECTION (Amending WSR 15-15-115, filed 7/16/15, effective 8/16/15)

WAC 392-700-195 Longitudinal performance goals. (1) Longitudinal performance data for the program and the statewide reengagement system as a whole will be reported through the Washington's P-20 (preschool to postsecondary and workforce) longitudinal data system maintained by the ERDC.

(2) The district, tribal compact school, or charter school will work with the agency or college to collect and report student data requested by the ERDC in order to accomplish the longitudinal follow-up of reengagement students.

(3) At the end of each school year, the ERDC will identify the cohort of students for each program for whom longitudinal tracking will be done. Standard criteria to determine when students will be included in a longitudinal study cohort will be developed by the ERDC, with input from OSPI, the district, the tribal compact school, the charter school, and program representatives and will apply to all programs.

(4) The ERDC will collect longitudinal data for each specific program cohort on an annual basis for five years. The ERDC will work with the OSPI administrator responsible for programs to prepare annual program specific reports for each cohort and an annual system-wide report for the entire reengagement system including data for the cohorts of all programs.

(5) The ERDC and OSPI will work with the district, tribal compact school, or charter school so that the district, tribal compact school, or charter school, and the agency or college will have the opportunity to review data about the program prior to the release of the annual reports in December of each year. The ERDC and OSPI will develop procedures by which the district, tribal compact school, charter school, or agency can provide supplemental information and backup documentation for review and inclusion as it relates to postsecondary or workforce engagement of specific students in the cohort.

WSR 17-01-137
PERMANENT RULES
DEPARTMENT OF LICENSING

[Filed December 20, 2016, 3:46 p.m., effective January 20, 2017]

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

Purpose: This adopted rule change will apply minimal housekeeping to WAC 196-27A-010 Purpose and applicability and 196-29-110 Land surveying practice standards. Both reference RCW 18.43.105(11) which no longer exists. There will be no anticipated effects on stakeholders.

Citation of Existing Rules Affected by this Order: Amending WAC 196-27A-010 and 196-29-110.

Statutory Authority for Adoption: RCW 18.43.035.

Adopted under notice filed as WSR 16-17-110 on August 22, 2016.

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 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 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: December 20, 2016.

Damon Monroe
Rules Coordinator

AMENDATORY SECTION (Amending WSR 02-23-027, filed 11/12/02, effective 12/13/02)

WAC 196-27A-010 Purpose and applicability. (1) RCW 18.43.110 provides the board of registration for professional engineers and land surveyors (board) with the exclusive power to fine and reprimand registrants and suspend or revoke the certificate of registration of any registrant for violation of any provisions of chapter 18.43 or 18.235 RCW. ((~~This includes, as stated in RCW 18.43.105(11), "Committing any other act, or failing to act, which act or failure are customarily regarded as being contrary to the accepted professional conduct or standard generally expected of those practicing engineering or land surveying."~~)) The purpose of chapter 196-27A WAC is to provide further guidance to registrants with respect to the accepted professional conduct and practice generally expected of those practicing engineering or land surveying.

(2) These rules of professional conduct and practice are applicable to all registrants and engineering/land surveying firms. A registrant is any person holding a certificate or license issued in accordance with chapter 18.43 RCW and an engineering/land surveying firm is one that has been issued a certificate of authorization to practice by the board.

(3) All persons, corporations, joint stock associations and limited liability companies registered under the provisions of chapter 18.43 RCW are charged with having knowledge of, and practicing in accordance with, the provisions of this chapter.

AMENDATORY SECTION (Amending WSR 06-22-038, filed 10/25/06, effective 11/25/06)

WAC 196-29-110 Land surveying practice standards. Failure by any registrant to comply with the provisions of the Survey Recording Act, chapter 58.09 RCW and the survey standards, chapter 332-130 WAC shall be considered misconduct or malpractice as defined by RCW 18.43.-105((~~(11)~~))(10).

The following standards shall also apply:

(1) The monumentation, posting, and/or the marking of a boundary line between two existing corner monuments constitutes the "practice of land surveying" as defined in chapter 18.43 RCW and chapter 196-16 WAC, and consequently requires said work to be performed under the direct supervision of a registered professional land surveyor.

(2) The field survey work performed to accomplish the monumentation, posting, and marking of a boundary line between two existing corner monuments shall meet the minimum standards imposed by chapter 332-130 WAC.

(3) The monumentation, posting, and/or marking of a boundary line between two existing corner monuments involves a determination of the accuracy and validity of the existing monuments by the use of standard survey methods and professional judgment.

(4) The monumentation, posting, and marking of a boundary line between two existing corner monuments shall require the filing of a record of survey according to chapter 58.09 RCW unless both corners satisfy one or both of the following requirements:

(a) The corner(s) are shown as being established on a properly recorded or filed survey according to chapter 58.09 RCW and are accurately and correctly shown thereon.

(b) The corner(s) are described correctly, accurately, and properly on a land corner record according to chapter 58.09 RCW if their establishment was by a method not requiring the filing of a record of survey.

WSR 17-01-138
PERMANENT RULES
EXECUTIVE ETHICS BOARD

[Filed December 20, 2016, 4:32 p.m., effective January 20, 2017]

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

Purpose: Update the rules and provide guidance and clarity on executive ethics board's procedures.

Citation of Existing Rules Affected by this Order: Repealing WAC 292-100-010 and 292-100-040; and amending WAC 292-100-007, 292-100-020, 292-100-030, 292-100-041, 292-100-042, 292-100-045, 292-100-046, 292-100-047, and 292-100-050.

Statutory Authority for Adoption: RCW 42.52.360.

Adopted under notice filed as WSR 16-19-056 on September 16, 2016.

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 Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 9, Repealed 2.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 9, Repealed 2.

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: December 20, 2016.

Ruthann Bryant
Administrative Officer

AMENDATORY SECTION (Amending WSR 05-19-142, filed 9/21/05, effective 10/22/05)

WAC 292-100-007 Definitions. Unless the context clearly requires otherwise, the definitions in this section apply throughout this chapter.

(1) "Board staff" shall include the executive director, ((~~the~~)) investigators, administrative officer, and assistant attorneys general who bring cases before the board((~~, and the training and information specialist~~)).

(2) "Complainant" means a person who has filed a complaint with the board.

(3) "Employing agency" means the former or current state agency of the respondent during the time the alleged violation occurred.

(4) ((~~"Lobbying," for the purposes of RCW 42.52.380, does not include written communication by the board to members of the state legislature or to any other government official on matters pertaining directly to the Ethics in Public Service Act.~~)) "Investigation" means the fact finding conducted prior to a dismissal or reasonable cause determination.

(5) "Party" includes the board staff and the respondent. ((~~The respondent may be represented in any matter filed under chapter 42.52 RCW by an attorney or an exclusive bargaining representative. If the respondent is represented by a person who is not an attorney, the representation shall conform to the standards of ethical conduct required of attorneys before the courts of the state of Washington.~~

~~(6) "Preliminary investigation" refers to the confidential fact-finding investigation that occurs before the board's determination of reasonable cause.~~

~~(7)~~))

(6) "Presiding officer" refers to the board chair, vice chair, a board member designated as presiding officer by the chair or vice chair, or an administrative law judge.

(((~~(8)~~))) (7) "Respondent" means a current or former state officer or state employee alleged to have violated chapter 42.52 RCW ((~~by a complainant~~)).

AMENDATORY SECTION (Amending WSR 01-13-033, filed 6/13/01, effective 7/14/01)

WAC 292-100-020 Complaint procedures—Status of complainant and others. (1) When a complaint has been filed with the board, neither the complainant, if other than

board, nor any other person ((~~shall~~)) will have special standing to participate or intervene in the investigation or consideration of the complaint by the board. The complainant is not a party to an ethics case for any purpose((~~; however, the board staff will give notice to the complainant and the employing agency of any open board hearings on the matter~~)).

(2) If a member of the board or the board's staff files a complaint in his or her individual capacity, the board member or staff member will be disqualified from acting in his or her official capacity with regard to the disposition of that complaint.

(3) This section does not affect the right to request a review of a board staff decision to dismiss a complaint, pursuant to RCW 42.52.425 and WAC 292-100-045.

(((~~(3) The person or persons alleged in a complaint to have violated chapter 42.52 RCW, are respondents as to that complaint.~~))

AMENDATORY SECTION (Amending WSR 01-13-033, filed 6/13/01, effective 7/14/01)

WAC 292-100-030 Complaint procedures ((~~for filing complaints~~)). (1) A complaint filed with the board shall be in writing on a form provided by the board((~~,~~)) or in an appropriate written form that includes the information in subsection (2) of this section, and signed by the complainant or by the complainant's counsel, unless anonymous.

(2) A complaint shall include:

(a) The complainant's name((~~; except that the board may choose to issue a complaint based upon information provided by a person who refuses to be identified~~)), unless anonymous;

(b) A statement of the nature of the alleged violation(s) and the name of person(s) responsible ((~~and the complaint should also include~~)) as well as the date, time, and place of each alleged violation; and

(c) All available documentation and other evidence including any witnesses to the violation which the complainant is able to supply to demonstrate a reason for believing that a violation of chapter 42.52 RCW, or the rules adopted under it, has occurred.

(3) A complaint which is incomplete, ((~~or~~)) does not contain enough information to allege a violation of chapter 42.52 RCW, or is not within the jurisdiction of the board, will not be accepted for filing.

(((~~(4) The board will not consider allegations in a properly filed complaint that fall outside the jurisdiction of the board. The board or its staff may refer such allegations to an appropriate agency with jurisdiction.~~))

AMENDATORY SECTION (Amending WSR 01-13-033, filed 6/13/01, effective 7/14/01)

WAC 292-100-041 Investigation of complaints. (1) ((~~If board staff determines that a complaint should not be dismissed pursuant to RCW 42.52.425 and WAC 292-100-045, the board staff shall conduct a preliminary investigation.~~

~~(2)~~)) During the course of ((~~the preliminary~~)) an investigation, the board staff will give the respondent(s) a copy of the complaint or a summary ((~~thereof~~)) of the complaint, and an opportunity to ((~~present such information as the respondent may desire, provided that if a complainant has requested confidentiality under chapter 42.17 RCW,~~)) respond to the allegations. In accordance with RCW 42.52.410, the complainant's name and identifying information ((~~shall~~)) may be ((~~deleted~~)) redacted from the complaint.

(((~~(3) It is the intent of the board that~~)) (2) During the course of the investigation board staff ((~~who are investigating a complaint will work with the respondent's employing agency, unless in the judgment of the investigator it~~)) will provide the employing agency with a copy of the complaint or a summary of the complaint, unless board staff determines it would impede the investigation. ((~~During the course of the investigation, the board staff shall provide the employing agency with a copy of the complaint or a summary thereof. If a complainant has requested confidentiality under chapter 42.17 RCW~~)) In accordance with RCW 42.52.410, the complainant's name and identifying information ((~~shall be deleted~~)) may be redacted from the complaint.

(((~~(4) The board staff shall reduce the results of a preliminary review or investigation to writing.~~))

AMENDATORY SECTION (Amending WSR 01-13-033, filed 6/13/01, effective 7/14/01)

WAC 292-100-042 Board staff referral of allegations. (1) If the complaint is outside the jurisdiction of the board, the board or its staff may also refer such allegations to an appropriate agency with jurisdiction.

(2) The board staff may refer a complaint ((~~or a summary thereof~~)) to the employing agency for investigation and recommendation of resolution. In accordance with RCW 42.52.410, the complainant's name and identifying information may be redacted from the complaint.

(a) The referral will include a copy of the complaint and all supporting documentation and shall include a date for submission of the report and recommendation, allowing at least thirty days. ((~~If a complainant has requested confidentiality under chapter 42.17 RCW, the complainant's name and identifying information shall be deleted from the complaint.~~)) The agency receiving the referral may request additional time, if needed.

(b) During the course of the agency's investigation, the agency ((~~shall~~)) will contact the respondent and provide the respondent with a copy of the complaint. The agency will provide the respondent with an opportunity to ((~~present such information as the respondent may desire.~~

~~(2)~~)) respond to the allegations.

(3) If board staff determine that a complaint alleges conduct which may violate a criminal statute, the board staff may refer the complaint to the appropriate law enforcement authority ((~~and if~~)). Once referred, the board staff will suspend their investigation until the law enforcement authority responds as to whether criminal charges will be filed. If the law enforcement authority elects to file criminal charges, no further action will be taken while the criminal case is pending. If the law enforcement authority elects not to file criminal charges, board staff ((~~shall~~)) will complete their investigation ((~~and follow the procedures set forth in these rules~~)).

AMENDATORY SECTION (Amending WSR 07-02-001, filed 12/20/06, effective 1/20/07)

WAC 292-100-045 Dismissal of complaints. (1) ((~~If after a preliminary review or investigation~~)) The executive director may dismiss the complaint if the board or the board staff determines that:

(a) Any alleged violation that may have occurred is not within the jurisdiction of the board;

(b) The complaint is obviously unfounded or frivolous; or

(c) The complaint presents a violation of chapter 42.52 RCW, but any violation that may have occurred does not constitute a material violation because it was inadvertent and minor, or has been cured, and, after consideration of all of the circumstances, further proceedings would not serve the purposes of this chapter((~~, the executive director may dismiss the complaint by issuing an order of dismissal~~)).

(2) If the executive director dismisses the complaint, the ((~~preliminary review or~~)) investigation report and a written notice of the executive director's order of dismissal ((~~shall~~)) will be provided to the complainant, respondent, and the board and ((~~shall~~)) will include a statement of the complainant's right to ((~~appeal to~~)) request review of the dismissal by the board. (((~~See RCW 42.52.425.~~)))

(3) If the board dismisses the complaint, written notice ((~~shall~~)) will be provided to the complainant((~~, respondent, and the board. (See RCW 42.52.425.~~)) and the respondent.

AMENDATORY SECTION (Amending WSR 01-13-033, filed 6/13/01, effective 7/14/01)

WAC 292-100-046 Complainant's request for review of executive director's dismissal order. (1) ((~~Upon the written request of the complainant, the executive director's order of dismissal will be reviewed by the board.~~

~~(2)~~)) A written request for review by a complainant must be received at the board's administrative office no later than twenty days after the date the order of dismissal is mailed to the complainant.

(((~~(3)~~))) (2) A request for review ((~~shall~~)) must state the grounds ((~~therefor~~)) for the request for review.

(((~~(4)~~))) (3) When a request for review is received, the board staff ((~~shall~~)) will prepare a record for the board's review and serve notice upon the respondent that a review has been requested. The record will consist of:

(a) The complaint;

(b) The ((~~preliminary review or~~)) investigation report((~~, as applicable~~));

(c) The order of dismissal;

(d) The complainant's request for review;

(e) The executive director's response to the request for review; and

(f) Any additional material requested by the chair or the chair's designee.

(((~~(5)~~))) (4) At the next available opportunity, the board ((~~shall~~)) will review the record and deliberate in closed session, without oral argument, and act on the request ((~~at the next meeting at which it may be practicable~~)) by:

(a) Affirming the dismissal;

(b) Directing board staff to conduct further investigation; or

(c) Issuing a determination that there is reasonable cause to believe that a violation has been or is being committed.

(((~~(6)~~))) (5) In reviewing the executive director's order of dismissal, the board ((~~shall~~)) will base its review on whether the executive director had a rational basis for the decision. The board will only ((~~shall~~)) reverse a decision to the extent that a rational basis is lacking.

(((~~(7)~~))) (6) The board's decision ((~~shall be reduced to~~)) will be in writing and provided to the complainant and the respondent.

AMENDATORY SECTION (Amending WSR 01-13-033, filed 6/13/01, effective 7/14/01)

WAC 292-100-047 Board member's request for review of executive director's dismissal order. (1) ((~~Upon the written request of a board member, the executive director's order of dismissal will be reviewed by the board.~~

~~(2) The preliminary review or investigation report and a written notice of the executive director's order of dismissal shall be provided to the board at the next regular meeting.~~

~~(3) A request for review by a board member must be received by the executive director no later than twenty days after the date the order of dismissal is provided to the board.~~

~~(4)~~)) A written request for review by a board member must be received by the executive director no later than twenty days after the date the order of dismissal is provided to the board.

(2) When a request for review is received, the board staff ((~~shall~~)) will prepare a record for the board's review and serve notice upon the respondent that a review has been requested. The record will consist of:

(a) The complaint;

(b) The ((~~preliminary review or~~)) investigation report((~~, as applicable~~));

(c) The order of dismissal;

(d) Any additional material requested by the chair, the chair's designee or the board member who requested the review.

(((~~(5) The board shall review the record, consider the request in executive session, and act on the request at the next meeting at which it may be practicable~~)) (3) At the next available opportunity, the board will review the record and deliberate in closed session, without oral argument, and act on the request by:

(a) Affirming the dismissal;

(b) Directing board staff to conduct further investigation; or

(c) Issuing a determination that there is reasonable cause to believe that a violation has been or is being committed.

(((~~(6)~~))) (4) In reviewing the executive director's order of dismissal, the board will base its review on whether the executive director had a rational basis for the decision. The board will only reverse a decision to the extent that a rational basis is lacking.

(5) The board's decision ((~~shall be reduced to~~)) will be in writing and provided to the complainant and the respondent.

AMENDATORY SECTION (Amending WSR 07-02-001, filed 12/20/06, effective 1/20/07)

WAC 292-100-050 Determination on reasonable cause. (1) Following ((~~the preliminary~~)) an investigation, if the complaint is not dismissed, the board staff ((~~shall~~)) will prepare a written investigation report and make a recommendation to the board on whether to find reasonable cause, including a recommendation as to ((~~whether~~)) the potential penalty ((~~should be greater than $500~~)).

(2) Upon receipt of the board staff's investigation report and recommendation, the board ((~~shall~~)) will determine whether or not there is reasonable cause to believe that a violation of chapter 42.52 RCW has occurred and ((~~whether any~~)) the potential penalty ((~~should be greater than $500~~)).

(3) The board's reasonable cause determination ((~~shall~~)) will be done in closed session.

(4) If after determining reasonable cause, the board ((~~further~~)) determines that the penalty and costs should be greater than (($500)) five hundred dollars, the respondent ((~~shall~~)) will be given the option to have an administrative law judge conduct the hearing and rule on procedural and evidentiary matters((~~. If the respondent is not given that option, the board may not impose penalty and costs greater than $500~~)) in accordance with RCW 42.52.500.

(5) The board may, on its own initiative, choose to retain an administrative law judge to conduct any hearing.

(((~~5~~))) (6) Upon receipt of an investigation report and recommendation on a complaint referred to the employing agency for investigation, the board ((~~shall~~)) will either:

(a) Reject the report and recommendation and initiate its own investigation; or

(b) Reject or concur with the report and recommendation and dismiss the complaint; or

(c) Concur with the report and recommendation and ((~~either initiate a hearing if the recommended penalty is a monetary fine or~~)) proceed under this section; or

(d) Concur with the report and recommendation and refer the matter to the employing agency for implementation of the recommendation if the recommendation is within the agency's authority to implement. The agency ((~~shall~~)) will report implementation to the board and the board ((~~shall~~)) will then dismiss the complaint((~~; or~~

~~(c) Concur with the report and recommendation, enter a finding of no reasonable cause and dismiss the complaint; or~~

~~(d) Concur with the report and recommendation, consider the report an investigative report, enter a finding of reasonable cause, and proceed under this section~~)).

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 292-100-010	Initiation of complaint.
WAC 292-100-040	Acceptance and preliminary review of complaints.

WSR 17-01-139
PERMANENT RULES
OFFICE OF INSURANCE COMMISSIONER

[Insurance Commissioner Matter No. R 2016-07—Filed December 20, 2016, 4:49 p.m., effective January 1, 2017]

Effective Date of Rule: January 1, 2017, required by statute (chapter 210, Laws of 2016).

Purpose: Registration and regulation of pharmacy benefit managers.

Statutory Authority for Adoption: RCW 48.02.060, 19.340.010, 19.340.030, 19.340.100, 19.340.110.

Other Authority: Chapter 210, Laws of 2016, effective June 9, 2016 (sections 2 through 7) and January 1, 2017 (section 1).

Adopted under notice filed as WSR 16-22-088 on November 2, 2016.

Changes Other than Editing from Proposed to Adopted Version: In WAC 284-180-420(5), the office of insurance commissioner (OIC) replaced the word "OIC" with the word "commissioner."

A final cost-benefit analysis is available by contacting Bianca Stoner, P.O. Box 40260, Olympia, WA 98504, phone (360) 725-7041, fax (360) 586-3109, email rulescoordinator @oic.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 18, Amended 0, Repealed 0.

Number of Sections Adopted at 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 18, 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: December 20, 2016.

Mike Kreidler
Insurance Commissioner

Chapter 284-180 WAC

PHARMACY BENEFIT MANAGERS

SUBCHAPTER A

GENERAL PROVISIONS

NEW SECTION

WAC 284-180-110 Purpose. These regulations implement chapter 19.340 RCW including, but not limited to, the processes and procedures for registration and regulation of pharmacy benefit managers by the office of the insurance commissioner (commissioner).

NEW SECTION

WAC 284-180-120 Applicability and scope. This chapter applies to pharmacy benefit managers as defined in RCW 19.340.010.

(1) Specifically, this chapter applies to the actions of pharmacy benefit managers regarding contracts with pharmacies on behalf of an insurer, a third-party payor, or the prescription drug purchasing consortium established under RCW 70.14.060 in regard to:

(a) Fully insured health plans; and

(b) Medicaid plans. However, the appeal requirements of RCW 19.340.100 do not apply to medicaid plans.

(2) This chapter does not apply to the actions of pharmacy benefit managers acting as third-party administrators regarding contracts with pharmacies on behalf of an insurer, a third-party payor, or the prescription drug purchasing consortium established under RCW 70.14.060 in regard to:

(a) Self-insured health plans; and

(b) Medicare plans.

NEW SECTION

WAC 284-180-130 Definitions. Except as defined in other subchapters and unless the context requires otherwise, the following definitions apply throughout this chapter:

(1) "Corporate umbrella" means an arrangement consisting of, but not limited to, subsidiaries and affiliates operating under common ownership or control.

(2) "Generally available for purchase" means available for purchase by multiple pharmacies within the state of Washington from national or regional wholesalers.

(3) "Net amount" means the invoice price that the pharmacy paid to the supplier for a prescription drug that it dispensed, plus any taxes, fees or other costs, minus the amount of all discounts and other cost reductions attributable to the drug.

(4) "Oversight activities" includes all work done by the commissioner to ensure that the requirements of chapter 19.340 RCW are properly followed and in fulfilling its duties as required under chapter 19.340 RCW.

(5) "Predetermined reimbursement cost" means maximum allowable cost, maximum allowable cost list, or any other benchmark price utilized by the pharmacy benefit manager, including the basis of the methodology and sources utilized to determine multisource generic drug reimbursement amounts. However, dispensing fees are not included in the calculation of predetermined reimbursement costs for multisource generic drugs.

(6) "Readily available for purchase" means manufactured supply is held in stock and available for order by more than one pharmacy in Washington state when such pharmacies are not under the same corporate umbrella.

(7) "Retaliate" means action, or the implied or stated threat of action, to decrease reimbursement or to terminate, suspend, cancel or limit a pharmacy's participation in a pharmacy benefit manager's provider network solely or in part because the pharmacy has filed or intends to file an appeal under RCW 19.340.100.

(8) "Unsatisfied" means that the network pharmacy did not receive the reimbursement that it requested at the first tier appeal.

NEW SECTION

WAC 284-180-140 Computation of time. In computing any period of time prescribed by this rule, the commissioner:

(1) Will not count the first day;

(2) Will count the last day, unless the last day is a weekend or a state legal holiday; and

(3) Will count the next day that is not a weekend or a state legal holiday as the last day if the last day is a weekend or a state legal holiday.

NEW SECTION

WAC 284-180-150 Severability. If any provision of this chapter or its application to any person or circumstances is held invalid, the remainder of the chapter or its application of the provision to other persons or circumstances is not affected.

SUBCHAPTER B

REGISTRATION AND RENEWAL

NEW SECTION

WAC 284-180-210 Registration and renewal fees. (1) The registration, renewal and oversight activities for pharmacy benefit managers must be self-supporting. Each pharmacy benefit manager must contribute a sufficient amount to the commissioner's regulatory account to pay the reasonable costs, including overhead, of regulating pharmacy benefit managers.

(2) The registration fee is two hundred dollars.

(3) For the renewal fee, the commissioner will charge a proportional share of the annual cost of renewal and oversight activities to all pharmacy benefit managers. The pharmacy benefit managers' proportional share shall be based on their Washington state annual gross pharmacy benefit manager business income for the previous calendar year. The minimum renewal fee is five hundred dollars.

(4) No later than March 1st of each year, pharmacy benefit managers must report their Washington state annual gross pharmacy benefit manager business income for the previous calendar year on a form prescribed by the commissioner.

(5) On or before June 1st of each year, the commissioner will calculate and set the renewal fees for the ensuing fiscal year of July 1st through June 30th.

(6) If an unexpended balance of pharmacy benefit manager registration and renewal funds remain in the insurance commissioner's regulatory account at the close of a fiscal year, the commissioner will carry the unexpended funds forward and use them to reduce future renewal fees.

NEW SECTION

WAC 284-180-220 Pharmacy benefit manager registration. (1) Beginning January 1, 2017, and thereafter, to conduct business in this state, pharmacy benefit managers must register with the commissioner and must annually renew the registration.

(2) Pharmacy benefit managers must register using the commissioner's electronic system, which is available at www.insurance.wa.gov.

(3) The registration period is valid from the date of registration through June 30th of the same fiscal year.

(4) The registration is not complete until the commissioner receives both the complete registration form and the correct registration fee.

NEW SECTION

WAC 284-180-230 Pharmacy benefit manager renewal. (1) Pharmacy benefit managers must annually renew their registrations by paying the renewal fee. Pharmacy benefit managers must access invoices through the commissioner's electronic system, which is available at www.insurance.wa.gov.

(2) The renewal is valid for one fiscal year, from July 1st through June 30th.

(3) The renewal fee is due and payable no later than July 15th of each year. Failure to timely pay the renewal fee may subject a pharmacy benefit manager to a civil penalty under RCW 19.340.110(2).

(4) The renewal is not complete until the commissioner receives the correct renewal fee.

NEW SECTION

WAC 284-180-240 Providing and updating registration information. (1) At the time of registration, a pharmacy benefit manager must provide its legal name as well as any and all additional names that it uses to conduct business.

(2) Registered pharmacy benefit managers must provide the commissioner with a valid e-mail address, which the commissioner will use as the official contact address for all communications regarding registrations, renewals and oversight activities.

(3) Registered pharmacy benefit managers must ensure that the information that they disclosed when they registered with the commissioner remains current by notifying the commissioner of any changes or additions.

(a) This information includes, but is not limited to:

(i) Any and all additional names that pharmacy benefit managers use to conduct business; and

(ii) The e-mail address for official communications between the commissioner and the pharmacy benefit manager.

(b) Within thirty days of any change, pharmacy benefit managers must report changes to the commissioner using the commissioner's electronic system.

SUBCHAPTER C

ENFORCEMENT

NEW SECTION

WAC 284-180-310 Pharmacy benefit manager records. (1) Pharmacy benefit managers must maintain records and make them available to the commissioner upon request. Records include, but are not limited to:

(a) Registration and renewal materials that pharmacy benefit managers submit to the commissioner to request registration and renewal; and

(b) Information about appeals under chapter 19.340 RCW.

(2) These materials are subject to review by the commissioner's representatives.

(3) The commissioner may require pharmacy benefit managers to provide copies of records.

(4) When the commissioner requests copies of records for inspection, pharmacy benefit managers must transmit these documents to the commissioner electronically.

NEW SECTION

WAC 284-180-320 Deadline to provide copies of records. If the commissioner requests records for inspection for a purpose other than to resolve an appeal under RCW 19.340.100(6), a pharmacy benefit manager must make the records available to the commissioner within fifteen days from the date on the written request. If the commissioner grants a written extension, then the records are due by the date indicated on the extension.

NEW SECTION

WAC 284-180-330 Actions that may result in a fine. The commissioner may issue a fine against any person, corporation, third-party administrator of prescription drug benefits, pharmacy benefit manager, or business entity for failing to comply with any statute or rule pertaining to pharmacy benefit managers as specified in chapter 19.340 RCW and Title 284 WAC.

NEW SECTION

WAC 284-180-340 When a violation is knowing and willful. (1) A violation is knowing and willful for the purpose of chapter 19.340 RCW when the actor as defined in WAC 284-180-330 who committed the violation was aware or should have been aware of each act, failure to act, or other facts or circumstances that led to the violation. A violation is knowing and willful regardless of whether the person who committed the violation had a malicious motive, intended to violate the law, or knew that the law was being violated.

(2) A person should have been aware of an act, failure to act, or other facts or circumstances when the person had information that would lead a reasonable person in the same situation to be aware of the act, failure to act, or other facts or circumstances. A person is presumed to have intended the natural and probable consequences of their voluntary acts.

SUBCHAPTER D

APPEALS

NEW SECTION

WAC 284-180-400 Appeals by network pharmacies to pharmacy benefit managers. A network pharmacy may appeal a reimbursement to a pharmacy benefit manager (first tier appeal) if the reimbursement for the drug is less than the net amount the network pharmacy paid to the supplier of the drug. "Network pharmacy" has the meaning set forth in RCW 19.340.100 (1)(d). "Pharmacy benefit manager" has the meaning set forth in RCW 19.340.010 (6)(a). A pharmacy benefit manager must process the network pharmacy's appeal as follows:

(1) A pharmacy benefit manager must include language in the pharmacy provider contract and on the pharmacy benefit manager's web site fully describing the right to appeal under RCW 19.340.100. The description must include, but is not limited to:

(a) Contact information, including:

(i) A telephone number by which the pharmacy may contact the pharmacy benefit manager during normal business hours and speak with an individual responsible for processing appeals;

(ii) A summary of the specific times when the pharmacy benefit manager will answer calls from network pharmacies at that telephone number;

(iii) A fax number that a network pharmacy can use to submit information regarding an appeal; and

(iv) An e-mail address that a network pharmacy can use to submit information regarding an appeal.

(b) A detailed description of the actions that a network pharmacy must take to file an appeal; and

(c) A detailed summary of each step in the pharmacy benefit manager's appeals process.

(2) The pharmacy benefit manager must reconsider the reimbursement. A pharmacy benefit manager's review process must provide the network pharmacy or its representatives with the opportunity to submit information to the pharmacy benefit manager including, but not limited to, documents or written comments. The pharmacy benefit manager must review and investigate the reimbursement and consider all information submitted by the network pharmacy or its representatives prior to issuing a decision.

(3) The pharmacy benefit manager must complete the appeal within thirty calendar days from the time the network pharmacy submits the appeal. If the network pharmacy does not receive the pharmacy benefit manager's decision within that time frame, then the appeal is deemed denied.

(4) The pharmacy benefit manager must uphold the appeal of a network pharmacy with fewer than fifteen retail outlets within the state of Washington, under its corporate umbrella, if the pharmacy demonstrates that they are unable to purchase therapeutically equivalent interchangeable product from a supplier doing business in the state of Washington at the pharmacy benefit manager's list price. "Therapeutically equivalent" is defined in RCW 69.41.110(7).

(5) If the pharmacy benefit manager denies the network pharmacy's appeal, the pharmacy benefit manager must provide the network pharmacy with a reason for the denial and the national drug code of a drug that has been purchased by other network pharmacies located in the state of Washington at a price less than or equal to the predetermined reimbursement cost for the multisource generic drug. "Multisource generic drug" is defined in RCW 19.340.100 (1)(c).

(6) If the pharmacy benefit manager upholds the network pharmacy's appeal, the pharmacy benefit manager must make a reasonable adjustment no later than one day after the date of the determination. If the request for an adjustment is from a critical access pharmacy, as defined by the state health care authority by rule for purpose related to the prescription drug purchasing consortium established under RCW 70.14.060, any such adjustment shall apply only to such pharmacies.

(7) If otherwise qualified, the following may file an appeal with a pharmacy benefit manager:

(a) Persons who are natural persons representing themselves;

(b) Attorneys at law duly qualified and entitled to practice in the courts of the state of Washington;

(c) Attorneys at law entitled to practice before the highest court of record of any other state, if attorneys licensed in Washington are permitted to appear before the courts of such other state in a representative capacity, and if not otherwise prohibited by state law;

(d) Public officials in their official capacity;

(e) A duly authorized director, officer, or full-time employee of an individual firm, association, partnership, or corporation who appears for such firm, association, partnership, or corporation;

(f) Partners, joint venturers or trustees representing their respective partnerships, joint ventures, or trusts; and

(g) Other persons designated by a person to whom the proceedings apply.

NEW SECTION

WAC 284-180-410 Use of brief adjudicative proceedings for appeals by network pharmacies to the commissioner. The commissioner has adopted the procedure for brief adjudicative proceedings provided in RCW 34.05.482 through 34.05.494 for actions involving a network pharmacy's appeal of a pharmacy benefit manager's reimbursement for a drug subject to predetermined reimbursement costs for multisource generic drugs (reimbursement). WAC 284-180-410 through 284-180-440 describe the procedures for how the commissioner processes a network pharmacy's appeal of the pharmacy benefit manager's decision in the first tier appeal (second tier appeal) through a brief adjudicative proceeding.

This rule does not apply to adjudicative proceedings under WAC 284-02-070, including converted brief adjudicative proceedings.

NEW SECTION

WAC 284-180-420 Appeals by network pharmacies to the commissioner. The following procedure applies to brief adjudicative proceedings before the commissioner for

actions involving a network pharmacy's appeal of a pharmacy benefit manager's decision in a first tier appeal regarding reimbursement for a drug subject to predetermined reimbursement costs for multisource generic drugs, unless the matter is converted to a formal proceeding as provided in WAC 284-180-440(3).

(1) **Grounds for appeal.** A network pharmacy or its representative may appeal a pharmacy benefit manager's decision to the commissioner if it meets all the following requirements:

(a) The pharmacy benefit manager's decision must have denied the network pharmacy's appeal, or the network pharmacy must be unsatisfied with the outcome of its appeal to the pharmacy benefit manager;

(b) The network pharmacy must request review of the pharmacy benefit manager's decision by filing a written petition for review form. A form for this purpose is available at www.insurance.wa.gov.

The petition for review must include:

(i) The network pharmacy's basis for appealing the pharmacy benefit manager's decision in the first tier appeal;

(ii) The network pharmacy's federal identification number, unified business identifier number, business address, and mailing address;

(iii) The documents from the first tier review, including the documents that the pharmacy submitted to the pharmacy benefit manager as well as the documents that the pharmacy benefit manager provided to the pharmacy in response to the first tier review; and

(iv) Any additional information that the commissioner may require.

(c) The network pharmacy must deliver the petition for review to the commissioner's Tumwater office by mail, hand delivery, or by other methods that the commissioner may make available;

(d) The network pharmacy must file the petition for review with the commissioner within thirty days of receipt of the pharmacy benefit manager's decision; and

(e) The network pharmacy making the appeal must have less than fifteen retail outlets within the state of Washington under its corporate umbrella. The petition for review that the network pharmacy submits to the commissioner must state that this requirement is satisfied, and must be signed and verified by an officer or authorized representative of the network pharmacy.

(2) **Time frames governing appeals to the commissioner.** The commissioner must complete the appeal within thirty calendar days of the receipt of the network pharmacy's appeal. An appeal before the commissioner is deemed complete when a presiding officer issues an initial order on behalf of the commissioner to both the network pharmacy and pharmacy benefit manager under subsection (7) of this section. Within seven calendar days of the resolution of a dispute, the presiding officer shall provide a copy of the initial order to both the network pharmacy and pharmacy benefit manager.

(3) **Relief the commissioner may provide.** The commissioner, by and through a presiding officer or reviewing officer, may enter an order directing the pharmacy benefit manager to make an adjustment to the disputed claim, denying the network pharmacy's appeal, or may take other actions deemed fair and equitable.

(4) **Notice.** If the presiding officer under the use of discretion chooses to conduct an oral hearing, the presiding officer will set the time and place of the hearing. Written notice shall be served upon both the network pharmacy and pharmacy benefit manager at least seven days before the date of the hearing. Service is to be made pursuant to WAC 284-180-440(2). The notice must include:

(a) The names and addresses of each party to whom the proceedings apply and, if known, the names and addresses of any representatives of such parties;

(b) The official file or other reference number and name of the proceeding, if applicable;

(c) The name, official title, mailing address and telephone number of the presiding officer, if known;

(d) A statement of the time, place and nature of the proceeding;

(e) A statement of the legal authority and jurisdiction under which the hearing is to be held;

(f) A reference to the particular sections of the statutes or rules involved;

(g) A short and plain statement of the matters asserted by the network pharmacy against the pharmacy benefit manager and the potential action to be taken; and

(h) A statement that if either party fails to attend or participate in a hearing, the hearing can proceed and the presiding or reviewing officer may take adverse action against that party.

(5) **Appearance and practice at a brief adjudicative proceeding.** The right to practice before the commissioner in a brief adjudicative proceeding is limited to:

(a) Persons who are natural persons representing themselves;

(b) Attorneys at law duly qualified and entitled to practice in the courts of the state of Washington;

(c) Attorneys at law entitled to practice before the highest court of record of any other state, if attorneys licensed in Washington are permitted to appear before the courts of such other state in a representative capacity, and if not otherwise prohibited by state law;

(d) Public officials in their official capacity;

(e) A duly authorized director, officer, or full-time employee of an individual firm, association, partnership, or corporation who appears for such firm, association, partnership, or corporation;

(f) Partners, joint venturers or trustees representing their respective partnerships, joint ventures, or trusts; and

(g) Other persons designated by a person to whom the proceedings apply with the approval of the presiding officer.

In the event a proceeding is converted from a brief adjudicative proceeding to a formal proceeding, representation is limited to the provisions of law and RCW 34.05.428.

(6) **Hearings by telephone.** If the presiding officer chooses to conduct a hearing, then the presiding officer may choose to conduct the hearing telephonically. The conversation will be recorded and will be part of the record of the hearing.

(7) **Presiding officer.**

(a) Per RCW 34.05.485, the presiding officer may be the commissioner, one or more other persons designated by the commissioner per RCW 48.02.100, or one or more other administrative law judges employed by the office of administrative hearings. The commissioner's choice of presiding officer is entirely discretionary and subject to change at any time. However, it must not violate RCW 34.05.425 or 34.05.458.

(b) The presiding officer shall conduct the proceeding in a just and fair manner. Before taking action, the presiding officer shall provide both parties the opportunity to be informed of the presiding officer's position on the pending matter and to explain their views of the matter. During the course of the proceedings before the presiding officer, the parties may present all relevant information.

(c) The presiding officer may request additional evidence from either party at any time during review of the initial order. After the presiding officer requests evidence from a party, the party has seven days after service of the request to supply the evidence to the presiding officer, unless the presiding officer, under the use of discretion, allows additional time to submit the evidence.

(d) The presiding officer has all authority granted under chapter 34.05 RCW.

(8) **Entry of orders.**

(a) When the presiding officer issues a decision, the presiding officer shall briefly state the basis and legal authority for the decision. Within ten days of issuing the decision, the presiding officer shall serve upon the parties the initial order, as well as information regarding any administrative review that may be available before the commissioner. The presiding officer's issuance of a decision within the ten day time frame satisfies the seven day requirement in subsection (2) of this section.

(b) The initial order consists of the decision and the brief written statement of the basis and legal authority. The initial order will become a final order if neither party requests a review as provided in WAC 284-180-430(1).

NEW SECTION

WAC 284-180-430 Review of initial orders from brief adjudicative proceedings. The following procedure applies to the commissioner's review of a brief adjudicative proceeding conducted pursuant to WAC 284-180-420, unless the matter is converted to a formal proceeding as provided in WAC 284-180-440(4).

(1) **Request for review of initial order.** A party to a brief adjudicative proceeding under WAC 284-180-420 may request review of the initial order by filing a written petition for review with the commissioner within twenty-one days after service of the initial order is received or deemed to be received by the party. A form for this purpose is available at www.insurance.wa.gov. The request for review must be in writing and delivered to the commissioner's Tumwater office by mail, hand delivery, or by other methods that the commissioner may make available.

(a) When making a petition for review of the initial order, the petitioner must submit to the reviewing officer any evidence or written material relevant to the matter that the party wishes the reviewing officer to consider.

(b) The commissioner may, on its own motion, conduct an administrative review of the initial order as provided for in RCW 34.05.491.

(2) **Reviewing officer.** The commissioner shall appoint a reviewing officer who satisfies the requirements of RCW 34.05.491(2). The reviewing officer shall:

(a) Make such determination as may appear to be just and lawful;

(b) Provide both the network pharmacy and the pharmacy benefit manager an opportunity to explain their positions on the matter; and

(c) Make any inquiries necessary to determine whether the proceeding should be converted to a formal adjudicative proceeding. The review is governed by the brief adjudicative procedures of chapter 34.05 RCW and this rule, or WAC 284-02-070 in the event a brief adjudicative hearing is converted to a formal adjudicative proceeding. The reviewing officer shall have the authority of a presiding officer as provided in WAC 284-180-420.

(3) **Record review.**

(a) Review of an initial order is limited to:

(i) The evidence that the presiding officer considered;

(ii) The initial order;

(iii) The recording of the initial proceeding; and

(iv) Any records and written evidence that the parties submitted to the reviewing officer.

(b) However, the record that the presiding officer made does not need to constitute the exclusive basis for the reviewing officer's decision.

(c) The reviewing officer may request additional evidence from either party at any time during review of the initial order. After the reviewing officer requests evidence from a party, the party has seven days after service of the request to supply the evidence to the reviewing officer, unless the reviewing officer, under the use of discretion, allows additional time to submit the evidence.

(d) If the reviewing officer determines that oral testimony is needed, the officer may schedule a time for both parties to present oral testimony. Oral statements before the reviewing officer shall be by telephone, unless specifically scheduled by the reviewing officer to be in person.

(e) Each party will have an opportunity to respond to the other party's request for review and may also submit any other relevant evidence and written material to the reviewing officer.

(i) The other party must:

(A) Submit material within seven days of service of the material submitted by the party requesting review of the initial order; and

(B) Serve a copy of all evidence and written material provided to the reviewing officer to the party requesting review according to WAC 284-180-440(2).

(ii) Proof of service is required under WAC 284-180-440 (2)(g) when a party submits material to the other party under this subsection.

(4) **Failure to participate.** If a party requesting review of an initial order under subsection (1) of this section fails to participate in the proceeding or fails to provide documenta-

tion to the reviewing officer upon request, the reviewing officer may uphold the initial order based upon the record.

(5) **Final orders.**

(a) The reviewing officer's final order must include the decision of the reviewing officer and a brief statement of the basis and legal authority for the decision.

(b) Unless there are continuances, the reviewing officer will issue the final order within twenty days of the petition for review.

(6) **Reconsideration.** Unless otherwise provided in the reviewing officer's order, the reviewing officer's order represents the final position of the commissioner. A petitioner may only seek a reconsideration of the reviewing officer's order if the final order contains a right to a reconsideration.

(7) **Judicial review.** Judicial review of the final order of the commissioner is available under Part V, chapter 34.05 RCW. However, as required by RCW 34.05.534, judicial review may be available only if the petitioner has requested a review of the initial order under this subsection and has exhausted all other administrative remedies.

NEW SECTION

WAC 284-180-440 General procedures governing brief adjudicative proceedings before the commissioner. (1) **Rules of evidence - Record of the proceeding.**

(a) Evidence is admissible if in the judgment of the presiding or reviewing officer it is the kind of evidence on which reasonably prudent persons are accustomed to relying on in conducting their affairs. The presiding and reviewing officer should apply RCW 34.05.452 when ruling on evidentiary issues in the proceeding.

(b) All oral testimony must be recorded manually, electronically, or by another type of recording device. The agency record must consist of the documents regarding the matters that were considered or prepared by the presiding officer, or by the reviewing officer in any review, and the recording of the hearing. These records must be maintained by the commissioner as its official record.

(2) **Service.** All notices and other pleadings or papers filed with the presiding or reviewing officer must be served on the network pharmacy and the pharmacy benefit manager.

(a) Service is made by one of the following methods:

(i) In person;

(ii) By first-class, registered, or certified mail;

(iii) By fax and same-day mailing of copies;

(iv) By commercial parcel delivery company; or

(v) By electronic delivery as allowed by the presiding officer.

(b) Service by mail is regarded as completed upon deposit in the United States mail properly stamped and addressed.

(c) Service by electronic fax is regarded as completed upon the production by the fax machine of confirmation of transmission.

(d) Service by commercial parcel delivery is regarded as completed upon delivery to the parcel delivery company, properly addressed with charges prepaid.

(e) Service by electronic delivery is regarded as completed on the date that any party electronically sends the information to other parties or electronically notifies other parties that the information is available for them to access.

(f) For matters before the reviewing officer, service to the reviewing officer must be sent to:

Office of the Insurance Commissioner
P.O. Box 40255
Olympia, Washington 98504-0255

(g) Where proof of service is required, the proof of service must include:

(i) An acknowledgment of service;

(ii) A certification, signed by the person who served the document, stating the date of service; that the person served the document upon all or one or more of the parties of record in the proceeding by delivering a copy in person to the recipient; and that the service was accomplished by a method of service as provided in this subsection.

(3) **Conversion of a brief adjudicative proceeding to a formal proceeding.** The presiding or reviewing officer may at any time, on motion of either party or on the officer's own motion, convert the brief adjudicative proceeding to a formal proceeding. The presiding or reviewing officer may convert the proceeding if the officer finds that:

(a) Use of the brief adjudicative proceeding violates any provision of law;

(b) The protection of the public interest requires the agency to give notice to and an opportunity to participate to persons other than the parties; or

(c) The issues and interests involved warrant the use of procedures governed by RCW 34.05.413 through 34.05.476 or 34.05.479.

WSR 17-01-142
PERMANENT RULES
OFFICE OF INSURANCE COMMISSIONER

[Insurance Commissioner Matter No. R 2016-25—Filed December 20, 2016, 4:57 p.m., effective January 20, 2017]

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

Purpose: This proposed rule changes name in WAC 284-17-551 from "candidate handbook," to "candidate information bulletin" to align with phrasing used by PSI Services and the NAIC State Licensing Handbook.

Citation of Existing Rules Affected by this Order: Amending WAC 284-17-551.

Statutory Authority for Adoption: RCW 48.02.060 and 48.17.005.

Adopted under notice filed as WSR 16-20-024 on September 27, 2016.

A final cost-benefit analysis is available by contacting Stacy Middleton, P.O. Box 40260, Olympia, WA 98504, phone (360) 725-9651, fax (360) 586-3109, email rulescoordinator@oic.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 0, Repealed 0.

Number of Sections Adopted at 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: December 20, 2016.

Mike Kreidler
Insurance Commissioner

AMENDATORY SECTION (Amending WSR 09-02-073, filed 1/6/09, effective 7/1/09)

WAC 284-17-551 Prelicensing insurance education—Candidate ((~~handbook~~)) information bulletin. The prelicensing insurance education curriculum is described in the candidate ((~~handbook~~)) information bulletin. The candidate ((~~handbook~~)) information bulletin is incorporated by reference and its entire contents will be enforced by the commissioner. A copy of the current candidate ((~~handbook~~)) information bulletin is available through the commissioner's web site at www.insurance.wa.gov.

(1) Information in the current version of the candidate ((~~handbook~~)) 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.

WSR 17-01-143
PERMANENT RULES
DEPARTMENT OF HEALTH
(Pharmacy Quality Assurance Commission)
[Filed December 20, 2016, 4:59 p.m., effective January 20, 2017]

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

Purpose: WAC 246-860-100 Sexual misconduct, the pharmacy quality assurance commission is amending the sexual misconduct standards to clarify what forcible or nonconsensual acts are within the definition of sexual misconduct by a pharmacist, or pharmacy intern, technician, or assistant.

Citation of Existing Rules Affected by this Order: Amending WAC 246-860-100.

Statutory Authority for Adoption: RCW 18.64.005, 18.130.062, and 18.130.050.

Adopted under notice filed as WSR 16-17-019 on August 5, 2016.

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 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: September 29, 2016.

Tim Lynch, PharmD, MS, Chair
Pharmacy Quality Assurance Commission

AMENDATORY SECTION (Amending WSR 07-08-040, filed 3/28/07, effective 4/28/07)

WAC 246-860-100 Sexual misconduct. (1) A health care provider shall not engage, or attempt to engage, in sexual misconduct with a current patient, client, or key party, inside or outside the health care setting. Sexual misconduct shall constitute grounds for disciplinary action. Sexual misconduct includes, but is not limited to:

(a) Sexual intercourse;

(b) Touching the breasts, genitals, anus or any sexualized body part except as consistent with accepted community standards of practice within the health care practitioner's scope of practice;

(c) Rubbing against a patient or client or key party for sexual gratification;

(d) Kissing;

(e) Hugging, touching, fondling or caressing of a romantic or sexual nature;

(f) Not allowing a patient or client privacy to dress or undress except as may be necessary in emergencies or custodial situations;

(g) Not providing the patient or client a gown or draping except as may be necessary in emergencies;

(h) Dressing or undressing in the presence of the patient, client or key party;

(i) Removing patient's or client's clothing or gown or draping without consent, emergent medical necessity or being in a custodial setting;

(j) Encouraging masturbation or other sex act in the presence of the health care provider;

(k) Masturbation or other sex act by the health care provider in the presence of the patient, client or key party;

(l) Suggesting or discussing the possibility of a dating, sexual or romantic relationship after the professional relationship ends;

(m) Terminating a professional relationship for the purpose of dating or pursuing a romantic or sexual relationship;

(n) Soliciting a date with a patient, client or key party;

(o) Discussing the sexual history, preferences or fantasies of the health care provider;

(p) Any behavior, gestures, or expressions that may reasonably be interpreted as seductive or sexual;

(q) Making statements regarding the patient, client or key party's body, appearance, sexual history, or sexual orientation other than for legitimate health care purposes;

(r) Sexually demeaning behavior including any verbal or physical contact which may reasonably be interpreted as demeaning, humiliating, embarrassing, threatening or harming a patient, client or key party;

(s) Photographing or filming the body or any body part or pose of a patient, client, or key party, other than for legitimate health care purposes; and

(t) Showing a patient, client or key party sexually explicit photographs, other than for legitimate health care purposes.

(2) Sexual misconduct also includes sexual contact with any person involving force, intimidation, or lack of consent; or a conviction of a sex offense as defined in RCW 9.94A.-030.

(3) A health care provider shall not:

(a) Offer to provide health care services in exchange for sexual favors;

(b) Use health care information to contact the patient, client or key party for the purpose of engaging in sexual misconduct;

(c) Use health care information or access to health care information to meet or attempt to meet the health care provider's sexual needs.

(((~~(3)~~))) (4) A health care provider shall not engage, or attempt to engage, in the activities listed in subsection (1) of this section with a former patient, client, or key party if:

(a) There is a significant likelihood that the patient, client or key party will seek or require additional services from the health care provider; or

(b) There is an imbalance of power, influence, opportunity and/or special knowledge of the professional relationship.

(((~~(4)~~))) (5) When evaluating whether a health care provider engaged, or attempted to engage, in sexual misconduct, the ((~~board~~)) commission will consider factors((~~,~~)) including, but not limited to:

(a) Documentation of a formal termination and the circumstances of termination of the provider-patient relationship;

(b) Transfer of care to another health care provider;

(c) Duration of the provider-patient relationship;

(d) Amount of time that has passed since the last health care services to the patient or client;

(e) Communication between the health care provider and the patient or client between the last health care services rendered and commencement of the personal relationship;

(f) Extent to which the patient's or client's personal or private information was shared with the health care provider;

(g) Nature of the patient or client's health condition during and since the professional relationship;

(h) The patient or client's emotional dependence and vulnerability; and

(i) Normal revisit cycle for the profession and service.

(((~~(5)~~))) (6) Patient, client or key party initiation or consent does not excuse or negate the health care provider's responsibility.

(((~~(6)~~))) (7) These rules do not prohibit:

(a) Providing health care services in case of emergency where the services cannot or will not be provided by another health care provider;

(b) Contact that is necessary for a legitimate health care purpose and that meets the standard of care appropriate to that profession; or

(c) Providing health care services for a legitimate health care purpose to a person who is in a preexisting, established personal relationship with the health care provider where there is no evidence of, or potential for, exploiting the patient or client.

WSR 17-01-145
PERMANENT RULES
OFFICE OF INSURANCE COMMISSIONER

[Insurance Commissioner Matter No. R 2016-21—Filed December 20, 2016, 5:11 p.m., effective January 20, 2017]

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

Purpose: Special enrollment rule: Expanded health benefit exchange request.

Citation of Existing Rules Affected by this Order: Amending WAC 284-43-1140.

Statutory Authority for Adoption: RCW 48.02.060, 48.18.120(2), 48.20.450, 48.44.050, and 48.46.200.

Adopted under notice filed as WSR 16-22-098 on November 2, 2016.

A final cost-benefit analysis is available by contacting Bianca Stoner, P.O. Box 40260, Olympia, WA 98504, phone (360) 725-7041, fax (360) 586-3109, email rulescoordinator @oic.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 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 1, 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 1, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: December 20, 2016.

Mike Kreidler
Insurance Commissioner

AMENDATORY SECTION (Amending WSR 16-14-106, filed 7/6/16, effective 8/6/16)

WAC 284-43-1140 Duration, notice requirements and effective dates of coverage for individual market spe-

cial enrollment periods. (1) Special enrollment periods must not be shorter than sixty days from the date of the qualifying event.

(2) The effective date of coverage for those enrolling in an individual health plan through a special enrollment period is the first date of the next month after the premium is received by the issuer, unless one of the following exceptions applies:

(a) For those enrolling after the ((~~twentieth~~)) fifteenth of the month, the issuer must begin coverage not later than the first date of the second month after the application is received. Issuers may establish an earlier effective date at their discretion;

(b) For special enrollment of newborn, adopted or placed for adoption children, the date of birth, date of adoption or date of placement for adoption, as applicable, becomes the first effective date of coverage. The same requirement applies to foster children or children placed for foster care on qualified health plans;

(c) For special enrollment based on marriage or the beginning of a domestic partnership, and for special enrollment based on loss of minimum essential coverage, coverage must begin on the first day of the next month.

(3) For individual plans offered either on or off the health benefit exchange, an issuer must include detailed information about special enrollment options and rights in its health plan documents provided pursuant to WAC 284-43-5130, and in the policy, contract or certificate of coverage provided to an employer, plan sponsor or enrollee. The notice must be substantially similar to the model notice provided by the U.S. Department of Health and Human Services.

WSR 17-01-146
PERMANENT RULES
DEPARTMENT OF HEALTH
(Pharmacy Quality Assurance Commission)

[Filed December 20, 2016, 5:12 p.m., effective December 31, 2016]

Effective Date of Rule: December 31, 2016.

Other Findings Required by Other Provisions of Law as Precondition to Adoption or Effectiveness of Rule: This filing replaces emergency rules expiring on December 31, 2016, that were adopted to address the emergent pharmacy needs of communities facing evacuation from catastrophic events.

Purpose: WAC 246-869-105 Continuity of care refills in proclaimed emergencies, this new rule will allow temporary prescription refills of legend drugs, maintenance medications and certain controlled substances for patients displaced from their homes and usual pharmacy services during an event resulting in a governor's emergency proclamation. When effective, this permanent rule will replace emergency rules filed on August 22, 2016, as WSR 16-17-114.

Statutory Authority for Adoption: RCW 18.64.005.

Other Authority: RCW 18.64.500.

Adopted under notice filed as WSR 16-16-012 on July 21, 2016.

Changes Other than Editing from Proposed to Adopted Version: The commission made changes to new subsection (1)(a) and (b) after deliberating and taking public comment. The additional language allows a pharmacist to use their professional judgment in making the decision to provide pharmaceutical services to the displaced patient, expands the ability to provide refills when no refills are available and includes maintenance medications.

A final cost-benefit analysis is available by contacting Richard Cieslinski, Department of Health, P.O. Box 47852, Olympia, WA 98504-7852, phone (360) 236-4861, fax (360) 236-4626, email richard.cieslinski@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 0, Repealed 0.

Number of Sections Adopted at 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 1, Amended 0, Repealed 0.

Date Adopted: September 29, 2016.

Tim Lynch, PharmD, MS, Chair
Pharmacy Quality Assurance Commission

NEW SECTION

WAC 246-869-105 Continuity of care refills in proclaimed emergencies. Notwithstanding WAC 246-869-100 (2)(f), when the governor issues an emergency proclamation for an event which prevents continuity of health care for persons and animals because their prescribed medications are no longer available to them due to the emergency event, pharmacists and pharmacies may provide emergency prescription supplies for medications during the period of the proclaimed emergency as provided below:

(1) An initial supply of up to thirty days of current prescriptions for legend drug (noncontrolled) medications or seven-day supply of current prescriptions for controlled substance medications in Schedules III, IV, and V may be provided to patients under the following conditions:

(a) Presentation of a valid prescription container complete with legible label indicating there are remaining refills, or confirmation of the prescribed medication and available refills by review of the patient's current medical records or pharmacy records or in the professional judgment of the pharmacist; or

(b) If the prescription is expired or has no refills and the pharmacist is unable to readily obtain refill authorization from the prescriber, the pharmacist may dispense a one-time emergency refill of up to a seventy-two hour supply of the prescribed medication as described in WAC 246-869-100

(2)(f) or up to a thirty-day supply of a maintenance medication.

(2) For each medication dispensed under this section, a pharmacist shall:

(a) Document the dispensing as a prescription, noting where the information from subsection (1)(a) of this section was obtained, whether from the prescription container, the patient's prescriber or from the pharmacy records;

(b) Inform the patient's provider and the pharmacy at which the patient obtains his or her medications of the dispensing as soon as possible following the emergency dispensing;

(c) Mark the face of the prescription as an "emergency" prescription.

(3) Nothing in this rule modifies insurers' requirements for coverage and payment for prescribed medications.

WSR 17-01-155
PERMANENT RULES
DEPARTMENT OF REVENUE

[Filed December 21, 2016, 9:28 a.m., effective January 21, 2017]

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

Purpose: WAC 458-20-252 Hazardous substance tax and petroleum product tax (Rule 252) and 458-20-281 Petroleum product tax (new Rule 281) were, prior to this expedited rule making, combined into one rule. Now split into two separate rules.

Amended Rule 252:
- Added language to clarify that HST does not include specified noncompound metals when in solid form larger than certain size.
- Added federal statutory cite for FIFRA to definition of "pesticide products."
- Added language for "agricultural crop protection product exemption."

New Rule 281:
- Deleted "liquefied or liquefiable gases" from definition of "petroleum product."
- Added language under definition of "wholesale value" for determining the tax for petroleum products introduced at the rack.
- Added definitions of "rack," "terminal," and "nonbulk transfer."
- Decreased the tax rate from 0.5 percent to 0.3 percent.
- Decreased the tax rate from 0.3 percent to 0.15 percent starting July 1, 2021.
- Extended the PPT by ten years to July 1, 2030.

Citation of Existing Rules Affected by this Order: Amending WAC 458-20-252 Hazardous substance tax and petroleum product tax.

Statutory Authority for Adoption: RCW 82.32.300 and 82.01.060(2).

Adopted under notice filed as WSR 16-21-094 on October 19, 2016.

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 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: December 21, 2016.

Kevin Dixon
Rules Coordinator

AMENDATORY SECTION (Amending WSR 89-16-091, filed 8/2/89, effective 9/2/89)

WAC 458-20-252 Hazardous substance tax ((~~and petroleum product tax~~)).

((~~PART 1 HAZARDOUS SUBSTANCE TAX~~))

(1) Introduction. Under ((~~the provisions of~~)) chapter ((~~82.22~~)) 82.21 RCW (referred to in this rule as the "law"), a hazardous substance tax ((~~was~~)) is imposed((~~, effective January 1, 1988,~~)) upon the wholesale value of certain substances and products, with specific credits and exemptions provided. ((~~This law is significantly changed, effective on March 1, 1989, because of Initiative 97 (I-97) which was passed by the voters in the November 8, 1988 general election.~~)) The tax((~~, which is reimposed by I-97,~~)) is an excise tax upon the privilege of possessing hazardous substances or products in this state. ((~~It is imposed in addition to all other taxes of an excise or property tax nature and is not in lieu of any other such taxes.~~))

(a) ((~~I-97, which will be referred to as chapter 2, Laws of 1989,~~)) Chapter 82.21 RCW defines certain specific substances as being hazardous and includes other substances by reference to federal legislation governing such things. It also provides authority to the director of the state department of ecology to designate by rule any other substance((~~s~~)) or product((~~s~~)) as hazardous ((~~which~~)) that could present a threat to human health or the environment. ((~~The department of ecology, by duly published rule, defines and enumerates hazardous substances and products and otherwise administers the provisions of the law relating to hazardous and toxic or dangerous materials, waste, disposal, cleanup, remedial actions, and monitoring. (See chapter 173 __ of the~~)) (Chapter 173-342 WAC.)

(b) ((~~Sections 8 through 12 of I-97 consist of the tax provisions relating to hazardous substances and products which are~~)) Chapter 82.21 RCW is administered exclusively under this ((~~section~~)) rule. The ((~~tax provisions~~)) law relates exclusively to the possession of hazardous substances and products. The ((~~tax provisions do~~)) law does not relate to waste, releases or spills of any materials, cleanup, compensation, or liability for such things, nor does tax liability under the law

depend upon such factors. The incidence or privilege ((~~which~~)) that incurs tax liability is simply the possession of the hazardous substance or product, whether or not such possession actually causes any hazardous or dangerous circumstance.

(c) The hazardous substance tax is imposed upon any possession of a hazardous substance or product in this state by any person who is not expressly exempt of the tax. However, it is the intent of the law that the economic burden of the tax should fall upon the first such possession in this state. Therefore, the law provides that if the tax has not been paid upon any hazardous substance or product the department of revenue may collect the tax from any person who has had possession. The amount of tax paid then constitutes a debt owed by the first person having had taxable possession to the person who pays the tax.

(2) Definitions. For purposes of this ((~~part~~)) rule the following ((~~terms will~~)) definitions apply.

(a) "Tax" means the hazardous substance tax imposed under ((~~section 10 of I-97~~)) chapter 82.21 RCW.

(b) "Hazardous substance" means ((~~anything designated as such by the provisions of chapter 173 WAC, administered by the state department of ecology, as adopted and thereafter amended. In addition, the law defines this term to include~~)):

(i) Any substance that, on March 1, ((~~1989~~)) 2002, is a hazardous substance under section 101(14) of the Federal Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), 42 U.S.C. Sec. 9601(14), as amended by Public Law 99-499 on October 17, 1986, except that hazardous substance does not include the following noncompound metals when in solid form in a particle larger than one hundred micrometers (0.004 inches) in diameter: Antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver, thallium, or zinc. These substances consist of chemicals and elements in their purest form. A CERCLA substance ((~~which~~)) that contains water is still considered pure. Combinations of CERCLA substances as ingredients together with nonhazardous substances will not be taxable unless the end product is specifically designated as a hazardous substance by the department of ecology((~~.~~));

(ii) Petroleum products (further defined below);

(iii) Pesticide products required to be registered under section 136a of the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), 7 U.S.C. Sec. 136 et seq., as amended by Public Law 104-170 on August 3, 1996; and

(iv) Anything else enumerated as a hazardous substance in chapter ((~~173-__~~)) 173-342 WAC by the department of ecology.

(c) "Product(s)" means any item(s) containing a combination of ingredients, some of which are hazardous substances and some of which are not hazardous substances.

(d) "Petroleum product" means any plant condensate, lubricating oil, crankcase motor oil, gasoline, aviation fuel, kerosene, diesel motor fuel, benzol, fuel oil, residual fuel, asphalt base, liquefied or liquefiable gases, such as butane, ethane and propane, and every other product derived from the refining of crude oil, but the term does not include crude oil.

((~~(i)~~)) The term "derived from the refining of crude oil" as used herein, means produced because of and during petroleum processing. "Petroleum processing" includes all activities of a commercial or industrial nature wherein labor or skill is applied, by hand or machinery, to crude oil or any byproduct of crude oil so that as a result thereof a fuel or lubricant is produced for sale or commercial or industrial use. "Fuel" includes all combustible gases and liquids suitable for the generation of energy. The term "derived from the refining of crude oil" does not mean petroleum products ((~~which~~)) that are manufactured from refined oil derivatives, such as petroleum jellies, cleaning solvents, asphalt paving, etc. Such further manufactured products become hazardous substances only when expressly so designated by the director of the department of ecology in chapter 173-342 WAC.

(e) "Possession" means control of a hazardous substance located within this state and includes both actual and constructive possession.

(i) "Control" means the power to sell or use a hazardous substance or to authorize the sale or use by another.

(ii) "Actual possession" occurs when the person with control has physical possession.

(iii) "Constructive possession" occurs when the person with control does not have physical possession.

(f) "Previously taxed hazardous substance" means a hazardous substance upon which the tax has been paid and which has not been remanufactured or reprocessed in any manner.

(i) Remanufacturing or reprocessing does not include the mere repackaging or recycling for beneficial reuse. Rather, these terms embrace activities of a commercial or industrial nature involving the application of skill or labor by hand or machinery so that as a result, a new or different substance or product is produced.

(ii) "Recycling for beneficial reuse" means the recapturing of any used substance or product, for the sole purpose of extending the useful life of the original substance or product in its previously taxed form, without adding any new, different, or additional ingredient or component.

(iii) Example: Used motor oil drained from a crankcase, filtered, and containerized for reuse is not remanufactured or reprocessed. If the tax was paid on possession of the oil before use, the used oil is a previously taxed substance.

(iv) Possessions of used hazardous substances by persons who merely operate recycling centers or collection stations and who do not reprocess or remanufacture the used substances are not taxable possessions.

(g) "Wholesale value" is the tax measure or base. It means the fair market value determined by the wholesale selling price.

In cases where no sale has occurred, wholesale value means the fair market wholesale value, determined as nearly as possible according to the wholesale selling price at the place of use of similar substances of like quality and character. In such cases the wholesale value shall be the "value of the products" as determined under the alternate methods set forth in WAC 458-20-112.

(h) "Selling price" means consideration of any kind expressed in terms of money paid or delivered by a buyer to a seller, without any deductions for any costs whatsoever. Bona fide discounts actually granted to a buyer result in reductions in the selling price rather than deductions.

(i) "State," for purposes of the credit provisions of the hazardous substance tax, means:

(i) The state of Washington((~~,~~)).

(ii) States of the United States or any political subdivisions of such other states((~~,~~)).

(iii) The District of Columbia((~~,~~)).

(iv) Territories and possessions of the United States((~~,~~)).

(v) Any foreign country or political subdivision thereof.

(j) "Person" means any natural or artificial person, including a business organization of any kind, and has the further meaning defined in RCW 82.04.030.

(((~~(i)~~))) The term "natural person," for purposes of the tax exemption ((~~provided by section 11(2) of I-97~~)) in subsection (4)(b) of this rule regarding substances used for personal or domestic purposes, means human beings in a private, as opposed to a business sense.

(k) Except as otherwise expressly defined in this ((~~section~~)) rule, the definitions of terms provided in chapters 82.04, 82.08, and 82.12 RCW apply equally for this ((~~section~~)) rule. Other terms not expressly defined in these chapters or this ((~~section~~)) rule are to be given their common and ordinary meanings.

(3) Tax rate and measure. The tax is imposed upon the privilege of possessing a hazardous substance((~~s~~)) in this state. The tax rate is seven tenths of one percent (.007). The tax measure or base is the wholesale value of the substance, as defined ((~~herein~~)) in this rule.

(4) Exemptions. The following are expressly exempt from the tax:

(a) Any successive possessions of any previously taxed hazardous substances are tax exempt.

(i) Any person who possesses a hazardous substance ((~~which~~)) that has been acquired from any other person who is registered with the department of revenue and doing business in this state may take a written statement certifying that the tax has been previously paid. Such certifications must be taken in good faith and must be in the form provided in ((~~the last part of this section~~)) subsection (14) of this rule. Blanket certifications may be taken, as appropriate, which must be renewed at intervals not to exceed four years. These certifications may be used for any single hazardous substance or any broad classification of hazardous substances, e.g., "all chemicals."

(ii) In the absence of taking such certifications, the person who possesses any hazardous substance must retain proofs that it purchased or otherwise acquired the substance from a previous possessor in this state. It is not necessary for subsequent possessors to obtain certificates of previously taxed hazardous substances in order to perfect their tax exemption. Documentation ((~~which~~)) that establishes any evidence of previous tax payment by another person will suffice. This includes invoices or billings from in-state suppliers ((~~which~~)) that reflect their payment of the tax or simple bills of lading or delivery documents revealing an in-state source of the hazardous substances.

(iii) This exemption for taxes previously paid is available for any person in successive possession of a taxed hazardous substance even though the previous payment may have been satisfied by the use of credits or offsets available to the previous person in possession.

(iv) Example. Company A brings a substance into this state upon which it has paid a similar hazardous substance tax in another state. Company A takes a credit against its Washington tax liability in the amount of the other state's tax paid. It then sells the substance to Company B, and provides Company B with a certificate of previously taxed substance. Company B's possession is tax exempt even though Company A has not directly paid Washington's tax but has used a credit against its Washington liability.

(b) Any possession of a hazardous substance by a natural person for use of a personal or domestic nature, rather than a business nature, is tax exempt.

(i) This exemption extends to relatives, as well as other natural persons who reside with the person possessing the substance, and also to regular employees of that person who use the substance for the benefit of that person.

(ii) This exemption does not extend to possessions by any independent contractors hired by natural persons, which contractors themselves provide the hazardous substance.

(iii) Examples: Possessions of spray materials by an employee-gardener or soaps and cleaning solvents by an employee-domestic servant, when such substances are provided by the natural person for whose domestic benefit such things are used, are tax exempt. Also, possessions of fuel by private persons for use in privately owned vehicles are tax exempt.

(c) Any possession of any hazardous substance, other than pesticides or petroleum products, possessed by a retailer for making sales to consumers, in an amount ((~~which~~)) that is determined to be "minimal" by the department of ecology. That department has determined that the term "minimal" means less than $1,000.00 worth of such hazardous substances measured by their wholesale value, possessed during any calendar month.

(d) Possessions of alumina or natural gas are tax exempt.

(e) Persons or activities ((~~which~~)) that the state is prohibited from taxing under the United States Constitution are tax exempt.

(i) This exemption extends to the U.S. government, its agencies and instrumentalities, and to any possession the taxation of which has been expressly reserved or preempted under the laws of the United States.

(ii) The tax will not apply with respect to any possession of any hazardous substance purchased, extracted, produced or manufactured outside this state ((~~which~~)) that is shipped or delivered into this state until the interstate transportation of such substance has finally ended in this state. Thus, out-of-state sellers or producers need not pay the tax on substances shipped directly to customers in this state. The customers must pay the tax upon their first possession unless otherwise expressly exempt.

(iii) Out-of-state sellers or producers will be subject to tax upon substances shipped or delivered to warehouses or other in-state facilities owned, leased, or otherwise controlled by them.

(iv) However, the tax will not apply with respect to possessions of substances ((~~which~~)) that are only temporarily stored or possessed in this state in connection with through, interstate movement of the substances from points of origin to points of destination both of which are outside of this state.

(f) The former exemption for petroleum products for export sale or use outside this state as fuel was effectively repealed by I-97. There are no exemptions under the law for any possessions of hazardous substances in this state simply because such substances may later be sold or used outside this state.

(g) ((~~Though I-97 contains an exemption for persons possessing any hazardous substance where such possession first occurred before March 1, 1989, this exemption applies only to the tax imposed under I-97. It does not apply retroactively to excuse the hazardous substance tax which was imposed under chapter 82.22 RCW in effect from January 1, 1988 until March 1, 1989. However:~~

(~~i) **Transitional rule:** Persons who possess stocks or inventories of petroleum products as of March 1, 1989, which are destined for sale or use outside this state as fuel are not subject to tax upon such possessions of preexisting inventories. For periods before March 1, 1989 the former exemption of RCW 82.22.040(3) for export petroleum products applies. For periods on and after March 1, 1989 the exemption for prepossessed hazardous substances explained in subsection (g) above will apply. Records appropriate to establish that such petroleum products were destined for out-of-state sale or use as fuel must be retained by any possessor claiming exemption under this transitional rule.~~)) Any possession of an agricultural crop protection product that is solely for use by a farmer or certified applicator as an agricultural crop protection product and is warehoused in this state or transported to or from this state is tax exempt, provided that the person possessing the product does not use, manufacture, package for sale, or sell the product in this state. The following definitions apply throughout this subsection unless the context clearly requires otherwise.

(i) "Agricultural crop protection product" means a chemical regulated under the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. Sec. 136 as amended as of September 1, 2015, when used to prevent, destroy, repel, mitigate, or control predators, diseases, weeds, or other pests.

(ii) "Certified applicator" has the same meaning as provided in RCW 17.21.020.

(iii) "Farmer" has the same meaning as in RCW 82.04.-213.

(iv) "Manufacturing" includes mixing or combining agricultural crop protection products with other chemicals or other agricultural crop protection products.

(v) "Package for sale" includes transferring agricultural crop protection products from one container to another, including the transfer of fumigants and other liquid or gaseous chemicals from one tank to another.

(vi) "Use" has the same meaning as in RCW 82.12.010.

(5) Credits. There are three distinct kinds of tax credits against liability ((~~which~~)) that are available under the law.

(a) A credit may be taken by any manufacturer or processor of a hazardous substance produced from ingredients or components ((~~which~~)) that are themselves hazardous substances, and upon which the hazardous substance tax has been paid by the same person or is due for payment by the same person.

(i) Example. A manufacturer possesses hazardous chemicals ((~~which~~)) that it combines to produce an acid which is also designated as a hazardous substance or product. When it reports the tax upon the wholesale value of the acid it may use a credit to offset the tax by the amount of tax it has already paid or reported upon the hazardous chemical ingredients or components. In this manner the intent of the law to tax hazardous substances only once is fulfilled.

(ii) Under circumstances where the hazardous ingredient and the hazardous end product are both possessed by the same person during the same tax reporting period, the tax on the respective substances must be computed and the former must be offset against the latter so that the tax return reflects the tax liability after the credit adjustment.

(iii) This credit may be taken only by manufacturers who have the first possession in this state of both the hazardous ingredients and the hazardous end product.

(b) A credit may be taken in the amount of the hazardous substance tax upon the value of fuel ((~~which~~)) that is carried from this state in the fuel tank of any airplane, ship, truck, or other vehicle.

(i) The credit may be claimed only for the amount of tax reported or actually due to be paid on the fuel, not the amount representing the value of the fuel.

(ii) The purpose of this credit is to exclude from taxation any possessions of fuel ((~~which~~)) that remains in the fuel tanks of any carrier vehicles powered by such fuel when they leave this state, regardless of where or from whom such fuel-in-tanks was acquired.

(iii) The nature of this credit is such that it generally has application only for interstate and foreign private or common carriers ((~~who~~)) that carry fuel into this state and/or purchase fuel in this state. The intent is that the tax will apply only to so much of such fuel as is actually consumed by such carriers within this state.

(iv) In order to equitably and efficiently administer this tax credit, any fuel ((~~which~~)) that is brought into this state in carrier vehicle fuel tanks must be accounted for separately from fuel ((~~which~~)) that is purchased in this state for use in such fuel tanks. Formulas approved by the department of revenue for reporting the amount of fuel consumed in this state for purposes of this tax or other excise tax purposes will satisfy the separate accounting required under this subsection.

(v) Fuel-in-tanks brought into this state must be fully reported for tax and then the credit must be taken in the amount of such fuel ((~~which~~)) that is taken back out of this state. This is to be done on the same periodic excise tax return so that the net effect is that the tax is actually paid only upon the portion of fuel consumed here.

(vi) The credit for fuel-in-tanks purchased in this state must be accounted for by using a fuel-in-tanks credit certificate in substantially the following form:

Certificate of Credit for Fuel Carried from this State in Fuel Tanks

I hereby certify that the petroleum products specified herein, purchased by or transferred to the undersigned, from (name of seller or transferor), are entitled to the credit for fuel ((~~which~~)) that is carried from this state in the fuel tank of any airplane, ship, truck, or other vehicle operated by a private or common carrier in interstate or foreign commerce. I will become liable for and pay the taxes due upon all or any part

of such fuel ((~~which~~)) that is not so carried from this state. This certification is given with full knowledge of, and subject to the legally prescribed penalties for fraud and tax evasion.

Registration No.	..... (if applicable)
Type of Business	.....
Firm Name	.....
Business Address	.....
Registered Name	..... (if different)
Tax Reporting Agent	..... (if applicable)
Authorized Signature	.....
Title	.....
Identity of Fuel	..... (kind and amount by volume)
	Date: .....

(vii) This certificate may be executed and provided to any possessor of fuel in this state, throughout the chain of distribution, with respect to fuel ((~~which~~)) that ultimately will be sold and delivered into any carrier's fuel tanks in this state. Thus, refiners or manufacturers will take such certificates directly from carriers or from their wholesale purchasers who will sell to such carriers. Similarly, fuel dealers and distributors will take such certificates from carriers to whom they sell such fuel. These certificates must be retained as a permanent part of such seller's business records.

(viii) Persons who execute and provide these credit certificates to their fuel suppliers must retain suitable purchase and sales records as may be necessary to determine the amount of tax for which such persons may be liable.

(ix) Blanket certificates may be used to cover recurrent purchases of fuel by the same purchaser. Such blanket certificates must be renewed every two years.

(c) A credit may be taken against the tax owed in this state in the amount of any other state's hazardous substance tax ((~~which~~)) that has been paid by the same person measured by the wholesale value of the same hazardous substance.

(i) In order for this credit to apply, the other state's tax must be significantly similar to Washington's tax in all its various respects. The taxable incident must be possessing the substance; the tax purpose must be that the substance is hazardous; and the tax measure must be stated in terms of the wholesale value of the substance, without deductions for costs of doing business, such that the other state's tax does not constitute an income tax or added value tax.

(ii) This credit may be taken for the amount of any other state's qualifying tax ((~~which~~)) that has actually been paid before Washington state's tax is incurred because the substance was previously possessed by the same person in another taxing jurisdiction.

(iii) The amount of credit is limited to the amount of tax paid in this state upon possession of the same hazardous substance in this state. Also, the credit may not be applied against any tax paid or owed in this state other than the hazardous substance tax imposed ((~~by section 10 of I-97~~)) under chapter 82.21 RCW.

(iv) Exchange agreements under which hazardous substances or products possessed in this state are exchanged through any accounts crediting system with like substances possessed in other states do not qualify for this credit. The substance taxed in another state, and for which this credit is sought, must be actually, physically possessed in this state.

(v) Persons claiming this credit must maintain records necessary to verify that the credit taking qualifications have been met. ((~~See~~)) Additional information regarding record-keeping requirements is provided in WAC 458-20-19301((~~, part (9) for record keeping requirements~~)). The department of revenue will publish an excise tax bulletin listing other states' taxes ((~~which~~)) that qualify for this credit.

(6) Newly defined hazardous substances. Under chapter 82.21 RCW the director of the department of ecology may identify and designate ((~~things~~)) other substances or products as being hazardous substances ((~~after March 1, 1989. Also, things~~)) for purposes of the tax. The director of the department of ecology may also delete substances or products previously designated as hazardous substances ((~~may be deleted from this definition~~)). Such actions are done by ((~~the adoption and subsequent periodic amendments to rules of the department of ecology under the Washington Administrative Code~~)) amending chapter 173-342 WAC.

(a) The law allows the addition or deletion of substances or products as hazardous substances by rule amendments, no more often than twice in any calendar year.

(b) When such ((~~definitions~~)) additions or deletions are ((~~changed~~)) made, they do not take effect for tax purposes until the first day of the following month ((~~which~~)) that is at least thirty days after the effective date of rule ((~~action~~)) amendment by the department of ecology.

(i) Example. The department of ecology ((~~adopts or~~)) amends ((~~the rule~~)) chapter 173-342 WAC by adding a new substance and the effective date of the amendment is June 15th. Possession of the substance does not become taxable until August 1st.

(ii) The tax is owed by any person who has possession of the newly designated hazardous substance upon the tax effective date as explained herein. It is immaterial that the person in possession on that date was not the first person in possession of the substance in this state before it was designated as hazardous.

(7) Recurrent tax liability. It is the intent of the law that all hazardous substances possessed in this state should incur this tax liability only once unless they are expressly exempt. This is true of hazardous ingredients of products as well as the manufactured end product itself, if designated as a hazardous substance. The *exemption* for previously taxed hazardous substances does not apply to "products" ((~~which~~)) that have been manufactured or remanufactured simply because an ingredient or ingredients of that product may have already been taxed when possessed by the manufacturer. Instead of an exemption, manufacturers in possession of both the hazardous ingredient(s) and end product(s) should use the *credit* provision explained at ((~~part~~)) subsection (5)(a) of this ((~~section~~)) rule.

(a) However, the term "product" is defined to mean only an item or items ((~~which~~)) that contain a combination of both hazardous substance(s) and nonhazardous substance(s). The

term does not include combinations of only hazardous substances. Thus, possessions of substances produced by combining other hazardous substances upon all of which the tax has previously been paid will not again be taxable.

(b) When any hazardous substance(s) is first produced during and because of any physical combination or chemical reaction ((~~which~~)) that occurs in a manufacturing or processing activity, the intermediate possession of such substance(s) within the manufacturing or processing plant is not considered a taxable possession if the substance(s) becomes a component or ingredient of the product being manufactured or processed or is otherwise consumed during the manufacturing or processing activity.

(((~~i~~))) However, when any intermediate hazardous substance is first produced during a manufacturing or processing activity and is withdrawn for sale or transfer outside of the manufacturing or processing plant, a taxable first possession occurs.

(c) Concentrations or dilutions for shipment or storage. The mere addition or withdrawal of water or other nonhazardous substances to or from hazardous substances designated under CERCLA or FIFRA for the sole purpose of transportation, storage, or the later manufacturing use of such substances does not result in any new hazardous product.

(8) How and when to pay tax. The tax must be reported on a special line of the combined excise tax return designated "hazardous substances." It is due for payment together with the timely filing of the return upon which it is reported, covering the tax reporting period during which the hazardous substance(s) is first possessed within this state. Any person who is not expressly exempt of the tax and who possesses any hazardous substance in this state, without having proof that the tax has previously been paid on that substance, must report and pay the tax.

(a) It may be that the person who purchases a hazardous substance will not have billing information from which to determine the wholesale value of the substance when the tax return for the period of possession is due. In such cases the tax is due for payment no later than the next regular reporting due date following the reporting period in which the substance(s) is first possessed.

(b) The taxable incident or event is the possession of the substance. Tax is due for payment by the purchaser of any hazardous substance whether or not the purchase price has been paid in part or in full.

(c) Special provision for manufacturers, refiners, and processors. Manufacturers, refiners, and processors who possess hazardous substances are required to report the tax and take any available exemptions and credits only at the time that such hazardous substances are withdrawn from storage for purposes of their sale, transfer, remanufacture, or consumption.

(9) How and when to claim credits. Credits should be claimed and offset against tax liability reported on the same excise tax return when possible. The tax return form provides a line for reporting tax on hazardous substances and a line for taking credits as an offset against the tax reported. It is not required that any documents or other evidences of entitlement to credits be submitted with the report. Such proofs must be retained in permanent records for the purpose of verification of credits taken.

(10) Special provision for consumer/first possessors. Under circumstances where the consumer is the first person in possession of any nonexempt hazardous substance (e.g., substances imported by the consumer), or where the consumer is the person who must pay the tax upon substances previously possessed in this state (fuel purchased for export in fuel tanks) the consumer's tax measure will be eighty percent of its retail purchase price. This provision is intended to achieve a tax measure equivalent to the wholesale value.

(11) Hazardous substances or products on consignment. Consignees who possess hazardous substances or products in this state with the power to sell such things, in their own name or on behalf of a disclosed or undisclosed consignor are liable for payment of the tax. The exemption for previously taxed substances is available for such consignees only if the consignors have paid the tax and the consignee has retained the certification or other proof of previous tax payment referred to in ((~~part~~)) subsection (4)(a)(i) and (ii) of this ((~~section~~)) rule. Possession of consigned hazardous substances by a consignee does not constitute constructive possession by the consignor.

(12) Hazardous substances untraceable to source. Various circumstances may arise whereby a person will possess hazardous substances in this state, some of which have been previously taxed in this or other states and some of which may not. In such cases formulary tax reporting may be used, only upon a special ruling by the department of revenue.

(((~~a~~))) Example. Fungible petroleum products from sources both within and outside this state are commingled in common storage facilities. Formulary reporting is appropriate based upon volume percentages reflecting the ratio of in-state production to out-of-state production or other form of acquisition.

(13) Administrative provisions. The provisions of chapter 82.32 RCW regarding due dates, reporting periods, tax return requirements, interest and penalties, tax audits and limitations, disputes and appeals, and all such general administrative provisions apply equally to the hazardous substance tax. Special requested rulings covering unique circumstances generally will be issued within sixty days from the date upon which complete information is provided to the department of revenue.

(14) Certification of previously taxed hazardous substance. Certification that the hazardous substance tax has already been paid by a person previously in possession of the substance(s) may be taken in substantially the following form:

I hereby certify that this purchase - all purchases of (omit one) . . . . . .

. . . . . by . . . . . .,
(identify substance(s) purchased) (name of purchaser)

who possesses registration no. . . . . .,
(buyer's number, if registered)

consists of the purchase of hazardous substance(s) or product(s) upon which the hazardous substance tax has been paid

in full by a person previously in possession of the substance(s) or product(s) in this state. This certificate is given with full knowledge of, and subject to the legally prescribed penalties for fraud and tax evasion, and with the full knowledge and agreement that the undersigned hereby assumes any liability for hazardous substance tax which has not been previously paid because of possession of the hazardous substance(s) or product(s) identified herein.

. . . . .	The registered seller named below personally paid the tax upon possession of the hazardous substances.
. . . . .	A person in possession of the hazardous substances prior to the possession of the registered seller named below paid the tax.

(Check the appropriate line.)

Name of registered seller	Registration No. . . . .
Firm name	Address . . . . .
Type of business	
Authorized signature	Title . . . . .
	Date . . . . .

((~~PART II - PETROLEUM PRODUCTS TAX~~

~~(1) Under the provisions of chapter 383, Laws of 1989, (hereinafter referred to as the law), a petroleum product tax was imposed, effective July 1, 1989, upon the wholesale value of petroleum products in this state with specific credits and exemptions provided. The tax is an excise tax upon the privilege of first possessing petroleum products in this state. It is imposed in addition to all other taxes of an excise or property tax nature, including the hazardous substance tax explained earlier in this section, and is not in lieu of any other such taxes.~~

~~(a) Sections 14-18 of the law consist of the tax provisions relating to possession of petroleum products which are administered exclusively under this section. The application of the petroleum product tax with the exceptions noted below, is the same as the hazardous substance tax applications explained in subsection (1)(c) of part 1 of this section.~~

~~(b) The petroleum product tax is imposed upon any possession of petroleum products in this state by any person who is not expressly exempt of the tax. However, it is the intent of the law that the economic burden of the tax should fall only upon the first such possession in this state just like the hazardous substance tax.~~

~~(2) Definitions. For purposes of this part the following terms will apply.~~

~~(a) "Tax" means the petroleum product tax imposed under section 16 of the law.~~

~~(b) "Petroleum product" means any plant condensate, lubricating oil, gasoline, aviation fuel, kerosene, diesel motor fuel, benzol, fuel oil, residual fuel oil, asphalt base, liquefied or liquefiable gases, such as butane, ethane and propane, and every other product derived from the refining of crude oil, but the term does not include crude oil.~~

~~(c) "Possession" means control of a petroleum product located within this state and includes both actual and constructive possession.~~

~~(i) "Control" means the power to sell or use a petroleum product or to authorize the sale or use by another.~~

~~(ii) "Actual possession" occurs when the person with control has physical possession.~~

~~(iii) "Constructive possession" occurs when the person with control does not have physical possession.~~

~~(d) "Previously taxed petroleum products" means petroleum products upon which the petroleum product tax has been paid and which have not been remanufactured or reprocessed in any manner (other than mere repackaging or recycling for beneficial reuse) since the tax was paid.~~

~~(e) "Wholesale value" is the tax measure or base. It means the fair market value determined by the wholesale selling price at the place of use of similar products of like quality and character. "Wholesale value" shall be determined in precisely the manner for the petroleum product tax as it is for the hazardous substance tax in part 1, subsection (2)(g) of this section.~~

~~(f) "Selling price." See 2(h) of part 1 of this section.~~

~~(g) "State," for purposes of the credit provisions of the petroleum product tax, means:~~

~~(i) A state of the United States other than Washington, or any political subdivision of such other state,~~

~~(ii) The District of Columbia,~~

~~(iii) Any foreign country or political subdivision thereof, and~~

~~(iv) Territories and possessions of the United States.~~

~~(3) Tax rate and measure. The tax is imposed upon the privilege of possession of petroleum products in this state. The tax rate is fifty one-hundredths of one percent (.005). The tax measure or base is the wholesale value of the petroleum products, as defined herein. The tax will apply for first possessions of petroleum products in all periods after its effective date unless the department notifies taxpayers in writing of the department's determination that the pollution liability reinsurance program trust account contains a sufficient balance to cause a moratorium on the tax application. The department will again notify taxpayers in writing if and when the account balance requires reapplication of the tax.~~

~~(4) Exemptions. The following are expressly exempt from the tax:~~

~~(a) Any successive possessions of any previously taxed petroleum products are exempt in precisely the manner as the same exemption for the hazardous substance tax. (See part 1, subsection (4)(a) of this section.) If the tax is paid by any person other than the first person having taxable possession of a petroleum product, the amount of tax paid shall constitute a debt owed by the first person having taxable possession to the person who paid the tax.~~

~~(b) Any possession of a petroleum product by a natural person for use of a personal or domestic nature rather than a business nature is exempt in precisely the manner as the same exemption for the hazardous substance tax. (See part 1, subsection (4)(b) of this section.)~~

~~(c) Any possessions of the following substances are tax exempt:~~

~~(i) Natural gas, or petroleum coke;~~

~~(ii) Liquid fuel or fuel gas used in processing petroleum;~~

~~(iii) Petroleum products that are exported for use or sale outside this state as fuel.~~

~~(iv) The exemption for possessions of petroleum products for export sale or use as fuel may be taken by any person~~

~~within the chain of distribution of such products in this state. To perfect its entitlement to this exemption the person possessing such product(s) must take from its buyer or transferee of the product(s) a written certification in substantially the following form:~~

~~Certificate of Tax Exempt Export Petroleum Products~~

~~I hereby certify that the petroleum products specified herein, purchased by or transferred to the undersigned, from (seller or transferor), are for export for use or sale outside Washington state as fuel. I will become liable for and pay any petroleum product tax due upon all or any part of such products which are not so exported outside Washington state. This certificate is given with full knowledge of, and subject to the legally prescribed penalties for fraud and tax evasion.~~

~~Registration No. . . . . .~~
~~Type of Business . . . . . .~~
~~(If applicable) Firm Name . . . . . .~~
~~Registered Name (If different) . . . . . .~~
~~Authorized Signature . . . . . .~~
~~Title . . . . . .~~
~~Identity of Petroleum Product . . . . . .~~
~~(Kind and amount by volume)~~
~~Date: . . . . . .~~

~~(v) Each successive possessor of such petroleum products must, in turn, take a certification in this form from any other person to whom such petroleum products are sold or transferred in this state. Failure to take and keep such certifications as part of its permanent records will incur petroleum product tax liability by such sellers or transferrers of petroleum products.~~

~~(vi) Persons in possession of such petroleum products who themselves export or cause the exportation of such products to persons outside this state for further sale or use as fuel must keep the proofs of actual exportation required by WAC 458-20-193, parts A or C. Carriers who will purchase fuel in this state to be taken out-of-state in the fuel tanks of any ship, airplane, truck, or other carrier vehicle will provide their fuel suppliers with this certification. Then such carriers will directly report and pay the tax only upon the portion of such fuel actually consumed by them in this state. (With respect to fuel brought into this state in fuel tanks and partially consumed here, see the credit provisions of part 1, subsection (5)(b) of this section.~~

~~(vii) Blanket export exemption certificates may never be accepted in connection with petroleum products exchanged under exchange agreements.~~

~~(d) Any possession of petroleum products packaged for sale to ultimate consumers. This exemption is limited to petroleum products which are prepared and packaged for sale at usual and ordinary retail outlets. Examples are containerized motor oil, lubricants, and aerosol solvents.~~

~~(5) Credits. There are two distinct kinds of tax credits against liability which are available under the law.~~

~~(a) A credit may be taken in the amount of the petroleum product tax upon the value of fuel which is carried from this state in the fuel tank of any airplane, ship, truck, or other vehicle. The credit is applied in precisely the same manner as the hazardous substance tax in part 1, subsection (5)(b) of this section.~~

~~The same form of certification as used for the fuel-in-tanks hazardous substance tax credit in subsection (5)(b)(vi) of part 1 of this section may be used.~~

~~(b) A credit may be taken against the tax owed in this state in the amount of any other state's petroleum product tax which has been paid by the same person measured by the wholesale value of the same petroleum product tax.~~

~~(i) In order for this credit to apply, the other state's tax must be significantly similar to Washington's tax in all its various respects. The taxable incident must be on the act or privilege of possessing petroleum products and the tax must be of a kind that is not generally imposed on other activities or privileges; the tax purpose must be to fund pollution liability insurance; and the tax measure must be stated in terms of the wholesale value of the petroleum products, without deductions for costs of doing business, such that the other state's tax does not constitute an income tax or added value tax.~~

~~(ii) The credit is applied in precisely the same manner as the state credit for hazardous substance tax in part 1, subsection (5)(c) of this section. The amount of the credit shall not exceed the petroleum product tax liability with respect to that petroleum product.~~

~~(6) The general administrative and tax reporting provisions for the hazardous substance tax contained in part 1 (8) through (14) of this section apply as well for the petroleum products tax of this part in precisely the same manner except the references to "hazardous substance(s)" or "substance(s)" should be replaced with the words, "petroleum products."~~))

NEW SECTION

WAC 458-20-281 Petroleum product tax. (1) Introduction. Under chapter 82.23A RCW (hereinafter referred to as the "law"), a petroleum product tax is imposed upon the wholesale value of petroleum products in this state with specific credits and exemptions provided. The tax is an excise tax upon the privilege of first possessing petroleum products in this state. The tax is administered by the department of revenue.

(a) Chapter 82.23A RCW is administered exclusively under this rule. The application of the petroleum product tax with the exceptions noted below, is the same as the application of the hazardous substance tax explained in WAC 458-20-252 (1)(c).

(b) The petroleum product tax is imposed upon any possession of petroleum products in this state by any person who is not expressly exempt of the tax. However, it is the intent of the law that the economic burden of the tax should fall only upon the first such possession in this state just like the hazardous substance tax.

(2) Definitions. For purposes of this rule the following definitions will apply.

(a) "Tax" means the petroleum product tax imposed under chapter 82.23A RCW.

(b) "Petroleum product" means any plant condensate, lubricating oil, gasoline, aviation fuel, kerosene, diesel motor fuel, benzol, fuel oil, residual fuel oil, asphalt base, and every

other product derived from the refining of crude oil, but the term does not include crude oil or liquefiable gases.

(c) "Possession" means control of a petroleum product located within this state and includes both actual and constructive possession.

(i) "Control" means the power to sell or use a petroleum product or to authorize the sale or use by another.

(ii) "Actual possession" occurs when the person with control has physical possession.

(iii) "Constructive possession" occurs when the person with control does not have physical possession.

(d) "Previously taxed petroleum product" means a petroleum product in respect to which the petroleum product tax has been paid and that has not been remanufactured or reprocessed in any manner (other than mere repackaging or recycling for beneficial reuse) since the tax was paid.

(e) "Wholesale value" is the tax measure or base. It means the fair market value determined by the wholesale selling price at the place of use of similar products of like quality and character.

(i) For purposes of determining the tax for petroleum products introduced at the rack, the wholesale value is determined when the petroleum product is removed at the rack unless the removal is to a properly licensed petroleum products exporter for direct delivery to a destination outside of the state. For all other cases, the wholesale value is determined upon the first nonbulk possession in the state.

(ii) In cases where no sale has occurred, wholesale value means the fair market wholesale value, determined as nearly as possible according to the wholesale selling price at the place of use of similar substances of like quality and character. In such cases, the wholesale value shall be the "value of the products" as determined under the alternate methods set forth in WAC 458-20-112.

(f) "Selling price" has the same meaning as provided in WAC 458-20-252 (2)(h).

(g) "State," for purposes of the credit provisions of the petroleum product tax, means:

(i) A state of the United States other than Washington, or any political subdivision of such other state;

(ii) The District of Columbia;

(iii) Any foreign country or political subdivision thereof; and

(iv) Territories and possessions of the United States.

(h) "Rack" means a mechanism for delivering petroleum products from a refinery or terminal into a truck, trailer, railcar, or other means of nonbulk transfer. For purposes of this definition:

(i) "Nonbulk transfer" means a transfer of a petroleum product that does not meet the definition of "bulk transfer" in (h)(ii) of this subsection;

(ii) "Bulk transfer" means a transfer of a petroleum product by pipeline or vessel; and

(iii) "Terminal" means a petroleum product storage and distribution facility that has been assigned a terminal control number by the internal revenue service, is supplied by pipeline or vessel, and from which certain petroleum products are removed at a rack.

(3) Tax rate and measure. The tax is imposed upon the privilege of possession of a petroleum product in this state.

(a) The tax rate is thirty one-hundredths of one percent (.003). Starting July 1, 2021, the rate will be decreased from thirty one-hundreds of one percent (.003) to fifteen one-hundreds of one percent (.0015).

(b) The tax measure or base is the wholesale value of the petroleum product, as defined in this rule.

(c) The tax will apply for first possessions of any petroleum products in all periods after its effective date unless the department notifies taxpayers in writing of the department's determination that the pollution liability reinsurance program trust account contains a sufficient balance to cause a moratorium on the tax application. The department will again notify taxpayers in writing if and when the account balance requires reapplication of the tax.

(4) Exemptions. The following are expressly exempt from the tax:

(a) Any successive possessions of any previously taxed petroleum products are exempt in precisely the manner as the same exemption for the hazardous substance tax. (Additional information is provided in WAC 458-20-252 (4)(a).) If the tax is paid by any person other than the first person having taxable possession of a petroleum product, the amount of tax paid shall constitute a debt owed by the first person having taxable possession to the person who paid the tax.

(b) Any possession of a petroleum product by a natural person for use of a personal or domestic nature rather than a business nature is exempt in precisely the manner as the same exemption for the hazardous substance tax. (Additional information is provided in WAC 458-20-252 (4)(b).)

(c) Any possessions of the following substances are tax exempt:

(i) Natural gas, or petroleum coke;

(ii) Liquid fuel or fuel gas used in processing petroleum;

(iii) Petroleum products that are exported for use or sale outside this state as fuel.

(iv) The exemption for possessions of petroleum products for export sale or use as fuel may be taken by any person within the chain of distribution of such products in this state. To perfect its entitlement to this exemption the person possessing such product(s) must take from its buyer or transferee of the product(s) a written certification in substantially the following form:

Certificate of Tax Exempt Export Petroleum Products

I hereby certify that the petroleum products specified herein, purchased by or transferred to the undersigned, from (seller or transferor), are for export for use or sale outside Washington state as fuel. I will become liable for and pay any petroleum product tax due upon all or any part of such products that are not so exported outside Washington state. This certificate is given with full knowledge of, and subject to the legally prescribed penalties for fraud and tax evasion.

Registration No. (If applicable)	. . . . .
Type of Business	. . . . .
Registered Name (If different)	. . . . .
Authorized Signature	. . . . .
Title	. . . . .

Identity of Petroleum Product . . . . . .
(Kind and amount by volume)

Date: . . . . . .

(v) Each successive possessor of such petroleum products must, in turn, take a certification in this form from any other person to whom such petroleum products are sold or transferred in this state. Failure to take and keep such certifications as part of its permanent records will incur petroleum product tax liability by such sellers or transferors of petroleum products.

(vi) Persons in possession of such petroleum products who themselves export or cause the exportation of such products to persons outside this state for further sale or use as fuel must keep the proofs of actual exportation required by WAC 458-20-193C, parts A or B. Carriers who will purchase fuel in this state to be taken out-of-state in the fuel tanks of any ship, airplane, truck, or other carrier vehicle will provide their fuel suppliers with this certification. Then such carriers will directly report and pay the tax only upon the portion of such fuel actually consumed by them in this state. (With respect to fuel brought into this state in fuel tanks and partially consumed here, information regarding the credit provisions is provided in WAC 458-20-252 (5)(b).)

(vii) Blanket export exemption certificates may never be accepted in connection with petroleum products exchanged under exchange agreements.

(d) Any possession of petroleum products packaged for sale to ultimate consumers. This exemption is limited to petroleum products that are prepared and packaged for sale at usual and ordinary retail outlets. Examples are containerized motor oil, lubricants, and aerosol solvents.

(5) Credits. There are two distinct kinds of tax credits against liability which are available under the law.

(a) A credit may be taken in the amount of the petroleum product tax upon the value of fuel which is carried from this state in the fuel tank of any airplane, ship, truck, or other vehicle. The credit is applied in precisely the same manner as the hazardous substance tax in WAC 458-20-252 (5)(b).

The same form of certification as used for the fuel-in-tanks hazardous substance tax credit in WAC 458-20-252 (5)(b)(vi) may be used.

(b) A credit may be taken against the tax owed in this state in the amount of any other state's petroleum product tax that has been paid by the same person measured by the wholesale value of the same petroleum product tax.

(i) In order for this credit to apply, the other state's tax must be significantly similar to Washington's tax in all its various respects. The taxable incident must be on the act or privilege of possessing petroleum products and the tax must be of a kind that is not generally imposed on other activities or privileges; the tax purpose must be to fund pollution liability insurance; and the tax measure must be stated in terms of the wholesale value of the petroleum products, without deductions for costs of doing business, such that the other state's tax does not constitute an income tax or added value tax.

(ii) The credit is applied in precisely the same manner as the state credit for hazardous substance tax in WAC 458-20-252 (5)(c). The amount of the credit shall not exceed the petroleum product tax liability with respect to that petroleum product.

(6) General administration and tax reporting. The general administrative and tax reporting provisions for the hazardous substance tax contained in WAC 458-20-252 (8) through (14) apply as well for the petroleum product tax of this rule in precisely the same manner except the references to "hazardous substance(s)" or "substance(s)" should be replaced with the words, "petroleum products."

(7) Expiration date. The petroleum product tax expires July 1, 2030.

WSR 17-01-159
PERMANENT RULES
PUBLIC DISCLOSURE COMMISSION

[Filed December 21, 2016, 9:59 a.m., effective January 21, 2017]

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

Purpose: New WAC 390-05-195 establishes a timely filing presumption for mailed reports that are received within five business days of the statutory filing deadline, provided that there is no statutory filing requirement for the mailed report.

Statutory Authority for Adoption: RCW 42.17A.110.

Adopted under notice filed as WSR 16-22-048 on October 28, 2016.

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 Request of a Nongovernmental Entity: New 0 [1], Amended 1 [0], Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0 [1], Amended 1 [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: December 8, 2016.

Jana Y. Greer
Executive Assistant

NEW SECTION

WAC 390-05-195 Application of RCW 42.17A.140 (1). (1) In accordance with RCW 42.17A.140(1), the date of receipt of any properly addressed application, report, statement, notice, or payment required under the provisions of chapter 42.17A RCW is the date shown by the post office cancellation mark on the envelope. The commission frequently receives mailed items that do not bear a post office cancellation mark.

(2) Any report mailed to the commission under the provisions of chapter 42.17A RCW is presumed to be filed

timely if received within five business days of the due date provided for in chapter 42.17A RCW.

(3) A mailed report may not be substituted for a report required to be electronically filed under the provisions of chapter 42.17A RCW.

WSR 17-01-160
PERMANENT RULES
PUBLIC DISCLOSURE COMMISSION

[Filed December 21, 2016, 10:01 a.m., effective January 21, 2017]

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

Purpose: New WAC 390-16-236 establishes a schedule for registering a surplus funds account and disclosing surplus funds expenditures.

Statutory Authority for Adoption: RCW 42.17A.110 and 42.17A.240(11).

Adopted under notice filed as WSR 16-21-036 on October 11, 2016.

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 Request of a Nongovernmental Entity: New 0 [1], Amended 1 [0], Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0 [1], Amended 1 [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: December 8, 2016.

Jana Y. Greer
Executive Assistant

NEW SECTION

WAC 390-16-236 Surplus funds accounts—Disclosure. (1) **Registering a surplus funds account.**

(a) Any person who opens an account into which surplus funds will be deposited shall register the account by filing PDC Form C-1, Candidate Registration with the public disclosure commission. The committee name on the C-1 will be the name used by the campaign committee that raised the surplus funds followed by the designation, "surplus funds account." The C-1 must identify by name the treasurer of the account and the bank or depository where the account is held.

(b) The C-1 must be filed within two weeks after the date the account is opened.

(2) **Depositing surplus funds.**

(a) After a surplus funds account is established, a candidate may deposit into the account all surplus funds from subsequent campaigns.

(b) Only surplus funds may be deposited in a surplus funds account.

(c) A candidate who deposits surplus funds into a surplus funds account discloses an expenditure of campaign funds with the description "transfer to surplus funds account," the amount transferred, and the date the transfer occurred.

(3) **Disclosing surplus funds expenditures.**

(a) The treasurer shall file with the commission a report on the tenth day of each month detailing expenditures made in the preceding calendar month. This report need only be filed if the total expenditures made since the last such report exceeded two hundred dollars. The report shall be on PDC Form C-4, Campaign Summary Receipt & Expenditures.

(b) The treasurer shall file reports as required by (a) of this subsection until the account is closed, at which time a final report shall be filed.

(c) All reports filed disclosing expenditures from the surplus funds account shall be certified as correct by the treasurer.

WSR 17-01-161
PERMANENT RULES
PUBLIC DISCLOSURE COMMISSION

[Filed December 21, 2016, 10:03 a.m., effective January 21, 2017]

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

Purpose: The commission revises WAC 390-16-234 that authorizes a candidate to transfer campaign funds to another candidate for the purpose of making joint campaign expenditures to impose a deadline for the transfer of two business days from the date the expenditure is made.

Citation of Existing Rules Affected by this Order: Amending 1 [WAC 390-16-234].

Statutory Authority for Adoption: RCW 42.17A.110.

Adopted under notice filed as WSR 16-21-035 on October 11, 2016.

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 Request of a Nongovernmental Entity: New 0, Amended 1, 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: December 8, 2016.

Jana Y. Greer
Executive Assistant

AMENDATORY SECTION (Amending WSR 12-03-002, filed 1/4/12, effective 2/4/12)

WAC 390-16-234 Transfers of ((~~surplus and nonsurplus~~)) candidate funds. (1) ((~~One candidate may reimburse another for the former's proportionate share of documented and properly reported joint campaign expenses without the transaction constituting a "transfer" within the meaning of RCW 42.17A.430.~~)) Candidates are encouraged to directly pay to a vendor their proportionate share of joint campaign expenses. When separate, direct payments are not possible, one candidate may transfer campaign funds to another candidate without violating RCW 42.17A.430(8): Provided, That:

(a) The transferred funds are used exclusively for the joint expenditure;

(b) The amount may not exceed the prorated share attributable to the candidate who transfers the funds;

(c) The funds are transferred within two business days of the expenditure;

(d) Any transferred funds not used for the joint expenditure are returned no later than one business day after the expenditure is made; and

(e) The purpose of the transferred funds is timely disclosed as would be required for a direct expenditure.

(2) Candidate surplus funds may be transferred without limit to a bona fide political party or to a caucus political committee.

(3) Except as provided in subsections (1) and (2) of this section, no candidate or candidate's authorized committee may transfer surplus or nonsurplus funds to any other candidate or political committee.

WSR 17-01-162
PERMANENT RULES
DEPARTMENT OF REVENUE

[Filed December 21, 2016, 10:08 a.m., effective January 1, 2017]

Effective Date of Rule: January 1, 2017.

Other Findings Required by Other Provisions of Law as Precondition to Adoption or Effectiveness of Rule: The department is adopting these rules with an effective date of January 1 because these rules provide rates used for refunds and property valuations during 2017.

Purpose:

- WAC 458-18-220 Refunds—Rate of interest, provides the rate of interest that applies to tax refunds made pursuant to RCW 84.69.010 through 84.69.090 in accordance with RCW 84.69.100, and also to judgments entered in favor of the plaintiff pursuant to RCW 84.68.030. This rule has been amended to provide the rate of interest to be used when refunding property taxes paid in 2017.
- WAC 458-30-262 Agricultural land valuation—Interest rate—Property tax component, provides the interest rate and the property tax component used to value farm and agricultural lands classified under chapter 84.34 RCW (open space program). This rule has been amended to provide the interest rate and property tax component to be used when valuing classified farm and agricultural land during the 2017 assessment year.
- WAC 458-30-590 Rate of inflation—Publication—Interest rate—Calculation, provides the rate of inflation used to calculate interest on deferred special benefit assessments when farm and agricultural or timber land is removed or withdrawn from classification under chapter 84.34 RCW (open space program). This rule has been amended to provide the rate of inflation used in calculating interest for deferred special benefit assessments of land removed or withdrawn during 2017.

Citation of Existing Rules Affected by this Order: Amending WAC 458-18-220 Refunds—Rate of interest, 458-30-262 Agricultural land valuation—Interest rate—Property tax component, and 458-30-590 Rate of inflation—Publication—Interest rate—Calculation.

Statutory Authority for Adoption: RCW 84.34.065, 84.34.360, 84.34.141, and 84.69.100.

Adopted under notice filed as WSR 16-21-096 on October 19, 2016.

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 Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 3, 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: December 21, 2016.

Kevin Dixon
Rules Coordinator

AMENDATORY SECTION (Amending WSR 16-01-035, filed 12/9/15, effective 1/1/16)

WAC 458-18-220 Refunds—Rate of interest. The following rates of interest ((~~shall~~)) apply ((~~on~~)) to refunds of taxes made pursuant to RCW 84.69.010 through 84.69.090 in accordance with RCW 84.69.100. The following rates ((~~shall~~)) also apply to judgments entered in favor of the plaintiff pursuant to RCW 84.68.030. The interest rate is derived from the equivalent coupon issue yield of the average bill rate for twenty-six week treasury bills as determined at the first bill market auction conducted after June 30th of the calendar year preceding the date the taxes were paid. The rate ((~~thus determined shall be~~)) is applied to the amount of the judgment or the amount of the refund, until paid:

Year tax paid	Auction Year	Rate
1984	1983	9.29%

Year tax paid	Auction Year	Rate
1985	1984	11.27%
1986	1985	7.36%
1987	1986	6.11%
1988	1987	5.95%
1989	1988	7.04%
1990	1989	8.05%
1991	1990	8.01%
1992	1991	5.98%
1993	1992	3.42%
1994	1993	3.19%
1995	1994	4.92%
1996	1995	5.71%
1997	1996	5.22%
1998	1997	5.14%
1999	1998	5.06%
2000	1999	4.96%
2001	2000	5.98%
2002	2001	3.50%
2003	2002	1.73%
2004	2003	0.95%
2005	2004	1.73%
2006	2005	3.33%
2007	2006	5.09%
2008	2007	4.81%
2009	2008	2.14%
2010	2009	0.29%
2011	2010	0.21%
2012	2011	0.08%
2013	2012	0.15%
2014	2013	0.085%
2015	2014	0.060%
2016	2015	0.085%
2017	2016	0.340%

AMENDATORY SECTION (Amending WSR 16-01-035, filed 12/9/15, effective 1/1/16)

WAC 458-30-262 Agricultural land valuation—Interest rate—Property tax component. For assessment year ((~~2016~~)) 2017, the interest rate and the property tax component that are ((~~to be~~)) used to value classified farm and agricultural lands are as follows:

(1) The interest rate is ((~~4.46~~)) 4.53 percent; and

(2) The property tax component for each county is:

COUNTY	PERCENT	COUNTY	PERCENT
Adams	((~~1.27~~)) 1.25	Lewis	1.13
Asotin	((~~1.18~~)) 1.14	Lincoln	((~~1.19~~)) 1.17
Benton	((~~1.17~~)) 1.16	Mason	((~~1.15~~)) 1.16
Chelan	((~~1.11~~)) 1.08	Okanogan	((~~1.06~~)) 1.08
Clallam	((~~1.08~~)) 1.02	Pacific	((~~1.38~~)) 1.36
Clark	((~~1.29~~)) 1.23	Pend Oreille	((~~0.91~~)) 0.90
Columbia	((~~1.13~~)) 1.06	Pierce	((~~1.52~~)) 1.47
Cowlitz	((~~1.23~~)) 1.16	San Juan	((~~0.69~~)) 0.68
Douglas	((~~1.14~~)) 1.09	Skagit	((~~1.23~~)) 1.19
Ferry	0.97	Skamania	((~~1.07~~)) 1.00
Franklin	((~~1.26~~)) 1.24	Snohomish	((~~1.21~~)) 1.13
Garfield	((~~0.99~~)) 0.95	Spokane	((~~1.38~~)) 1.36
Grant	((~~1.29~~)) 1.23	Stevens	((~~0.97~~)) 0.96
Grays Harbor	((~~1.31~~)) 1.36	Thurston	((~~1.30~~)) 1.28
Island	0.93	Wahkiakum	((~~0.98~~)) 0.89
Jefferson	1.01	Walla Walla	1.32
King	1.06	Whatcom	((~~1.14~~)) 1.13
Kitsap	((~~1.20~~)) 1.23	Whitman	((~~1.42~~)) 1.44
Kittitas	((~~0.99~~)) 1.00	Yakima	1.22
Klickitat	((~~0.98~~)) 0.96		

AMENDATORY SECTION (Amending WSR 16-01-035, filed 12/9/15, effective 1/1/16)

WAC 458-30-590 Rate of inflation—Publication—Interest rate—Calculation. (1) **Introduction.** This rule sets forth the rates of inflation discussed in WAC 458-30-550. It also explains the department of revenue's obligation to annually publish a rate of inflation and the manner in which this rate is determined.

(2) **General duty of department((—)) - Basis for inflation rate.** Each year the department determines and publishes a rule establishing an annual rate of inflation. This rate of inflation is used in computing the interest that is assessed when farm and agricultural or timber land, which are exempt from special benefit assessments, is withdrawn or removed from current use classification.

(a) The rate of inflation is based upon the implicit price deflator for personal consumption expenditures calculated by the United States Department of Commerce. This rate is used to calculate the rate of interest collected on exempt special benefit assessments.

(b) The rate is published by December 31st of each year and applies to all withdrawals or removals from farm and agricultural or timber land classification that occur the following year.

(3) **Assessment of rate of interest.** An owner of classified farm and agricultural or timber land is liable for interest on the exempt special benefit assessment. Interest accrues from the date the local improvement district is created until the land is withdrawn or removed from classification. Interest accrues and is assessed in accordance with WAC 458-30-550.

(a) Interest is assessed only for the time (years and months) the land remains classified under RCW 84.34.020 (2) or (3).

(b) If the classified land is exempt from the special benefit assessment for more than one year, the annual inflation rates are used to calculate an average rate of interest. This average is determined by adding the inflation rate for each year the classified land was exempt from the special benefit assessment after the local improvement district was created. The sum of the inflation rates is then divided by the number of years involved to determine the applicable rate of interest.

(c) Example. A local improvement district for a domestic water supply system was created in January 1990 and the owner used the statutory exemption provided in RCW 84.34.320. On July 1, 1997, the land was removed from the farm and agricultural classification. An average interest rate was calculated using the inflation rates for 1990 through 1997. The owner was then notified of the amount of previously exempt special benefit assessment, plus the average interest rate.

(4) **Rates of inflation.** The rates of inflation used to calculate the interest as required by WAC 458-30-550 are as follows:

YEAR	PERCENT	YEAR	PERCENT
1976	5.6	1977	6.5
1978	7.6	1979	11.3
1980	13.5	1981	10.3
1982	6.2	1983	3.2
1984	4.3	1985	3.5
1986	1.9	1987	3.7
1988	4.1	1989	4.8
1990	5.4	1991	4.2
1992	3.3	1993	2.7
1994	2.2	1995	2.3
1996	2.2	1997	2.1
1998	0.85	1999	1.42
2000	2.61	2001	1.89
2002	1.16	2003	1.84
2004	2.39	2005	2.54
2006	3.42	2007	2.08
2008	4.527	2009	-0.85 (negative)
2010	1.539	2011	2.755
2012	1.295	2013	1.314
2014	1.591	2015	0.251
2016	0.953		

WSR 17-01-163
PERMANENT RULES
DEPARTMENT OF HEALTH
(Podiatric Medical Board)

[Filed December 21, 2016, 10:10 a.m., effective January 21, 2017]

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

Purpose: WAC 246-922-600 Sexual misconduct, the podiatric medical board has amended the rule to clarify what forcible or nonconsensual acts are within the definition of sexual misconduct by a podiatric physician.

Citation of Existing Rules Affected by this Order: Amending WAC 246-922-600.

Statutory Authority for Adoption: RCW 18.22.015 and 18.130.050.

Other Authority: RCW 18.130.062 and Executive Order 06-03.

Adopted under notice filed as WSR 16-16-094 on August 1, 2016.

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 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 13, 2016.

Suzanne Wilson, DPM
Chair

AMENDATORY SECTION (Amending WSR 07-12-092, filed 6/6/07, effective 7/7/07)

WAC 246-922-600 Sexual misconduct. (1) ((~~Definitions:~~)) The definitions in this subsection apply throughout this section unless the context clearly requires otherwise:

(a) "Patient" means a person who is receiving health care or treatment, or has received health care or treatment without a termination of the podiatric physician-patient relationship. The determination of when a person is a patient is made on a case-by-case basis with consideration given to a number of factors, including the nature, extent and context of the professional relationship between the podiatric physician and the person. The fact that a person is not actively receiving treatment or professional services is not the sole determining factor.

(b) "Podiatric physician" means a person licensed to practice podiatric medicine and surgery under chapter 18.22 RCW.

(c) "Key third party" means a person in a close personal relationship with the patient and includes, but is not limited to, spouses, domestic partners, parents, siblings, children, guardians and proxies.

(2) A podiatric physician shall not engage in sexual misconduct with a current patient or a key third party. A podiatric physician engages in sexual misconduct when he or she engages in the following behaviors with a patient or key third party:

(a) Sexual intercourse or genital to genital contact;

(b) Oral to genital contact;

(c) Genital to anal contact or oral to anal contact;

(d) Kissing in a romantic or sexual manner;

(e) Touching breasts, genitals or any sexualized body part for any purpose other than appropriate examination or treatment;

(f) Examination or touching of genitals without using gloves;

(g) Not allowing a patient the privacy to dress or undress;

(h) Encouraging the patient to masturbate in the presence of the podiatric physician or masturbation by the podiatric physician while the patient is present;

(i) Offering to provide practice-related services, such as medication, in exchange for sexual favors;

(j) Soliciting a date;

(k) Engaging in a conversation regarding the sexual history, preferences or fantasies of the podiatric physician.

(3) Sexual misconduct also includes sexual contact with any person involving force, intimidation, or lack of consent; or a conviction of a sex offense as defined in RCW 9.94A.030.

(4) A podiatric physician shall not engage in any of the conduct described in subsection (2) of this section with a former patient or key third party if the podiatric physician:

(a) Uses or exploits the trust, knowledge, influence, or emotions derived from the professional relationship; or

(b) Uses or exploits privileged information or access to privileged information to meet the podiatric physician's personal or sexual needs.

(((~~4~~))) (5) To determine whether a patient is a current patient or a former patient, the board will analyze each case individually, and will consider a number of factors((~~,~~)) including, but not limited to, the following:

(a) Documentation of formal termination;

(b) Transfer of the patient's care to another health care provider;

(c) The length of time that has passed;

(d) The length of time of the professional relationship;

(e) The extent to which the patient has confided personal or private information to the podiatric physician;

(f) The nature of the patient's health problem;

(g) The degree of emotional dependence and vulnerability.

(((~~5~~))) (6) This section does not prohibit conduct that is required for medically recognized diagnostic or treatment purposes if the conduct meets the standard of care appropriate to the diagnostic or treatment situation.

(((~~6~~))) (7) It is not a defense that the patient, former patient, or key third party initiated or consented to the conduct, or that the conduct occurred outside the professional setting.

(((~~7~~))) (8) A violation of any provision of this section shall constitute grounds for disciplinary action.

WSR 17-01-164
PERMANENT RULES
DEPARTMENT OF HEALTH
(Board of Osteopathic Medicine and Surgery)

[Filed December 21, 2016, 10:15 a.m., effective January 21, 2017]

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

Purpose: WAC 246-853-600 Sexual misconduct, the board of osteopathic medicine and surgery has amended the rule to clarify what forcible or nonconsensual acts are within the definition of sexual misconduct by osteopathic physicians.

Citation of Existing Rules Affected by this Order: Amending WAC 246-853-600.

Statutory Authority for Adoption: RCW 18.57.005 and 18.130.050.

Other Authority: RCW 18.130.062 and Executive Order 06-03.

Adopted under notice filed as WSR 16-16-073 on July 28, 2016.

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 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: September 23, 2016.

C. Hunter, DO
Chair

AMENDATORY SECTION (Amending WSR 07-12-091, filed 6/6/07, effective 7/7/07)

WAC 246-853-600 Sexual misconduct. (1) ((~~Definitions:~~)) The definitions in this subsection apply throughout this section unless the context clearly requires otherwise:

(a) "Patient" means a person who is receiving health care or treatment, or has received health care or treatment without a termination of the osteopathic physician-patient relationship. The determination of when a person is a patient is made on a case-by-case basis with consideration given to a number of factors, including the nature, extent and context of the professional relationship between the osteopathic physician and the person. The fact that a person is not actively receiving treatment or professional services is not the sole determining factor.

(b) "Osteopathic physician" means a person licensed to practice osteopathic medicine and surgery under chapter 18.57 RCW.

(c) "Key third party" means a person in a close personal relationship with the patient and includes, but is not limited to, spouses, partners, parents, siblings, children, guardians and proxies.

(2) An osteopathic physician shall not engage in sexual misconduct with a current patient or a key third party. An osteopathic physician engages in sexual misconduct when he or she engages in the following behaviors with a patient or key third party:

(a) Sexual intercourse or genital to genital contact;

(b) Oral to genital contact;

(c) Genital to anal contact or oral to anal contact;

(d) Kissing in a romantic or sexual manner;

(e) Touching breasts, genitals or any sexualized body part for any purpose other than appropriate examination or treatment;

(f) Examination or touching of genitals without using gloves;

(g) Not allowing a patient the privacy to dress or undress;

(h) Encouraging the patient to masturbate in the presence of the osteopathic physician or masturbation by the osteopathic physician while the patient is present;

(i) Offering to provide practice-related services, such as medication, in exchange for sexual favors;

(j) Soliciting a date;

(k) Engaging in a conversation regarding the sexual history, preferences or fantasies of the osteopathic physician.

(3) Sexual misconduct also includes sexual contact with any person involving force, intimidation, or lack of consent; or a conviction of a sex offense as defined in RCW 9.94A.030.

(4) An osteopathic physician shall not engage in any of the conduct described in subsection (2) of this section with a former patient or key third party if the osteopathic physician:

(a) Uses or exploits the trust, knowledge, influence, or emotions derived from the professional relationship; or

(b) Uses or exploits privileged information or access to privileged information to meet the osteopathic physician's personal or sexual needs.

((~~(4)~~)) (5) To determine whether a patient is a current patient or a former patient, the board will analyze each case individually, and will consider a number of factors((~~,~~)) including, but not limited to, the following:

(a) Documentation of formal termination;

(b) Transfer of the patient's care to another health care provider;

(c) The length of time that has passed;

(d) The length of time of the professional relationship;

(e) The extent to which the patient has confided personal or private information to the osteopathic physician;

(f) The nature of the patient's health problem;

(g) The degree of emotional dependence and vulnerability.

((~~(5)~~)) (6) This section does not prohibit conduct that is required for medically recognized diagnostic or treatment purposes if the conduct meets the standard of care appropriate to the diagnostic or treatment situation.

((~~(6)~~)) (7) It is not a defense that the patient, former patient, or key third party initiated or consented to the conduct, or that the conduct occurred outside the professional setting.

((~~(7)~~)) (8) A violation of any provision of this rule shall constitute grounds for disciplinary action.

WSR 17-01-166
PERMANENT RULES
OFFICE OF INSURANCE COMMISSIONER

[Insurance Commissioner Matter No. R 2016-16—Filed December 21, 2016, 10:32 a.m., effective see below]

Effective Date of Rule: For WAC 284-43-0160 is July 1, 2017; for WAC 284-43-5170 is thirty-one days after filing; and for the repeal of WAC 284-43-5040 is December 31, 2017.

Purpose: The rule clarifies the prescription drug benefit disclosure requirements for health carriers to make them easier to understand. The rule also clarifies that drugs covered under the medical benefit are included within the definition of the formulary.

Citation of Existing Rules Affected by this Order: Repealing WAC 284-43-5040; and amending WAC 284-43-0160 and 284-43-5170.

Statutory Authority for Adoption: RCW 48.02.060, 48.43.510.

Adopted under notice filed as WSR 16-21-091 on October 18, 2016.

A final cost-benefit analysis is available by contacting Jim Freeburg, P.O. Box 40260, Olympia, WA 98504-0260, phone (360) 725-7170, fax (360) 586-3109, email rules coordinator@oic.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 0, Repealed 0.

Number of Sections Adopted at 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 1.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 2, Repealed 1.

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: December 21, 2016.

Mike Kreidler
Insurance Commissioner

AMENDATORY SECTION (Amending WSR 16-01-081, filed 12/14/15, effective 12/14/15)

WAC 284-43-0160 Definitions. Except as defined in other subchapters and unless the context requires otherwise, the following definitions shall apply throughout this chapter.

(1) "Adverse determination" has the same meaning as the definition of adverse benefit determination in RCW 48.43.005, and includes:

(a) The determination includes any decision by a health carrier's designee utilization review organization that a request for a benefit under the health carrier's health benefit plan does not meet the health carrier's requirements for medical necessity, appropriateness, health care setting, level of care, or effectiveness or is determined to be experimental or investigational and the requested benefit is therefore denied, reduced, or terminated or payment is not provided or made, in whole or in part for the benefit;

(b) The denial, reduction, termination, or failure to provide or make payment, in whole or in part, for a benefit based on a determination by a health carrier or its designee utilization review organization of a covered person's eligibility to participate in the health carrier's health benefit plan;

(c) Any prospective review or retrospective review determination that denies, reduces, or terminates or fails to provide or make payment in whole or in part for a benefit;

(d) A rescission of coverage determination; or

(e) A carrier's denial of an application for coverage.

(2) "Authorization" or "certification" means a determination by the carrier that an admission, extension of stay, or other health care service has been reviewed and, based on the information provided, meets the clinical requirements for medical necessity, appropriateness, level of care, or effectiveness in relation to the applicable health plan.

(3) "Clinical review criteria" means the written screens, decision rules, medical protocols, or guidelines used by the carrier as an element in the evaluation of medical necessity and appropriateness of requested admissions, procedures, and services under the auspices of the applicable health plan.

(4) "Covered health condition" means any disease, illness, injury or condition of health risk covered according to the terms of any health plan.

(5) "Covered person" or "enrollee" means an individual covered by a health plan including a subscriber, policyholder, or beneficiary of a group plan.

(6) "Emergency fill" means a limited dispensed amount of medication that allows time for the processing of a preauthorization request. Emergency fill only applies to those circumstances where a patient presents at a contracted pharmacy with an immediate therapeutic need for a prescribed medication that requires a prior authorization.

(7) "Emergency medical condition" means the emergent and acute onset of a symptom or symptoms, including severe pain, that would lead a prudent layperson acting reasonably to believe that a health condition exists that requires immediate medical attention, if failure to provide medical attention would result in serious impairment to bodily functions or serious dysfunction of a bodily organ or part, or would place the person's health in serious jeopardy.

(8) "Emergency services" has the meaning set forth in RCW 48.43.005.

(9) "Enrollee point-of-service cost-sharing" or "cost-sharing" means amounts paid to health carriers directly providing services, health care providers, or health care facilities by enrollees and may include copayments, coinsurance, or deductibles.

(10) "Facility" means an institution providing health care services, including but not limited to hospitals and other licensed inpatient centers, ambulatory surgical or treatment centers, skilled nursing centers, residential treatment centers, diagnostic, laboratory, and imaging centers, and rehabilitation and other therapeutic settings, and as defined in RCW 48.43.005.

(11) "Formulary" means a listing of drugs used within a health plan. A formulary must include drugs covered under an enrollee's medical benefit.

(12) "Grievance" has the meaning set forth in RCW 48.43.005.

(13) "Health care provider" or "provider" means:

(a) A person regulated under Title 18 RCW or chapter 70.127 RCW, to practice health or health-related services or otherwise practicing health care services in this state consistent with state law; or

(b) An employee or agent of a person described in (a) of this subsection, acting in the course and scope of his or her employment.

(14) "Health care service" or "health service" means that service offered or provided by health care facilities and health care providers relating to the prevention, cure, or treatment of illness, injury, or disease.

(15) "Health carrier" or "carrier" means a disability insurance company regulated under chapter 48.20 or 48.21 RCW, a health care service contractor as defined in RCW 48.44.010, and a health maintenance organization as defined in RCW 48.46.020, and includes "issuers" as that term is used in the Patient Protection and Affordable Care Act (P.L. 111-148, as amended (2010)).

(16) "Health plan" or "plan" means any individual or group policy, contract, or agreement offered by a health carrier to provide, arrange, reimburse, or pay for health care service except the following:

(a) Long-term care insurance governed by chapter 48.84 RCW;

(b) Medicare supplemental health insurance governed by chapter 48.66 RCW;

(c) Limited health care service offered by limited health care service contractors in accordance with RCW 48.44.035;

(d) Disability income;

(e) Coverage incidental to a property/casualty liability insurance policy such as automobile personal injury protection coverage and homeowner guest medical;

(f) Workers' compensation coverage;

(g) Accident only coverage;

(h) Specified disease and hospital confinement indemnity when marketed solely as a supplement to a health plan;

(i) Employer-sponsored self-funded health plans;

(j) Dental only and vision only coverage; and

(k) Plans deemed by the insurance commissioner to have a short-term limited purpose or duration, or to be a student-only plan that is guaranteed renewable while the covered person is enrolled as a regular full-time undergraduate or graduate student at an accredited higher education institution, after a written request for such classification by the carrier and subsequent written approval by the insurance commissioner.

(17) "Immediate therapeutic needs" means those needs where passage of time without treatment would result in imminent emergency care, hospital admission or might seriously jeopardize the life or health of the patient or others in contact with the patient.

(18) "Indian health care provider" means:

(a) The Indian Health Service, an agency operated by the U.S. Department of Health and Human Services established by the Indian Health Care Improvement Act, Section 601, 25 U.S.C. §1661;

(b) An Indian tribe, as defined in the Indian Health Care Improvement Act, Section 4(14), 25 U.S.C. §1603(14), that operates a health program under a contract or compact to carry out programs of the Indian Health Service pursuant to the Indian Self-Determination and Education Assistance Act (ISDEAA), 25 U.S.C. §450 et seq.;

(c) A tribal organization, as defined in the Indian Health Care Improvement Act, Section 4(26), 25 U.S.C. §1603(26), that operates a health program under a contract or compact to carry out programs of the Indian Health Service pursuant to the ISDEAA, 25 U.S.C. §450 et seq.;

(d) An Indian tribe, as defined in the Indian Health Care Improvement Act, Section 4(14), 25 U.S.C. §1603(14), or tribal organization, as defined in the Indian Health Care Improvement Act, Section 4(26), 25 U.S.C. §1603(26), that operates a health program with funding provided in whole or part pursuant to 25 U.S.C. §47 (commonly known as the Buy Indian Act); or

(e) An urban Indian organization that operates a health program with funds in whole or part provided by Indian Health Service under a grant or contract awarded pursuant to Title V of the Indian Health Care Improvement Act, Section 4(29), 25 U.S.C. §1603(29).

(19) "Managed care plan" means a health plan that coordinates the provision of covered health care services to a covered person through the use of a primary care provider and a network.

(20) "Medically necessary" or "medical necessity" in regard to mental health services and pharmacy services is a carrier determination as to whether a health service is a covered benefit because the service is consistent with generally recognized standards within a relevant health profession.

(21) "Mental health provider" means a health care provider or a health care facility authorized by state law to provide mental health services.

(22) "Mental health services" means in-patient or out-patient treatment, partial hospitalization or out-patient treatment to manage or ameliorate the effects of a mental disorder listed in the *Diagnostic and Statistical Manual (DSM) IV* published by the American Psychiatric Association, excluding diagnoses and treatments for substance abuse, 291.0 through 292.9 and 303.0 through 305.9.

(23) "Network" means the group of participating providers and facilities providing health care services to a particular health plan or line of business (individual, small, or large group). A health plan network for issuers offering more than one health plan may be smaller in number than the total number of participating providers and facilities for all plans offered by the carrier.

(24) "Out-patient therapeutic visit" or "out-patient visit" means a clinical treatment session with a mental health provider of a duration consistent with relevant professional standards used by the carrier to determine medical necessity for the particular service being rendered, as defined in *Physicians Current Procedural Terminology,* published by the American Medical Association.

(25) "Participating provider" and "participating facility" means a facility or provider who, under a contract with the health carrier or with the carrier's contractor or subcontractor, has agreed to provide health care services to covered persons with an expectation of receiving payment, other than coinsurance, copayments, or deductibles, from the health carrier rather than from the covered person.

(26) "Person" means an individual, a corporation, a partnership, an association, a joint venture, a joint stock company, a trust, an unincorporated organization, any similar entity, or any combination of the foregoing.

(27) "Pharmacy services" means the practice of pharmacy as defined in chapter 18.64 RCW and includes any drugs or devices as defined in chapter 18.64 RCW.

(28) "Primary care provider" means a participating provider who supervises, coordinates, or provides initial care or continuing care to a covered person, and who may be required by the health carrier to initiate a referral for specialty care and maintain supervision of health care services rendered to the covered person.

(29) "Preexisting condition" means any medical condition, illness, or injury that existed any time prior to the effective date of coverage.

(30) "Premium" means all sums charged, received, or deposited by a health carrier as consideration for a health plan or the continuance of a health plan. Any assessment or any "membership," "policy," "contract," "service," or similar fee or charge made by a health carrier in consideration for a health plan is deemed part of the premium. "Premium" shall not include amounts paid as enrollee point-of-service cost-sharing.

(31) "Service area" means the geographic area or areas where a specific product is issued, accepts members or enrollees, and covers provided services. A service area must be defined by the county or counties included unless, for good cause, the commissioner permits limitation of a service area by zip code. Good cause includes geographic barriers within a service area, or other conditions that make offering coverage throughout an entire county unreasonable.

(32) "Small group plan" means a health plan issued to a small employer as defined under RCW 48.43.005(33) comprising from one to fifty eligible employees.

(33) "Substitute drug" means a therapeutically equivalent substance as defined in chapter 69.41 RCW.

(34) "Supplementary pharmacy services" or "other pharmacy services" means pharmacy services involving the provision of drug therapy management and other services not required under state and federal law but that may be rendered in connection with dispensing, or that may be used in disease prevention or disease management.

AMENDATORY SECTION (Amending WSR 16-19-086, filed 9/20/16, effective 10/21/16)

WAC 284-43-5170 Prescription drug benefit disclosures. (1) A carrier must include the following information in the certificate of coverage issued for a health benefit plan, policy or agreement that includes a prescription drug benefit((÷)) in addition to those required elsewhere in Titles 48 RCW and 284 WAC. The commissioner may disapprove any contract issued on or after January 1, 2018, if the requirements of this subsection are not met.

(a) A clear statement explaining that the health benefit plan((~~, policy or agreement may cover brand name drugs or medication under the circumstances set forth in WAC [284-43-5080] [284-43-817] or [284-43-5100] [284-43-818], including, if a formulary is part of the benefit design, brand name drugs or other medication not in the formulary~~)) uses the following in its coverage of drugs (as applicable):

(i) Exclusion of certain brand name or other medications from its formulary;

(ii) Therapeutic drug substitution;

(iii) Incentives for use of generic drugs (such as step-therapy protocols);

(iv) Prior authorization requirements;

(v) Mid-plan year formulary changes; or

(vi) Other limits of its prescription drug benefit.

(b) A clear explanation of the substitution process required under WAC 284-43-5080 that the enrollee or their provider must use to seek coverage of a prescription drug or medication that is not in the formulary or is not the carrier's preferred drug or medication for the covered medical condition.

(c) A clear statement explaining that consumers may be eligible to receive an emergency fill for prescription drugs under the circumstances described in WAC 284-170-470. The disclosure must include the process for consumers to obtain an emergency fill, and cost-sharing requirements, if any, for an emergency fill.

(d) The process for developing coverage standards and formularies, including the principal criteria by which drugs are selected for inclusion, exclusion, restriction or limitation.

(e) The process of changing formularies and coverage standards, including changes in the use of substitute drugs. If the plan has provisions for "grandfathering" certain ongoing prescriptions or other coverage exceptions, these practices must be disclosed.

(f) The disclosure must state whether drugs may move between tiers during a plan year and whether this may affect cost-sharing.

(g) Any medication management, disease management, or other pharmacy-related services reimbursed by the plan in addition to those required under state and federal law in connection with dispensing drugs, such as disease management services for migraine, diabetes, smoking cessation, asthma, or lipid management.

(h) The general categories of drugs excluded from coverage must be disclosed. Such categories may include items such as appetite suppressants, dental prescriptions, cosmetic agents or most over-the-counter medications. This subsection does not require that any particular category of coverage for drugs or pharmacy services should be excluded, reduced, or limited by a health plan.

(2) When a carrier eliminates a previously covered drug from its formulary, or establishes new limitations on coverage of the drug or medication, at a minimum a carrier must ensure that prior notice of the change will be provided as soon as is practicable, to enrollees who filled a prescription for the drug within the prior three months.

(a) Provided the enrollee agrees to receive electronic notice and such agreement has not been withdrawn, either electronic mail notice, or written notice by first class mail at the last known address of the enrollee, are acceptable methods of notice.

(b) If neither of these notice methods is available because the carrier lacks contact information for enrollees, a carrier may post notice on its web site or at another location that may be appropriate, so long as the posting is done in a manner that is reasonably calculated to reach and be noticed by affected enrollees.

(3) A carrier and health plan may use provider and enrollee education to promote the use of therapeutically equivalent generic drugs. The materials must not mislead an enrollee about the difference between biosimilar or bioequivalent, and therapeutically equivalent, generic medications.

(4) A carrier must include the following statement in the certificate of coverage issued for a health benefit plan, policy, or agreement that includes a prescription drug benefit, and provide current contact information as prompted below:

YOUR PRESCRIPTION DRUG RIGHTS

You have the right to safe and effective pharmacy services. You also have the right to know what drugs are covered by your plan and the limits that apply. If you have a question or concern about your prescription drug benefits, please contact us (the health carrier) at (health carrier's contact phone number) or visit (health carrier's web site). If you would like to know more about your rights, or if you have concerns about your plan, you may contact the Washington state office of insurance commissioner at 1-800-562-6900 or

www.insurance.wa.gov. If you have a concern about the pharmacists or pharmacies serving you, please contact the Washington state department of health at 360-236-4700, www.doh.wa.gov, or HSQACSC@doh.wa.gov.

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 284-43-5040 Coverage for pharmacy services.

WSR 17-01-169
PERMANENT RULES
DEPARTMENT OF LICENSING
[Filed December 21, 2016, 11:37 a.m., effective January 21, 2017]

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

Purpose: This adopted rule change will replace the current stamp design with a new design that has been presented by the landscape architecture industry and approved by the board of licensure for landscape architects. Only individuals licensed after the effective date of this rule will be required to obtain the new stamp.

Citation of Existing Rules Affected by this Order: Amending WAC 308-13-055 Do I need a stamp or seal?

Statutory Authority for Adoption: RCW 18.96.060.

Other Authority: RCW 18.96.150.

Adopted under notice filed as WSR 16-19-108 on September 21, 2016.

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 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: December 21, 2016.

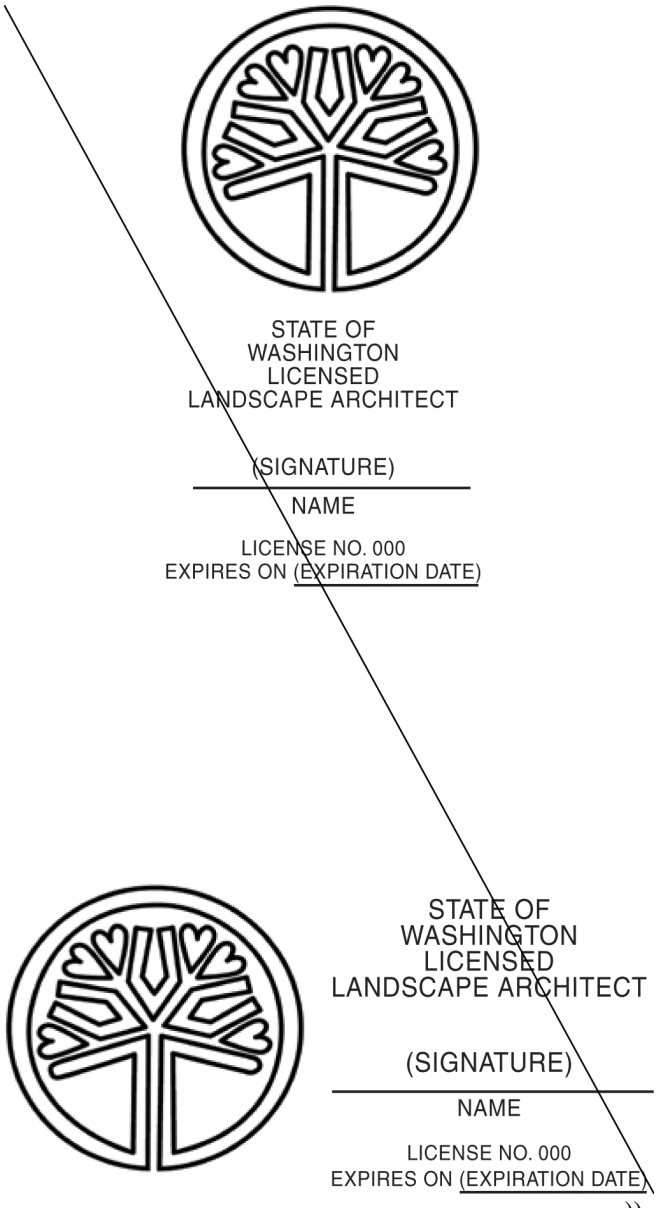
Damon Monroe
Rules Coordinator

AMENDATORY SECTION (Amending WSR 10-12-116, filed 6/2/10, effective 7/3/10)

WAC 308-13-055 Do I need a stamp or seal? If you were issued your initial license on or after ((~~July 1, 2010~~)) January 1, 2017, you must have a seal/stamp of the design authorized by the board, bearing your name, license number and the legend "Licensed landscape architect, state of Washington." The size of the seal/stamp may be ((~~used in a horizontal or vertical format~~)) adjusted provided it remains readable. Other deviations are not allowed. Examples of the board-authorized seal/stamp appear below.

If you were licensed before ((~~July 1, 2010~~)) January 1, 2017, you may continue to use your existing registration stamp.

((



))

(1) Your seal/stamp must include your signature and your license expiration date.

(2) You must seal/stamp the following:

(a) All technical submissions required for building permits, regulatory approvals and/or construction drawings that are filed with authorities having jurisdiction;

(b) Drawings prepared by you on each sheet;

(c) Specifications and other technical submissions need only be sealed/stamped on the cover, title page, and all pages of the table of contents.

(3) Your seal/stamp shall not be affixed to any drawings not prepared by you or your regularly employed subordinates, or not reviewed by you. If you seal/stamp drawings or specifications that you have reviewed, you shall be responsible to the same extent as if those drawings or specifications were prepared by you.

Without exception, these sealing/stamping requirements for landscape architects shall apply to all work prepared or supervised by the landscape architect.

(((~~(3)~~))) (4) The terms "signature" or "signed" as used in chapter 18.96 RCW and this chapter, shall mean the following:

(a) A handwritten identification or a digital representation of your handwritten identification that represents the act of putting your name on a document to attest to its validity. The handwritten or digital identification must be:

(i) Original and written by hand, or a scanned image of an original, handwritten identification;

(ii) Permanently affixed to the document(s) being certified;

(iii) Applied to the document by the identified licensee; and

(iv) Placed adjacent to the seal/stamp of the licensee((~~;~~)).

(b) A digital identification that is an electronic authentication process attached to or logically associated with an electronic document. The digital identification may include a scanned or digitized signature. The digital identification must be:

(i) Unique to the licensee using it;

(ii) Capable of independent verification;

(iii) Under the exclusive control of the licensee using it;

(iv) Linked to a document in such a manner that the digital identification is invalidated if any data in the document is changed.