WSR 16-10-002 PERMANENT RULES PARKS AND RECREATION COMMISSION

[Filed April 20, 2016, 3:09 p.m., effective May 21, 2016]

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

Purpose: These revised chapters and sections will provide clarification and modifications to various rules.

WAC 352-32-010 Definitions, clarification on remote controlled aircraft definition.

WAC 352-32-056 Peace and quiet, changes in this rule allow for park ranger discretion in handling noise from any individual campsite.

WAC 352-32-130 Aircraft, this WAC adds language to clarify the use of remote controlled aircraft via written permission from the director or designee.

WAC 352-32-200 Expulsion from state park areas, changes [to] this rule allow for park ranger discretion in expelling individuals from state park areas based on the elements of the infraction or crime committed.

WAC 352-32-210 Consumption of alcohol in state parks, the change in this rule prohibits possessing alcoholic beverages, either opened or unopened in areas as already established in WAC.

WAC 352-32-250 Standard fees charged, changes in this WAC allow for a towed vehicle to drive into a park unhitched from the recreational vehicle with which it is affiliated and not be subject to the extra vehicle fee, as long as they arrive together. Changes in this WAC also clarify the charge for motorcycles as extra vehicles in campsites, whether with recreational vehicles or other motorcycles.

Chapter 352-04 WAC, Brief adjudicative proceedings, allows for a more expedited process to adjudicate notices of expulsion.

Citation of Existing Rules Affected by this Order: Amending 352-32-010, 352-32-056, 352-32-130, 352-32-200, 352-32-210, 352-32-250, and chapter 352-04 WAC.

Statutory Authority for Adoption: Chapter 79A.05 RCW.

Adopted under notice filed as WSR 16-03-032 on January 12, and WSR 16-05-049 on February 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Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 1, Amended 6, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 1, Amended 6, Repealed 0.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: March 31, 2016.

Valeria Evans Management Analyst

NEW SECTION

WAC 352-04-060 Brief adjudicative proceedings. This rule is adopted in accordance with RCW 34.05.482 through 34.05.494, the provisions of which are hereby adopted. Brief adjudicative proceedings shall be used in all matters related to appeals of expulsion orders issued pursuant to WAC 352-32-200.

AMENDATORY SECTION (Amending WSR 08-24-006, filed 11/20/08, effective 12/21/08)

WAC 352-32-010 Definitions. Whenever used in this chapter the following terms shall be defined as herein indicated:

"Aircraft" shall mean any machine designed to travel through the air, whether heavier or lighter than air; airplane, dirigible, balloon, helicopter, etc. The term aircraft shall not include paraglider or remote controlled aircraft.

"Aquatic facility" shall mean any structure or area within a state park designated by the director or designee for aquatic activities((,,)) including, but not limited to, swimming pools, wading pools, swimming beaches, floats, docks, ramps, piers or underwater parks.

"Bivouac" shall mean to camp overnight on a vertical rock climbing route on a ledge or in a hammock sling.

"Campfires" shall mean any open flame from a wood source.

"Camping" shall mean erecting a tent or shelter or arranging bedding, or both, or parking a recreation vehicle or other vehicle for the purpose of remaining overnight.

"Camping party" shall mean an individual or a group of people (two or more persons not to exceed eight) that is organized, equipped and capable of sustaining its own camping activity in a single campsite. A "camping party" is a "camping unit" for purposes of RCW 79A.05.065.

"Commercial recreation provider" is any individual or organization that packages and sells a service that meets the definition of a commercial recreation use.

"Commercial recreation use" is a recreational activity in a state park that is packaged and sold as a service by an organization or individual, other than state parks or a state park concessionaire.

(("Commercial recreation provider" is any individual or organization that packages and sells a service that meets the definition of a commercial recreation use.))

"Commercial use (nonrecreation)" is any activity involving commercial or business purpose within a state park that may impact park facilities, park visitors or staff and is compatible with recreational use and stewardship, limited in duration and does not significantly block/alter access or negatively impact recreational users.

"Commission" shall mean the Washington state parks and recreation commission.

"Conference center" shall mean a state park facility designated as such by the director or designee that provides spe-

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cialized services, day-use and overnight accommodations available by reservation for organized group activities.

"Day area parking space" shall mean any designated parking space within any state park area designated for daytime vehicle parking.

"Director" shall mean the director of the Washington state parks and recreation commission or the director's designee.

"Disrobe" shall mean to undress so as to appear nude.

"Emergency area" is an area in the park separate from the designated overnight camping area, which the park manager decides may be used for camping when no alternative camping facilities are available within reasonable driving distances.

"Environmental interpretation" shall mean the provision of services, materials, publications and/or facilities, including environmental learning centers (ELCs), for other than basic access to parks and individual camping, picnicking, and boating in parks, that enhance public understanding, appreciation and enjoyment of the state's natural and cultural heritage through agency directed or self-learning activities.

"Environmental learning centers (ELCs)" shall mean those specialized facilities, designated by the director or designee, designed to promote outdoor recreation experiences and environmental education in a range of state park settings.

"Extra vehicle" shall mean each additional unhitched vehicle in excess of the one recreational vehicle that will be parked in a designated campsite or parking area for overnight.

"Fire" shall mean any open flame from any source or device including, but not limited to, campfires, stoves, candles, torches, barbeques and charcoal.

"Fish" shall mean all marine and freshwater fish and shellfish species including all species of aquatic invertebrates.

"Foster family home" means an agency which regularly provides care on a twenty-four-hour basis to one or more children, expectant mothers, or persons with developmental disabilities in the family abode of the person or persons under whose direct care and supervision the child, expectant mother, or person with a developmental disability is placed.

"Geocache" shall mean geocaches, letterboxes, and related activities. Geocaching is an outdoor treasure hunting game in which participants (called "geocachers") use a Global Positioning System receiver or other navigational techniques to hide and seek containers (called "geocaches" or "caches").

"Group" shall mean twenty or more people engaged together in an activity.

"Group camping areas" are designated areas usually primitive with minimal utilities and site amenities and are for the use of organized groups. Facilities and extent of development vary from park to park.

"Hiker/biker campsite" shall mean a campsite that is to be used solely by visitors arriving at the park on foot or bicy-

"Intimidate" means to engage in conduct that would make a reasonable person fearful.

"Motorcycle" means every motor vehicle having a saddle for the use of the rider and designed to travel on not more than three wheels in contact with the ground, but excluding a farm tractor and a moped.

"Multiple campsite" shall mean a designated and posted camping facility encompassing two or more individual standard, utility or primitive campsites.

"Obstruct pedestrian or vehicular traffic" means to walk, stand, sit, lie, or place an object in such a manner as to block passage by another person or a vehicle, or to require another person or a driver of a vehicle to take evasive action to avoid physical contact. Acts authorized as an exercise of one's constitutional right to picket or to legally protest, and acts authorized by a permit issued pursuant to WAC 352-32-165 shall not constitute obstruction of pedestrian or vehicular traffic.

"Out-of-home care" means placement in a foster family home or with a person related to the child under the authority of chapters 13.32A, 13.34, or 74.13 RCW.

"Overflow area" shall mean an area in a park separate from designated overnight and emergency camping areas, designated by the park manager, for camping to accommodate peak camping demands in the geographic region.

"Overnight accommodations" shall mean any facility or site designated for overnight occupancy within a state park area

"Paraglider" shall mean an unpowered ultralight vehicle capable of flight, consisting of a fabric, rectangular or elliptical canopy or wing connected to the pilot by suspension lines and straps, made entirely of nonrigid materials except for the pilot's harness and fasteners. The term "paraglider" shall not include hang gliders or parachutes.

"Person" shall mean all natural persons, firms, partnerships, corporations, clubs, and all associations or combinations of persons whenever acting for themselves or by an agent, servant, or employee.

"Person related to the child" means those persons referred to in RCW 74.15.020 (2)(a)(i) through (vi).

"Personal watercraft" means a vessel of less than sixteen feet that uses a motor powering a water jet pump, as its primary source of motive power and that is designed to be operated by a person sitting, standing, or kneeling on, or being towed behind the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

"Popular destination park" shall mean any state park designated by the director or designee as a popular destination park because, it is typically occupied to capacity on Friday or Saturday night during the high use season.

"Primitive campsite" shall mean a campsite not provided with flush comfort station nearby and which may not have any of the amenities of a standard campsite.

"Public assembly" shall mean a meeting, rally, gathering, demonstration, vigil, picketing, speechmaking, march, parade, religious service, or other congregation of persons for the purpose of public expression of views of a political or religious nature for which there is a reasonable expectation that a minimum of twenty persons will attend based on information provided by the applicant. Public assemblies must be open to all members of the public, and are generally the subject of attendance solicitations circulated prior to the event, such as media advertising, flyers, brochures, word-of-mouth notification, or other form of prior encouragement to attend.

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Alternatively, the agency director or designee may declare an event to be a public assembly in the following cases: Where evidentiary circumstances and supporting material suggest that more than one hundred persons will attend, even where the applicant does not indicate such an expectation; or where there is reason to expect a need for special preparations by the agency or the applicant, due to the nature or location of the event.

"Ranger" shall mean a duly appointed Washington state parks ranger who is vested with police powers under RCW 79A.05.160, and shall include the park manager in charge of any state park area.

"Recreation vehicle" shall mean a vehicle/trailer unit, van, pickup truck with camper, motor home, converted bus, or any similar type vehicle which contains sleeping and/or housekeeping accommodations.

"Remote controlled aircraft" shall mean nonpeopled model aircraft <u>and other unmanned aircraft systems, including those commonly known as "drones"</u> that are flown by using internal combustion, electric motors, elastic tubing, or gravity/wind for propulsion. The flight is controlled by a person on the ground using a hand held radio control transmitter.

"Residence" shall mean the long-term habitation of facilities at a given state park for purposes whose primary character is not recreational. "Residence" is characterized by one or both of the following patterns:

- (1) Camping at a given park for more than thirty days within a forty-day time period April 1 through September 30; or forty days within a sixty-day time period October 1 through March 31. As provided in WAC 352-32-030(7), continuous occupancy of facilities by the same camping party shall be limited to ten consecutive nights April 1 through September 30. Provided that at the discretion of the park ranger the maximum stay may be extended to fourteen consecutive nights if the campground is not fully occupied. Campers may stay twenty consecutive nights October 1 through March 31 in one park, after which the camping unit must vacate the overnight park facilities for three consecutive nights. The time period shall begin on the date for which the first night's fee is paid.
- (2) The designation of the park facility as a permanent or temporary address on official documents or applications submitted to public or private agencies or institutions.

"Seaweed" shall mean all species of marine algae and flowering sea grasses.

"Sno-park" shall mean any designated winter recreational parking area.

"Special groomed trail area" shall mean those sno-park areas designated by the director as requiring a special groomed trail permit.

"Special recreation event" shall mean a group recreation activity in a state park sponsored or organized by an individual or organization that requires reserving park areas, planning, facilities, staffing, or other services beyond the level normally provided at the state park to ensure public welfare and safety and facility and/or environmental protection.

"Standard campsite" shall mean a designated camping site which is served by nearby domestic water, sink waste, garbage disposal, and flush comfort station. "State park area" shall mean any area under the ownership, management, or control of the commission, including trust lands which have been withdrawn from sale or lease by order of the commissioner of public lands and the management of which has been transferred to the commission, and specifically including all those areas defined in WAC 352-16-020. State park areas do not include the seashore conservation area as defined in RCW 79A.05.605 and as regulated under chapter 352-37 WAC.

"Trailer dump station" shall mean any state park sewage disposal facility designated for the disposal of sewage waste from any recreation vehicle, other than as may be provided in a utility campsite.

"Upland" shall mean all lands lying above mean high water.

"Utility campsite" shall mean a standard campsite with the addition of electricity and which may have domestic water and/or sewer.

"Vehicle" shall include every device capable of being moved upon a public highway and in, upon, or by which any persons or property is or may be transported or drawn upon a public highway. For the purposes of this chapter, this definition excludes bicycles, wheelchairs, motorized foot scooters, electric personal assistive mobility devices (EPAMDs), snowmobiles and other nonlicensed vehicles.

"Vehicle parking permit" means the permit issued on a daily, multiple day or annual basis for parking a vehicle in any state park area designated for daytime vehicle parking, excluding designated sno-park parking areas.

"Vessel" shall mean any watercraft used or capable of being used as a means of transportation on the water.

"Walk-in campsite" shall mean a campsite that is accessed only by walking to the site and which may or may not have vehicle parking available near by.

"Watercraft launch" is any developed launch ramp designated for the purpose of placing or retrieving watercraft into or out of the water.

"Water trail advisory committee" shall mean the twelvemember committee constituted by RCW 79A.05.420.

"Water trail camping sites" shall mean those specially designated group camp areas identified with signs, that are near water ways, and that have varying facilities and extent of development.

"Wood debris" shall mean down and dead tree material.

AMENDATORY SECTION (Amending WSR 12-22-031, filed 10/31/12, effective 12/1/12)

WAC 352-32-056 Peace and quiet. To ((insure)) ensure peace and quiet for visitors:

- (1) No person ((shall conduct themselves so that park users are disturbed in their sleeping quarters or in campgrounds or park employees in their sleeping quarters)) may cause a sound that may be plainly audible beyond the person's immediate area of use or campsite between the quiet hours of 10:00 p.m. and 6:30 a.m.
- (2) No person shall, at any time, use sound-emitting ((electronie)) equipment including ((electrical speakers, radios, phonographs, televisions, or other such equipment)) musical instruments, at a volume which emits sound beyond

- the ((person's)) user's vehicle ((or)), immediate area of use, ((individual camp or pienie site that may disturb other park users)) or campsite without specific permission of the park ranger.
- (3) Engine driven electric generators may be operated only between the hours of 8:00 a.m. and 9:00 p.m., except at Crystal Springs and Easton Reload sno-parks where engine driven electric generators may be operated after 9:00 p.m. during the winter recreation season.
- (4) Any violation of this section is an infraction under chapter 7.84 RCW.

AMENDATORY SECTION (Amending WSR 07-03-121, filed 1/22/07, effective 2/22/07)

- WAC 352-32-130 Aircraft. (1) No aircraft shall land on or take off from any body of water or land area in a state park area not specifically designated for landing aircraft. This provision does not apply to official aircraft used in the performance of search and rescue missions, medical emergencies, law enforcement activities, emergency evacuations or firefighting activities. It also does not apply in cases where the director or designee specifically authorizes such landings or take offs, in writing, associated with the operational, or administrative needs of the agency or state.
- (2) Individuals who have complied with the registration process provided or who have obtained a special recreation event permit pursuant to WAC 352-32-047 may launch and land paragliders in state park areas specifically designated by the director or designee as available for paragliding. Prior to any such designation, the director or designee shall advertise and conduct a public meeting in the region where the park is located. The director or designee shall consider the potential impacts of paragliding in the proposed area, including but not limited to the following factors: The degree of conflict paragliding may have with other park uses, public safety issues, and any potential damage to park resources/facilities. Any park designated for paragliding shall be conspicuously posted as such by the agency.
 - (3) Individuals paragliding in state parks must:
- (a) Comply with the registration process provided for such purposes;
 - (b) Observe all applicable laws and regulations;
- (c) Never destroy or disturb park facilities, natural features, or historical or ((archeological)) archaeological resources:
- (d) Conduct themselves with thoughtfulness, courtesy and consideration for others, and not interfere with other recreational activities;
- (e) Conduct themselves in compliance with the following basic safety regulations:
- (i) Comply with specific site operational ((rules)) restrictions that are posted;
 - (ii) Fly in a manner consistent with the pilot rating held;
- (iii) Preplanned landings should be made in areas no smaller than forty feet wide by one hundred feet long:
- (iv) Make preflight checks of weather, equipment and site conditions;
- (v) Observe all published traffic and right of way flight guidelines, including yielding right of way to all aircraft;

- (vi) Wear protective clothing, headgear, Coast Guard approved flotation gear, reserve parachute, supplemental oxygen and communication equipment as appropriate for conditions;
- (vii) Fly in a manner that does not create a hazard for other persons or property;
- (viii) Fly only during daylight hours, or hours otherwise specified by posting at the site;
- (ix) Do not fly over congested areas of parks or open air assembly of persons;
 - (x) Fly only in designated areas of parks;
- (xi) Fly with visual reference to the ground surface at all times:
- (xii) Do not tether paraglider to the ground or other stable nonmovable object.
 - (f) Not fly while under the influence of alcohol or drugs.
- (4) Except as provided in subsection (5) of this section, individuals flying remote controlled aircraft ((must)) may do so only within flying areas designated by the director or designee and only when following the remote controlled aircraft management plan approved by the director or designee and posted for that designated area.
- (a) Prior to ((any such designation)) designating any remote controlled aircraft flying area, the director or designee shall advise and conduct a public meeting in the region where the park is located. The director or designee shall consider the potential impacts of remote controlled aircraft flying in the proposed area, including, but not limited to, the following factors: The degree of conflict remote controlled aircraft flying may have with other park uses, public safety issues, and any potential damage to park resources/facilities. Any park area designated for remote controlled aircraft flying shall be conspicuously posted as such by the director or designee.
- (b) The director or designee shall establish a committee to advise park staff on park management issues related to remote controlled aircraft flying for each state park area designated as a remote controlled aircraft flying ((site)) area.
- (c) Each state park area with an established advisory committee, which includes remote controlled aircraft flyers will have an approved management plan which will specify remote controlled aircraft flying ((rules)) restrictions concerning types of aircraft, flying hours, identified approved flying zones, identified runways for take-offs and landings, engine muffler requirements, use of and posting of radio frequency, fuel spills and cleanup. The director or designee shall ensure that any remote controlled aircraft flying ((rules)) restrictions contained in the remote controlled aircraft flying management plan are conspicuously posted at the entrance of the affected park area.
- (d) The director or designee may permanently, or for a specified period or periods of time, close any designated flying area to remote controlled aircraft flying if the director or designee concludes that a remote controlled aircraft flying closure is necessary for the protection of the health, safety, and welfare of the public, park visitors or staff, or park resources. Prior to closing any designated flying area to remote controlled aircraft flying, the director or designee shall hold a public meeting near the state park area to be closed to remote controlled aircraft flying. Prior notice of the meeting shall be published in a newspaper of general circula-

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tion in the area and at the park at least thirty days prior to the meeting. In the event that the director or designee or park manager determines that it is necessary to close a designated flying area immediately to protect against an imminent and substantial threat to the health, safety, and welfare of the public, park visitors or staff, or park resources, the director or designee or park manager may take emergency action to close a state park area to remote controlled aircraft flying without first complying with the publication and meeting requirements of this subsection. Such emergency closure may be effective for only so long as is necessary for the director or designee to comply with the publication and meeting requirements of this subsection. The director or designee shall ensure that any designated flying area closed to remote controlled aircraft flying is conspicuously posted as such at the entrance of the affected park area.

- (((e) Except as provided in WAC 352 32 310,)) (5) Remote controlled aircraft may be flown in any state park area pursuant to written permission from the director or designee. In granting such permission, the director or designee may specify time, geographic, and elevation restrictions, and any other restrictions necessary to protect the public, park visitors or staff, or park resources. While operating a remote controlled aircraft pursuant to written permission under this subsection, the operator shall be in possession of a copy of the written permission and shall produce it upon request by parks staff. Permission granted by the director or designee to fly a remote controlled aircraft is subject to rescission as necessary to protect the public, park visitors or staff, or park resources.
- (6) Any violation of this section ((or)), including any failure to abide by a conspicuously posted remote controlled aircraft flying ((rule)) restriction or failure to abide by the terms of written permission to fly remote controlled aircraft, is an infraction under chapter 7.84 RCW.

AMENDATORY SECTION (Amending WSR 00-13-070, filed 6/16/00, effective 7/17/00)

- WAC 352-32-200 Expulsion from state park areas. (1) In addition to the penalty provided in RCW 79A.05.165, or any other existing or future law of the state of Washington, violation of or failure to comply with any section of this chapter, or of any other chapter of this title, or any other rule or regulation of the commission, or with any other federal, state, or local law, rule, or regulation applicable under the circumstances, shall subject the person so violating or failing to comply to expulsion from any state park area((, for a period of time no less than forty-eight hours)). Any park ranger may expel a person from any state park area under the authority of this section by issuing the person a notice of expulsion.
- (2) ((All drug or alcohol related misconduct for which a citation is issued shall additionally subject the individual to expulsion from all lands administered by the commission for the following periods:
- (a) One incident shall result in a forty-eight-hour expulsion.
 - (b) Two incidents shall result in a thirty-day expulsion.
- (e) Three incidents shall result in a one-year expulsion.)) A notice of expulsion shall:

- (a) Be in writing and signed by the ranger issuing it.
- (b) Contain the date of issuance and effective date, the violation that the person is alleged to have committed, a citation to the code, statute, or rule violated, and a description of the egregious nature of the violation warranting a deviation from the standard expulsion duration (if any).
- (c) Specify the locations where the individual will be expelled from and the duration of the expulsion.
- (d) Set out the method of appealing the notice, which shall also include the address where the appeal should be sent.
- (e) Prominently display a warning of the consequences for failure to comply with the notice and state that a violation of the terms of the notice will constitute criminal trespass under chapter 9A.52 RCW.
- (3) The person subject to expulsion need not be charged, tried, or convicted of any crime or be issued an infraction or have an in-fraction found committed in order for a notice of expulsion to be issued or effective. The issuing ranger need only establish that good cause existed to support the issuance of the notice of expulsion. "Good cause" means facts and circumstances which lead a ranger to believe that a person has violated, or through his or her actions or behaviors, intends to violate the rules of this chapter or any applicable state, local, or federal law or regulation.
- (4) The period of expulsion shall be as follows, unless the issuing ranger deems a longer period of expulsion is warranted based on the egregiousness of the violation:
 - (a) First violation: Forty-eight hour expulsion.
 - (b) Second violation: Thirty day expulsion.
 - (c) Third violation: One year expulsion.
- (5) A person subject to expulsion pursuant to this section may appeal the expulsion to the director by mailing a written statement of the basis for appeal, together with a copy of the expulsion notice, to the director within ten days of receipt of the notice of expulsion. The appeal shall be decided as a brief adjudicative appeal under RCW 34.05.482 through 34.05.494 and shall be decided by the director or designee. Unless the expulsion period expires, the expulsion shall remain in effect during the pendency of an appeal.

AMENDATORY SECTION (Amending WSR 13-17-037, filed 8/13/13, effective 9/13/13)

- WAC 352-32-210 Consumption of alcohol in state park areas. (1) ((Opening.,)) Possessing alcoholic beverages ((in an open container.,)) or consuming ((any)) alcoholic beverages in any state park or state park area is prohibited except in the following designated areas and under the following circumstances in those state parks or state park areas not posted by the director or designee as closed to alcohol pursuant to subsection (4) of this section:
- (a) In designated campsites or in other overnight accommodations, by registered occupants or their guests; provided ELC users obtain written permission through state parks application process;
- (b) In designated picnic areas, which shall include those sites within state park areas where picnic tables, benches, fireplaces, and/or outdoor kitchens are available, even though

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not signed as designated picnic areas and public meeting rooms:

- (c) In any reservable group day use facility by any authorized group which has paid the reservation fee and applicable damage deposit and which has obtained prior permit authorization to have alcohol by the park manager; and
- (d) In any building, facility or park area operated and maintained under a concession agreement, wherein the concessionaire has been licensed to sell alcoholic beverages by the Washington state liquor control board, and where the dispensation of such alcoholic beverages by such concessionaire has been approved by the commission.
- (2) Possessing alcoholic beverage ((in an open container,)) or consuming any alcoholic beverages is prohibited at the following locations:
 - (a) Dash Point State Park;
 - (b) Saltwater State Park;
 - (c) Sacajawea State Park;
 - (d) Flaming Geyser State Park;

Except in the following designated areas and under the following circumstances:

- (i) In designated campsites, or in other overnight accommodations by registered occupants or their guests.
- (ii) In any building, facility or park area operated and maintained under a concession agreement wherein the concessionaire has been licensed to sell alcoholic beverages by the Washington state liquor control board, and where the dispensation of such alcoholic beverages by such concessionaire has been approved by the commission.
- (iii) In any reservable group day use facility by any authorized group which has paid the reservation fee and applicable damage deposit and which has obtained prior permit authorization to have alcohol by the park manager.
- (3) The director or designee may, for a specified period or periods of time, close any state park or state park area to alcohol if the director or designee concludes that an alcohol closure is necessary for the protection of the health, safety and welfare of the public, park visitors or staff, or park resources. The director or designee shall consider factors including but not limited to the effect or potential effect of alcohol on public and employee safety, park appearance, atmosphere, and noise levels, conflicts with other park uses or users, the demand for law enforcement, and the demand on agency staff. Prior to closing any park or park area to alcohol, the director or designee shall hold a public hearing in the general area of the park or park area to be closed to alcohol. Prior notice of the meeting shall be published in a newspaper of general circulation in the area. In the event the director or designee determines that an immediate alcohol closure is necessary to protect against an imminent and substantial threat to the health, safety and welfare of the public, park visitors or staff, or park resources, the director or designee may take emergency action to close a park or park area to alcohol without first complying with the publication and hearing requirements of this subsection. Such emergency closure may be effective for only so long as the imminent and substantial threat exists.
- (4) The director or designee shall ensure that any park or park area closed to alcohol pursuant to subsection (3) of this section is conspicuously posted as such at the entrance to said

park or park area. Additionally, the director or designee shall maintain for public distribution a current list of all parks and park areas closed to alcohol pursuant to subsection (3) of this section.

- (5) Dispensing alcoholic beverages from containers larger than two gallons is prohibited in state park areas except when authorized in writing and in advance by the park manager.
- (6) The provisions of this rule shall not apply to any part of the Seashore Conservation Area, as designated and established by RCW 79A.05.605.
- (7) Opening, consuming, or storing alcoholic beverages in Fort Simcoe State Park and Squaxin Island State Park is prohibited.
- (8) Any violation of this section is an infraction under chapter 7.84 RCW.

AMENDATORY SECTION (Amending WSR 08-24-006, filed 11/20/08, effective 12/21/08)

WAC 352-32-250 Standard fees charged. Fees shall be charged in parks operated by the commission for use of lands, facilities, programs, services, and materials as published by state parks: Provided, however, That the commission may suspend any or all of these fees if revenues generated by the fees are not returned to the benefit of the parks: Provided further, That the director or designee has the authority to discount fees in order to take advantage of marketing opportunities to encourage use and increase revenues. Any such discounts shall be effective for a limited period of time up to one year in duration. The director or designee may consider the following factors in temporarily establishing or discounting fees:

Prevailing rates for comparable facilities;

Day of the week;

Season of the year;

Amenities of the park area and site;

Demand for facilities;

Low-income eligibility requirements as adopted by state parks; and

Such other considerations as the director or designee deems appropriate. The director or designee shall prescribe the specific details and manner in which fees shall be applied. The director or designee may also waive fees for marketing or promotional purposes or to redress visitor complaints. The director or designee may also establish temporary fees for a maximum of one year for new facilities or services. An administrative fee, as published by state parks, will be assessed for replacement of lost, damaged, or destroyed passes or permits.

- (1) The director or designee may authorize reciprocity or cooperative arrangements with other state and/or federal agencies for the use of annual permits for like services, provided, that Washington licensed vehicles and/or residents shall be required to have and/or display the appropriate Washington permit or other permit as approved by the director or designee.
- (2) Overnight camping Standard campsite; utility campsite; emergency campsite; overflow campsite; hiker/biker campsite; walk-in campsite; primitive campsite for

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- nonmotorized for motorized vehicle Fees will be charged as published by state parks. Payment for utility campsite will be collected whether utility hookups are actually used or not, except when otherwise specified by a ranger.
- (3) Overnight camping Multiple campsites: Where campsites are designated and posted as a "multiple campsite," an individual may rent the multiple campsite by paying the multiple campsite fee and providing the required information on the occupants of the other sites. The multiple campsite fee will be calculated by multiplying the standard, utility or primitive campsite fee, as applicable, by the number of individual campsites to be used in the designated multiple campsite.
- (4) Group camping area Certain parks: Individual camping units using these facilities must pay campsite fees as published by state parks.
- (5) Convenience camping Fees will be charged for use of overnight accommodations such as yurts, cabins, platform tents, etc.
- (6) Conference center facilities Fees will be charged for use of facilities and services as set forth in the fee schedule published by state parks and will include, but not be limited to: Overnight accommodations in individual recreational housing units or dormitory units; use of meeting rooms, performance venues and rally areas; linen and janitorial services; group food services; and use of equipment, supplies, and staff time necessary to support group activities. Certain deposits, reservation and cancellation fees also apply as set forth in the fee schedule published by state parks and may not be refundable.
 - (7) Environmental interpretation:
- (a) Service fees will be established by the director or designee in order to recover, to the maximum extent practicable, all direct and indirect costs of environmental interpretation services on a program-wide basis based on anticipated attendance.
- (b) Material and publication fees will be established by the director or designee. All material and publication fees will be deposited in the parks improvement account to be used for purposes specified in RCW 79A.05.060.
- (c) Facility use, including environmental learning center fees, will be established by the commission. A facility use fee schedule is available by contacting Washington State Parks and Recreation Commission, P.O. Box 42650, Olympia, WA 98504-2650.
- (8) Adirondacks Not to include those located in ELC areas: Occupancy shall be limited to the number of built-in bunks provided.
- (9) Extra vehicle overnight parking fee will be charged for each additional unhitched vehicle or motorcycle in excess of the one recreational vehicle and its affiliated tow vehicle allowed at each campsite: Provided, An extra vehicle overnight parking fee shall not be imposed when:
- (a) Up to four motorcycles occupy one campsite, exclusive of other vehicles, motorcycles, or recreation vehicles; or
- (b) When the recreational vehicle and the ((towed)) affiliated tow vehicle arrive at the park ((hitched)) together, and after the camper has registered for and occupied the assigned campsite either the recreational vehicle or the ((towed)) affiliated tow vehicle remain parked at the campsite for the duration of the camper's stay.

- (10) Unattended vehicle overnight parking permit: Unoccupied vehicles parked overnight in designated areas must register and pay the nightly permit fee. The permit must be prominently displayed in the vehicle.
- (11) Watercraft launch permit fee shall be charged at designated facilities. Watercraft launch permit shall not be required for:
- (a) Registered overnight guests in the park containing the watercraft launch;
- (b) Persons holding limited-income senior citizen, disability or disabled veteran passes;
- (c) Vehicles displaying a valid annual natural investment permit (watercraft launch) permit.
- (12) Trailer dump station fee Fee shall not be required for:
- (a) Registered camping vehicles in the park containing the dump station;
- (b) Vehicles of persons holding limited-income senior citizen, disability or disabled veterans passes;
- (c) Vehicles displaying a valid annual natural investment permit.
- (13) Variable pricing Variable prices will apply for use of campsites and/or facilities during such periods as the director or designee may specify.
- (14) Popular destination park A surcharge will apply for use of standard or utility campsites located in a popular destination park during such periods as the director may specify.
- (15) Water trail site fees For one day/night will be set by the commission.
- (16) In addition to the regular fee, a surcharge may be imposed for failure to pay the self-registration fee.
- (17) Group day use facilities A minimum daily permit fee will be charged for groups of 20 or more.
- (18) Reservation transaction Fees will be charged as published by state parks and are not refundable.
- (19) Moorage facilities Fee will be charged as published by state parks.
- (20) Hot showers, electric stoves Fees will be charged as published by state parks. Fees published by state parks do not apply in those circumstances set forth in WAC 352-32-280 and 352-32-285 as now or hereafter amended.
- (21) Film permits and site location fees will be charged as outlined in chapter 352-74 WAC.
- (22) Off-season pass fees will be charged as published by state parks.
- (23) Administrative fees will be charged as published by state parks for the replacement of lost, stolen or destroyed passes and permits.
- (24) Commercial recreation provider permit registration a fee shall be charged, as published by state parks for registration as a commercial recreation provider.
- (25) Commercial recreation provider permit A fee shall be charged, as published by state parks for obtaining a permit to engage in commercial recreational use of state parks, as defined in WAC 352-32-010.
- (26) Sno-park permit Seasonal and daily permit fees will be charged as published by state parks.
- (27) Special groomed trail permit A statewide special groomed trail permit will be required for use of special

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groomed trail areas. The fee charged will be as published by state parks.

- (28) Wood debris collection permit Fee will be charged for collection and removal of wood debris from a state park area pursuant to RCW 4.24.210. The fee may be waived for volunteers assisting with emergency salvage and storm cleanup in the parks.
- (29) Merchandise Prices for merchandise including but not limited to interpretive, recreational and historic materials, literature, food, beverage, grocery and other items at agency operated sales points will be based on market rates and practices.
- (30) Back country camping permit Fee will be charged as published by state parks for selected state park areas as designated by the director.
- (31) Group use registration Fee will be charged for groups of a size to be specified in the fee schedule on a park by park basis who have not otherwise reserved group facilities
- (32) Special event Fees will be charged based on the cost of providing events and market rates for comparable activities at other locations.
- (33) Public assembly Permit fees based on costs as indicated in WAC 352-32-165.
- (34) Aquatic and other state park facilities Fees will be charged as published by state parks.
- (35) Checks dishonored by nonacceptance or nonpayment (NSF checks) Handling fee and interest:
- (a) A handling fee may be assessed consistent with the maximum amount allowed in the office of state procurement, department of general administration's state contract and as published by state parks for checks as defined by chapter 62A.3-104 RCW, dishonored by nonacceptance or nonpayment.
- (b) Interest at the maximum rate allowable may be charged on the NSF check as defined by chapter 62A.3-515 RCW, and as published by state parks for a check not paid within fifteen days after a statutory notice of dishonor is sent to maker's last known address.
- (36) Fees subject to certificate of participation (COP) and as determined by the commission.

WSR 16-10-018 PERMANENT RULES BOARD OF ACCOUNTANCY

[Filed April 22, 2016, 4:32 p.m., effective May 23, 2016]

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

Purpose: Rule making is needed to eliminate the following sentence in WAC 4-30-060 (1)(c): "For purposes of meeting this subsection, individuals will be given 1.5 credits for each 1.0 graduate level credit of accounting courses taken."

This change will align the qualifications on a national level to ensure Washington state is substantially equivalent to the other state boards.

Citation of Existing Rules Affected by this Order: Amending WAC 4-30-060 What are the education requirements to qualify to apply for the CPA examination?

Statutory Authority for Adoption: RCW 18.04.055, 18.04.105

Adopted under notice filed as WSR 16-06-033 on February 23, 2016.

Changes Other than Editing from Proposed to Adopted Version: For clarification changed proposed language in subsection (5) to:

- (a) The accredited college or university must be accredited at the time your education was earned by a regionally or nationally accrediting agency recognized by the board. ((of membership in one of the following accrediting agencies:
- (i) Middle States Association of College and Secondary Schools;
 - (ii) New England Association of Schools and Colleges;
- (iii) North Central Association of Colleges and Schools, Higher Learning Commission;
- (iv) Northwest Commission on Colleges and Universities (formerly the Northwest Association of Schools and Colleges);
 - (v) Southern Association of Colleges and Schools;
 - (vi) Western Association of Schools and Colleges; and
- (vii) Accrediting Commission for Independent Colleges and Schools, or its predecessor, the Accrediting Commission of the Association of Independent Colleges and Schools))

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: April 20, 2016.

Charles E. Satterlund, CPA, CIA Executive Director

AMENDATORY SECTION (Amending WSR 10-24-009, filed 11/18/10, effective 12/19/10)

- WAC 4-30-060 What are the education requirements to qualify to apply for the CPA examination? (1) Education requirements: Effective July 1, 2000, to apply for the CPA examination you must have completed:
- (a) At least one hundred fifty semester hours (two hundred twenty-five quarter hours) of college education, including;
 - (b) A baccalaureate or higher degree; and
- (c) An accounting <u>major or</u> concentration as defined as at least:
- (i) Twenty-four semester hours (thirty-six quarter hours) or the equivalent in accounting subjects of which at least fifteen semester hours must be at the upper level or graduate

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level (an upper level course is defined as a course that frequently carries completion of a lower level course(s) as a prerequisite)((. For the purposes of meeting this subsection, individuals will be given 1.5 credits for each 1.0 graduate level eredit of accounting courses taken)); and

- (ii) Twenty-four semester hours (thirty-six quarter hours) or the equivalent in business administration subjects at the undergraduate or graduate level.
- (((d) The board will not recognize accounting concentration credits awarded for "life experience" or similar activities retroactively evaluated and recognized by colleges or universities. This restriction is not intended to apply to internships prospectively approved by colleges or universities.))
- (2) One hundred eighty-day provision: If you expect to meet the education requirements of this section within one hundred eighty days following the examination, you will be eligible to take the CPA examination provided you submit a signed Certificate of Enrollment from the educational institution in which you are enrolled stating that you will meet the board's education requirements within one hundred eighty days following the day you first sit for any one section of the examination. If you apply for the exam using the one hundred eighty-day provision, then within two hundred ten days of first sitting for any section of the exam, you must provide the examination administrator complete documentation demonstrating that you met the board's education requirements within one hundred eighty days of first sitting for any one section of the exam. If you do not provide such documentation within the required two hundred ten-day time period, your exam score(s) will not be released and you will not be given credit for any section(s) of the examination. Applicants failing to provide such documentation must reapply as a firsttime applicant.
- (3) Education obtained outside the United States: If you obtained all or a portion of your education outside the United States you must have your education evaluated by a board approved foreign education credential evaluation service. The board will establish the criteria for board approval of foreign education credential evaluation services. The board ((will)) does not provide education credential evaluation services.
- (4) **Semester versus quarter hours:** As used in these rules, a "semester hour" means the conventional college semester hour. Your quarter hours will be converted to semester hours by multiplying them by two-thirds.
- (5) Accreditation standards: For purposes of this rule, the board will recognize colleges and universities which are accredited in accordance with (a) through (c) of this subsection.
- (a) The ((accredited)) college or university must be accredited at the time your education was earned by ((virtue of membership in one of the following accrediting agencies:
- (i) Middle States Association of College and Secondary Schools;
 - (ii) New England Association of Schools and Colleges;
- (iii) North Central Association of Colleges and Schools, Higher Learning Commission;
- (iv) Northwest Commission on Colleges and Universities (formerly the Northwest Association of Schools and Colleges);

- (v) Southern Association of Colleges and Schools;
- (vi) Western Association of Schools and Colleges; and
- (vii) Accrediting Commission for Independent Colleges and Schools, or its predecessor, the Accrediting Commission of the Association of Independent Colleges and Schools)) a regionally or nationally accrediting agency recognized by the board.
- (b) If an institution was not accredited at the time your education was earned but is so accredited at the time your application is filed with the board, the institution will be deemed to be accredited for the purpose of (a) of this subsection provided that it:
- (i) Certifies that your total educational program would qualify the applicant for graduation with a baccalaureate degree during the time the institution has been accredited; and
- (ii) Furnishes the board satisfactory proof, including college catalogue course numbers and descriptions, that the preaccrediting courses used to qualify you for a concentration in accounting are substantially equivalent to postaccrediting courses.
- (c) If your degree was received at an accredited college or university as defined by (a) or (b) of this subsection, but the educational program which was used to qualify you for a concentration in accounting included courses taken at nonaccredited institutions, either before or after graduation, such courses will be deemed to have been taken at the accredited institution from which your degree was received, provided the accredited institution either:
- (i) Has accepted such courses by including them in its official transcript; or
- (ii) Certifies to the board that it will <u>or would</u> accept such courses for credit toward graduation.
- (6) Alternative to accreditation: If you graduated from a ((four year)) degree-granting institution that was not accredited at the time your degree was received or at the time your application was filed, you will be deemed to be a graduate of ((a four-year)) an accredited college or university if a credentials evaluation service approved by the board certifies that your degree is equivalent to a degree from an accredited college or university as defined in subsection (5) of this section. The board does not provide education credential evaluation services.

WSR 16-10-019 PERMANENT RULES BOARD OF ACCOUNTANCY

[Filed April 22, 2016, 4:33 p.m., effective May 23, 2016]

Effective Date of Rule: Thirty-one days after filing. Purpose: WAC 4-30-062, rule making is needed to correct the error in one of the sentence structure[s] for clarification.

Citation of Existing Rules Affected by this Order: Amending WAC 4-30-062 How do I apply to take the CPA examination?

Statutory Authority for Adoption: RCW 18.04.055, 18.04.105.

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Adopted under notice filed as WSR 16-06-034 on February 23, 2016.

Changes Other than Editing from Proposed to Adopted Version: For clarification - changed proposed language in subsection (5)(b)(iii) to the following:

(iii) You must pass all four sections of the examination within a rolling eighteen-month period, which begins on the date that the first section(s) is passed. A section is considered passed on the date that ((is used is the date that)) you took the exam section and not the date that your grades are is released.

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: April 20, 2016.

Charles E. Satterlund, CPA, CIA Executive Director

AMENDATORY SECTION (Amending WSR 10-24-009, filed 11/18/10, effective 12/19/10)

- WAC 4-30-062 How do I apply to take the CPA examination? (1) Application process and due dates: Your application to take the CPA examination must be submitted to the board's examination administrator. Applicants must submit all required information, documents, and fees to complete their application within sixty days of the date their application is submitted to the board's examination administrator. Your application is not considered complete until all of the following are provided:
- Complete application information and requested documents;
 - Fee(s).
- (2) Fee refund and forfeiture: Upon submission of your application to the examination administrator, no portion of the board's administrative fee is refundable. Upon the examination administrator's authorization to test, no portion of the total exam fee (both administrative fee and section fee(s)) is refundable. If you fail to meet the board's scheduling or admission requirements, you forfeit all of the exam fee(s) and you must reapply to take the section(s) of the exam
- (3) **Notice of admittance to the examination or denial of your application:** You must contact the approved test provider to schedule the time and location for your examination. The notice of eligibility to take the examination is called a Notice to Schedule (NTS), the NTS will be valid for one tak-

ing of the examination within the six months following the date of the NTS.

Notice of a denial of your application, or notice of your eligibility to take the examination will be sent to you by the examination administrator.

- (4) Examination content and grading: The CPA examination shall test the knowledge and skills required for performance as an entry-level certified public accountant. The examination shall include the subject areas of accounting and auditing and related knowledge and skills as the board may require. The examination will consist of the following four sections: Auditing and attestation; financial, accounting and reporting; regulation; and business environment and concepts. The board may accept the advisory grading services of the American Institute of Certified Public Accountants.
 - (5) Examination process:
- (a) Conditions for examinations held prior to January 1, 2004: Contact a customer service representative at customerservice@cpaboard.wa.gov or by phone at 360-753-2586.
- (b) For examinations taken after December 31, 2003: The board uses all parts of the uniform CPA examination and the advisory grading services of the American Institute of Certified Public Accountants.
- (i) To satisfy the examination requirement for a license you must have achieved a score of seventy-five on all four sections of the examination within a rolling eighteen-month period.
- (ii) You may take the required four sections individually and in any order. Credit for any section(s) taken and passed after December 31, 2003, will be valid for eighteen months from the actual date you successfully passed any particular section of the examination.
- (iii) You must pass all four sections of the examination within a rolling eighteen-month period, which begins on the date that the first section(s) is passed. A section is considered passed on the date that ((is used is the date that)) you took the exam section and not the date that your grade((s)) is released.
- (iv) You may not retake a failed section(s) in the same examination window. An examination window refers to a three-month period in which candidates have an opportunity to take the examination (comprised of two months in which the examination is available to be taken and one month in which the examination will not be offered while routine maintenance is performed and the examination is refreshed).
- (v) In the event you do not pass all four sections of the examination within the rolling eighteen-month period, credit for any section(s) passed prior to the eighteen-month period will expire and you must retake any expired section.

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WSR 16-10-046 PERMANENT RULES DEPARTMENT OF FINANCIAL INSTITUTIONS

(Division of Consumer Services) [Filed April 29, 2016, 9:30 a.m., effective June 1, 2016]

Effective Date of Rule: June 1, 2016.

Purpose: The rules implementing the Check Cashers and Sellers Act, chapter 208-630 WAC are being amended to aid the regulated industry by putting them on notice of federal laws they must comply with, to have consistent rules, and to make technical changes for clarity and consistency.

The rules are being amended under the authority of OFM Guidelines 3.a. and e. dated October 12, 2011.

Citation of Existing Rules Affected by this Order: Repealing WAC 208-630-711; and amending WAC 208-630-110, 208-630-130, 208-630-135, 208-630-501, 208-630-520, 208-630-532, 208-630-545, 208-630-555, 208-630-556, 208-630-835, and 208-630-836.

Statutory Authority for Adoption: Chapter 43.320 RCW, RCW 31.45.200.

Adopted under notice filed as WSR 16-05-092 on February 16, 2016.

Changes Other than Editing from Proposed to Adopted Version: 1. WAC 208-630-501(5), the proposed language was amended to clarify that early payoff of a loan is permitted

- 2. WAC 208-630-520(4), the proposed language was amended to clarify installment plan repayment periods.
- 3. WAC 208-630-556(11), the proposed language was amended to accommodate the electronic transfer of funds.
- 4. WAC 208-630-556 (12)(d), the proposed language was amended to clarify receipt of formal notice of a bankruptcy before closing the loan.
- 5. WAC 208-630-605, the proposed language was amended to tie the requirement to the business triggering the license requirement.
- 6. WAC 208-630-606, the proposed language was amended to tie the requirement to the business triggering the license requirement.
- 7. WAC 208-630-715, the proposed language was amended to clarify that the language is not a separate requirement from the federal requirement.
- 8. WAC 208-630-716, the proposed language was amended to clarify that the language is not a separate requirement from the federal requirement.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 2, Amended 0, Repealed 1; or Recently Enacted State Statutes: New 1, 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 6, Amended 11, Repealed 1.

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 6, Amended 11, Repealed 1; Pilot Rule Mak-

ing: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: April 29, 2016.

Charles Clark, Director Division of Consumer Services

AMENDATORY SECTION (Amending WSR 14-24-048, filed 11/25/14, effective 1/1/15)

WAC 208-630-110 What definitions are required to understand these rules? The definitions in RCW 31.45.010 and this section apply throughout this chapter unless the context clearly requires otherwise.

"ACH" means automated clearing house, an electronic network for financial transactions that processes credit and debit transactions.

"Act" means chapter 31.45 RCW.

"Advertise, advertising, and advertising material" means any form of sales or promotional materials used in connection with the business. Advertising material includes, but is not limited to, newspapers, magazines, leaflets, flyers, direct mail, indoor or outdoor signs or displays, point-of-sale literature or educational materials, other printed materials; radio, television, public address system, or other audio broadcasts; internet pages, social media, instant messages, or electronic bulletin boards.

"Affiliate" means any person who directly or indirectly through one or more intermediaries, controls, or is controlled by, or is in common control with another person.

"Agent" for purposes of RCW 31.45.079 means a person who engages in the business of making small loans by performing small loan agent services.

"Annual percentage rate" or "APR" means the cost of credit expressed as a yearly rate, determined in accordance with the federal Truth in Lending Act (15 U.S.C. Sec. 1601 et seq.), and Regulation Z (12 C.F.R. Part 1026 et seq.), as amended.

The Office of the Comptroller of the Currency (OCC) has developed an APR calculator (APRWIN) that licensees may download and use without charge. APRWIN is available on the OCC's web site at http://www.occ.treas.gov/aprwin.htm.

"Board director" means a director of a corporation or a person occupying a similar status and performing a similar function with respect to an organization, whether incorporated or unincorporated.

"Check" means the same as defined in RCW 62A.3-104(f) and, for purposes of conducting the business of making small loans, includes other electronic forms of payment, including stored value cards, internet transfers, and automated clearing house transactions.

"Check casher" means an individual, partnership, unincorporated association, or corporation that, for compensation, engages, in whole or in part, in the business of cashing checks, drafts, money orders, or other commercial paper serving the same purpose.

"Check seller" means an individual, partnership, unincorporated association, or corporation that, for compensation, engages, in whole or in part, in the business of selling checks,

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drafts, money orders, or other commercial paper serving the same purpose.

"Close of business" for the purposes of RCW 31.45.86 and these regulations means the actual time a licensee closes for business at the location from which a small loan was originated or 11:59 p.m. Pacific Time, whichever is earlier.

"Default" means:

- (a) The borrower's failure to repay a small loan in compliance with the terms contained in the small loan agreement or note; or
- (b) Failure to pay any installment plan payment within ten days after the date upon which the installment was scheduled to be paid. See WAC 208-630-556 (12)(b).

"Department" means the department of financial institutions.

"Exempt entity" means a person described in RCW 31.45.020 that is engaged in the business of making small loans.

"Gross monthly income" means an individual's total personal income earned during a month prior to any taxes or deductions.

"Installment plan" is a contract between a licensee and borrower that provides that the loaned amount will be repaid in substantially equal installments scheduled on or after a borrower's pay dates and no less than fourteen days apart.

"Investigation" means an examination undertaken for the purpose of detecting violations of chapter 31.45 RCW or these rules or obtaining information lawfully required under chapter 31.45 RCW or these rules.

"License" means a license issued by the director to engage in the business of check cashing or check selling under the provision of chapter 31.45 RCW.

"Loaned amount" means the outstanding principal balance and any fees authorized under RCW 31.45.073 that have not been paid by the borrower.

"Monetary instrument" means a check, draft, money order or other commercial paper serving the same purpose.

"Paid" means that moment in time when the licensee deposits the borrower's check, accepts cash, or initiates an ACH withdrawal from the borrower's account for the full amount owed on a valid small loan. If the borrower's check is dishonored and returned unpaid by the borrower's bank, the loan is not paid. If an ACH authorization is denied, the loan is not paid.

"Payday advance lender" or "payday lender" means a licensee under this chapter who has obtained a small loan endorsement under RCW 31.45.073.

"Payday advance loan," "payday loan" or "deferred deposit loan" means the same as a small loan.

"Postdated check" means a check delivered prior to its date, generally payable at sight or on presentation on or after the day of its date. "Postdated check" does not include any promise or order made or submitted electronically by a borrower to a licensee.

"RCW" means the Revised Code of Washington.

"Small loan" or "loan" means a loan of up to the maximum amount and for a period of time up to the maximum term specified in RCW 31.45.073.

"Small loan agent services" include, but are not limited to:

- (a) Marketing and advertising small loans;
- (b) Collecting nonpublic personal information from consumers in anticipation of selling the information to potential licensed lenders or other entities providing small loan agent services;
- (c) Assisting consumers in completing small loan documentation;
- (d) Providing required applicable state and federal disclosures in connection with small loans; and
 - (e) Collecting on small loans.

Small loan agent services do not include (a) services performed by any person holding a small loan endorsement or (b) collection of small loans by a person licensed under chapter 19.16 RCW or exempt from that chapter or otherwise authorized under Washington law to act as a collection agent.

"State" means the state of Washington.

"Unsafe or unsound financial practice" means any action, or lack of action, the likely consequences of which, if continued, would materially impair the net worth of a licensee or create an abnormal risk of loss to its customers.

AMENDATORY SECTION (Amending WSR 07-23-094, filed 11/20/07, effective 12/21/07)

WAC 208-630-130 How does a business apply for a check casher's or seller's license or a small loan endorsement to a check casher's or seller's license? Each applicant for a check casher license, or check seller license, or a small loan endorsement to a check casher's or seller's license must apply to the director by filing the following:

- (1) An application in a form prescribed by the director including at least the following information:
- (a) The legal name, residence, and business address of the applicant if the applicant is an individual or sole proprietorship, and in addition, if the applicant is a partnership, corporation, limited liability company, limited liability partnership, trust, company, or association, the name and address of every member, partner, officer, controlling person, and board director:
- (b) The trade name or name under which the applicant will do business under the act;

The director or the director's designated representative may deny an application for a proposed license or trade name if the proposed license or trade name is similar to a currently existing licensee name, including trade names.

- (c) The street and mailing address of the company headquarters and each location in which the applicant will engage in business under the act;
- (d) The location at which the applicant's records will be kept; and
- (e) Financial statements and any other pertinent information the director may require with respect to the applicant and its board directors, officers, trustees, members, or employees, including information regarding any civil litigation filed within the preceding ten years against the applicant or controlling person of the applicant;
- (2) A surety bond and related power of attorney, or other security acceptable to the director in an amount equal to the

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penal sum of the required bond as set forth in this rule. In lieu of the bond, the applicant may demonstrate to the director net worth in excess of three times the amount of the penal sum of the required bond in accordance with RCW 31.45.030 (5)(b) and (e) and this rule;

- (3) A current financial statement as of the most recent quarter end prepared in accordance with generally accepted accounting principles which includes a statement of assets and liabilities and a profit and loss statement;
- (4) Information on the applicant's or any affiliate's current or previous small loan or related type business in this state or any other state, including, but not limited to, name, address, city, state, licensing authority, and whether any enforcement action is pending or has been taken against the applicant in any state;
- (5) Upon request, a complete set of fingerprints and a recent photograph of each sole proprietor, owner, director, officer, partner, member, and controlling person; and
 - (6) An application fee.

Any information in the application regarding a personal residential address or telephone number, and any trade secret as defined in RCW 19.108.010 including any financial statement that is a trade secret is exempt from the public disclosure requirements of chapter 42.17 RCW.

AMENDATORY SECTION (Amending WSR 14-24-048, filed 11/25/14, effective 1/1/15)

WAC 208-630-135 What must I do to be authorized to offer small loan agent services? (1) Persons providing small loan agent services must license with the department. To license you must provide the following information:

- (a) The legal name, residence, and business address if an individual or sole proprietorship, and in addition, if a partnership, corporation, limited liability company, limited liability partnership, trust, company, or association, the name and address of every member, partner, officer, controlling person, and board director.
- (b) The trade or business name under which you will do business. Please note, your request may be denied if the proposed trade or business name is similar to a currently existing licensee name, including trade names.
- (c) The street and mailing address of each location where you will engage in business.
 - (d) The location at which your records will be kept.
- (e) Whether the applicant or other person subject to the act is, or has been, subject to a cease and desist order or an injunction issued pursuant to the act or rules or any state or federal law applicable to the business activity.
- (f) Whether the applicant or other person subject to the act has been charged or found through an administrative, civil, or criminal proceeding to have violated the provisions of the act or rules, or any state or federal law applicable to the business activity.
- (g) Whether the applicant or other person subject to the act has been convicted of, or pled guilty or nolo contendere, in a domestic, foreign, or military court to:
- (i) A gross misdemeanor involving dishonesty or financial misconduct within the prior seven years;
 - (ii) A felony within the prior seven years; or

- (iii) A felony that involved an act of fraud, dishonesty, breach of trust, or money laundering at any time preceding the date of application.
- (h) Any other pertinent information the director may require.
- (2) You must also provide to the department a declaration that the company will not sell consumers' nonpublic personal information to unlicensed entities making loans or to unlicensed small loan agents.
- (3) The small loan agent license expires December 31st of each year. You must pay the renewal fee prescribed by the director to renew the license.
- (4) If any information about the company changes from that provided to the department at the time of licensure, you must notify the director in writing of the change within a reasonable amount of time from the change.

NEW SECTION

WAC 208-630-155 May I conduct my business from more than one location? Yes. You may establish one or more branch offices under your license.

AMENDATORY SECTION (Amending WSR 09-24-089, filed 12/1/09, effective 1/1/10)

WAC 208-630-501 How must I determine the due date on the loan? (1) The earliest due date for repayment is on or after the borrower's next pay date unless the pay date is within seven days of the date of the small loan. If the pay date falls within the seven days, you must set the repayment date on or after the borrower's second pay date after the date of the small loan. With the small loan origination date being day zero, count seven days out to determine the first available due date. A borrower with pay dates on the 5th and 20th of each month has a small loan with a loan origination date of February 1st. February 1st is day zero. February 8th is day seven. The borrower's pay date of February 5th is "within" seven days from loan's origination date. So the first due date will have to be on or after the borrower's next occurring pay date, February 20th.

- (2) A loan's due date must be forty-five days or fewer from the origination date on the loan unless the term of the loan is extended by written agreement between you and the borrower at no additional cost to the borrower.
- (3) If a small loan's due date falls on a date your business is not open, you must automatically extend the due date to your next business day.
- (4) For purposes of this section, "pay date" means the borrower's scheduled pay date or the date the borrower's account is credited with any direct deposit or other electronic transfer of funds into their bank account, whichever is later.
- (5) The borrower can pay off the loan at any time before the due date at no additional charge or fee.

AMENDATORY SECTION (Amending WSR 09-24-089, filed 12/1/09, effective 1/1/10)

WAC 208-630-520 If a borrower and licensee enter into an installment plan, what are the terms of the install-

ment plan? An installment plan under RCW 31.45.084 must contain the following terms:

- (1) The plan must be in writing;
- (2) If the small loan is four hundred dollars or less the term must be for a period of at least ninety days;
- (3) If the small loan is over four hundred dollars the term must be for a period of at least one hundred eighty days;
- (4)(a) Installment payments must be both substantially equal in payment amount and substantially equally distributed over the installment plan payment period.
- (b) An installment plan for ninety to one hundred eighty days is in compliance if there is at least one payment in each month in the period and payments are substantially equally distributed throughout the installment plan period.
- (c) The borrower and licensee may mutually agree to fewer payments as long as they are substantially equal in amount and substantially equally distributed over the installment plan payment period.
- (5) The borrower may pay off the total amount due at any time without additional penalty, fee, or charge for prepayment; and
- (((5))) (6) You may enter into a written installment plan with a borrower on terms other than these as long as the terms are not less favorable to the borrower and there is no charge to the borrower.

AMENDATORY SECTION (Amending WSR 09-24-089, filed 12/1/09, effective 1/1/10)

WAC 208-630-532 May I make a small loan to a borrower who is in default on another small loan? No. You are prohibited from making a small loan to a borrower who is in default on another small loan ((originated on or after January 1, 2010)). This prohibition expires if the small loan is paid in full or two years have passed from the origination date of the small loan, whichever occurs first.

AMENDATORY SECTION (Amending WSR 09-24-089, filed 12/1/09, effective 1/1/10)

WAC 208-630-545 ((May I use a name or place of business other than that named on the license or small loan endorsement?)) How do I use a trade name when conducting business? ((No. You may not make any loan under authority granted by chapter 31.45 RCW under any name or at any place of business other than that named on the license and small loan endorsement.)) (1) You may add a trade or "DBA" name to your license if you first apply to the department, in a form prescribed by the department, and receive department approval. When the department has approved the trade name, you must conduct business under that trade name in at least one of the two following ways:

- (a) Use your license name together with the trade name; or
- (b) Use your license number together with the trade name.
- (2) The director may deny an application for a proposed DBA name if the proposed DBA name is similar to a currently existing licensee name.

AMENDATORY SECTION (Amending WSR 09-24-089, filed 12/1/09, effective 1/1/10)

WAC 208-630-555 What is the purpose of the data base? The purpose of this data base system is to:

- (1) Prevent the practice of refinancing a small loan with another small loan;
- (2) Prevent multiple licensees from making simultaneous small loans to an individual borrower so that the loans' total principal balance ((is)) exceeds the lesser of seven hundred dollars or thirty percent of the borrower's gross monthly income;
- (3) Prevent licensees from making more than eight loans to any one borrower in any twelve-month period;
- (4) Prevent a licensee from making a loan to a borrower who already has an outstanding small loan principal balance of the lesser of seven hundred dollars or thirty percent of their gross monthly income;
- (5) Prevent licensees from making a loan to a borrower who is in default on a small loan or is in an installment plan; and
- (6) Ensure that licensees set the small loan due date no earlier than the borrower's next pay date that is more than seven days from the origination date.

AMENDATORY SECTION (Amending WSR 09-24-089, filed 12/1/09, effective 1/1/10)

WAC 208-630-556 How do I use the data base system for small loan transactions? (1) Beginning January 1, 2010, each small loan transaction must be registered with the data base system and receive a data base system-generated transaction authorization number. The transaction authorization number demonstrates that the transaction has been recorded in the data base prior to you making the small loan to the borrower.

- (2) **Do I have to buy any equipment, hardware, or software to use the data base system?** You must have a computer with access to the internet and Microsoft Internet Explorer 6 or higher. Dial-up capacity of at least 56 kps is sufficient. DSL or broadband access will provide faster access and response. It is also possible to interface directly with the data base system; the data base vendor can provide you with information about that process.
 - (3) How and when may I access the data base system?
- (a) The data base system is the means by which real-time access to the data is made available to you through your internet connection.
- (b) You must use a computer and the internet to access the data base system.
- (c) The data base system will be accessible twenty-four hours a day every day of the year, except for routine scheduled system maintenance and upgrades performed by the data base vendor.
- (4) What must I do to maintain confidentiality of the borrower's information provided to the data base? In order to maintain the confidentiality and security of the borrower's information, you must not transmit information to the data base system using publicly accessible computers, computers that are not under your control, unsecured wireless connections, or other connections that are not secure. Main-

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taining a secure connection includes, but is not limited to, installing and regularly updating antivirus and antispyware software and a firewall.

- (5) How do I use the data base system to determine a borrower's eligibility for a small loan? You must:
- (a) Access the data base system using the assigned user identification and password provided by the security administrator of your company;
- (b) Enter the borrower's Social Security number, individual tax identification number (ITIN), or alien identification number, and the borrower's gross monthly income into the system.
- (6) What information will the data base system give me when an eligibility search is conducted? The data base system will state a borrower's eligibility or ineligibility for a small loan and will give a reason for the eligibility determination. If the borrower is eligible for a small loan, the data base system will provide the dollar amount the borrower is eligible to receive.

(7) What must I do once the initial search determines that the borrower is eligible for a small loan?

- (a) If you receive an initial indication from the data base vendor that the borrower is eligible for a small loan, you must then submit all of the required borrower information necessary to register the transaction in the data base, as prescribed by the date base vendor.
- (b) When the required information has been submitted to the data base, the data base system will confirm the initial borrower search. If the borrower's eligibility is confirmed, the small loan transaction will be recorded as open and assigned a transaction authorization number evidencing that the transaction has been authorized by the data base system. You must place the transaction authorization number on the small loan agreement.
- (8) What must I do if the borrower is determined to be ineligible for a small loan? If the borrower is deemed ineligible you will be provided with a printable message with a reason for the determination. The message will also include the name, address, and toll-free support number of the data base vendor. You must provide a copy of the printable message to the borrower.
- (9) If I make a mistake entering data and must void the transaction, what do I do? Follow the data base vendor's instructions to administratively void the transaction.
- (10) If the data base system is inaccessible via the internet, how do I access the data base?
- (a) You will be given at least twenty-four hours notice for scheduled maintenance or system upgrades. The notice will be by electronic mail to the designated security administrator, or by a broadcast message on the data base vendor's web site.
- (b) In the event the data base system is unavailable, you must adhere to the following procedures:
- (i) Confirm that the data base system remains unavailable by attempting to access the data base system with every borrower seeking a new small loan transaction. You need not comply with this procedure if you have been notified via electronic mail by the data base vendor of an expected period of time necessary to correct whatever problem is causing the data base system to remain unavailable;

- (ii) Contact the data base vendor's toll-free help desk or voice response system to obtain a temporary transaction authorization number directly from the data base vendor; and
- (iii) Enter the remaining transactional data into the data base system within twenty-four hours of obtaining the temporary transaction authorization number from the data base vendor.
- (c) In the event that either the department of financial institutions or the data base vendor notifies you that the data base system is unavailable and that all alternative methods for registering a transaction and receiving a transaction authorization number are also unavailable:
- (i) You are authorized to conduct transactions during the specific period of unavailability, after receiving written authorization, via electronic mail or facsimile from either the department of financial institutions or the data base vendor with the department of financial institutions' consent.
- (ii) Copies of the written authorization for any transactions conducted during an unavailability period must be attached to the small loan agreement for those transactions. One copy of the authorization must be provided to the borrower and another copy must be kept as an audit record.
- (d) Transactions created during a period of authorized unavailability must be registered with the data base within twenty-four hours of notification that the data base system is available; provided, however, that if the data base system is unavailable for more than twenty-four hours, then the period for registration shall be extended by twenty-four hours for each additional twenty-four-hour period of unavailability.
- (e) Once the transaction has been registered with the data base, the transaction number assigned to that transaction must be placed on the licensee's record copy of the small loan agreement signed by the borrower for that transaction. If the borrower requests that transaction number at any time, the licensee must provide it to the borrower.
- (11) Once a loan is made, how can it be canceled or rescinded as authorized under RCW 31.45.086? A borrower may rescind a small loan agreement before the close of business on the next day of business after the date of the transaction without incurring a transaction fee. If a borrower elects to cancel a small loan agreement you must close the transaction on the data base as soon as practicable after the borrower rescinds the small loan transaction. A loan that has been rescinded does not count toward the eight loan limit; nor will you incur a one dollar transaction fee on that loan. For the purpose of rescinding a loan, the date of the transaction is the date the borrower actually receives the proceeds either in person or by direct deposit or other electronic transfer of funds into the borrower's bank account.

(12) When must I update information on the data base system?

(a) When a borrower's small loan is paid (date of cash received, check deposited, or ACH authorization initiated), you must update open transactions on the data base system as soon as practicable to ensure that all identifying information regarding both the borrower and the transaction are accurate, including any comments on the transaction which you deem relevant. You must input the date and time a transaction closes, as well as the payment method, unless you previously entered the payment method.

- (b) When a small loan that was in default is paid, it is considered paid when the loaned amount and default fee is paid.
- (c) When a loan is in default, you must mark the loan in the data base as in default as soon as practicable after the default as follow:
- (i) A small loan is in default if not paid on the date and by the time indicated in the small loan agreement. If no time is indicated the small loan is in default the first day after the due date
- (ii) A small loan in an installment plan is in default if unpaid on the 11th day after the due date, with the due date being day zero. If the due date for an installment plan payment is January 1st and is not paid, the loan is considered in default and the data base must be updated on January 11th.
- (d) When you receive formal notice that a small loan has been discharged in bankruptcy you must close the loan as having been paid, leaving a comment in the comment box about the bankruptcy. Do not administratively close the loan. The loan must continue to count toward the borrower's eight loan limit.
- (13) **How much will each data base transaction cost me?** The data base vendor's transaction fee is one dollar per loan registered. The data base vendor will assess this fee for each transaction that has been registered on the data base.
- (14) What happens if I do not pay the data base fees to the data base vendor? The data base vendor will lock you out of the data base system.
- (15) What happens if I do not receive training and become certified in using the data base? If you or another designated person in the company do not receive training and certification to use the data base, you will not be given an access number for the data base.

NEW SECTION

WAC 208-630-605 Must I maintain a business resumption plan? Yes. Licensees must have a written plan that details the company's response and recovery to any event that results in damage to or destruction of the books and records relating to the licensee's business triggering the license requirement. The plan must be maintained as part of the licensee's books and records.

NEW SECTION

WAC 208-630-606 Must I have a policy that deals with records disposal? Yes. Licensees must have written policies and procedures for the destruction of records relating to the licensee's business triggering the license requirement, including electronic records, when the two-year retention period ends. The destruction of records must be accomplished so that the information cannot be reconstructed or read. The destruction of consumer credit report information must also comply with the Federal Disposal Rule at 16 C.F.R. 682.

NEW SECTION

WAC 208-630-715 What are the minimum requirements of an information security program required by

- the Federal Safeguards Rule implementing the Gramm-Leach-Billey Act? (1) Generally, applicants and licensees must have a written program appropriate to the company's size and complexity, the activity conducted, and the sensitivity of information at issue. The program must ensure the information's security and confidentiality, protect against anticipated threats or hazards to the security or integrity of the information, and protect against unauthorized access to or use of the information.
- (2) Specifically, at a minimum the plan described in subsection (1) of this section must:
- (a) Designate an employee or employees to coordinate the information security program;
 - (b) Identify and assess the risks to customer information;
- (c) Design and implement safeguards to control the risks identified in the risk assessment and regularly monitor and test the safeguards;
- (d) Select service providers that can maintain appropriate safeguards and oversee their handling of customer information; and
- (e) At least annually evaluate and adjust the program in light of relevant circumstances, including changes in business operations, or the results of testing and monitoring the effectiveness of the implemented safeguards.
- (3) The information security plan must be maintained as part of your books and records.
- (4) Compliance with the federal Gramm-Leach-Bliley Act and Regulation P, 12 C.F.R. Part 1016, will be deemed compliance with this subsection.
- (5) For more information access the FTC web site on the Safeguards Rule at: https://www.ftc.gov/tips-advice/business-center/guidance/financial-institutions-customer-information-complying and see 16 C.F.R. 314.

NEW SECTION

WAC 208-630-716 What are the minimum requirements for Consumer Financial Information Privacy under the Gramm-Leach-Bliley Act (Regulation P)? Licensees must comply with Regulation P.

- (1) At a minimum, licensees must:
- (a) Provide customers with initial and annual notices regarding their privacy policies. These notices describe whether and how the licensee shares consumers' nonpublic personal information, including personally identifiable financial information, with other entities; and
- (b) If licensees share certain customer information with particular types of third parties, the institutions are also required to provide notice to their customers and an opportunity to opt out of the sharing. If a licensee limits its types of sharing to those which do not trigger opt-out rights, it may provide a "simplified" annual privacy notice to its customers that does not include opt-out information. If a licensee's privacy policy has not changed, additional notices may not be required.
- (2) Compliance with the federal Gramm-Leach-Bliley Act and Regulation P, 12 C.F.R. Part 1016, will be deemed compliance with this subsection.
- (3) See Regulation P at 12 C.F.R. 1016 for the required details.

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NEW SECTION

WAC 208-630-717 Must a licensee provide notice to consumers if its data is compromised? Maybe. If the licensee's data is compromised the licensee may be subject to chapter 19.255 RCW and may have to provide notices to consumers whose information was acquired. Under certain circumstances notice of the breach may also be required by the attorney general's office.

<u>AMENDATORY SECTION</u> (Amending WSR 09-24-089, filed 12/1/09, effective 1/1/10)

WAC 208-630-835 When must I inform the director of significant changes in my business? (1) You must notify the director in writing within five days of the occurrence of any of the following significant developments:

- (a) Your company filing for a chapter 7 or 11 bank-ruptcy;
- (b) Your company receiving notification of a license revocation procedure against it in any state;
- (c) You, or a director, officer, partner, member or controlling person of the company being convicted of a crime;
- (d) You, or a director, officer, partner, member or controlling person of the company receiving notification of the filing of criminal charges or a criminal indictment or information, in any way related to check cashing, check selling or small loan activities.
- (2) You must notify the director in writing at least fifteen days prior to a change of control. In the case of a corporation, control is defined as a change of ownership by a person or group acting in concert to acquire fifty percent of the stock, or the ability of a person or group acting in concert to elect a majority of the board directors or otherwise effect a change in policy of the corporation. The director may require such information as deemed necessary to determine whether a new application is required. In the case of entities other than corporations, change in control means any change in controlling persons of the organization, either active or passive. Change of control investigation fees are billed to the persons or group at the rate billed for applications.
- (3) Other. Post notification. Within forty-five days of a data breach you must notify the director in writing. This notification requirement may change based on directives or recommendations from law enforcement. See also WAC 208-630-717.

AMENDATORY SECTION (Amending WSR 09-24-089, filed 12/1/09, effective 1/1/10)

WAC 208-630-836 When ceasing my small loan business, what information must I file before I close the business? (1) You must notify the department at least thirty days before ceasing operations. The notice must be in writing, signed by a principal of the small loan licensee, and include the following:

- (a) The date you will cease small loan activity:
- (b) A list of all open and pending transactions;
- (c) Your contact address and e-mail address; and
- (d) Your plan for the orderly closure of open loans on the data base system.

(2) For purposes of this section, the term "ceasing operations" means that you have closed the offices to the public or have removed public access to the web site, if such access is the sole means of communication with customers. This provision does not apply if you have given customers a reasonable alternative for communications and payments.

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 208-630-711

What are the minimum requirements of a policy that protects borrowers' nonpublic personal information (NPI) under the Gramm-Leach-Bliley Act?

WSR 16-10-061 PERMANENT RULES CENTER FOR CHILDHOOD DEAFNESS AND HEARING LOSS

[Filed May 2, 2016, 10:44 a.m., effective June 2, 2016]

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

Purpose: Rule changes are needed to update, clarify and streamline student conduct code standards and procedures, as well as to incorporate federal and state requirements regarding harassment, intimidation, bullying, discrimination and sexual harassment, as well as Title IX/OCR guidance. Prohibited student conduct will be more clearly defined and expanded to cover additional undesirable behaviors. The revised codes will enhance the center and school's compliance with Title IX guidance from the Office for Civil Rights and state laws prohibiting bullying of students based on sexual orientation and gender expression and identity as well as prohibiting harassment, intimidation and bullying of all students

Citation of Existing Rules Affected by this Order: Repealing 4; and amending 9.

Statutory Authority for Adoption: RCW 72.40.0191. Other Authority: RCW 28A.300.285.

Adopted under notice filed as WSR 16-07-099 March 18, 2016.

Number of Sections Adopted in Order to Comply with Federal Statute: New 2, 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 6, 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: April 29, 2016.

Rick Hauan Executive Director

NEW SECTION

WAC 148-120-001 Purpose and application. The purpose of this chapter is to establish standards of conduct for students and prescribe the substantive and procedural due process rights of students at the Washington school for the deaf. The procedures and standards set forth in this chapter shall govern the imposition of discipline. "Discipline" means all forms of corrective action other than emergency removal from a class, subject, or activity, suspension, or expulsion and shall include the exclusion of a student from a class by a teacher or administrator for a period of time not exceeding the balance of the immediate class period: Provided that the student is in the custody of a school employee for the balance of such period. Discipline shall also mean the exclusion of a student from any other type of activity conducted by or on behalf of the school. Discipline is considered part of the school's educational process. In every case of misconduct, the nature and circumstances of the violation will be considered and appropriate discipline will be administered on a less restrictive alternative basis including, but not limited to, time out, detention, behavior contracts, restriction of privileges, reprimand, restitution, suspension or expulsion.

AMENDATORY SECTION (Amending WSR 94-13-058, filed 6/8/94, effective 7/9/94)

WAC 148-120-010 Student responsibilities and duties. Washington school for the deaf is dedicated to offering its students an opportunity for the best education for deaf and hard-of-hearing ((impaired)) students in the state of Washington. Concomitant to the rights and privileges guaranteed by federal and state law to students are duties and responsibilities ((which guarantee the rights of all students, including)) of each student to pursue his/her course of studies, show respect for the rights of others, ((compliance)) comply with written rules adopted herein and set forth in student handbooks, and ((submission)) submit to reasonable ((disciplinary)) corrective action for violation(s) for such rules. This chapter is intended to assure that ((disciplinary)) corrective action is imposed for just cause and in a fair and reasonable manner.

NEW SECTION

WAC 148-120-012 Jurisdiction. The student conduct code shall apply to student conduct that occurs on school premises, during transportation to and from school, to conduct that occurs at or in connection with school-sponsored programs or activities, or to off-campus conduct (or in non-school electronic environments) that in the judgment of the school threatens safety or security or otherwise adversely impacts the school community.

AMENDATORY SECTION (Amending WSR 94-13-058, filed 6/8/94, effective 7/9/94)

- WAC 148-120-015 Student rights. (1) Each student ((is guaranteed)) shall possess the following substantive rights((, within the limitations of statutory law and school policy which are deemed necessary to achieve the school's educational goals:
- (a) Students possess the right to a learning environment which is free from unlawful discrimination, inappropriate and disrespectful conduct, and sexual harassment.
- (b) Students possess the rights, guaranteed under the Constitution, to freedom of expression, free inquiry, and peaceful assembly upon and within school facilities that are generally open and available to the public)):
- (a) No student shall be unlawfully denied an equal educational opportunity or be unlawfully discriminated against because of sex, race, creed, religion, color, national origin, age, veteran or military status, sexual orientation, gender expression or identity, disability, or the use of a trained dog guide or service animal.
- (b) Students possess the constitutional right to freedom of speech and press, and the constitutional right to peaceably assemble and to petition the government and its representatives for a redress of grievances.
- (c) Students possess the rights, guaranteed under the Constitution, to the free exercise of religion and to have their school free from sectarian control or influence, subject to reasonable limitations upon the time, place, and manner of exercising such right.
- (d) Students possess the constitutional right to be secure in their persons, quarters, papers, and effects against unreasonable searches and seizures, subject to limitations set forth in RCW 28A.600.210 through 28A.600.240 as now or hereafter amended.
- (e) Students have the right to be free from unlawful interference in their pursuit of an education while enrolled at the Washington school for the deaf.
- (f) Students shall not be deprived of the right to an equal educational opportunity in whole or in part by the Washington school for the deaf without due process including:
- (i) Notice to the accused student of the nature of the charges and the proposed disciplinary action; and
- (ii) The opportunity to request a hearing as set forth in this chapter.
- (2) The foregoing enumeration of rights shall not be construed to deny or disparage other rights guaranteed in the Constitution and the laws of the state of Washington.
- (3) The school shall publish and make available to all students and parents, on an annual basis, written rules which state with reasonable clarity the types of misconduct for which disciplinary action may be imposed.

NEW SECTION

WAC 148-120-020 References to OSPI's rules. Where OSPI's rules are incorporated by reference: "School district" means "Washington school for the deaf"; "school district superintendent" means "superintendent of the Washington school for the deaf." These substitutions should be made as

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appropriate. They should not be made where the "school district" referred to is the student's district of residence.

NEW SECTION

- WAC 148-120-110 Prohibited student conduct. The school may impose disciplinary sanctions against a student who commits, or aids, abets, incites, encourages or assists another person to commit, an act(s) of misconduct set forth in this section. As applicable, the term "conduct" includes acts performed by electronic means.
- (1) **Personal offenses.** The term "personal offense" is an offense against the safety or security of any person and includes physical assault, reckless endangerment, physical or verbal abuse, threats, intimidation, harassment, bullying, stalking, invasion of privacy, or other similar conduct that harms any person, or that is reasonably perceived as threatening the health or safety of any person, or that has the purpose or effect of unlawfully interfering with any person's rights. The term includes personal offenses committed by electronic means
- (a) Bullying is physical or verbal abuse, repeated over time, and involving a power imbalance between the aggressor and victim.
- (b) Stalking is intentional and repeated following of another person, which places that person in reasonable fear that the perpetrator intends to injure, intimidate, or harass that person. Stalking also includes instances where the perpetrator knows or reasonably should know that the person is frightened, intimidated, or harassed, even if the perpetrator lacks such an intent.
- (2) **Property violations.** The term "property violation" includes the theft, misappropriation, unauthorized use or possession, vandalism, or other nonaccidental damaging or destruction of school property or the property of another person; including possession of such property or money after it has been stolen. Property for purposes of this subsection includes computer passwords, access codes, identification cards, other confidential personal information, and intellectual property.
- (3) **Sexual misconduct.** The term "sexual misconduct" includes, but is not limited to, sexual harassment and sexual violence.
- (a) **Sexual harassment.** The term "sexual harassment" means unwelcome conduct of a sexual nature, including unwelcome sexual advances, requests for sexual favors, and other verbal, nonverbal, or physical conduct of a sexual nature that is sufficiently serious as to deny or limit, and that does deny or limit, based on sex, the ability of a student to participate in or benefit from the school's educational programs/activities or that creates an intimidating, hostile, or offensive educational environment.

Sexual harassment may include conduct or communication that involves adult to student, student to adult, student to student, adult to adult, male to female, female to male, male to male, and female to female.

(b) **Sexual intimidation.** The term "sexual intimidation" incorporates the definition of "sexual harassment" and means threatening or emotionally distressing conduct based on sex, including stalking (or cyberstalking), voyeurism, indecent

exposure, or the nonconsensual recording of sexual activity or distribution of such recording.

- (c) **Sexual violence.** The term "sexual violence" incorporates the definition of "sexual harassment" and means a physical sexual act perpetrated without clear, knowing, and voluntary consent, such as committing a sexual act against a person's will, exceeding the scope of consent, or where the person is incapable of giving consent. A number of different acts fall into the category of sexual violence, including rape, sexual assault, sexual battery, sexual abuse, sexual coercion, sexual exploitation, or gender- or sex-based stalking. A person may be incapable of giving consent because she or he is underage, unable to understand what is happening, or is disoriented, helpless, asleep or unconscious for any reason, including due to drug or alcohol consumption, is disabled, or cannot consent because of threat or intimidation.
- (4) **Disruptive or obstructive conduct.** The term "disruptive" or "obstructive conduct" means conduct, not protected by law, that interferes with, impedes, or otherwise unreasonably hinders the normal teaching, learning, administrative, or other functions, procedures, services, programs, or activities of the school. The term includes disorderly conduct, breach of the peace, lewd or obscene conduct, obstruction of pedestrian or vehicular traffic, or interfering with the orderly conduct of school investigations or disciplinary proceedings, including interfering with or retaliating against any complainant, witness, or other participant.
- (5) **Failure to comply.** Refusal or failure to comply with instructions or directions of school officials, refusing to comply with any term or condition of a disciplinary sanction.
- (6) **Safety violations.** Any nonaccidental conduct that interferes with or otherwise compromises any school policy, equipment, or procedure relating to the safety and security of the center and school community, including tampering with or disabling safety equipment and triggering false alarms or other emergency response systems.
- (7) **False or deceptive conduct.** The term "false" or "deceptive conduct" means dishonest conduct (other than academic dishonesty) that includes forgery, altering or falsifying of school records, furnishing false or misleading information, or falsely accusing any person of misconduct.
- (8) **Academic dishonesty.** All forms of cheating, plagiarism and fabrication.
- (a) **Cheating.** Cheating includes any attempt to give or obtain unauthorized assistance relating to the completion of an academic assignment. This includes assisting another to commit an act of academic dishonesty or allowing someone to do these things for one's benefit.
- (b) **Plagiarism.** Plagiarism includes taking and using as one's own, without proper attribution, the ideas, writings or work of another person in completing an academic assignment. Prohibited conduct may also include the unauthorized submission for credit of academic work that has been submitted for credit in another course.
- (c) **Fabrication.** Fabrication includes falsifying data, information, or citations in completing an academic assignment and also includes providing false or deceptive information to a teacher concerning the completion of an assignment.
- (9) **Unauthorized access.** The term "unauthorized access" means gaining entry without permission to any

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restricted area or property of the school or the property of another person, including any computer system, e-mail account, or electronic or paper files. Unauthorized access includes computer hacking and the unauthorized possession or sharing of any restricted means of gaining access, including keys, keycards, passwords, or access codes.

- (10) Alcohol, drug and tobacco violations.
- (a) **Alcohol.** Use, possession, delivery, or being visibly under the influence of any alcoholic beverages.
- (b) **Marijuana.** Use, possession, delivery, or being visibly under the influence of marijuana or the psychoactive compounds found in marijuana and intended for human consumption, regardless of form.
- (c) **Drug.** Use, possession, distribution, delivery, or being under the influence of any legend drug, including anabolic steroids, androgens, or human growth hormones as defined in chapter 69.41 RCW, or any other controlled substance under chapter 69.50 RCW, except as prescribed for a student's use by a licensed practitioner. The abuse, misuse, or unlawful sale or distribution of prescription or over-the-counter medications may also constitute a drug violation.
- (d) **Tobacco.** Smoking or use of tobacco, tobacco products, electronic smoking devices, or other smoking devices.
- (11) **Retaliation.** Harming, threatening, intimidating, coercing or taking adverse action of any kind against a person because such person reported an alleged violation of this code or other school policies, provided information about an alleged violation, or participated as a witness or in any other capacity in an investigation or disciplinary proceeding.
- (12) **Weapons violations.** A "weapons violation" includes possessing, carrying, displaying, exhibiting, or storing any firearm or dangerous weapon. Dangerous weapons include, but are not limited to, firearms, dangerous chemicals, explosives, slungshots, sand clubs, metal knuckles, daggers, dirks, spring blade knives, nunchaku sticks, throwing stars, air guns, stun guns, and devices used or intended to be used as a weapon to injure a person by an electric shock, charge, or impulse.
- (13) **Harassment, intimidation, or bullying.** Harassment, intimidation, or bullying means any intentional electronic, written, verbal or physical act including, but not limited to, one shown to be motivated by race, color, religion, ancestry, national origin, gender, sexual orientation including gender identity or expression, mental or physical disability, socio-economic status, physical appearance, or other distinguishing characteristic, when the act:
- (a) Physically harms a student or damages the student's property;
- (b) Has the effect of substantially interfering with a student's education;
- (c) Is so severe, persistent, or pervasive that it creates an intimidating or threatening educational environment; or
- (d) Has the effect of substantially disrupting the orderly operation of the school.

Nothing in this section requires the affected student to actually possess a characteristic that is a basis for the harassment, intimidation, or bullying.

"Intentional act" refers to the individual's choice to engage in the act rather than the ultimate impact of the action(s).

Harassment, intimidation, and bullying are often carried out through acts of misconduct, which are addressed and prohibited under other rules in this chapter.

- (14) **Gang activity.** Claiming membership in, association with, affiliation with, or participation in a gang, in gangrelated activities or similar destructive or illegal group behavior at school, during school-related functions, or on any school property. "Gang" has the meaning given the term under RCW 28A.600.455.
- (15) **Theft or misuse of electronic resources.** Theft or misuse of computer time or other electronic information resources of the school. Such misuse includes, but is not limited to:
- (a) Unauthorized use of such resources or opening of a file, message, or other item;
- (b) Unauthorized duplication, transfer, or distribution of a computer program, file, message, or other item;
- (c) Unauthorized use or distribution of someone else's password or other identification;
- (d) Use of such time or resources to interfere with someone else's work;
- (e) Use of such time or resources to send, display, or print an obscene or abusive message, text, or image;
- (f) Use of such time or resources to harass, abuse, bully or engage in other conduct which harms, threatens, or is reasonably perceived as threatening the health or safety of another person;
- (g) Use of such time or resources to interfere with normal operation of the school's computing system or other electronic information resources;
- (h) Use of such time or resources in violation of applicable copyright or other law;
- (i) Failure to comply with the student computing resources policy.
- (16) **Cyber misconduct.** Cyberstalking, cyberbullying, or online harassment. Use of electronic communications including, but not limited to, electronic mail, instant messaging, electronic bulletin boards, and social media sites to harass, abuse, bully, or engage in other conduct which harms, threatens, or is reasonably perceived as threatening the health or safety of another person. Prohibited activities include, but are not limited to, unauthorized monitoring of another's email communications directly or through spyware, sending threatening e-mails, disrupting electronic communications with spam or by sending a computer virus, sending false messages to third parties using another's e-mail identity, nonconsensual recording of sexual activity, and nonconsensual distribution of a recording of sexual activity.
- (17) **Violation of other laws or policies.** Violation of any federal, state, local law, rule, or regulation or other school rules or policies which are published annually in the student/parent handbook.

AMENDATORY SECTION (Amending WSR 11-05-033, filed 2/8/11, effective 3/11/11)

WAC 148-120-205 Limitations. (1) No form of disciplinary action shall be enforced in such a manner as to prevent a student from accomplishing specific academic grade, subject, or graduation requirement: Provided, That a student's

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academic grade or credit in a particular subject or course may be adversely affected as a result of excessive tardiness or absences.

(2) Corporal punishment as defined by the superintendent of public instruction in WAC 392-400-235(((4))) (2) as now or hereafter amended, is prohibited.

AMENDATORY SECTION (Amending WSR 94-13-058, filed 6/8/94, effective 7/9/94)

WAC 148-120-210 Emergency removal from class or activity. (1) Notwithstanding any other provision of this chapter, a student may be removed immediately from a class, subject, or activity by a certificated teacher or an administrator and sent to the principal or his/her designee: Provided, That the teacher or administrator has good and sufficient reason to believe that the student's presence poses an immediate and continuing danger to the student, other students, or school personnel, or an immediate and continuing threat of substantial disruption of the class, subject, activity, or educational process of the school. The removal from classes, subjects, or activities shall continue only until:

- (a) The danger or threat ceases; or
- (b) The principal or his/her designee acts to impose disciplinary action pursuant to this chapter.
- (2) The principal or his/her designee shall meet with the student as soon as reasonably possible following the student's removal and <u>initiate or</u> take appropriate ((disciplinary)) <u>corrective</u> action. In no case shall the student's opportunity for such meeting be delayed beyond the commencement of the next school day. Prior to or at the time any such student is returned to the class(es), subject(s), or activity(ies), the principal or his/her designee shall notify the teacher or administrator who removed the student therefrom of the action which has been taken.

AMENDATORY SECTION (Amending WSR 11-05-033, filed 2/8/11, effective 3/11/11)

WAC 148-120-250 Discipline procedures. Disciplinary procedures for students at ((WSD)) the school who are eligible for special education shall follow the requirements in WAC 392-172A-05140 through 392-172A-05175, which are adopted by reference. ((Students at WSD are)) In addition to the rules and procedures in this chapter, students may also be subject to rules and procedures governing discipline for all students in public schools in chapter 392-400 WAC. ((WSD)) The school shall determine on a case-by-case basis whether and to what extent the rules and procedures in chapter 392-400 WAC may apply.

AMENDATORY SECTION (Amending WSR 01-16-100, filed 7/27/01, effective 8/27/01)

WAC 148-120-313 Referral to and action by law enforcement and judicial authorities. (1) Nothing in Part B of the Individuals with Disabilities Education Act, or this chapter prohibits the Washington school for the deaf from reporting a crime committed by a student to appropriate authorities, or prevents state law enforcement and judicial authorities from exercising their responsibilities with regard

to the application of federal and state law to crimes committed by a student.

- (2) When reporting a crime committed by a student, the school shall ensure that copies of the special education and disciplinary records of the student are transmitted for consideration by the appropriate authorities to whom it reports the crime((-
- (3) When reporting a crime under this section, the school may transmit copies of the student's special education and disciplinary records only)), to the extent that the transmission is permitted by the Family Educational Rights and Privacy Act.

AMENDATORY SECTION (Amending WSR 04-02-002, filed 12/24/03, effective 1/24/04)

WAC 148-120-400 Emergency expulsion—Limitations. ((Notwithstanding any other provision of this chapter, a student may be expelled immediately by the superintendent or a designee of the superintendent in emergency situations: Provided, That the superintendent or designee has good and sufficient reason to believe that the student's presence poses an immediate and continuing danger to the student, other students, or school personnel or an immediate and continuing threat of substantial disruption of the educational process. An emergency expulsion shall continue until reseinded by the superintendent or his or her designee, or until modified or reversed pursuant to the hearing provisions set forth in WAC 148-120-415.)) WAC 392-400-295 is incorporated by reference.

AMENDATORY SECTION (Amending WSR 04-02-002, filed 12/24/03, effective 1/24/04)

WAC 148-120-405 Emergency expulsion—Notice of hearing—Waiver of hearing right. (((1) The student and his or her parent(s) or guardian(s) shall be notified of the emergency expulsion of the student and of their opportunity for a hearing either (a) by hand delivering written notice to the student's parent(s) or guardian(s) within twenty-four hours of the expulsion and documenting delivery by obtaining his or her signature acknowledging receipt or the written certification of the person making the delivery, or (b) by certified letter(s) deposited in the United States mail, within twenty-four hours of the expulsion: Provided, That if the emergency expulsion is based upon a failure to comply with the state immunization law (see chapter 180-38 WAC), the notice must be received by the student's parent(s) or guardian(s) prior to the emergency expulsion of the student regardless of the method of delivery. In addition, if the notice is by certified letter, reasonable attempts shall be made to notify the student and his or her parent(s) or guardian(s) by telephone or in person as soon as reasonably possible. Such written and oral notice shall:

- (a) Be provided in the predominant language of a student and/or a parent(s) or guardian(s) who predominantly speak a language other than English, to the extent feasible,
- (b) Specify the alleged reason(s) for the emergency expulsion,
- (c) Set forth the corrective action or punishment taken and proposed,

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- (d) Set forth the right of the student and/or his or her parent(s) or guardian(s) to a hearing for the purpose of contesting the allegation(s) as soon as reasonably possible, and
 - (e) Set forth the facts that:
- (i) A written (or "oral" if provided for by school policy) request for a hearing must be received by the school employee designated, or by his or her office, on or before the expiration of the tenth school business day after receipt of the notice of opportunity for a hearing, and
- (ii) If such a request is not received within the prescribed period of time, then the right to a hearing may be deemed to have been waived and the emergency expulsion may be continued as deemed necessary by the school without any further opportunity for the student or his or her parent(s) or guardian(s) to contest the matter. A schedule of "school business days" potentially applicable to the exercise of such hearing right should be included with the notice.
- (2) The student and/or his or her parent(s) or guardian(s) shall reply to the notice of opportunity for a hearing and request a hearing within ten school business days after the date of receipt of the notice. A request for a hearing shall be provided to the school employee specified in the notice of opportunity for a hearing, or to his or her office. A request for a hearing shall be accepted if in writing and may be accepted orally if expressly provided for and allowed by rule of the school.
- (3) If a request for a hearing is not received within the required ten school business day period, the school may deem the student and his or her parent(s) or guardian(s) to have waived the right to a hearing and the emergency expulsion may be continued as deemed necessary by the school district.)) WAC 392-400-300 is incorporated by reference.

AMENDATORY SECTION (Amending WSR 04-02-002, filed 12/24/03, effective 1/24/04)

- WAC 148-120-410 Emergency expulsion—Prehearing and hearing process. (((1) If a request for a hearing within the required ten school business days is received pursuant to WAC 148-120-405, the school shall immediately schedule and give notice of a hearing to commence as soon as reasonably possible and in no case later than the third school business day after receipt of the request for hearing.
- (2) The student and his or her parent(s) or guardian(s) shall have the right to:
- (a) Inspect in advance of the hearing any documentary and other physical evidence which the school district intends to introduce at the hearing,
 - (b) Be represented by legal counsel,
- (e) Question and confront witnesses, unless a school witness does not appear and the nonappearance of the witness is excused by the person(s) hearing the case based upon evidence of good reason for doing so submitted by the school. The evidence submitted by the school must at a minimum establish either:
- (i) That the school made a reasonable effort to produce the witness and is unable to do so; or.
- (ii) That it is not advisable for the student to appear due to an expectation and fear on the part of the responsible

- school official(s) or the student of retaliation against the student if he or she appears as a witness,
- (d) Present his or her explanation of the alleged misconduct, and
- (e) Make such relevant showings by way of witnesses and the introduction of documentary and other physical evidence as he or she desires.
- (3) The designee(s) of the school assigned to present the school's case and/or the assistant attorney general shall have the right to inspect in advance of the hearing any documentary and other physical evidence that the student and his or her parent(s) or guardian(s) intend to introduce at the hearing.
- (4) The person(s) hearing the case shall not be a witness and the guilt or innocence of the student shall be determined solely on the basis of the evidence presented at the hearing.
- (5) Either a tape-recorded or verbatim record of the hearing shall be made.
- (6) Within one school business day after the date upon which the hearing concludes, a decision as to whether or not the expulsion shall be continued shall be rendered, and the student's legal counsel or, if none, the student and his or her parent(s) or guardian(s) shall be notified thereof by depositing a certified letter in the United States mail. The decision shall set forth the findings of fact, the conclusions (including a conclusion as to whether or not the emergency situation giving rise to the emergency expulsion continues), and whether or not the emergency expulsion shall be continued or a lesser form of corrective action or punishment is to be imposed.
- (7) An emergency expulsion may be continued following the hearing on the basis that the emergency situation continues and/or as corrective action or punishment for the action(s) giving rise to the emergency expulsion in the first instance.)) WAC 392-400-305 is incorporated by reference.

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 148-120-100 Conduct violations.

WAC 148-120-120 Misdemeanor and/or felony.

WAC 148-120-200 Policy.

WAC 148-120-314 Aversive interventions.

WSR 16-10-062 PERMANENT RULES CENTER FOR CHILDHOOD DEAFNESS AND HEARING LOSS

[Filed May 2, 2016, 10:45 a.m., effective June 2, 2016]

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

Purpose: Chapter 381, Laws of 2009 (E2SHB 1879) established the Washington state center for childhood deafness and hearing loss (CDHL), established a board of trustees as the governing body for the center and required the board to adopt rules for its governance. The proposed rules implement

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the agency name change and update the title of the CDHL director to executive director as approved by the board.

Citation of Existing Rules Affected by this Order: Repealing 2; and amending 5.

Statutory Authority for Adoption: RCW 72.42.041.

Adopted under notice filed as WSR 16-07-100 on March 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 5, 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 0, Repealed 0.

Date Adopted: April 29, 2016.

Rick Hauan Executive Director

AMENDATORY SECTION (Amending WSR 02-22-059, filed 11/1/02, effective 12/2/02)

WAC 148-100-001 Description of organization. (1) The Washington state ((school for the deaf)) center for child-hood deafness and hearing loss is a state agency established and organized under the authority of chapter 72.40 RCW((The school provides special education and related services to deaf and hearing impaired students pursuant to the Individuals with Disabilities Education Act, 20 U.S.C. secs. 1400 et seq.; and as administered and generally supervised by the superintendent of public instruction under chapter 28A.155 RCW.

(2) The school operates under the direction and control of the superintendent and the board of trustees.)) to provide statewide leadership and support for the coordination of regionally delivered educational services in the full range of communication modalities, for children who are deaf, deafblind, or hard of hearing. The center manages and directs the supervision of the school for the deaf and collaborates with appropriate public and private partners for the training and professional development of educators serving children who are deaf, deaf-blind, or hard of hearing.

(2) The ((school)) center is governed by a ((nine-member)) ten-member board of trustees, appointed by the governor, which is responsible for performing needed oversight services to the governor and legislature in the development of programs for the deaf, hard of hearing ((impaired)) or deafblind and in the operation of the center, including the school for the deaf. The ((superintendent is the principal administrative officer of the school and)) executive director of the Washington state center for childhood deafness and hearing loss shall be responsible for supervision and management of

the <u>center, including the</u> school <u>for the deaf</u> and its programs as well as other duties which are prescribed by ((section 3, chapter 209, Laws of 2002)) <u>RCW 72.40.0191 and 72.40.-</u>024.

(3) The administrative office of the ((sehool)) center is located at 611 Grand Blvd., Vancouver, Washington 98661. Any person may obtain additional information and make submissions and requests at the administrative office. Additional information concerning organization and educational programs may also be obtained from the school's webpage at http://www.wsd.wa.gov.

((BYLAWS))

AMENDATORY SECTION (Amending WSR 05-10-008, filed 4/25/05, effective 5/26/05)

WAC 148-100-010 ((Time and place of board)) Meetings of the board of trustees. The board of trustees ((eustomarily holds a regular meeting each month)) holds regular meetings in accordance with the Open Public Meetings Act. chapter 42.30 RCW, and RCW 72.42.070 pursuant to a schedule established yearly by the board and such special meetings as may be requested by the chair of the board or by a majority of the members of the board and announced in accordance with RCW 42.30.080. The dates, times and locations of these meetings may be found in the Washington State Register or by contacting the office of the executive director, Washington state center for childhood deafness and hearing loss, 611 Grand Boulevard, Vancouver, Washington. A regular meeting may be canceled by action of the board or the board chair.

((Meetings of the board shall be at the Washington School for the Deaf, 611 Grand Blvd., Vancouver, Washington 98661, or at such other location as the board may determine.))

All regular and special meetings are open to the general public; however, the chair may call an executive session when permitted by law at which members of the general public shall not be present unless invited.

No official business may be conducted by the board of trustees except during a regular or special meeting. No individual member of the board may act on behalf of the board unless specifically instructed by action of the board.

AMENDATORY SECTION (Amending WSR 02-22-059, filed 11/1/02, effective 12/2/02)

WAC 148-100-020 Meetings—Board agenda—Communication. (1) Anyone, other than a board member or a representative of the ((superintendent's)) executive director's office wishing an item placed on the agenda of a board meeting, must have a written request to the board secretary, ((superintendent's)) executive director's office, no later than twelve o'clock noon twelve business days before the next scheduled meeting of the board. The secretary will relate the request to the chair of the board as soon as feasible. The chair will determine whether the item is to be placed on the agenda. The chair or designee will notify the individual initiating the request as to whether or not the item will be placed on the agenda.

- (2) All materials to be considered by the board must be submitted in sufficient quantities to provide each member of the board and the secretary with appropriate copies. To allow the board to have the benefit of background information and research, the ((superintendent)) executive director shall be given an opportunity, whenever possible, to review and evaluate all materials prepared for consideration by the board prior to submission to the board. The ((superintendent)) executive director shall also have the opportunity to make recommendations prior to a decision by the board on the matter.
- (3) Proposed new policies and/or changes in policy will be presented first to the board of trustees as a report. Board action will usually be taken at a subsequent meeting. If expedient action on the matter would clearly be beneficial to the school, the board may consider taking action at the time the policy is first presented to the board.
- (4)(a) Each regular meeting of the board shall provide members of the public an opportunity to address the board on any item of business. Groups and individuals are to submit their statements in writing to the board secretary, ((superintendent's)) executive director's office, whenever possible no less than two weeks prior to the time of the meeting. The board encourages groups to designate a spokesperson to address the board on their behalf.
- (b) The chair of the board reserves the right to determine time limits on statements and presentations.
- (c) The intent of the board shall be to provide equal time for opposing presentations. The chair also maintains the right to regulate the subject matter of that which may be presented or discussed at the open meeting including, but not limited to, matters which are the subject of current or pending grievances or adjudicative or disciplinary proceedings. Matters for consideration, discussion, and/or debate will be limited to the extent allowed by the Open Public Meetings Act, chapter 42.30 RCW.

AMENDATORY SECTION (Amending WSR 02-22-059, filed 11/1/02, effective 12/2/02)

- WAC 148-100-030 Officers of the board. (1) At the first regular meeting of the board each fiscal year, the board shall elect from its membership, a chair and vice-chair to serve for the ensuing year. In addition, the ((superintendent of the Washington school for the deaf)) executive director shall serve as secretary to the board of trustees. The secretary may, at his or her discretion, appoint the executive assistant to the ((superintendent)) executive director to act as recording secretary for all regular and special meetings of the board.
- (2) The chair shall preside at each regular or special meeting of the board, sign all legal and official documents recording action of the board, and review the agenda prepared for each meeting of the board. The chair shall, while presiding at official meetings, have full right of discussion and vote.
- (3) The vice-chair shall act as chair of the board in the absence of the chair.
- (4) In case of the absence of the chair and vice-chair from any meeting of the board of trustees or in case of the inability of both of the two to act, the board of trustees shall elect for the meeting a chair pro tempore, and may authorize

such chair pro tempore to perform the duties and acts authorized or required by said chair or vice-chair to be performed, as long as the inability of these said officers to act may continue.

- (5) The secretary of the board shall, in addition to any duties imposed by law or the governor, keep the official seal of the board, maintain all records of meetings and other official action of the board.
- (6) The secretary shall also be responsible for board correspondence, compiling the agenda of meetings, and distributing the minutes of the meetings and related reports.
- (7) The secretary, or his or her designee, must attend all regular and special meetings of the board, and official minutes must be kept of all such meetings except in executive sessions.

AMENDATORY SECTION (Amending WSR 02-22-059, filed 11/1/02, effective 12/2/02)

- WAC 148-100-050 Revision of bylaws. (1) The board of trustees may adopt bylaws to govern its operations. ((A record of these bylaws shall be maintained in the office of the president.))
- (2) Bylaws of the board may be revised by majority vote of the board, provided such changes are proposed at least one meeting prior to the meeting at which the vote is taken. Bylaws may be revised by unanimous vote of the board at the same meeting at which the revision is originally proposed.

((RULES COORDINATOR))

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 148-100-040 Records of board action.

WAC 148-100-200 Rules coordinator.

WSR 16-10-063 PERMANENT RULES CENTER FOR CHILDHOOD DEAFNESS AND HEARING LOSS

[Filed May 2, 2016, 10:47 a.m., effective June 2, 2016]

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

Purpose: Rule changes update provisions for consistency with the revision in the federal and state regulations implementing the Family Educational Rights Privacy Act and Individuals with Disabilities Education Act. Chapter 381, Laws of 2009 (E2SHB 1879) established the Washington state center for childhood deafness and hearing loss. Proposed rule changes update agency name.

Citation of Existing Rules Affected by this Order: Repealing 1; and amending 8.

Statutory Authority for Adoption: RCW 72.40.0191. Other Authority: 34 C.F.R. Parts 99 and 300.

Adopted under notice filed as WSR 16-07-101 on March 18, 2016.

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Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 8, 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 6, 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: April 29, 2016.

Rick Hauan Executive Director

Chapter 148-280 WAC

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT ((OF 1974))

AMENDATORY SECTION (Amending WSR 03-20-014, filed 9/22/03, effective 10/23/03)

WAC 148-280-010 Confidentiality of student records. The Washington ((sehool for the deaf)) state center for childhood deafness and hearing loss implements policy contained in this chapter in compliance with the Family Educational Rights and Privacy Act ((of 1974)), 20 U.S.C. Sec. 1232(g); 34 C.F.R. Part 99 (FERPA)((, and the Individuals with Disabilities Education Act (IDEA), 20 U.S.C. § 1412 (a)(8). These laws establish)). This law establishes that the education records of students attending or having attended the school for the deaf (school) are confidential and can be released only with written permission of the parent (or adult student). The primary rights of parents and adult students under FERPA are:

- (1) To inspect and review education records;
- (2) To request amendment of education records; and
- (3) To have some control over the disclosure of information from education records.

AMENDATORY SECTION (Amending WSR 03-20-014, filed 9/22/03, effective 10/23/03)

WAC 148-280-011 **Definitions.** As used in this chapter:

(1) "Directory information" means information contained in an education record of a student which would not generally be considered harmful or an invasion of privacy if disclosed. It includes, but is not limited to, the student's name, photograph, ((address, telephone listing,)) date ((and place)) of birth, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, diplomas, honors, and awards received, and ((previous)) most recent school or program attended.

- (2) "Disclosure" means to permit access to or the release, transfer, or other communication of education records, or the personally identifiable information contained in those records, to any party, by any means, including oral, written, or electronic means.
- (3) "Education records" means ((those records, files, documents, and other materials that are:
 - (a) Maintained by the school; and
 - (b) Directly related to a student.
 - The term "education records" does not include:
- (i) Records of school staff that are kept in the sole possession of the maker of the record, and are not accessible or revealed to any other person except a temporary substitute for the maker of the record:
- (ii) Records created and maintained by school security or the law enforcement unit of the school;
- (iii) Records made and maintained in the normal course of business which relate exclusively to such person in that person's capacity as an employee and which are not available for any other purpose: Provided, That this exception does not apply to records relating to an individual in attendance at the school who is employed as a result of his or her status as a student:
- (iv) Records on a student who is eighteen years of age or older that are created and maintained by a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional acting in his or her professional or paraprofessional capacity, or assisting in that capacity and that are created, maintained, or used only in connection with the treatment of the student; and are not available to anyone other than persons providing such treatment; provided, however, that such records can be personally reviewed by a physician or other appropriate professional of the student's choice; and
- (v) Records that contain only information relating to an individual after he or she is no longer a student at the school)) the type of records covered under the definition of "education records" in 34 C.F.R. Part 99 (regulations implementing FERPA).
- (4) "Adult student" means a student who has reached eighteen years of age. When a student becomes an "adult student," the rights accorded to, and the consent required of, parents under this chapter transfer from the parents to the student.
- (5) "Legitimate educational interest" ((means the necessity to review educational records)) exists if the school official needs to have access to the record in order to fulfill the official's professional responsibility, perform appropriate tasks that are specified in his or her position description or contract agreement, perform a function related to a student's education or discipline, perform a service or benefit relating to the student or student's family, such as health education, counseling, advising, or student employment, or maintain safety and security.
- (6) "Parent" means a parent of a student and includes a natural parent, a guardian, or an individual acting as a parent in the absence of a parent or guardian.
- (7) "Personally identifiable information" includes, but is not limited to, the student's name; the name of the student's parent or other family member; the address of the student or student's family; a personal identifier, such as the student's

Social Security number or student number <u>or biometric record</u>; a list of personal characteristics <u>or other information</u> that would make ((the student's identity easily traceable; or other information that would make the student's identity easily traceable)) it possible to identify the student with reasonable certainty.

- (8) "School official" includes a person employed by the center or the school as a teacher, administrator, supervisor, counselor, support or clerical staff ((member (including health or medical staff and law enforcement unit personnel), a person serving on the school)), human resources staff, information systems specialist, school security personnel, a person appointed to the board of trustees, a person with whom the school has contracted to perform a ((special task)) service to or on behalf of the center or school (such as an attorney, hearing officer, auditor, medical consultant, or therapist), ((or)) a parent or student serving on an official committee or assisting another school official in performing his or her tasks, or other party to whom the school has outsourced institutional services or functions.
- (9) "Participating agency" means any school district, agency or institution which collects, maintains, or uses personally identifiable information, or from which information is obtained in implementing chapters 392-172A and 148-172 WAC (rules for the provision of special education), and includes the OSPI, school districts and other public agencies.

AMENDATORY SECTION (Amending WSR 03-20-014, filed 9/22/03, effective 10/23/03)

WAC 148-280-015 Notice. The school ((shall)) provides parents and adult students currently in attendance with annual notice of their rights ((as defined by)) under FERPA by publication in the parent/student handbook and through these rules.

AMENDATORY SECTION (Amending WSR 03-20-014, filed 9/22/03, effective 10/23/03)

WAC 148-280-020 ((Education records—))Access rights. (1) ((A parent, adult student, or representative of the parent has the right to inspect and review the education records of the student.)) The school shall permit parents of students eligible for special education to inspect and review, during school business hours, any education records relating to the student which are collected, maintained, or used by the school under chapters 392-172A and 148-172 WAC. A request by a parent (or adult student) to inspect and review education records should be made in writing to the supervising administrator K-12 (i.e., building principal). The supervising administrator K-12 shall comply with a request promptly and before any meeting regarding an individualized education program or hearing or resolution session relating to the identification, evaluation, educational placement of the student or provision of FAPE to the student, including disciplinary proceedings. The school shall respond, in no case, more than forty-five calendar days after the request has been made.

(2) Where the education record ((or data)) includes information on more than one student, the parent(s) of those students (or the adult students) shall have the right to inspect and

review only the information relating to their child (or themselves) or to be informed of that specific information.

- (3) ((The parent (or adult student) has the right to obtain copies of the student's education records. Charges for the copies shall not exceed the cost normally charged by the school. However, if the fee effectively prevents the parent (or adult student) from exercising the right to inspect and review the student's education records, the school may provide such copies free of charge.)) The right to inspect and review education records under this section includes:
- (a) The right to a response from the center to reasonable requests for explanations and interpretations of the records:
- (b) The right to request that the center provide copies of the records containing the information if failure to provide those copies would effectively prevent the parent or adult student from exercising the right to inspect and review the records; and
- (c) The right to have a representative of the parent or adult student inspect and review records.
- (4) The school may presume that a parent has authority to inspect and review records relating to his/her child unless the school has been advised that ((there is a court order, parenting plan, or legally binding document relating to such matters as dissolution, separation, guardianship, or custody that specifically revokes these rights)) the parent does not have the authority under applicable state law governing such matters as guardianship, separation, and divorce.
- (5) ((The parent (or adult student) has the right to a response from the school to reasonable requests for explanations and interpretations of the records.)) A list of the types and locations of education records collected, maintained, or used by the school may be obtained by the parent (or adult student) at the superintendent's office.

<u>AMENDATORY SECTION</u> (Amending WSR 03-20-014, filed 9/22/03, effective 10/23/03)

- WAC 148-280-030 ((Education records—))Amendment of records—Hearing on request to amend records. (1)(a) A parent (or adult student) who believes that information contained in the education record is inaccurate, misleading, or violates the privacy or other rights of the student, may request the school to amend the information.
- (b) A parent (or adult student) shall not be permitted under this chapter to challenge the validity of grades or other evaluations which are accurately recorded.
- (2) The school shall decide whether to amend the record as requested within a reasonable time after receipt of the request.
- (3) If the school decides to deny the request, it shall inform the parent (or adult student) of the decision and of the right to a hearing. ((The hearing shall be a brief adjudicative proceeding.))
- (4) The school will conduct a hearing within a reasonable time after it has received the request for a hearing.
- (a) Notice of the date, time and place shall be provided reasonably in advance of the hearing.
- (b) The hearing ((will be conducted by a hearing officer who is a disinterested party. This hearing officer may be a school official)) may be conducted by any party, including an

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- official of the school, who does not have a direct interest in the outcome of the hearing. The parent (or adult student) shall be afforded a full and fair opportunity to present evidence relevant to the issues raised in the original request to amend an education record. The parent (or adult student) may, at their own expense, be assisted or represented at the hearing by one or more individuals, including an attorney.
- (c) The ((hearing officer will prepare)) school will provide a written decision ((based solely on the evidence presented at)) within a reasonable period of time after the conclusion of the hearing. The decision ((will)) shall be based solely upon the evidence presented at the hearing and include a summary of the evidence presented and the reasons for the decision.
- (5) If, as a result of the hearing, the school decides that the information is inaccurate, misleading, or otherwise in violation of the privacy or other rights of the student, it shall amend the information accordingly and so inform the parent (or adult student) in writing.
- (6) If, as a result of the hearing, the school decides that the information is not inaccurate, misleading, or otherwise in violation of the privacy or other rights of the student, it shall inform the parent (or adult student) of the right to place in the record a statement commenting on the challenged information ((and/or a statement of the parent's (or adult student's))) or setting forth any reasons for disagreeing with the decision of the school in the records it maintains on the student.
- (7) Any explanation placed in the records of the student under this section must:
- (a) Be maintained by the school as part of the records of the student as long as the record or contested portion is maintained by the school; and
- (b) Be included with any disclosure of the record or contested portion to which the explanation relates.

AMENDATORY SECTION (Amending WSR 03-20-014, filed 9/22/03, effective 10/23/03)

- WAC 148-280-040 ((Disclosure of personally identifiable information from education)) Consent for release of records. (((1) The school shall not disclose information from education records (other than "directory information") without the written consent of the parent (or adult student) except that records may be disclosed without consent when disclosure is to:
- (a) School officials who have a legitimate educational interest in the records;
- (b) Officials of another school, school system, or institution of postsecondary education where the student seeks or intends to enroll. Pursuant to RCW 28A.225.330, records disclosed under this subsection will include disciplinary action, violent behavior or behavior listed in RCW 13.04.155, attendance, immunization records, and academic performance. The school shall provide the parent (or adult student), upon request, with a copy of the records disclosed and an opportunity for a hearing to challenge the content of the record;
- (e) Federal and state officials requiring access to education records in connection with the audit and evaluation of a federal or state-supported education program, or in connec-

- tion with the enforcement of or compliance with federal or state legal requirements which relate to such programs;
- (d) Organizations conducting studies for, or on behalf of the school, for purposes of developing, validating, or administering predictive tests, administering student aid programs, and improving instruction: Provided, That the study is conducted in such a manner that does not permit the personal identification of parents and students by persons other than representatives of such organizations, and such information is destroyed when no longer needed for the purposes for which it was provided;
- (e) Accrediting organizations in order to carry out their accrediting functions;
- (f) Any person or entity designated by judicial order or lawfully issued subpoena: Provided, That the school shall make a reasonable effort to notify the parent (or adult student) in advance of compliance, unless such notification and disclosure is specifically prohibited by an order of the court or other issuing agency or the order has been issued *ex parte*.
- (i) If the school initiates legal action against a parent or student, the school may disclose to the court, without a court order or subpoena, the education records of the student that are relevant and necessary for the school to proceed with the legal action.
- (ii) If a parent or student initiates legal action against the school, the school may disclose to the court, without a court order or subpoena, the student's education records that are relevant and necessary for the school's defense;
- (g) State and local officials or authorities if specifically required by state law adopted before November 19, 1974, or if reporting or disclosure concerns the juvenile justice system and the system's ability to effectively serve the student prior to adjudication:
- (h) Appropriate persons in connection with a health or safety emergency if knowledge of such information is necessary to protect the health or safety of a student or other individuals:
- (i) Teachers and school officials in other schools and school districts, and teachers, security personnel and other personnel at the Washington school for the deaf who have a legitimate educational interest in the behavior of the student when the information concerns disciplinary action taken against the student for behavior that posed a significant risk to safety or well-being of that student, other students, or other members of the school community, or a history of violent behavior or behaviors listed in RCW 13.04.155. "Disciplinary action" means the investigation, adjudication or imposition of sanctions by the school for an infraction or violation of the student conduct code.
- (2) Where the consent of a parent (or adult student) is obtained for the release of education records, it shall be in writing, signed and dated by the person giving such consent, and shall include:
 - (a) A specification of the records to be released;
 - (b) The reasons for such release; and
- (c) The names of the parties to whom such records will be released.
- (3) When a disclosure is made under subsection (2) of this section, if a parent (or adult student) so requests, the

school shall provide him or her with a copy of the records diselosed

- (4) Personally identifiable education records released to third parties, with or without parent (or adult student) consent, shall be accompanied by a written statement indicating that the information cannot be subsequently released in a personally identifiable form to any other party without the prior consent of the parent (or adult student).)) (1) Parental consent must be obtained before personally identifiable information is disclosed to parties, other than officials of participating agencies in accordance with subsection (2) of this section, unless the information is contained in education records, and the disclosure is authorized without parental consent under 34 C.F.R. Part 99.
- (2) Except as provided in this section, parental consent is not required before personally identifiable information is released to officials of participating agencies for purposes of meeting a requirement of this part.
- (3) Parental consent, or the consent of an eligible student who has reached the age of majority under state law, must be obtained before personally identifiable information is released to officials of participating agencies providing or paying for transition services.
- (4) If a parent (or adult student) so requests, the school shall provide him or her with a copy of the records disclosed.
- (5) "Directory information" may be disclosed without the parent's (or adult student's) prior written consent, unless the parent (or adult student) notifies the school in writing within ten days of enrollment and thereafter by the tenth day of the academic year that he or she does not want any or all of the student's information to be designated as directory information.

AMENDATORY SECTION (Amending WSR 03-20-014, filed 9/22/03, effective 10/23/03)

- WAC 148-280-055 Record of access. (((1))) The school shall maintain a record of ((each request for access to and each disclosure of personally identifiable information from the education records of each student.
- (2) The sehool shall maintain the record with the education records of the student as long as the records are maintained.
- (3) For each request or disclosure the record must include:
- (a) The name of the party who had requested or received information;
 - (b) The date access was given; and
- (e) The legitimate interest or purpose the party has in requesting or obtaining the information.
- (4) If the party receiving personally identifiable information makes further disclosures of the information on behalf of the school, the record must include:
- (a) The names of additional parties to which the receiving party may disclose the information; and
- (b) The legitimate interests under WAC 148-280-040 which each of the additional parties has in requesting or obtaining the information.
- (5) Subsection (1) of this section does not apply if the request was from, or the disclosure was to:

- (a) The parent or adult student;
- (b) A designated school official with a legitimate educational interest under WAC 148-280-040 (1)(a);
- (c) A party with written consent from the parent or adult student;
 - (d) A party seeking directory information; or
- (e) A party seeking or receiving records as directed by a federal grand jury or other law enforcement subpoena and the issuing court or other issuing agency has ordered that the existence or the contents of the subpoena or the information furnished in response to the subpoena not be disclosed)) parties obtaining access to educational records collected, maintained, or used under this chapter including the name of the party, the date access was given, and the purpose for which the party is authorized to use the records. The agency is not required to keep a record of access by parents, and authorized employees with a legitimate educational interest in the records.

AMENDATORY SECTION (Amending WSR 03-20-014, filed 9/22/03, effective 10/23/03)

- WAC 148-280-060 Destruction of information. (1) Student education records may be destroyed in accordance with state laws and regulations: Provided, That the school shall not destroy any education records if there is an outstanding request to inspect and review the records under this chapter.
- (2)(a) The school shall inform parents (or adult students) when personally identifiable information is no longer needed to provide educational services to the student, or is no longer required to be retained under state or federal law.
- (b) At the request of a parent (or adult student), the school shall destroy personally identifiable information. However, the school may maintain a permanent record of the student's name, address, phone number, grades, attendance record, classes attended, grade level completed, and year of completion without time limitation.
- (3) For the purpose of this section, "destruction" shall mean physical destruction or removal of personal identifiers.

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 148-280-025 Education records—Access procedures.

WSR 16-10-064 PERMANENT RULES HEALTH CARE AUTHORITY

(Washington Apple Health)
[Filed May 2, 2016, 10:57 a.m., effective June 2, 2016]

Effective Date of Rule: Thirty-one days after filing.
Purpose: The agency is amending these rules to correct cross-reference errors.

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Citation of Existing Rules Affected by this Order: Amending WAC 182-535A-0030, 182-535A-0040, and 182-535A-0060.

Statutory Authority for Adoption: RCW 41.05.021, 41.05.160.

Adopted under notice filed as WSR 16-07-090 on March 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 3, Repealed 0.

Number of Sections Adopted Using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 3, Repealed 0.

Date Adopted: May 2, 2016.

Wendy Barcus Rules Coordinator

<u>AMENDATORY SECTION</u> (Amending WSR 14-08-032, filed 3/25/14, effective 4/30/14)

WAC 182-535A-0030 Orthodontic treatment and orthodontic-related services—Provider eligibility. The following provider types may furnish and be paid for providing covered orthodontic treatment and orthodontic-related services to eligible medical assistance clients:

- (1) Orthodontists;
- (2) Pediatric dentists:
- (3) General dentists; and
- (4) Agency_recognized craniofacial teams or other orthodontic specialists approved by the agency.

AMENDATORY SECTION (Amending WSR 14-08-032, filed 3/25/14, effective 4/30/14)

WAC 182-535A-0040 Orthodontic treatment and orthodontic-related services—Covered, noncovered, and limitations to coverage. (1) Subject to the limitations in this section and other applicable WAC, the medicaid agency covers orthodontic treatment and orthodontic-related services for a client who has one of the medical conditions listed in (a) and (b) of this subsection. Treatment and follow-up care must be performed only by an orthodontist or agency-recognized craniofacial team and do not require prior authorization.

- (a) Cleft lip and palate, cleft palate, or cleft lip with alveolar process involvement.
 - (b) The following craniofacial anomalies:
 - (i) Hemifacial microsomia;
 - (ii) Craniosynostosis syndromes;
 - (iii) Cleidocranial dental dysplasia;
 - (iv) Arthrogryposis; or

- (v) Marfan syndrome.
- (2) Subject to prior authorization requirements and the limitations in this section and other applicable WAC, the agency covers orthodontic treatment and orthodontic-related services for severe malocclusions with a Washington Modified Handicapping Labiolingual Deviation (HLD) Index Score of twenty-five or higher.
- (3) The agency may cover orthodontic treatment for dental malocclusions other than those listed in subsection (1) and (2) of this section on a case-by-case basis and when prior authorized.
- (4) The agency does not cover the following orthodontic treatment or orthodontic-related services:
- (a) Replacement of lost, or repair of broken, orthodontic appliances;
 - (b) Orthodontic treatment for cosmetic purposes;
- (c) Orthodontic treatment that is not medically necessary (as defined in WAC 182-500-0070);
- (d) Out-of-state orthodontic treatment, except as stated in WAC 182-501-0180 (see also WAC 182-501-0175 for medical care provided in bordering cities); or
- (e) Orthodontic treatment and orthodontic-related services that do not meet the requirements of this section or other applicable WAC.
- (5) The agency covers the following orthodontic treatment and orthodontic-related services with prior authorization, subject to the limitations listed (providers must bill for these services according to WAC 182-535A-0060):
- (a) Panoramic radiographs (X rays) when medically necessary.
- (b) Interceptive orthodontic treatment, when medically necessary.
- (c) Limited transitional orthodontic treatment, when medically necessary. The treatment must be completed within twelve months of the date of the original appliance placement (see subsection $((\frac{(6)}{}))$ (8)(a) of this section for information on limitation extensions). The agency's payment includes final records, photos, panoramic X rays, cephalometric films, and final trimmed study models.
- (d) Comprehensive full orthodontic treatment, when medically necessary. The treatment must be completed within thirty months of the date of the original appliance placement (see subsection (($\frac{(6)}{(6)}$)) (8)(a) of this section for information on limitation extensions). The agency's payment includes final records, photos, panoramic X rays, cephalometric films, and final trimmed study models.
 - (e) Orthodontic appliance removal only when:
- (i) The client's appliance was placed by a different provider or dental clinic; and
- (ii) The provider has not furnished any other orthodontic treatment or orthodontic-related services to the client.
- (f) Other medically necessary orthodontic treatment and orthodontic-related services as determined by the agency.
- (6) The treatment plan must indicate that the course of treatment will be completed prior to the client's twenty-first birthday.
- (7) The treatment must meet industry standards and correct the medical issue. If treatment is discontinued prior to completion, clear documentation must be kept in the client's file why treatment was discontinued or not completed.

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- (8) The agency evaluates a request for orthodontic treatment or orthodontic-related services:
- (a) That are in excess of the limitations or restrictions listed in this section, according to WAC 182-501-0169; and
- (b) That are listed as noncovered according to WAC 182-501-0160.
- (9) The agency reviews requests for orthodontic treatment or orthodontic-related services for clients who are eligible for services under the EPSDT program according to the provisions of WAC 182-534-0100.

AMENDATORY SECTION (Amending WSR 14-08-032, filed 3/25/14, effective 4/30/14)

- WAC 182-535A-0060 Orthodontic treatment and orthodontic-related services—Payment. (1) The medicaid agency pays providers for furnishing covered orthodontic treatment and orthodontic-related services described in WAC 182-535A-0040 according to this section and other applicable WAC.
- (2) The agency considers that a provider who furnishes covered orthodontic treatment and orthodontic-related services to an eligible client has accepted the agency's fees as published in the agency's fee schedules.
- (3) **Interceptive orthodontic treatment.** The agency pays for interceptive orthodontic treatment as follows:
- (a) The first three months of treatment starts the date the initial appliance is placed and includes active treatment for the first three months.
- (b) Treatment must be completed within twelve months of the date of appliance placement.
- (4) **Limited transitional orthodontic treatment.** The agency pays for limited transitional orthodontic treatment as follows:
- (a) The first three months of treatment starts the date the initial appliance is placed and includes active treatment for the first three months. The provider must bill the agency with the date of service that the initial appliance is placed.
- (b) Continuing follow-up treatment must be billed after each three-month treatment interval during the treatment.
- (c) Treatment must be completed within twelve months of the date of appliance placement. Treatment provided after one year from the date the appliance is placed requires a limitation extension. See WAC 182-535A-0040(((6))) (8).
- (5) **Comprehensive full orthodontic treatment.** The agency pays for comprehensive full orthodontic treatment as follows:
- (a) The first six months of treatment starts the date the initial appliance is placed and includes active treatment for the first six months. The provider must bill the agency with the date of service that the initial appliance is placed.
- (b) Continuing follow-up treatment must be billed after each three-month treatment interval, with the first three-month interval beginning six months after the initial appliance placement.
- (c) Treatment must be completed within thirty months of the date of appliance placement. Treatment provided after thirty months from the date the appliance is placed requires a limitation extension. See WAC 182-535A-0040(((6+))) (8).

- (6) Payment for orthodontic treatment and orthodonticrelated services is based on the agency's published fee schedule
- (7) Orthodontic providers who are in agency-designated bordering cities must:
 - (a) Meet the licensure requirements of their state; and
- (b) Meet the same criteria for payment as in-state providers, including the requirements to contract with the agency.
- (8) If the client's eligibility for orthodontic treatment under WAC 182-535A-0020 ends before the conclusion of the orthodontic treatment, payment for any remaining treatment is the ((individual's)) client's responsibility. The agency does not pay for these services.
- (9) The client is responsible for payment of any orthodontic service or treatment received during any period of ineligibility, even if the treatment was started when the client was eligible. The agency does not pay for these services.
- (10) See WAC 182-502-0160 and 182-501-0200 for when a provider or a client is responsible to pay for a covered service.

WSR 16-10-080 PERMANENT RULES PUBLIC DISCLOSURE COMMISSION

[Filed May 3, 2016, 10:40 a.m., effective June 3, 2016]

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

Purpose: New WAC 390-17-019 clarifies that multiple committees established, maintained or controlled by a candidate subject to the limits set out in RCW 42.17A.405 or 42.17A.410 are affiliated for the purpose of receiving contributions from a particular contributor. Also clarifies that a caucus campaign committee and any other political committee established, maintained, or controlled primarily by the same legislative caucus as a whole, or the officers of the caucus, are affiliated for the purpose of receiving contributions. Ballot measure committees are excluded.

Statutory Authority for Adoption: RCW 42.17A.110(1). Adopted under notice filed as WSR 16-06-090 on February 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 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.

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Date Adopted: April 28, 2016.

Lori Anderson Communications and Training Officer

NEW SECTION

WAC 390-17-019 Contribution limits to affiliated committees. (1) Intent. The public disclosure commission enforces campaign contribution limits and other provisions of chapter 42.17A RCW. The commission finds that persons subject to contribution limits may establish, maintain, or control multiple political committees. This rule sets out which committees, excluding ballot measure committees, are affiliated for the purpose of receiving contributions.

- (2) Persons subject to contribution limits may not circumvent those limits through contributions made to the various committees controlled by that person.
- (3) The following committees are affiliated for purposes of this rule:
- (a) The authorized committee of a candidate subject to contribution limits set out in RCW 42.17A.405 or 42.17A.410 and any other political committee established, maintained, or controlled primarily by that candidate are affiliated for the purpose of receiving contributions.
- (b) A caucus campaign committee and any other political committee established, maintained, or controlled primarily by the same legislative caucus as a whole or the officers of that caucus are affiliated for the purpose of receiving contributions.
- (4) As used in this rule, the terms "established, maintained, or controlled" means the ability to direct or participate, other than through a vote as a member, in the governance of another entity through provisions of constitution, bylaws, contract or other formal or informal procedure.

WSR 16-10-081 PERMANENT RULES DEPARTMENT OF LABOR AND INDUSTRIES

[Filed May 3, 2016, 10:54 a.m., effective July 1, 2016]

Effective Date of Rule: July 1, 2016.

Purpose: In the spring of 2012, the electrical utility safety advisory committee (EUSAC), a work group comprised of about fifty business and labor representatives, asked the department to commence rule making to update and clarify safety requirements that relate to electrical work being done with the assistance of helicopters. Some of the changes being adopted:

- Added language relating to certification requirements for helicopter service providers.
- Amended language to expand the scope of personnel to "all workers," and to specify that they must be "qualified and trained" to perform their assigned work tasks.
- Added language to address the requirement of hazard analysis and job briefings.
- Added language to address pilot fatigue.

 Sling and rigging requirements were updated to be able to perform new practices allowed by the proposed rule.

AMENDED SECTIONS:

WAC 296-45-67503 Definitions.

- Removed numbers from each definition.
- Added definitions for helicopter service provider and pilot in command, pilot or PIC.

WAC 296-45-67513 Personal protective equipment (PPE).

- Subsection (2), added an ANSI reference relating to hard hats and helmets.
- Subsection (3), added language relating to performing and documenting a hazard assessment to determine appropriate PPE.

WAC 296-45-67519 Housekeeping.

- Changed title of this section to "Landing zones."
- Subsection (1), added language relating to establishing a landing zone.

WAC 296-45-67521 Operator's responsibility.

- Changed title of this section to "Pilot's responsibility."
- Subsection (1), added language relating to the pilot being properly rested and fit for duty.
- Replaced "operator" with "pilot" throughout this section.
- Subsection (5), added language relating to the pilot possessing the appropriate ratings for the aircraft and be [being] competent to safely conduct assigned tasks.

WAC 296-45-67523 Hooking and unhooking loads.

Subsections (1) through (3), reworded language for clarity

WAC 296-45-67525 Static charge.

• Revised language to include "bonded" as means to protect against static charge and removed rubber gloves.

WAC 296-45-67527 Load permitted.

- Changed title of this section to "Line stringing."
- Subsections (2) and (3), reworded for clarity.
- Subsection (4), added language relating to a helicopter shall not pull any cable, rope or similar line which is at any point attached to a fixed object other than the helicopter itself.

WAC 296-45-67529 Visibility.

Housekeeping change.

WAC 296-45-67531 Signal systems.

- Changed title of this section to "Communication."
- Subsections (1) and (2), reworded for clarity.
- Subsections (3) and (4), moved language from current WAC 296-45-67507 and reworded for clarity.

WAC 296-45-67533 Approaching the helicopter.

- Changed title of this section to "Helicopter operation."
- Subsections (2) through (12) are new but language is existing and considered current industry work practices. Merged this section with current WAC 296-45-67535.

WAC 296-45-67537 Sling and rigging.

 Subsection (1), clarified language making it clear that rigging must be checked prior to using.

- Subsection (2), added language requiring appropriate training.
- Subsection (3), reworded for clarity.
- Subsection (4), added language from current WAC 296-45-67509.

WAC 296-45-67545 Refueling operations.

- Reworded this section for clarity.
- Removed subsection (3)(h).

NEW SECTIONS:

WAC 296-45-67504 Operating certification.

 Added this section relating to operating certification requiring additional training.

WAC 296-45-67506 Personnel.

 Moved this section from current WAC 296-45-67539 adding additional training requirements.

WAC 296-45-67508 Hazard analysis and job briefing.

 Added this section relating to hazard analysis and job briefings adding additional training requirements.

WAC 296-45-67522 Cargo hooks.

 Moved this section from current WAC 296-45-67511 for better organization of information.

WAC 296-45-67536 Helicopter work tasks.

- Subsection (1), added language relating to aerial hover transfer.
- Subsection (2), reworded language relating to human external cargo (HEC).
- Subsection (3), added language relating to external cargo sling loads.

REPEALED SECTIONS:

WAC 296-45-67505 Briefing, 296-45-67507 Signals, 296-45-67509 Slings and taglines, 296-45-67511 Cargo hooks, 296-45-67535 In helicopter, 296-45-67539 Personnel, and 296-45-67543 General.

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.

Other Authority: Chapter 49.17 RCW.

Adopted under notice filed as WSR 16-01-029 on December 8, 2015.

Changes Other than Editing from Proposed to Adopted Version: As a result of written and oral comments received, the following sections are being changed as indicated below:

CHANGES TO THE RULES (Proposed rule versus rule actually adopted):

WAC 296-45-67503 Definitions.

Modified the definition of "cargo hooks." It now reads,
 "The cargo hook is the FAA approved primary attachment means to the aircraft. A device attached or suspended from an aircraft which is used to connect an external load to the aircraft through direct couplings or by lead lines. This unit has both primary and secondary release mechanisms."

- Modified the definition of "helicopter, helicopter crane and rotorcraft." It now reads, "A heavier-than-air aircraft that depends principally for its support in flight on the lift generated by one or more rotors."
- Modified the definition of "hooking and unhooking." It now reads, "The process by which an external load is either attached to or detached from the helicopter hook or sling line."
- Modified the definition of "sock line." It now reads, "A rope(s), cable(s) or similar line(s) that is used to pull a conductor line or other wire from a reel or to remove existing strung conductors from poles or towers."

WAC 296-45-67508 Hazard analysis and job briefing.

- Modified the language in subsection (1), it now reads:
- (1) Before the commencement of any construction, maintenance, or lifting activity using a helicopter, a job hazard analysis (JHA) must be conducted, which, at a minimum, must:
 - (a) Define the core tasks;
 - (b) Identify specific hazards;
 - (c) Identify mission specific tasks;
- (d) Describe procedures or controls used to safely manage or mitigate the hazards;
- (e) Describe the communication procedure to be used with the crew;
- (f) Discuss fatigue, and methods to eliminate or mitigate it:
 - (g) Specify minimum approach distances (MAD);
 - (h) Describe a site specific emergency action plan.
- Added a new subsection (2) relating to a site specific job briefing. It reads:
- (2) A site specific job briefing must be held each day construction, maintenance, or lifting activities using a helicopter are performed. The daily job briefing at a minimum must:
- (a) Summarize or recap the content of the JHA as applicable to the day's duties;
- (b) Communicate any site specific hazards not identified in the JHA and provide mitigation for those hazards;
- (c) Identify or establish roles for each person who will be interfacing with the aircraft or its load;
- (d) Describe the communication procedure to be used with the crew;
- (e) Specify minimum approach distances (MAD) from energized electrical lines and equipment in the work area;
- (f) Describe the applicable sections of the site specific emergency action plan, such as the locations of first aid equipment and rescue gear.
- The proposed subsection (2) now becomes subsection (3) and it reads:
- (3) An additional job briefing must be held immediately if working conditions change during the course of a job. Working conditions would include weather, wind, and visibility. During the job briefing all affected employees and others, including signalpersons, ground workers, pilot(s), must

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be advised of the hazards including a change of operation, if needed.

WAC 296-45-67522 Cargo hooks.

- Modified the language in subsection (1). It reads:
- (1) All cargo hooks shall have a primary and secondary release mechanism designed and installed as to prevent inadvertent operation. The hooks primary and secondary release shall be tested prior to each day's operation to determine that the release functions properly.

WAC 296-45-67523 Hooking and unhooking loads.

 Added a sentence to subsection (3) stating that this does not apply to assembly and erection of steel monopole construction.

WAC 296-45-67527 Line stringing.

- Modified the language in subsection (3)(c). It reads:
- (3)(c) No pulling operation shall be conducted at a ground speed greater than fifteen mph.

WAC 296-45-67531 Communication.

- Modified this section. The language in the proposed subsection (1) was rewritten and separated into subsections (1) through (4) for clarity. The language in the proposed (2) was slightly modified and becomes subsection (5). The language in subsections (3) and (4) becomes the new subsection (6) and (7). It reads:
- (1) Communication must be maintained between the air crew and ground personnel at all times by a designated and qualified signalperson. There must be a constant, open line of communication using radios or head and hand signals.
- (2) Signal systems must be understood by the air crew and the ground crew, including signalpersons, prior to the hoisting of any load.
- (3) Signaling and maintaining communications with the pilot will be exclusive to the designated signalperson during periods of loading and unloading. The signalperson must be distinguishable from other members of the ground crew by the pilot of the aircraft. This may be by way of orange-colored gloves, vest, or other apparel.
- (4) The lead worker and one top person must also have an operating transmitter and receiver.

Subsections (5), (6) and (7), no changes except the numbering.

WAC 296-45-67533 Helicopter operation.

- Modified the language in subsection (1). It reads:
- (1) Whenever approaching or leaving a helicopter with blades rotating, all employees must remain in full view of the pilot and remain in a crouched position while within 50 feet of the helicopter. No employee can approach the rear of the helicopter unless directly authorized and directed by the pilot of such craft. All employees when operating or working within 50 feet of the helicopter with blades turning are subject to the direction of the helicopter pilot.

WAC 296-45-67536 Helicopter work tasks.

- Added language relating to Class D operations in subsection (2)(a).
- Modified the language in subsection (2)(b)(iv). It reads:

(2)(b)(iv) All suspension harnesses used for HEC must be adjusted to the user. The harness must be designed to prevent suspension trauma or equipped with an orthostatic shock relief device. Such devices must be deployed and used if an employee has been in suspension longer than five minutes.

WAC 296-45-67537 Sling and rigging.

• Modified the language in subsection (4)(c). It reads:

(4)(c) In an energized environment helicopter load lines must be comprised of nonconductive materials which are the appropriate weight, strength, and length to prevent the line from being lifted and entangled into the aircraft rotor system.

WAC 296-45-67545 Refueling operations.

• Modified the language in subsection (3)(d). It reads:

There must be no smoking, open flames, exposed flame heaters, flare pots, or open flame lights within fifty feet of the refueling area or fueling equipment. The refueling area or the fuel truck must be posted with "no smoking" signs.

A final cost-benefit analysis is available by contacting Cynthia Ireland, P.O. Box 44620, Olympia, WA 98504-4620, phone (360) 902-5522, fax (360) 902-5619, e-mail cynthia. ireland@lni.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 5, Amended 12, Repealed 7; 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 5, Amended 12, Repealed 7.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 5, Amended 12, Repealed 7.

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: May 3, 2016.

Joel Sacks Director

AMENDATORY SECTION (Amending WSR 94-20-057, filed 9/30/94, effective 11/20/94)

WAC 296-45-67503 Definitions. (((1))) "Approved rubber gloves." Rubber insulating gloves used for protection of electrical workers from electric shock while working on energized conductors and equipment.

"Cargo hooks." The cargo hook is the FAA approved primary attachment means to the aircraft. A device attached or suspended from an aircraft which is used to connect an

external load to the aircraft through direct couplings or by lead lines. This unit has both ((mechanical and electrical locking/unlocking means)) primary and secondary release mechanisms.

- $((\frac{2}{2}))$ "Designated employees." Those employees selected or designated by the employer to work under or near helicopters who have first been instructed in hooking, unhooking, guiding and securing the load, including the signalperson, all of whom have been instructed in the hazards of helicopter work and who know the provisions of this section.
- $((\frac{3}{2}))$ "**Downwash.**" A down and outward air column from the main rotor system.
- ((4))) "Ground personnel or crew." Those employees who are physically and mentally capable, who are familiar with the hazards of helicopter use in power distribution and transmission line work, and who know these rules and the methods of operation.
- (((5))) "Helicopter," "helicopter crane," and "rotorcraft." ((Those aircraft whose support in the air is derived solely from the reaction of a stream of air driven downward by propellers revolving around a vertical axis, which are designed for and capable of carrying external loads.)) A heavier-than-air aircraft that depends principally for its support in flight on the lift generated by one or more rotors. The use of the word helicopter in these rules shall also means helicopter crane, rotorcraft, or similar device.
- (((6))) <u>"Helicopter service provider."</u> Entity that holds the appropriate FAA operating certification and provides helicopter support services.
- "Hooking and unhooking." ((That)) The process by which an external load is either attached to or ((released)) detached from the ((eargo hook)) helicopter hook or sling line.
- $(((\frac{7}{7})))$ <u>"Pilot in command, pilot or PIC."</u> The person who:
- Has the final authority and responsibility for the operation and safety of the flight;
- Has been designated as pilot in command before or during the flight; and
- Holds the appropriate category, class and type rating for the conduct of the flight if applicable.
- "Positive guide system." A system or method of installing a load into position so that the load is capable of being released from the helicopter without being otherwise secured so that the load will remain in position permanently or until otherwise secured by physical means.
- (((8))) "Rotors." That system of blades which rotates or revolves to supply lift or direction to the rotorcraft.
- (((9) "Approved rubber gloves." Rubber insulating gloves used for protection of electrical workers from electric shock while working on energized conductors and equipment
- (10)) "Signalperson." That member of the ground crew that is designated by an employer to direct, signal and otherwise communicate with the operator of the helicopter.
- (((11))) "Sling line." A strap, chain, rope or the like used to securely hold something being lifted, lowered, carried or otherwise suspended.
- $(((\frac{12}{2})))$ "Sock line." A rope(s), cable(s) or similar line(s) $((\frac{12}{2}))$ that is used to pull a conductor line or other

wire from a reel or to remove existing strung conductors from poles or towers.

- (((13))) "Static charge." A stationary charge of electricity.
- (((14))) "Tag line." A rope or similar device used to guide or control the direction or movement of a load.

NEW SECTION

WAC 296-45-67504 Operating certification. The helicopter service provider must hold appropriate certification and have a current "FAA Operating Certificate" for the category of operation being performed. (Reference 14 C.F.R. Parts 133, 135, and 137 - Contact the local Flight Standards District Office (FSDO) for assistance.)

NEW SECTION

- **WAC 296-45-67506 Personnel.** (1) All personnel must be physically and mentally able and qualified to perform the work to which they are assigned, including being knowledgeable in these rules.
- (2) There must be a sufficient number of qualified ground personnel to safely guide, secure, hook and unhook the load.
- (3) No employee shall perform or be ordered or assigned to perform any activity for which they are not trained, qualified, and competent or which they may compromise their safety or the safety of others.

Note: Applicable training requirements in WAC 296-45-065 shall be followed

NEW SECTION

- WAC 296-45-67508 Hazard analysis and job briefing. (1) Before the commencement of any construction, maintenance, or lifting activity using a helicopter, a job hazard analysis (JHA) must be conducted, which, at a minimum, must:
 - (a) Define the core tasks;
 - (b) Identify specific hazards;
 - (c) Identify mission specific tasks;
- (d) Describe procedures or controls used to safely manage or mitigate the hazards;
- (e) Describe the communication procedure to be used with the crew;
- (f) Discuss fatigue, and methods to eliminate or mitigate it;
 - (g) Specify minimum approach distances (MAD);
 - (h) Describe a site specific emergency action plan.
- (2) A site specific job briefing must be held each day construction, maintenance, or lifting activities using a helicopter are performed. The daily job briefing at a minimum must:
- (a) Summarize or recap the content of the JHA as applicable to the day's duties;
- (b) Communicate any site specific hazards not identified in the JHA and provide mitigation for those hazards;
- (c) Identify or establish roles for each person who will be interfacing with the aircraft or its load;

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- (d) Describe the communication procedure to be used with the crew:
- (e) Specify minimum approach distances (MAD) from energized electrical lines and equipment in the work area;
- (f) Describe the applicable sections of the site specific emergency action plan, such as the locations of first aid equipment and rescue gear.
- (3) An additional job briefing must be held immediately if working conditions change during the course of a job. Working conditions would include weather, wind, and visibility.

During the job briefing all affected employees and others, including signalpersons, ground workers, pilot(s), must be advised of the hazards including a change of operation, if needed.

<u>AMENDATORY SECTION</u> (Amending Order 76-38, filed 12/30/76)

WAC 296-45-67513 Personal protective equipment (PPE). Personal protective equipment when working on, under or in the near vicinity of helicopters:

- (1) All employees shall wear eye protection of such design as to prevent the likelihood of dust or other substances from contacting the eye(s) of employees.
- (2) All employees shall wear <u>ANSI-approved</u> hard hats ((which)) or helmets for electrical work specific to work associated with helicopter operations that shall be secured on the employee's head by a chinstrap or other suitable means.
- (3) The employer must perform and document a hazard assessment to identify and determine the appropriate PPE for the work being performed, the location and site and/or equipment.

<u>AMENDATORY SECTION</u> (Amending Order 76-38, filed 12/30/76)

WAC 296-45-67519 ((Housekeeping.)) <u>Landing</u> zones. (1) When establishing the landing zone, the following items shall be considered:

- Size and type of helicopter;
- Suitability of the planned activity;
- Physical barriers or obstructions;
- Helicopter touchdown area and congestion in the area.
- (2) All helicopter landing, loading and unloading areas shall be maintained in a neat and orderly fashion so as to reduce the likelihood of flying materials, tripping, or other hazards attendant to the work being performed.

AMENDATORY SECTION (Amending WSR 94-20-057, filed 9/30/94, effective 11/20/94)

WAC 296-45-67521 ((Operator's)) Pilot's responsibility. (1) The pilot and employer must ensure the pilot is properly rested and fit for duty.

- (2) The helicopter ((operator)) pilot shall be responsible for the size, weight and manner in which loads are connected to the helicopter.
- $((\frac{2}{2}))$ No load shall be made if the helicopter ((operator)) pilot believes the lift cannot safely be performed. The employer shall make certain that the ((operator)) pilot of the

- helicopter is able to freely exercise their prerogative and judgment as to safe operation of the helicopter itself concerning size, weight and manner by which loads are connected.
- $((\frac{3}{2}))$ (4) No employee shall work on, under, near or in conjunction with a helicopter whose operation does not correspond with the foregoing provisions.
- (5) The pilot shall possess the appropriate ratings for the aircraft and shall be competent to safely conduct the assigned tasks. The pilot shall have the final authority and is solely responsible for the safe operation of the helicopter load at all times.

NEW SECTION

- WAC 296-45-67522 Cargo hooks. (1) All cargo hooks shall have a primary and secondary release mechanism designed and installed as to prevent inadvertent operation. The hooks primary and secondary release shall be tested prior to each day's operation to determine that the release functions properly.
- (2) No employee shall be permitted to work under a hovering helicopter(s) unless the cargo hooks used comply with Federal Aviation Administration regulations governing such hooks.

<u>AMENDATORY SECTION</u> (Amending Order 76-38, filed 12/30/76)

WAC 296-45-67523 Hooking and unhooking loads. ((No employee shall perform work under hovering helicopters: Provided, That qualified and capable employees may function under such craft for that limited period of time necessary to guide, secure, hook or unhook the loads. When guiding, securing, hooking or unhooking the load at elevated positions, employees shall be assisted by and use a positive positioning guide system. When under hovering helicopters at any other location, the employee shall have a safe means of ingress and egress, including readily available escape route or routes in the event of an emergency. No other work or workrelated activity other than the aforementioned shall be permitted under hovering helicopters. Bolting of or otherwise permanently securing the structures is prohibited under hovering helicopters except that in the event of an unforeseen contingency of an emergency nature which represents a substantial hazard to life or property, an employee may do such work as is necessary to preserve life or protect substantial property.)) (1) Work performed at an elevated position and directly under hovering helicopters shall be performed only by qualified and capable employees.

- (a) Work shall be limited to the minimum time necessary to guide, secure, hook or unhook the loads, provided that only a single point of attachment is required to secure the load.
- (b) When an employee is working from the ground under hovering helicopters, the employee shall have a safe means of ingress and egress at all times, including a readily available escape route or routes in the event of an emergency.
- (2) Except as specifically permitted under WAC 296-45-675 through 296-45-67545, no other work or work-related activity shall be permitted under hovering helicopters.
- (3) Positive guide systems shall be used for the placement of large segments of primary tower structure and shall

enable the heavy lift helicopter to temporarily secure and release the load. Bolting of or otherwise permanently securing the structures is prohibited under hovering helicopters except that in the event of an unforeseen contingency of an emergency nature which represents a substantial hazard to life or property, an employee may do such work as is necessary to preserve life or protect substantial property.

Note: This does not apply to assembly and erection of steel monopole construction.

<u>AMENDATORY SECTION</u> (Amending Order 76-38, filed 12/30/76)

WAC 296-45-67525 Static charge. All loads shall be grounded or bonded with a ((grounding)) device capable of discharging either the actual or potential static charge before ground personnel either touch or come close enough to touch the suspended load((, or protective rubber gloves shall be worn by all ground personnel either touching the suspended load or who are likely to touch the load)).

AMENDATORY SECTION (Amending WSR 94-20-057, filed 9/30/94, effective 11/20/94)

- WAC 296-45-67527 ((Load permitted.)) Line stringing. (1) Weight of the external load shall not exceed the manufacturer's load limit.
- (2) ((A helicopter shall not pull any cable, rope or similar line which is at any point attached to a fixed object other than the helicopter itself. Helicopters may pull a free-wheeling sock line so long as the end of the sock line is not tied to a reel, truck, or other fixed object. Such line cannot be tied to or otherwise secured to the roll-off reel other than by having been wrapped around such reel.)) Each helicopter operator utilized in line stringing shall be authorized by the Federal Aviation Administration, Part 133, Class C Operations.
- (3) All line stringing operations shall be conducted in accordance with the following requirements:
- (a) Stringing tension method shall enable a consistent positive control of the cable, rope, or similar lines at all times during pulling operations;
- (b) During all pulling operations, the helicopter pilot shall maintain an aircraft orientation that allows the pilot to maintain constant visibility in both directions on line;
- (c) No pulling operation shall be conducted at a ground speed greater than fifteen mph;
- (d) When pulling from the aircraft belly hook attachment point, a ballast weight of a minimum three hundred pounds shall be utilized;
- (e) At no time during the pulling operation shall the load line that is attached to helicopter's belly hook attachment point exceed a thirty degree angle from vertical.

Note: Subsection (3)(d) and (e) does not apply when pulling from the helicopter's approved side pull attachment point.

(4) A helicopter shall not pull any cable, rope, or similar line which is at any point attached to a fixed object other than the helicopter itself. Helicopters may pull a "free-wheeling" or "pay-out" of the cable, rope, or similar line so long as the end is not tied to a truck or fixed object other than the reel itself.

AMENDATORY SECTION (Amending Order 76-38, filed 12/30/76)

WAC 296-45-67529 Visibility. Employees shall keep clear of and outside the downwash of the helicopters except as necessary to perform a permitted activity. Where reasonably ((practicable)) practical, reduced vision of the operator and ground crew shall be eliminated.

AMENDATORY SECTION (Amending WSR 94-20-057, filed 9/30/94, effective 11/20/94)

WAC 296-45-67531 ((Signal systems.)) Communication. (1) Communication ((shall)) must be maintained between the air crew and ground personnel at all times((-Such signal systems shall be understood by the air crew and the ground crew, including signalpersons, prior to the hoisting of any load)) by a designated and qualified signal person. There ((shall)) must be a constant ((radio)), open line of communication using radios or head and hand signals ((used. The signalperson shall have the sole and exclusive function during periods of loading and unloading of signaling and maintaining communications with the pilot. The signal person shall be so dressed as to make their appearance distinguishable from other members of the ground crew by the operator of the craft. This may be by way of orange colored gloves, vest, or other wearing apparel. In addition, the leadworker and one top person shall also have an operating transmitter and receiver.

(2) Designated)).

- (2) Signal systems must be understood by the air crew and the ground crew, including signalpersons, prior to the hoisting of any load.
- (3) Signaling and maintaining communications with the pilot will be exclusive to the designated signalperson during periods of loading and unloading. The signalperson must be distinguishable from other members of the ground crew by the pilot of the aircraft. This may be by way of orange-colored gloves, vest, or other apparel.
- (4) The lead worker and one top person must also have an operating transmitter and receiver.
- (5) Authorized and qualified employees may come within 50 feet of the helicopter when the rotor blades are turning, but no closer, other than to enter the ((eraft)) aircraft or to hook or unhook the load or do other essential functions. Other employee(s) shall not come closer than 100 feet of the ((eraft)) aircraft when it is operating.
- (6) The signals between the signalperson and the operator of the helicopter shall be those submitted to the FAA for the particular job. When head signals are to be used, the qualified worker must utilize a visually enhanced hard hat or helmet with clear markings to indicate the desired movement. Any signals other than up/down or in/out will require the use of hand signals.
- (7) Should there occur a change in the hazards, method of performing the job, signals to be used, or other operating conditions during the course of any particular job, a conference shall immediately be held at which time all affected employees and others (including signalpersons, ground workers, and pilots) will be advised of such hazards or change of operation. No employee shall be permitted to work

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unless such employee and others fully understand any changes that have taken place.

AMENDATORY SECTION (Amending Order 76-38, filed 12/30/76)

- WAC 296-45-67533 ((Approaching the)) Helicopter operation. (1) Whenever approaching or leaving a helicopter with blades rotating, all employees ((shall)) must remain in full view of the pilot ((or operator)) and remain in a crouched position ((if)) while within 50 feet of the helicopter. No employee ((shall)) can approach the rear of the helicopter unless directly authorized and directed by the ((operator)) pilot of such craft ((to be there at that time)). All employees when operating or working within 50 feet of the helicopter with blades turning are subject to the direction of the helicopter ((operator. No employee shall enter or leave the helicopter unless and until the place at which they enter or leave such craft is large enough for the helicopter itself to land)) pilot.
- (2) All materials and equipment loaded in the aircraft shall be properly secured for flight.
- (3) Long objects, such as shovels and hot sticks, shall be carried horizontally and below the waist to avoid contact with the aircraft rotor blades.
- (4) The pilot shall ensure that all loads are safely secured to the helicopter, or in cargo baskets, and properly loaded with regard to weight and balance.
- (5) Never throw anything while loading and unloading the helicopter. Thrown items may come in contact with the aircraft rotor blade, causing damage to the aircraft and possible injury to ground personnel.
- (6) While in the helicopter, safety belts must remain fastened at all times except when the pilot instructs otherwise or while entering or leaving the helicopter.
 - (7) Smoking in the helicopter is prohibited at all times.
- (8) No employee shall ride in or work under or near a helicopter with less than twenty minutes reserve fuel.
- (9) No employee shall have sharp objects in their pocket or unsecured while sitting in or on the helicopter.
- (10) No employee shall touch any switch, knob, instrument, or other control device in the cockpit unless specifically directed by the pilot.
- (11) No employee shall obscure or otherwise obstruct the pilot's ability to visually see the instruments or flight path during flight or operation.
- (12) No employee shall attempt to slow or stop the rotor-craft blades.

NEW SECTION

- WAC 296-45-67536 Helicopter work tasks. (1) Aerial hover transfer.
- (a) Full body harnesses, lanyards, hardware, and attachment points must meet the requirements in ANSI Z359.1-2007.
- (b) Any employees transferring from a helicopter to a structure/conductor must wear a full body harness and lanyard fixed to an approved attachment point on the helicopter, structure/conductor. An ANSI-approved device that allows the worker to be attached simultaneously to the helicopter

- and the structure/conductor shall be used until the transfer is complete.
- (c) Fall protection must be established and maintained one hundred percent during the entire time the employee is transferring from the helicopter to the structure/conductor.
 - (2) Human external cargo (HEC).
- (a) The sling/vertical suspension system (human external cargo or HEC) is a vertical system suspended from the helicopter cargo hook. The sling system will comply with all governmental requirements (e.g., 14 C.F.R. Part 133, Class B or D External Load.) For Class D operations the sling system will also comply with 14 C.F.R. 27.865 or 29.865.
- (b) Helicopter operations involving HEC shall incorporate the use of a secondary safety device, in addition to the helicopter's primary attachment means, to prevent the inadvertent release of the load. This device shall remain jettisonable in accordance with Class B load requirements.
- (i) All lines utilized for HEC operations shall be dedicated for HEC and shall not be used for transporting cargo.
- (ii) HEC lines shall not be less than 10:1 safety ratio between the rated breaking strength and the working load.
- (iii) All harnesses utilized for helicopter short-haul operations must meet the ANSI Z359.1-2007 standards for class III (full body) harnesses and must be equipped with both dorsal and sternal D rings.
- (iv) All suspension harnesses used for HEC must be adjusted to the user. The harness must be designed to prevent suspension trauma or equipped with an orthostatic shock relief device. Such devices must be deployed and used if an employee has been in suspension longer than five minutes.
- (c) External platform and skid operation. If a platform system is used to transport crews or where a crew member performs work from the platform system and all aircraft attachment points shall comply with applicable FAA regulations and requirements. All platform operations shall be conducted in accordance with the 14 C.F.R. Part 133, Class A External Load. Flight and hovering capabilities of the helicopter must not be adversely affected by the design of the platform. The platform must not affect the auto rotation and emergency capabilities of the helicopter. The platform and loads may affect the lateral and longitudinal CG weight and balance of the helicopter in flight. An engineered counterbalance system must be used if the platform exceeds the lateral CG limits of the manufacturer's specifications for the helicopter which will ensure stability.
- (3) External cargo sling loads. Helicopter longline support operations (cargo operations) shall only be performed by qualified, competent and trained personnel. All operations shall be conducted in accordance with applicable Federal Aviation Administration regulations.

AMENDATORY SECTION (Amending Order 76-38, filed 12/30/76)

WAC 296-45-67537 Sling and rigging. (1) The pilot is responsible for the integrity of the rigging for any external load and must ensure safe delivery of the cargo by inspecting and monitoring the security of the rigging throughout the operation. Prior to operations, the pilot must check the condition and application of all rigging gear to ensure serviceabil-

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ity. Prior to commencing operations, determine the complete rigging requirements, including slings and taglines.

- (2) All personnel involved with rigging activities must receive appropriate rigging training and show proficiency specific to helicopter operations and the work or tasks being performed.
- (3) The slings used for the external load ((shall)) <u>must</u> be inspected each day before use. <u>Slings must be inspected by an</u> employee designated ((as rigger, who shall be capable of properly inspecting the rigging, shall inspect the sling.
 - (2)), trained and qualified as a rigger.
- (4) No sling shall be used unless it has a <u>properly marked</u> minimum tensile strength of ((four)) <u>five</u> times the load which will be carried or is being carried.
- $((\frac{3}{2}))$ (a) No sling shall be used unless upon inspection it is determined to be in good condition and capable of the work which is to be performed and properly marked.
- (b) Loads must be properly slung so that there will be no slippage or shifting of the load and so that the load will not accidently be dislodged from the helicopter.
- (c) In an energized environment helicopter load lines must be comprised of nonconductive materials which are the appropriate weight, strength, and length to prevent the line from being lifted and entangled into the aircraft rotor system.
- (d) Pressed sleeves, wedged eyes, or equivalent means shall be used for all suspended loads utilizing wire rope. All eyes on synthetic line shall be produced by the lines manufacturer or a certified splicer for the specific type of line.

AMENDATORY SECTION (Amending WSR 01-17-033, filed 8/8/01, effective 9/1/01)

- WAC 296-45-67545 Refueling operations. (1) ((Under no circumstances shall the)) Refueling of any ((type)) helicopter with either aviation gasoline or Jet B (Turbine) type fuel ((be permitted)) shall be prohibited while the engines are running.
- (2) <u>Fueling of helicopters using Jet A (Turbine-Kerosene)</u> type fuel ((may be refueled)) <u>is allowed</u> with engines running ((provided the following eriteria is met:)).
- (3) All helicopter fueling must comply with the following:
- (a) No unauthorized persons shall be allowed within fifty feet of the refueling operation or fueling equipment.
- (b) A minimum of one thirty-pound fire extinguisher, or a combination of same, good for class A, B and C fires, shall be provided within one hundred feet on the upwind side of the refueling operation.

Note: For additional requirements relating to portable fire extinguishers see WAC 296-800-300.

- (c) All fueling personnel shall be thoroughly trained in the refueling operation and in the use of the available fire extinguishing equipment they may be expected to utilize.
- (d) There ((shall)) must be no smoking, open flames, exposed flame heaters, flare pots, or open flame lights within fifty feet of the refueling area or fueling equipment. ((All entrances to)) The refueling area ((shall)) or the fuel truck must be posted with "NO SMOKING" signs.
- (e) ((Due to the numerous causes of static electricity, it shall be considered present at all times. Prior to starting refu-

eling operations, the fueling equipment and the helicopter shall be grounded and the fueling nozzle shall be electrically bonded to the helicopter. The use of conductive hose shall not be accepted to accomplish this bonding. All grounding and bonding connections shall be electrically and mechanically firm, to clean unpainted metal parts.)) Prior to making any fueling connection to the aircraft, the fueling equipment shall be bonded to the aircraft by use of a cable, thus providing a conductive path to equalize the potential between the fueling equipment and the aircraft. The bond shall be maintained until fueling connections have been removed, thus allowing separated charges that could be generated during the fueling operation to reunite. Grounding during aircraft fueling shall not be permitted.

- (f) To control spills, fuel shall be pumped either by hand or power. Pouring or gravity flow shall not be permitted. Self-closing nozzles or deadman controls shall be used and shall not be blocked open. Nozzles shall not be dragged along the ground.
- (g) In case of a spill, the fueling operation shall be immediately stopped until such time as the person-in-charge determines that it is safe to resume the refueling operation.
- (((h) When ambient temperatures have been in the one hundred degrees Fahrenheit range for an extended period of time, all refueling of helicopters with the engines running shall be suspended until such time as conditions become suitable to resume refueling with the engines running.
- (3))) (4) Helicopters with their engines stopped being refueled with aviation gasoline or Jet B (Turbine) type fuel, shall also comply with subsection (((2))) (3)(a) through (g) of this section.

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 296-45-67505 Briefing.

WAC 296-45-67507 Signals.

WAC 296-45-67509 Slings and tag lines.

WAC 296-45-67511 Cargo hooks.

WAC 296-45-67535 In helicopter.

WAC 296-45-67539 Personnel.

WAC 296-45-67543 General.

WSR 16-10-082 PERMANENT RULES DEPARTMENT OF LABOR AND INDUSTRIES

[Filed May 3, 2016, 10:57 a.m., effective July 1, 2016]

Effective Date of Rule: July 1, 2016.

Purpose: This rule making was federally initiated. The department responded to a Federal Register notice where the Occupational Safety and Health Administration (OSHA) published their final rule relating to Electric Power Generation, Transmission, and Distribution; and Electrical Protec-

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tive Equipment (29 C.F.R. 1910 and 1926). This was published on April 11, 2014, and effective July 11, 2014. The department is required to update our rules to be at-least-as-effective-as OSHA. The department has a few provisions that may differ but is at-least-as-effective-as the OSHA rule. In addition, the rule changes incorporated the most recent national standards or best industry practices, including adoption of various 2014 ANSI standards, updating internal references and making minor housekeeping changes throughout the chapter.

AMENDED CHAPTER:

 Renamed the title of this chapter from "Safety Standards for Electrical Workers" to "Electric Power Generation, Transmission, and Distribution."

AMENDED SECTIONS:

WAC 296-45-015 Scope and application.

- Added the word "construction" in subsection (1). Added the word electrical to qualified employees in subsections (1)(a), (e)(i), (ii) and (7).
- Changed "qualified persons" to "qualified electrical employees" in the notes after subsection (2).
- Added a reference to chapter 296-27 WAC in subsection (4).
- Created a new subsection (12) with current language.

WAC 296-45-035 Definitions.

- Added definitions for contract employer, entry, fall restraint system, first-aid training, host employer, may, must, network system, personal fall arrest system, roadway or public highway, shall, should, statistical sparkover voltage, statistical withstand voltage, and workpositioning equipment.
- Modified the definitions for automatic circuit recloser, designated employee, enclosed space, line-clearance tree trimmer, line-clearance tree trimming, qualified person or qualified employee, and system operator or power dispatcher.
- Deleted the definitions of electric utility, public highway, and underground network.

WAC 296-45-045 NESC applicable.

Updated the NESC references to 2012.

WAC 296-45-055 Employer's responsibility.

• Updated a reference in subsection (2).

WAC 296-45-065 Training.

- Made housekeeping changes in subsections (1), (4), (5),
 (6) and (8).
- Added a new subsection (2) relating to the degree of training, using OSHA language. Renumbered the rest of this section.
- Added the word "electrical" to qualified employees in subsections (3) and (3)(c). Added language in subsection (3)(c) using OSHA language. Added a new subsection (3)(e), using OSHA language. Added the word "electrical" to qualified employees in the note after subsection (3)(e).
- Added notes after subsection (8) using OSHA language.
- Added a new subsection (9) relating to line-clearance tree trimmers using OSHA language.

WAC 296-45-075 Employer's safety program.

• Updated a reference in subsection (5).

WAC 296-45-105 Work required of leadworkers.

• Changed "lineworkers" to "qualified electrical employees" throughout this section.

WAC 296-45-125 Medical services and first aid.

• Added OSHA language in subsections (1)(a) and (3).

WAC 296-45-135 Job briefing.

- Reformatted part of the language in subsection (1) and moved to subsection (3).
- Added a new subsection (2) using OSHA language.
 Renumbered the rest of this section.

WAC 296-45-17505 Lockout/tagout (hazardous control) program.

 Added the word "designated" after "authorized" throughout this section.

WAC 296-45-17510 Retraining.

• Added the word "designated" after "authorized" in subsection (1).

WAC 296-45-17515 Protective materials and hardware.

• Updated a reference in the note at the end of this section.

WAC 296-45-17520 Energy isolation and 296-45-17525 Notification.

 Added the word "designated" after "authorized" in these sections.

WAC 296-45-17530 Lockout/tagout application.

 Added the word "designated" after "authorized" throughout this section.

WAC 296-45-17535 Releasing stored energy.

Added the word "designated" after "authorized" in subsection (2).

WAC 296-45-17540 Release from lockout/tagout, 296-45-17550 Group lockout/tagout, and 296-45-17565 Central system operator.

 Added the word "designated" after "authorized" throughout these sections.

WAC 296-45-205 Enclosed spaces.

• Updated this section using OSHA language. Also updated references throughout this section.

WAC 296-45-215 Underground electrical installations.

- Changed "qualified persons" to "qualified electrical employees" throughout this section.
- Updated a reference in the note.

WAC 296-45-225 Underground residential distribution (URD).

- Updated the table reference in subsection (1)(b).
- Changed "qualified employees" to "qualified electrical employees" throughout this section.
- Changed "qualified employee" to "designated employee" in subsection (1)(c).

WAC 296-45-255 Protective equipment.

• Updated the table reference in subsection (15).

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WAC 296-45-25505 Personal protective equipment.

- Updated the ANSI reference in subsection (2).
- Made housekeeping change in subsection (3).

WAC 296-45-25510 Fall protection.

- Updated this entire section with OSHA language.
- Added a reference to Appendix E.

WAC 296-45-275 Ladders, platforms, and manhole steps.

• Updated references in subsections (1), (2) and the note.

WAC 296-45-295 Gasoline engine power chain saws.

- Updated the ANSI reference in subsection (1).
- Updated a reference in subsection (2).
- Added a note after subsection (15).

WAC 296-45-305 Live-line tools.

- Updated the ASTM reference in the note.
- Made housekeeping change in subsection (2)(c).
- Updated the IEEE reference in the note.

WAC 296-45-315 Materials handling and storage.

• Changed "qualified employees" to "qualified electrical employees" throughout this section.

WAC 296-45-325 Working on or near exposed energized parts.

- Changed "qualified employees" to "qualified electrical employees" throughout this section.
- Made housekeeping change in subsection (3).
- Updated the table reference in subsections (4) and (11). Renumbered subsections (a) and (b).
- Replaced Minimum Approach Distance table with a more current table.
- Added Table 3, Altitude correction factors using OSHA language. This table was in Appendix A.
- Added a reference to Appendix A.
- Added a new subsection (13) relating to protection from arcs and flames using OSHA language. Deleted subsection (12)(b) and (c) and the note, now redundant with the new subsection (13). Renumbered section.
- Updated language referencing Appendix D.

WAC 296-45-335 Deenergizing lines and equipment for employee protection.

- Changed "designated employees" to "qualified electrical employees" throughout this section.
- Added a new subsection (15) relating to network protectors using OSHA language. Renumbered the rest of this section.
- Made housekeeping change in subsection (18).

WAC 296-45-345 Grounding for the protection of employees.

- Added "and bonding jumpers" to subsection (3). Also, added a note relating to bonding jumpers.
- Updated ASTM reference in the note.
- Added language to subsection (6) relating to the order of connection using OSHA language.
- Updated language referencing Appendix B.

WAC 296-45-355 Underground grounding.

Made housekeeping change in subsection (3).

WAC 296-45-365 Testing and test facilities.

- Changed "qualified employees" to "qualified electrical employees" in the note.
- Updated language referencing Appendix B.

WAC 296-45-375 Mechanical equipment, including aerial manlift equipment.

- Added references in subsections (1)(a) using OSHA language. Renumbered subsection.
- Made housekeeping change in subsection (1)(d).
- Updated the table reference in subsection (10)(a).
 Changed "qualified employee" to "qualified electrical employee."
- Updated the table reference in subsection (10)(c)(ii).
- Added the word "mechanical" to subsection (10)(c)(iii)(B) to match OSHA.
- Updated language referencing Appendix B.

WAC 296-45-385 Overhead lines.

- Made housekeeping change in the note, subsections (1)(c), (13)(d) and (16).
- Updated language referencing Appendix B and C.
- Added language relating to temporary protective grounds to subsection (2)(e) using OSHA language.
- Deleted subsections (2)(e)(i) through (v) since covered by new OSHA language. Added notes using OSHA language.
- Changed "qualified employees" to "qualified electrical employees" throughout this section.

WAC 296-45-455 Line-clearance tree-trimming operations.

- Changed "qualified employees" to "qualified electrical employees" in this section.
- Made housekeeping change in subsection (2) and (2)(c).
- Updated the table references in subsections (2)(b), (3), (4) and (5).

WAC 296-45-45505 Brush chippers.

Added a reference in subsection (2) and updated a reference in subsection (5).

WAC 296-45-475 Substations.

- Updated ANSI references throughout this section.
- Changed "qualified persons" to "qualified electrical employees" throughout this section.
- Updated the table references in subsection (6).

WAC 296-45-48515 Access and working space.

• Updated ANSI references throughout this section.

WAC 296-45-48525 Guarding of energized parts.

- Updated ANSI references throughout this section.
- Changed "qualified persons" to "qualified electrical employees" in subsection (2).

WAC 296-45-545 Trolley maintenance, jumpering or bypassing.

 Changed "lineworkers" to "qualified electrical employees" throughout this section.

WAC 296-45-903 Appendix B—Protection from step and touch potentials—Nonmandatory.

Updated this appendix to match OSHA.

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WAC 296-45-905 Appendix C—Methods of inspecting and testing wood poles—Nonmandatory.

Updated this appendix to match OSHA.

NEW SECTIONS:

WAC 296-45-067 Information transfer.

• Created this section relating to host and contract employers using OSHA language.

WAC 296-45-902 Appendix A—Working on exposed energized parts.

Added this appendix from 29 C.F.R. 1910.269.

WAC 296-45-906 Appendix D—Protection from flames and arcs—Nonmandatory.

 Added this appendix from 29 C.F.R. 1910.269 and add applicable WAC numbers.

WAC 296-45-907 Appendix E—Work-positioning equipment inspection guidelines—Nonmandatory.

• Added this appendix from 29 C.F.R. 1910.269.

WAC 296-45-908 Appendix F—Other applicable safety and health Washington administrative codes.

Added this appendix as a resource.

WAC 296-45-909 Appendix G—Flow chart—Nonmandatory.

Added this appendix from 29 C.F.R. 1910.269.

WAC 296-45-910 Appendix H—Reference documents.

Added this appendix from 29 C.F.R. 1910.269.

REPEALED SECTION:

WAC 296-45-901 Appendix A—Nonmandatory.

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.

Other Authority: Chapter 49.17 RCW.

Adopted under notice filed as WSR 16-01-030 on December 8, 2015.

Changes Other than Editing from Proposed to Adopted Version: As a result of written and oral comments received, the following sections are being changed as indicated below:

CHANGES TO THE RULES (Proposed rule versus rule actually adopted):

WAC 296-45-25510 Fall protection.

• Changed "qualified employee" to "qualified electrical employee" in subsection (4)(c)(iii) to be consistent in the use of this terminology throughout the rule.

WAC 296-45-905 Appendix C—Methods of inspecting and testing wood poles—Nonmandatory.

 II. "Inspection of wood poles." Changed "qualified employee" to "qualified electrical employee" to be consistent in the use of this terminology throughout the rule.

A final cost-benefit analysis is available by contacting Cynthia Ireland, P.O. Box 44620, Olympia, WA 98504-4620,

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Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 7, Amended 44, 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 7, Amended 44, Repealed 1.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 7, Amended 44, 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: May 3, 2016.

Joel Sacks Director

Chapter 296-45 WAC

((SAFETY STANDARDS FOR ELECTRICAL WORK-ERS)) ELECTRIC POWER GENERATION, TRANS-MISSION, AND DISTRIBUTION

<u>AMENDATORY SECTION</u> (Amending WSR 01-11-038, filed 5/9/01, effective 9/1/01)

WAC 296-45-015 Scope and application. (1) This chapter covers the operation ((and)), maintenance, and construction of electric power generation, control, transformation, transmission, and distribution lines and equipment. These provisions apply to:

(a) Power generation, transmission, and distribution installations, including related equipment for the purpose of communication or metering, which are accessible only to qualified <u>electrical</u> employees;

Note:

The types of installations covered by this chapter include the generation, transmission, and distribution installations of electric utilities, as well as equivalent installations of industrial establishments. Trolley maintenance, jumpering, and bypass is also covered by this chapter. Supplementary electric generating equipment that is used to supply a workplace for emergency, standby, or similar purposes only is covered under Part L of chapter 296-24 WAC and WAC 296-800-280.

- (b) Other installations at an electric power generating station, as follows:
- (i) Fuel and ash handling and processing installations, such as coal conveyors;
- (ii) Water and steam installations, such as penstocks, pipelines, and tanks, providing a source of energy for electric generators; and
 - (iii) Chlorine and hydrogen systems.
- (c) Test sites where electrical testing involving temporary measurements associated with electric power generation, transmission, and distribution is performed in laboratories, in

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the field, in substations, and on lines, as opposed to metering, relaying, and routine line work;

- (d) Work on or directly associated with the installations covered in subsections (1)(a) through (c) of this section; and
 - (e) Line-clearance tree-trimming operations, as follows:
- (i) This chapter except WAC 296-45-455, applies to line-clearance tree-trimming operations performed by qualified <u>electrical</u> employees (those who are knowledgeable in the construction and operation of electric power generation, transmission, or distribution equipment involved, along with the associated hazards).
- (ii) WAC 296-45-065, 296-45-125, 296-45-135, 296-45-255, 296-45-315, 296-45-375, and 296-45-455 through 296-45-45530 apply to line-clearance tree-trimming operations performed by line-clearance tree trimmers who are not qualified <u>electrical</u> employees.
- (2) Notwithstanding subsection (1) of this section, this chapter does not apply to electrical installations, electrical safety-related work practices, or electrical maintenance considerations covered by Part L of chapter 296-24 WAC and WAC 296-800-280.
- Note 1: Work practices conforming to WAC 296-24-970 through 296-24-985 are considered as complying with the electrical safety-related work practice requirements of this chapter, provided the work is being performed on a generation or distribution installation meeting WAC 296-24-95601 through 296-24-95699.

 This chapter also applies to work by qualified ((persons)) electrical employees directly on or associated with installations of electric power generation, transmission, and distribution lines or equipment, regardless of compliance with WAC 296-24-970 through 296-24-985.
- Note 2: Work practices performed by qualified ((persons)) electrical employees and conforming to this chapter are considered as complying with WAC 296-24-95601 through 296-24-95699.
- (3) This section applies in addition to all other applicable safety and health standards administered by the department. Specific references in this section to other standards are provided for emphasis only.
- (4) Operation, conditions, work methods and other work related situations or activities not specifically covered by this chapter are subject to the rules and regulations of chapter 296-24 WAC((-,-)) General safety and health standards; chapter 296-27 WAC Recordkeeping and reporting; chapter 296-62 WAC((-,-)) General occupational health standards; chapter 296-155 WAC((-,-)) Safety standards for construction work; chapter 296-800 WAC((-,-)) Safety and health core rules; and, insofar as applicable to employee safety and health, chapter 19.29 RCW. Additionally, operations, conditions, work methods and other work related situations or activities may be subject to additional rules and regulations depending upon the nature of the work being performed.
- (5) These rules shall not apply to the use of existing electrical installations during their lifetime, provided they are maintained in good condition and in accordance with the applicable safety factor requirements and the rules in effect at the time they were installed, and provided that reconstruction shall conform to the rules as herein provided.
- (6) Any rule, regulation or standard contained within this chapter, if subject to interpretation, shall be interpreted so as to achieve employee safety, which is the ultimate purpose of this chapter.

- (7) Should a rule or standard contained within this chapter conflict, in any manner, with a standard or rule contained within any other chapter of Title 296 WAC the standard or rule contained herein shall apply so long as the work being done is power generation, transmission, and distribution installations, including related equipment for the purpose of communication or metering, which are accessible only to qualified <u>electrical</u> employees. If there are rules within this chapter that conflict, the rule that provides the greatest employee safety will apply.
- (8) Neither the promulgation of these rules, nor anything contained in these rules shall be construed as affecting the relative status or civil rights or liabilities between employers and their employees and/or the employees of others and/or the public generally; nor shall the use herein of the words "duty" and "responsibility" or either, import or imply liability other than provided for in the industrial insurance and safety laws of the state of Washington, to any person for injuries due to negligence predicated upon failure to perform or discharge any such "duty" or "responsibility," but failure on the part of the employees, leadworker, or employer to comply with any compulsory rule may be cause for the department of labor and industries to take action in accordance with the industrial insurance and safety laws.
- (9) "Shall" and "must" as used in this chapter make the provisions mandatory. "Should," "may," or "it is recommended" are used to indicate the provisions are not mandatory but are recommended.
- (10) If any section, subsection, phrase, or provisions of this chapter or part thereof should be held invalid by any court for any reason, such invalidity shall not in any way affect the validity of the remainder of this chapter, unless such decision renders the remainder of the provision unintelligible, or changes the meaning of such other provision or provisions.
- (11) When the language used in this chapter indicates that it is the responsibility, duty, or obligation of the leadworker or other employee, it shall also be the employer's responsibility, obligation, and duty.
- (12) Whenever this chapter refers to the provisions of another safety and health standard or statute affecting safety and health, such reference refers to the statute or code in effect at the time the work is being performed.

AMENDATORY SECTION (Amending WSR 14-07-086, filed 3/18/14, effective 5/1/14)

- **WAC 296-45-035 Definitions.** These definitions apply to chapter 296-45 WAC.
- "Aerial manlift equipment" Equipment such as extended towers, boom-mounted cages or baskets, and truck-mounted ladders, that is primarily designed to place personnel and equipment aloft to work on elevated structures and equipment.
- "Affected employee" An employee whose job requires him or her to operate or use a machine or equipment on which servicing or maintenance is being performed under lockout or tagout, or whose job requires him or her to work in an area in which such servicing or maintenance is being performed.

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"Apprentice" - An employee who is being trained to be journey level.

"Approved" - Meets or exceeds the recognized standards of safety within the industry.

"Approved protectors" - Gloves worn over rubber insulating gloves which are of such material or substance and so constructed as to protect the rubber gloves from abrasions, lacerations, or other physical damage which might otherwise occur to rubber gloves. Approved protectors must conform to the standards which are recognized by the industry.

"Attendant" - An employee assigned to remain immediately outside the entrance to an enclosed or other space to render assistance as needed to employees inside the space.

"Authorized employee" - An employee who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee's duties include performing servicing or maintenance covered under this section.

"Automatic ((eireuit recloser)) reclosing device" - A self-controlled device for interrupting and reclosing an alternating current circuit with a predetermined sequence of opening and reclosing followed by resetting, hold-closed, or lock-out operation.

"Barricade" - A physical obstruction such as tapes, cones, or A-frame type wood or metal structures intended to provide a warning about and to limit access to a hazardous area.

"Barrier" - A physical obstruction which is intended to prevent contact with energized lines or equipment or to prevent unauthorized access to a work area.

"Bond" - The electrical interconnection of conductive parts designed to maintain a common electrical potential.

"Bus" - A conductor or a group of conductors that serve as a common connection for two or more circuits.

"Bushing" - An insulating structure, including a through conductor or providing a passageway for such a conductor, with provision for mounting on a barrier, conducting or otherwise, for the purposes of insulating the conductor from the barrier and conducting current from one side of the barrier to the other.

"Cable" - A conductor with insulation, or a stranded conductor with or without insulation and other coverings (single-conductor cable), or a combination of conductors insulated from one another (multiple-conductor cable).

"Cable sheath" - A conductive protective covering applied to cables.

Note: A cable sheath may consist of multiple layers of which one or more is conductive.

"Circuit" - A conductor or system of conductors through which an electric current is intended to flow.

"Clearance" (between objects) - The clear distance between two objects measured surface to surface.

"Clearance" (for work) - Authorization to perform specified work or permission to enter a restricted area.

"Communication lines." (See "Lines, communication.")

"Conductor" - A material, usually in the form of a wire, cable, or bus bar, used for carrying an electric current.

"Contract employer" - An employer, other than a host employer, that performs work covered by this chapter under contract.

"Covered conductor" - A conductor covered with a dielectric having no rated insulating strength or having a rated insulating strength less than the voltage of the circuit in which the conductor is used.

"Current-carrying part" - A conducting part intended to be connected in an electric circuit to a source of voltage. Noncurrent-carrying parts are those not intended to be so connected.

"Deenergized" - Free from any electrical connection to a source of potential difference and from electric charge; not having a potential difference from that of the earth.

Note: The term is used only with reference to current-carrying parts, which are sometimes energized (alive).

"Designated employee((/person))" - ((An employee/)) A person who is designated by the employer to perform specific duties under the terms of this ((section)) chapter and who is knowledgeable in the construction and operation of the equipment and the hazards involved.

Note:

Considering an employee to be a designated employee will depend on various circumstances in the workplace, on the level of training they have received, and the proficiency demonstrated by the employee with the tasks required of the job.

"Electric line truck" - Any vehicle used to transport employees, tools, and material, which serves as a traveling workshop for electric power line construction and maintenance work. It may be equipped with a boom and auxiliary equipment for setting poles, digging holes, and elevating material and/or workers.

"Electric supply equipment" - Equipment that produces, modifies, regulates, controls, or safeguards a supply of electric energy.

"Electric supply lines." (See "Lines, electric supply.") (("Electric utility" - An organization responsible for the installation, operation, or maintenance of an electric supply system.))

"Emergency" - An unforeseen occurrence endangering life, limb, or property.

"Enclosed" - Surrounded by a case, cage, fence or otherwise which will protect the contained equipment and prevent accidental contact of a person with live parts.

"Enclosed space" - A working space, such as a manhole, vault, tunnel, or shaft, that has a limited means of egress or entry, that is designed for periodic employee entry under normal operating conditions, and that under normal conditions does not contain a hazardous atmosphere, but that may contain a hazardous atmosphere under abnormal conditions.

Note:

Spaces that are enclosed but not designed for employee entry under normal operating conditions are not considered to be enclosed spaces for the purposes of this section. Similarly, spaces that are enclosed and that are expected to contain a hazardous atmosphere are not considered to be enclosed spaces for the purposes of this section. Such spaces meet the definition of permit spaces in ((WAC 296-62-145)) chapter 296-809 WAC, Confined spaces, and entry into them must be performed in accordance with that standard.

"Energized" (alive, live) - Electrically connected to a source of potential difference, or electrically charged so as to

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have a potential significantly different from that of earth in the vicinity.

"Energy isolating device" - A physical device that prevents the transmission or release of energy, including, but not limited to, the following: A manually operated electric circuit breaker, a disconnect switch, a manually operated switch, a slide gate, a slip blind, a line valve, blocks, and any similar device with a visible indication of the position of the device. (Push buttons, selector switches, and other control-circuit-type devices are not energy isolating devices.)

"Energy source" - Any electrical, mechanical, hydraulic, pneumatic, chemical, nuclear, thermal, or other energy source that could cause injury to personnel.

"Entry" (as used in WAC 296-45-205 of this chapter) - The action by which a person passes through an opening into an enclosed space. Entry includes ensuing work activities in that space and is considered to have occurred as soon as any part of the entrant's body breaks the plane of an opening into the space.

"Equipment" (electric) - A general term including material, fittings, devices, appliances, fixtures, apparatus, and the like used as part of or in connection with an electrical installation.

"Exposed" - Not isolated or guarded.

<u>"Fall restraint system"</u> - A fall protection system that prevents the user from falling any distance.

"Fault current" - The current that flows in an electrical system because of a defect in the circuit induced accidentally or otherwise.

"First-aid training" - Training in the initial care, including cardiopulmonary resuscitation (which includes chest compressions, rescue breathing, and, as appropriate, other heart and lung resuscitation techniques), performed by a person who is not a medical practitioner, of a sick or injured person until definitive medical treatment can be administered.

"Fixed ladder" - A ladder that is permanently secured to a structure.

"Ground" - A conducting connection, whether intentional or accidental, between an electric circuit or equipment and the earth, or to some conducting body that serves in place of the earth.

"Grounded" - Connected to earth or to some conducting body that serves in place of the earth.

"Grounded system" - A system of conductors in which at least one conductor or point (usually the middle wire, or neutral point of transformer or generator windings) is intentionally grounded either solidly or through a current-limiting device (not a current-interrupting device).

"Groundperson" - A member of crew working on ground under direction of a leadworker.

"Guarded" - Covered, fenced, enclosed, or otherwise protected, by means of suitable covers or casings, barrier rails or screens, mats, or platforms, designed to prevent the possibility, under normal conditions, of dangerous approach or accidental contact by persons or objects.

Note: Wires which are insulated, but not otherwise protected, are not considered as guarded.

"Hazardous atmosphere" - An atmosphere that may expose employees to the risk of death, incapacitation, impair-

ment of ability to self-rescue (that is, escape unaided from an enclosed space), injury, or acute illness from one or more of the following causes:

- Flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit (LFL);
- Airborne combustible dust at a concentration that meets or exceeds its LFL;

Note: This concentration may be approximated as a condition in which the dust obscures vision at a distance of 5 feet (1.52 m) or less:

- Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent;
- Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in chapter 296-62 WAC, Part L, or in chapter 296-62 WAC, toxic and hazardous substances, and which could result in employee exposure in excess of its dose or permissible exposure limit;

Note: An atmospheric concentration of any substance that is not capable of causing death, incapacitation, impairment of ability to self-rescue, injury, or acute illness due to its health effects is not covered by this provision.

• Any other atmospheric condition that is "immediately dangerous to life or health" (IDLH).

(("HDLH" Any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.

Some materials (hydrogen fluoride gas and cadmium vapor, for example) may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possibly fatal collapse 12-72 hours after exposure. The victim "feels normal" from recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be "immediately" dangerous to life or health.

Note: For air contaminants for which WISHA has not determined a dose or permissible exposure limit, other sources of information, such as Safety Data Sheets that comply with the hazard communication program, WAC 296-901-140, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.))

"High-power tests" - Tests in which fault currents, load currents, magnetizing currents, and line-dropping currents are used to test equipment, either at the equipment's rated voltage or at lower voltages.

"High-voltage tests" - Tests in which voltages of approximately 1000 volts are used as a practical minimum and in which the voltage source has sufficient energy to cause injury.

"High wind" - A wind of such velocity that the following hazards would be present:

- An employee would be exposed to being blown from elevated locations; or
- An employee or material handling equipment could lose control of material being handled; or
- An employee would be exposed to other hazards not controlled by the standard involved.

Note:

Winds exceeding 40 miles per hour (64.4 kilometers per hour), or 30 miles per hour (48.3 kilometers per hour) if material handling is involved, are normally considered as meeting this criteria unless precautions are taken to protect employees from the hazardous effects of the wind.

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"Host employer" - An employer that operates, or that controls the operating procedures for, an electric power generation, transmission, or distribution installation on which a contract employer is performing work covered by this chapter.

Note:

The division of occupational safety and health (DOSH) will treat the electric utility or the owner of the installation as the host employer if it operates or controls operating procedures for the installation. If the electric utility or installation owner neither operates nor controls operating procedures for the installation, DOSH will treat the employer that the utility or owner has contracted with to operate or control the operating procedures for the installation as the host employer. In no case will there be more than one host employer.

"IDLH" - Any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with an individual's ability to escape unaided from a permit space.

Note:

Some materials (hydrogen fluoride gas and cadmium vapor, for example) may produce immediate transient effects that, even if severe, may pass without medical attention, but are followed by sudden, possibly fatal collapse twelve to seventy-two hours after exposure. The victim "feels normal" from recovery from transient effects until collapse. Such materials in hazardous quantities are considered to be "immediately" dangerous to life or health.

Note:

For air contaminants for which WISHA has not determined a dose or permissible exposure limit, other sources of information, such as safety data sheets that comply with the hazard communication program, WAC 296-901-140, published information, and internal documents can provide guidance in establishing acceptable atmospheric conditions.

"Insulated" - Separated from other conducting surfaces by a dielectric (including air space) offering a high resistance to the passage of current.

Note:

When any object is said to be insulated, it is understood to be insulated for the conditions to which it is normally subjected. Otherwise, it is, within the purpose of this section, uninsulated.

"Insulation" (cable) - That which is relied upon to insulate the conductor from other conductors or conducting parts or from ground.

"Insulation shielding" - An envelope which encloses the insulation of a cable and provides an equipotential surface in contact with cable insulation.

"Isolated" - An object that is not readily accessible to persons unless special means of access are used.

"Leadworker" - The person directly in charge of workers doing the work, regardless of title.

"Line-clearance tree trimmer" - An employee who, through related training or on-the-job experience or both, is familiar with the special techniques and hazards involved in line-clearance tree trimming.

Note 1: An employee who is regularly assigned to a line-clearance treetrimming crew and who is undergoing on-the-job training and who, in the course of such training, has demonstrated an ability to perform duties safely at his or her level of training and who is under the direct supervision of a line-clearance tree trimmer is considered to be a line-clearance tree trimmer. Note 2: A line-clearance tree trimmer is not considered to be a "qualified electrical employee" under this section unless ((he or shehas)) they have the training required for a qualified electrical employee under WAC 296-45-065. However, under the electrical safety-related work practices standard, a line-clearance tree trimmer is considered to be a "qualified employee." Tree trimming performed by such "qualified employees" is not subject to the electrical safety-related work practice requirements contained in WAC 296-24-970. (See also the note following WAC 296-24-970 for information regarding the training an employee must have to be considered a qualified employee.)

"Line-clearance tree trimming" - The pruning, trimming, repairing, maintaining, removing, or clearing of trees or the cutting of brush that is within ((10 feet (305 em))) the following distance of electric supply lines and equipment:

- For voltages to ground of 50 kilovolts or less 3.05 meters (10 feet);
- For voltages to ground of more than 50 kilovolts 3.05 meters (10 feet) plus 0.10 meters (4 inches) for every 10 kilovolts over 50 kilovolts.

"Lines" -

• "Communication lines" - The conductors and their supporting or containing structures which are used for public or private signal or communication service, and which operate at potentials not exceeding 400 volts to ground or 750 volts between any two points of the circuit, and the transmitted power of which does not exceed 150 watts. If the lines are operating at less than 150 volts, no limit is placed on the transmitted power of the system. Under certain conditions, communication cables may include communication circuits exceeding these limitations where such circuits are also used to supply power solely to communication equipment.

Note:

Telephone, telegraph, railroad signal, data, clock, fire, police alarm, cable television, and other systems conforming with this definition are included. Lines used for signaling purposes, but not included under this definition, are considered as electric supply lines of the same voltage.

• "Electric supply lines" - Conductors used to transmit electric energy and their necessary supporting or containing structures. Signal lines of more than 400 volts are always supply lines within this section, and those of less than 400 volts are considered as supply lines, if so run and operated throughout.

"Live-line tools and ropes" - Tools and ropes specifically designed for work on energized high voltage lines and equipment.

"Load-break elbow" - A connector designed to close and interrupt current on energized circuits within the design current and voltage rating.

"Manhole" - A subsurface enclosure which personnel may enter and which is used for the purpose of installing, operating, and maintaining submersible equipment or cable.

"Manhole steps" - A series of steps individually attached to or set into the walls of a manhole structure.

"May" and "should" or "it is recommended" are used to indicate the provisions are not mandatory but are recommended.

"Minimum approach distance" - The closest distance an employee is permitted to approach an energized or a grounded object.

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"Must" and "shall" as used in this chapter make the provisions mandatory.

"Network system" - An electrical installation fed from multiple primary sources directly associated with area-wide secondary network connected into a common grid.

"Neutral" - A system in which one conductor is used as the neutral for one or more circuits; one conductor may be used as the neutral for both primary and secondary circuits of a distribution system.

<u>"Personal fall arrest system" - A system used to arrest an employee in a fall from a working level.</u>

"Pole" - Any device used to support a power distribution or transmission line. The pole may be made of any substance including wood, concrete, metal, is usually cylindrical in shape and comparatively slender. It is the upright standard to which is affixed part of the power distribution and transmission line system as defined in this chapter.

"Power dispatcher" (load dispatcher or system operator) - A person who has been designated by the employer as having authority over switching and clearances of high voltage lines and station equipment.

"Protective devices" - Devices such as rubber gloves, rubber blankets, line hose, rubber boots, or other insulating devices, which are specifically designed for the protection of employees.

(("Public highway" - Every way, land, road, street, boulevard, and every other way or place in the state open as a matter of right to public vehicular travel, both inside and outside the limits of cities and towns, regardless of ownership.))

"Qualified ((person or qualified)) electrical employee" - A person who is familiar ((with)) and knowledgeable in the construction ((of, or)) and operation of the electric power generation, transmission, and distribution equipment involved, and such lines and/or equipment that concerns his/her position and who is fully aware of the hazards connected therewith, or, one who has passed a journey status examination for the particular branch of the electrical trades with which he/she may be connected.

((Note 1:))

• An employee must have the training required by WAC 296
Notes:

45-065(((+1))) in order to be considered a qualified electrical employee.

((Note 2:)) (((Apprentice) Except under WAC 296-45-25510(12),)) • An employee who is undergoing on-the-job training ((and)) (an apprentice) who, in the course of such training, has demonstrated an ability to perform duties safely at his or her level of training and who is under the direct supervision of a qualified ((person)) electrical employee is considered to be a qualified ((person)) electrical employee for the performance of those duties.

• An employee having experience and training comparable to journey level would be considered a qualified electrical employee.

"Roadway or public highway" - Every way, land, road, street, boulevard, and every other way or place in the state open as a matter of right to public vehicular travel, both inside and outside the limits of cities and towns, regardless of ownership.

"Rubber" - Any goods, equipment, or tool made out of either natural or synthetic rubber.

"Secured ladder" - A ladder which is not capable of being dislodged from the top by lateral, or jerking motion(s).

"Shall" and "must" as used in this chapter make the provisions mandatory.

"Sheath" - As applied to tools carried in a lineman's tool belt, a sheath that effectively covers the tool and prevents such tool from falling from the belt.

"Should" and "may" or "it is recommended" are used to indicate the provisions are not mandatory but are recommended.

"Statistical sparkover voltage" - A transient overvoltage level that produces a 97.72 percent probability of sparkover (that is, two standard deviations above the voltage at which there is a 50 percent probability of sparkover).

<u>"Statistical withstand voltage"</u> - A transient overvoltage level that produces a 0.14 percent probability of sparkover (that is, three standard deviations below the voltage at which there is a 50 percent probability of sparkover).

"Step bolt" - A bolt or rung attached at intervals along a structural member and used for foot placement during climbing or standing.

"Supporting structure" - The main supporting unit (usually a pole or tower).

"Switch" - A device for opening and closing or for changing the connection of a circuit. In these rules, a switch is understood to be manually operable, unless otherwise stated.

"System operator or power dispatcher" - A qualified ((person)) electrical employee who has been designated by the employer and having authority over switching, clearances, and operation of the system and its parts.

"Tag" - A system or method of identifying circuits, systems, or equipment for the purpose of alerting employees and others that the circuit, system, or equipment is being worked on.

(("Underground network" An underground electrical installation fed from multiple primary sources directly associated with area-wide secondary network connected into a common grid.))

"Underground residential distribution system" (URD) - An electrical installation normally fed from a single primary source which may feed one or more transformers with secondaries not connected to a common grid.

"Utility" - An organization responsible for the installation, operation, or maintenance of electric supply or communications systems.

"Vault" - An enclosure, above or below ground, which personnel may enter and which is used for the purpose of installing, operating, or maintaining equipment or cable.

"Vented vault" - A vault that has provision for air changes using exhaust flue stacks and low level air intakes operating on differentials of pressure and temperature providing for airflow which precludes a hazardous atmosphere from developing.

"Voltage" - The effective (rms) potential difference between any two conductors or between a conductor and ground. Voltages are expressed in nominal values unless otherwise indicated. The nominal voltage of a system or circuit is the value assigned to a system or circuit of a given voltage class for the purpose of convenient designation. The operating voltage of the system may vary above or below this value.

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Note:

Low voltage includes voltages from 50 to 600 volts. High voltage shall mean those voltages of 601 volts to 230,000. Extra high voltage means any voltage over 230,000 volts. Where the words "high voltage" are used in this chapter it shall include extra high voltage, unless otherwise specified.

"Work-positioning equipment" - A body belt or body harness system rigged to allow an employee to be supported on an elevated vertical surface, such as a utility pole or tower leg, and work with both hands free while leaning.

<u>AMENDATORY SECTION</u> (Amending WSR 03-17-071, filed 8/19/03, effective 11/1/03)

WAC 296-45-045 NESC applicable. (1) All electric utilities and entities operating transmission and distribution facilities within the state of Washington must design, construct, operate, and maintain their lines and equipment according to the requirements of the ((2002)) 2012 National Electrical Safety Code (NESC) (ANSI-C2), parts (1), (2), and (3).

Note:

The department has copies of the NESC available for review at each service location across the state. To purchase a copy, write to:

The Institute of Electrical and Electronics Engineers, Inc.

(IEEE, Inc.) 445 Hoes Lane

Piscataway, NJ 08855-1331

(2) The employer must ensure that climbing space is provided on all poles and structures. The climbing space must meet the requirements of the ((2002)) 2012 National Electrical Safety Code (NESC) (ANSI-C2), except that Rule 236H does not apply.

AMENDATORY SECTION (Amending WSR 14-07-086, filed 3/18/14, effective 5/1/14)

- WAC 296-45-055 Employer's responsibility. (1) The employer shall provide and maintain the necessary protective devices specified in these rules and require the employees to use them properly.
- (2) The employer shall develop and maintain a hazard communication program as required by ((WAC 296-901-140)) chapter 296-901 WAC, which will provide information to all employees relative to hazardous chemicals or substances to which they are exposed, or may become exposed, in the course of their employment.
- (3) There shall be installed and maintained in every fixed establishment employing eight or more persons a safety bulletin board of a size to display and post safety bulletins, newsletters, posters, accident statistics and other safety educational material. It is recommended that safety bulletin boards be painted green and white.
- (4) The employer shall require the leadworker to observe and enforce all safety rules and shall furnish a copy of the electrical workers' safety rules to each employee who is covered by these rules.
- (5) The employer shall appoint only competent workers to supervise other employees and those appointed shall be responsible for the safety of the employees under their supervision.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

- WAC 296-45-065 Training. (1) Each employee((s)) shall be trained and proficient in the safety-related work practices, safety procedures, and other safety requirements in this section that pertain to their respective job assignments. Employees shall also be trained in and proficient with any other safety practices, including applicable emergency procedures (such as pole top, aerial, manhole, and tree rescue), that are not specifically addressed by this section but that are related to their work and are necessary for their safety.
- (((1))) <u>(2) The degree of training shall be determined by the risk of the employee for the hazard involved.</u>
- (3) Qualified <u>electrical</u> employees shall also be trained and competent in:
- (a) The skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment;
- (b) The skills and techniques necessary to determine the nominal voltage of exposed live parts;
- (c) The minimum approach distances specified in this ((section)) chapter corresponding to the voltages to which the qualified electrical employee will be exposed((;)) and the skills and techniques necessary to maintain those distances;
- (d) The proper use of the special precautionary techniques, personal protective equipment, insulating and shielding materials, and insulated tools for working on or near exposed energized parts of electric equipment; and
- (e) The recognition of electrical hazards to which the employee may be exposed and the skills and techniques necessary to control or avoid these hazards.

Note:

For the purposes of this section, a person must have this training in order to be considered a qualified ((person)) electrical employee.

- $((\frac{(2)}{2}))$ (4) The employer shall determine, through regular supervision and through inspections conducted on at least an annual basis, that each employee is complying with the safety-related work practices required by this ((section.
 - (3)) chapter.
- (5) An employee shall receive additional training (or retraining) under any of the following conditions:
- (a) If the supervision and annual inspections required by subsection $((\frac{(2)}{(2)}))$ (4) of this section indicate that the employee is not complying with the safety-related work practices required by this $((\frac{\text{section}}{(2)}))$ chapter; or
- (b) If new technology, new types of equipment, or changes in procedures necessitate the use of safety-related work practices that are different from those which the employee would normally use; or
- (c) If ((he or she)) the employee must employ safety related work practices that are not normally used during ((his or her)) their regular job duties.

Note:

((WISHA)) <u>DOSH</u> would consider tasks that are performed less often than once per year to necessitate retraining before the performance of the work practices involved.

- (((4))) (6) The training required by ((WAC 296-45-065)) this section shall be of the classroom or on-the-job type.
- $((\frac{5}{1}))$ (7) The training shall establish employee proficiency in the work practices required by this section and shall

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introduce the procedures necessary for compliance with this section

(((6))) (8) The employer shall certify that each employee has received the training required by ((WAC 296-45-065)) this section. This certification shall be made when the employee demonstrates proficiency in the work practices involved and shall be maintained for the duration of the employee's employment.

Notes:

- Employment records that indicate that an employee has received the required training are an acceptable means of meeting this requirement.
- For an employee with previous training, an employer may determine that the employee has demonstrated the proficiency required by this subsection using the following process:
- Confirm that the employee has the training required by this section;
- Use an examination or interview to make an initial determination that the employee understands the relevant safety related work practices before he or she performs any work covered by this chapter; and
- Supervise the employee closely until that employee has demonstrated proficiency as required by this section.
- (9) Each line-clearance tree trimmer who is not a qualified electrical employee shall also be trained and competent in:
- (a) The skills and techniques necessary to distinguish exposed live parts from other parts of electric equipment;
- (b) The skills and techniques necessary to determine the nominal voltage of exposed live parts; and
- (c) The minimum approach distances specified in this chapter corresponding to the voltages to which the employee will be exposed and the skills and techniques necessary to maintain those distances.

NEW SECTION

- **WAC 296-45-067 Information transfer.** (1) Host employer responsibilities. Before work begins, the host employer shall inform contract employers of:
- (a) The characteristics of the host employer's installation that are related to the safety of the work to be performed and are listed in subsection (4)(a) through (e) of this section;

Note:

This subsection requires the host employer to obtain information listed in subsection (4)(a) through (e) of this section if it does not have this information in existing records.

(b) Conditions that are related to the safety of the work to be performed, that are listed in subsection (4)(f) through (h) of this section, and that are known to the host employer;

Note:

For the purposes of this subsection, the host employer need only provide information to contract employers that the host employer can obtain from its existing records through the exercise of reasonable diligence. This subsection does not require the host employer to make inspections of worksite conditions to obtain this information.

(c) Information about the design and operation of the host employer's installation that the contract employer needs to make the assessments required by this chapter; and

Note:

This subsection requires the host employer to obtain information about the design and operation of its installation that contract employers need to make required assessments if it does not have this information in existing records. (d) Any other information about the design and operation of the host employer's installation that is known by the host employer, that the contract employer requests, and that is related to the protection of the contract employer's employees.

Note:

For the purposes of this subsection, the host employer need only provide information to contract employers that the host employer can obtain from its existing records through the exercise of reasonable diligence. This subsection does not require the host employer to make inspections of worksite conditions to obtain this information.

- (2) Contract employer responsibilities.
- (a) The contract employer shall ensure that each of its employees is instructed in the hazardous conditions relevant to the employee's work that the contract employer is aware of as a result of information communicated to the contract employer by the host employer under subsection (1) of this section.
- (b) Before work begins, the contract employer shall advise the host employer of any unique hazardous conditions presented by the contract employer's work.
- (c) The contract employer shall advise the host employer of any unanticipated hazardous conditions found during the contract employer's work that the host employer did not mention under subsection (1) of this section. The contract employer shall provide this information to the host employer within two working days after discovering the hazardous condition.
- (3) Joint host- and contract-employer responsibilities. The contract employer and the host employer shall coordinate their work rules and procedures so that each employee of the contract employer and the host employer is protected as required by this section.
- (4) Existing characteristics and conditions. Existing characteristics and conditions of electric lines and equipment that are related to the safety of the work to be performed shall be determined before work on or near the lines or equipment is started. Such characteristics and conditions include, but are not limited to:
 - (a) The nominal voltages of lines and equipment;
 - (b) The maximum switching-transient voltages;
 - (c) The presence of hazardous induced voltages;
- (d) The presence of protective grounds and equipment grounding conductors;
- (e) The locations of circuits and equipment, including electric supply lines, communication lines, and fire protective signaling circuits;
- (f) The condition of protective grounds and equipment grounding conductors;
 - (g) The condition of poles; and
 - (h) Environmental conditions relating to safety.

AMENDATORY SECTION (Amending WSR 01-11-038, filed 5/9/01, effective 9/1/01)

WAC 296-45-075 Employer's safety program. (1) The employer shall hold safety meetings at least once a month, which meetings shall be held at a reasonable time and place as selected by the employer. The employer shall require all employees subject to provisions of this chapter to attend

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said meetings: Provided, That employees whose presence is otherwise required by reason of an emergency or whose function is such that they cannot leave their station or cease their work without serious detriment to the service provided, such as dispatcher, may be excused from such meeting under those circumstances. Minutes shall be kept of each safety meeting and retained for a period of one year.

- (2) The employer or a representative(s) designated shall investigate all accidents or injuries of a serious nature and, where possible, take the proper remedial steps to prevent the occurrence of similar accidents.
- (3) The employer shall furnish instructions stating the proper procedure in event of an emergency, which shall include the names of those individuals to be notified and methods of contacting them.
- (4) The employer shall provide and make available to all employees accident report and safety suggestion forms or other approved methods. Safety suggestion forms should, where possible, be used for suggesting the elimination of hazardous conditions and such reported suggestions shall be retained (for one year) by the employer or an authorized representative.
- (5) ((The employer must notify the department of employee fatalities or catastrophes according to the requirements of WAC 296-800-320.)) For work-related injuries and illnesses involving any employee that resulted in death, inpatient hospitalization, amputation or loss of an eye, the employer must comply with the recordkeeping and reporting regulations located in chapter 296-27 WAC.
- (6) Nothing contained within this chapter shall prohibit an employer or an authorized representative from disciplining employees for failure to comply with the provisions of this or any other safety code.
- (7) Existing conditions related to the safety of the work to be performed shall be determined before work on or near electric lines or equipment is started. Such conditions include, but are not limited to, the nominal voltages of lines and equipment, the maximum switching transient voltages, the presence of hazardous induced voltages, the presence and condition of protective grounds and equipment grounding conductors, the condition of poles, environmental conditions relative to safety, and the locations of circuits and equipment, including power and communication lines and fire protective signaling circuits.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-105 Work required of leadworkers. (1) A leadworker cannot properly supervise the work and look out for the safety of employees under their direction if required to work as a leadworker and a ((lineworker)) qualified electrical employee at the same time.

- (2) Leadworkers should be constantly alert and shall not be required to serve in such dual capacity, except in crews of not more than two ((lineworkers)) qualified electrical employees, in which case they may work as one of the ((lineworkers)) qualified electrical employees.
- (3) In crews of two ((lineworkers)) qualified electrical employees or less, each ((lineworker)) qualified electrical

employee may have a groundworker but, if additional ((lineworkers)) qualified electrical employees or groundworkers are added to the crew, the leadworker shall confine his/her activities to supervising the work, as exhibited below:

Type of Crew

2 ((lineworkers)) <u>quali-</u> fied electrical employees

2 ((lineworkers)) <u>qualified electrical employees</u> plus 1 groundworker

2 ((lineworkers)) <u>qualified electrical employees</u> plus 2 groundworkers

2 ((lineworkers)) qualified electrical employees plus any combination of 3 ((lineworkers)) qualified electrical employees or groundworkers

Minimum Requirements

One ((lineworker)) <u>qualified</u> <u>electrical employee</u> as personin-charge.

One ((lineworker)) qualified electrical employee as person-in-charge or climbing leadworker.

One ((lineworker)) qualified electrical employee as personin-charge or climbing leadworker.

One nonclimbing leadworker.

AMENDATORY SECTION (Amending WSR 04-07-160, filed 3/23/04, effective 5/1/04)

WAC 296-45-125 Medical services and first aid. The employer shall provide medical services and first aid as required in WAC 296-800-150. The following requirements also apply:

- (1) Cardiopulmonary resuscitation and first-aid training. When employees are performing work on or associated with exposed lines or equipment energized at 50 volts or more, persons trained in first aid including cardiopulmonary resuscitation (CPR) shall be available as follows:
- (a) For field work involving two or more employees at a work location, at least two trained persons shall be available. However, for line-clearance tree trimming operations performed by line-clearance tree trimmers who are not qualified electrical employees, only one trained person need be available if all new employees are trained in first aid, including CPR, within 3 months of their hiring dates.
- (b) For fixed work locations such as generating stations, the number of trained persons available shall be sufficient to ensure that each employee exposed to electric shock can be reached within 4 minutes by a trained person. However, where the existing number of employees is insufficient to meet this requirement (at a remote substation, for example), all employees at the work location shall be trained.
- (2) First-aid supplies. First-aid supplies required by WAC 296-800-150 shall be placed in weatherproof containers if the supplies could be exposed to the weather.
- (3) First-aid kits. ((Each first-aid kit)) The employer shall ((be maintained)) maintain each first-aid kit, shall ((be)) ensure that it is readily available for use, and shall ((be inspected)) inspect it frequently enough to ensure that

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expended items are replaced ((but)). The employer also shall inspect each first-aid kit at least once per year.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

- WAC 296-45-135 Job briefing. (1) The employer shall ensure that the leadworker conducts a job briefing with the employees involved before they start each job. ((The briefing shall cover at least the following subjects: Hazards associated with the job, work procedures involved, special precautions, energy source controls, and personal protective equipment requirements.
- (1))) (2) The employer shall provide the employee in charge of the job with all available information that relates to the determination of existing characteristics and conditions required by WAC 296-45-067(4) of this chapter.
- (3) The briefing shall also cover at the least the following subjects:
 - (a) Hazards associated with the job;
 - (b) Work procedures involved:
 - (c) Special precautions;
 - (d) Energy source controls; and
 - (e) Personal protective equipment requirements.
- (4) Number of briefings. If the work or operations to be performed during the work day or shift are repetitive and similar, at least one job briefing shall be conducted before the start of the first job of each day or shift. Additional job briefings shall be held if significant changes, which might affect the safety of the employees, occur during the course of the work.
- $((\frac{(2)}{2}))$ (5) Extent of briefing. A brief discussion is satisfactory if the work involved is routine and if the employee, by virtue of training and experience, can reasonably be expected to recognize and avoid the hazards involved in the job. A more extensive discussion shall be conducted:
- (a) If the work is complicated or particularly hazardous; or
- (b) If the employee cannot be expected to recognize and avoid the hazards involved in the job.

Note: The briefing is always required to touch on all the subjects listed in the introductory text to this section.

 $((\frac{3}{2}))$ (6) Working alone. An employee working alone need not conduct a job briefing. However, the employer shall ensure that the tasks to be performed are planned as if a briefing were required.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-17505 Lockout/tagout (hazardous control) program. (1) The employer shall establish a program consisting of energy control procedures, employee training, and periodic inspections to ensure that, before any employee performs any servicing or maintenance on a machine or equipment where the unexpected energizing, start up, or release of stored energy could occur and cause injury, the machine or equipment is isolated from the energy source and rendered inoperative.

- (2) The employer's energy control program under this section shall meet the following requirements:
- (a) If an energy isolating device is not capable of being locked out, the employer's program shall use a tagout system.
- (b) If an energy isolating device is capable of being locked out, the employer's program shall use lockout, unless the employer can demonstrate that the use of a tagout system will provide full employee protection as follows:
- (i) When a tagout device is used on an energy isolating device which is capable of being locked out, the tagout device shall be attached at the same location that the lockout device would have been attached, and the employer shall demonstrate that the tagout program will provide a level of safety equivalent to that obtained by the use of a lockout program.
- (ii) In demonstrating that a level of safety is achieved in the tagout program equivalent to the level of safety obtained by the use of a lockout program, the employer shall demonstrate full compliance with all tagout-related provisions of this standard together with such additional elements as are necessary to provide the equivalent safety available from the use of a lockout device. Additional means to be considered as part of the demonstration of full employee protection shall include the implementation of additional safety measures such as the removal of an isolating circuit element, blocking of a controlling switch, opening of an extra disconnecting device, or the removal of a valve handle to reduce the likelihood of inadvertent energizing.
- (3) Whenever replacement or major repair, renovation, or modification of a machine or equipment is performed, and whenever new machines or equipment are installed, energy isolating devices for such machines or equipment shall be designed to accept a lockout device.
- (4) Procedures shall be developed, documented, and used for the control of potentially hazardous energy covered by this section.
- (5) The procedure shall clearly and specifically outline the scope, purpose, responsibility, authorization, rules, and techniques to be applied to the control of hazardous energy, and the measures to enforce compliance including, but not limited to, the following:
- (a) A specific statement of the intended use of this procedure;
- (b) Specific procedural steps for shutting down, isolating, blocking and securing machines or equipment to control hazardous energy;
- (c) Specific procedural steps for the placement, removal, and transfer of lockout devices or tagout devices and the responsibility for them; and
- (d) Specific requirements for testing a machine or equipment to determine and verify the effectiveness of lockout devices, tagout devices, and other energy control measures.
- (6) The employer shall conduct a periodic inspection of the energy control procedure at least annually to ensure that the procedure and the provisions of this section are being followed.
- (a) The periodic inspection shall be performed by an authorized/designated employee who is not using the energy control procedure being inspected.

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- (b) The periodic inspection shall be designed to identify and correct any deviations or inadequacies.
- (c) If lockout is used for energy control, the periodic inspection shall include a review, between the inspector and each authorized/designated employee, of that employee's responsibilities under the energy control procedure being inspected.
- (d) Where tagout is used for energy control, the periodic inspection shall include a review, between the inspector and each authorized/designated and affected employee, of that employee's responsibilities under the energy control procedure being inspected, and the elements set forth in this section.
- (e) The employer shall certify that the inspections required by this section have been accomplished. The certification shall identify the machine or equipment on which the energy control procedure was being used, the date of the inspection, the employees included in the inspection, and the person performing the inspection.

Note: If normal work schedule and operation records demonstrate adequate inspection activity and contain the required information, no additional certification is required.

- (7) The employer shall provide training to ensure that the purpose and function of the energy control program are understood by employees and that the knowledge and skills required for the safe application, usage, and removal of energy controls are acquired by employees. The training shall include the following:
- (a) Each authorized/<u>designated</u> employee shall receive training in the recognition of applicable hazardous energy sources, the type and magnitude of energy available in the workplace, and in the methods and means necessary for energy isolation and control.
- (b) Each affected employee shall be instructed in the purpose and use of the energy control procedure.
- (c) All other employees whose work operations are or may be in an area where energy control procedures may be used shall be instructed about the procedures and about the prohibition relating to attempts to restart or reenergize machines or equipment that are locked out or tagged out.
- (8) When tagout systems are used, employees shall also be trained in the following limitations of tags:
- (a) Tags are essentially warning devices affixed to energy isolating devices and do not provide the physical restraint on those devices that is provided by a lock.
- (b) When a tag is attached to an energy isolating means, it is not to be removed without authorization of the authorized/designated person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated.
- (c) Tags must be legible and understandable by all authorized/designated employees, affected employees, and all other employees whose work operations are or may be in the area, in order to be effective.
- (d) Tags and their means of attachment must be made of materials which will withstand the environmental conditions encountered in the workplace.
- (e) Tags may evoke a false sense of security, and their meaning needs to be understood as part of the overall energy control program.

(f) Tags must be securely attached to energy isolating devices so that they cannot be inadvertently or accidentally detached during use.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

- WAC 296-45-17510 Retraining. (1) Retraining shall be provided for all authorized/designated and affected employees whenever there is a change in their job assignments, a change in machines, equipment, or processes that present a new hazard or whenever there is a change in the energy control procedures.
- (2) Retraining shall also be conducted whenever a periodic inspection reveals, or whenever the employer has reason to believe, that there are deviations from or inadequacies in an employee's knowledge or use of the energy control procedures.
- (3) The retraining shall reestablish employee proficiency and shall introduce new or revised control methods and procedures, as necessary.
- (4) The employer shall certify that employee training has been accomplished and is being kept up to date. The certification shall contain each employee's name and dates of training.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

- WAC 296-45-17515 Protective materials and hardware. (1) Locks, tags, chains, wedges, key blocks, adapter pins, self-locking fasteners, or other hardware shall be provided by the employer for isolating, securing, or blocking of machines or equipment from energy sources.
- (2) Lockout devices and tagout devices shall be singularly identified; shall be the only devices used for controlling energy; may not be used for other purposes; and shall meet the following requirements:
- (a) Lockout devices and tagout devices shall be capable of withstanding the environment to which they are exposed for the maximum period of time that exposure is expected.
- (b) Tagout devices shall be constructed and printed so that exposure to weather conditions or wet and damp locations will not cause the tag to deteriorate or the message on the tag to become illegible.
- (c) Tagout devices shall be so constructed as not to deteriorate when used in corrosive environments.
- (3) Lockout devices and tagout devices shall be standardized within the facility in at least one of the following criteria: Color, shape, size. Additionally, in the case of tagout devices, print and format shall be standardized.
- (4) Lockout devices shall be substantial enough to prevent removal without the use of excessive force or unusual techniques, such as with the use of bolt cutters or metal cutting tools.
- (5) Tagout devices, including their means of attachment, shall be substantial enough to prevent inadvertent or accidental removal. Tagout device attachment means shall be of a nonreusable type, attachable by hand, self-locking, and nonreleasable with a minimum unlocking strength of no less than fifty pounds and shall have the general design and basic char-

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acteristics of being at least equivalent to a one-piece, all-environment-tolerant nylon cable tie.

- (6) Each lockout device or tagout device shall include provisions for the identification of the employee applying the device.
- (7) Tagout devices shall warn against hazardous conditions if the machine or equipment is energized and shall include a legend such as the following: Do Not Start, Do Not Open, Do Not Close, Do Not Energize, Do Not Operate.

Note:

((For specific provisions covering accident prevention tags, see chapter 296-24 WAC.)) See ANSI Z535.5, 2011 for the format and design criteria of danger/warning tags.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-17520 Energy isolation. Lockout and tagout device application and removal may only be performed by the authorized/designated employees who are performing the servicing or maintenance.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-17525 Notification. Affected employees shall be notified by the employer or authorized/designated employee of the application and removal of lockout or tagout devices. Notification shall be given before the controls are applied and after they are removed from the machine or equipment.

Note:

This section requires that the second notification take place before the machine or equipment is reenergized.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

- WAC 296-45-17530 Lockout/tagout application. The established procedures for the application of energy control (the lockout or tagout procedures) shall include the following elements and actions, and these procedures shall be performed in the following sequence:
- (1) Before an authorized/designated or affected employee turns off a machine or equipment, the authorized/designated employee shall have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the method or means to control the energy.
- (2) The machine or equipment shall be turned off or shut down using the procedures established for the machine or equipment. An orderly shutdown shall be used to avoid any additional or increased hazards to employees as a result of the equipment stoppage.
- (3) All energy isolating devices that are needed to control the energy to the machine or equipment shall be physically located and operated in such a manner as to isolate the machine or equipment from energy sources.
- (4) Lockout or tagout devices shall be affixed to each energy isolating device by authorized/designated employees.
- (a) Lockout devices shall be attached in a manner that will hold the energy isolating devices in a "safe" or "off" position.

- (b) Tagout devices shall be affixed in such a manner as will clearly indicate that the operation or movement of energy isolating devices from the "safe" or "off" position is prohibited.
- (5) Where tagout devices are used with energy isolating devices designed with the capability of being locked out, the tag attachment shall be fastened at the same point at which the lock would have been attached.
- (6) Where a tag cannot be affixed directly to the energy isolating device, the tag shall be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

- WAC 296-45-17535 Releasing stored energy. Following the application of lockout or tagout devices to energy isolating devices, all potentially hazardous stored or residual energy shall be relieved, disconnected, restrained, or otherwise rendered safe.
- (1) If there is a possibility of reaccumulation of stored energy to a hazardous level, verification of isolation shall be continued until the servicing or maintenance is completed or until the possibility of such accumulation no longer exists.
- (2) Before starting work on machines or equipment that have been locked out or tagged out, the authorized/designated employee shall verify that isolation and deenergizing of the machine or equipment have been accomplished. If normally energized parts will be exposed to contact by an employee while the machine or equipment is deenergized, a test shall be performed to ensure that these parts are deenergized.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

- WAC 296-45-17540 Release from lockout/tagout. Before lockout or tagout devices are removed and energy is restored to the machine or equipment, procedures shall be followed and actions taken by the authorized/designated employees to ensure the following:
- (1) The work area shall be inspected to ensure that nonessential items have been removed and that machine or equipment components are operationally intact.
- (2) The work area shall be checked to ensure that all employees have been safely positioned or removed.
- (3) After lockout or tagout devices have been removed and before a machine or equipment is started, affected employees shall be notified that the lockout or tagout devices have been removed.
- (4) Each lockout or tagout device shall be removed from each energy isolating device by the authorized/designated employee who applied the lockout or tagout device. However, if that employee is not available to remove it, the device may be removed under the direction of the employer, provided that specific procedures and training for such removal have been developed, documented, and incorporated into the employer's energy control program. The employer shall demonstrate that the specific procedure provides a degree of safety equivalent to that provided by the removal of the device by the authorized/designated employee who applied

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- it. The specific procedure shall include at least the following elements:
- (a) Verification by the employer that the authorized/designated employee who applied the device is not at the facility;
- (b) Making all reasonable efforts to contact the authorized/designated employee to inform him or her that his or her lockout or tagout device has been removed; and
- (c) Ensuring that the authorized/designated employee has this knowledge before he or she resumes work at that facility.

AMENDATORY SECTION (Amending WSR 99-09-080, filed 4/20/99, effective 8/1/99)

- WAC 296-45-17550 Group lockout/tagout. When servicing or maintenance is performed by a crew, craft, department, or other group, they shall use a procedure which affords the employees a level of protection equivalent to that provided by the implementation of a personal lockout or tagout device. Group lockout or tagout devices shall be used in accordance with the procedures required by the following specific requirements:
- (1) Primary responsibility shall be vested in an authorized/designated employee for a set number of employees working under the protection of a group lockout or tagout device (such as an operations lock);
- (2) Provision shall be made for the authorized/designated employee to ascertain the exposure status of all individual group members with regard to the lockout or tagout of the machine or equipment;
- (3) When more than one crew, craft, department, or other group is involved, assignment of overall job-associated lock-out or tagout control responsibility shall be given to an authorized/designated employee designated to coordinate affected work forces and ensure continuity of protection; and
- (4) Each authorized/designated employee shall affix a personal lockout or tagout device to the group lockout device, group lockbox, or comparable mechanism when he or she begins work and shall remove those devices when he or she stops working on the machine or equipment being serviced or maintained.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

- WAC 296-45-17565 Central system operator. If energy isolating devices are installed in a central location under the exclusive control of a system operator, the following requirements apply:
- (1) The employer shall use a procedure that affords employees a level of protection equivalent to that provided by the implementation of a personal lockout or tagout device.
- (2) The system operator shall place and remove lockout and tagout devices in place of the authorized/designated employee.
- (3) Provisions shall be made to identify the authorized/designated employee who is responsible for (that is, being protected by) the lockout or tagout device, to transfer responsibility for lockout and tagout devices, and to ensure that an authorized/designated employee requesting removal

or transfer of a lockout or tagout device is the one responsible for it before the device is removed or transferred.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-205 Enclosed spaces. This section covers enclosed spaces that may be entered by employees. It does not apply to vented vaults if the employer makes a determination ((is made)) that the ventilation system is operating to protect employees before they enter the space. This ((paragraph)) section applies to routine entry into enclosed spaces in lieu of the permit-space entry requirements contained in chapter 296-809 WAC ((296-62-145)). If, after the employer takes the precautions given in WAC 296-45-205, 296-45-215, and 296-45-225 ((are taken)), the hazards remaining in the enclosed space endanger the life of an entrant or could interfere with an entrant's escape from the space, then entry into the enclosed space shall meet the permit-space entry requirements of chapter 296-809 WAC ((296-62-145)).

Note: Entries into enclosed spaces conducted in accordance with the permit-space entry requirements of <u>chapter 296-809 WAC ((296-62-145))</u> are considered as complying with this section.

- (1) "Safe work practices." The employer shall ensure the use of safe work practices for entry into, and work in enclosed spaces and for rescue of employees from such spaces.
- (2) "Training." <u>Each employee((s))</u> who enters an enclosed space((s)) or who serves as an attendant((s)) shall be trained in the hazards of enclosed space entry, in enclosed space entry procedures, and in enclosed space rescue procedures.
- (3) "Rescue equipment." Employers shall provide equipment to ensure the prompt and safe rescue of employees from the enclosed space.
- (4) "((Evaluation)) Evaluating of potential hazards." Before any entrance cover to an enclosed space is removed, the employer shall determine whether it is safe to do so by checking for the presence of any atmospheric pressure or temperature differences and by evaluating whether there might be a hazardous atmosphere in the space. Any conditions making it unsafe to remove the cover shall be eliminated before the cover is removed.

Note: The ((evaluation)) determination called for in this subsection may ((take the form)) consist of a check of the conditions ((expected to)) that might foreseeably be in the enclosed space. For example, the cover could be checked to see if it is hot and, if it is fastened in place, could be loosened gradually to release any residual pressure. ((A determination must)) An evaluation also needs to be made of whether conditions at the site could cause a hazardous atmosphere, such as an oxygen deficient or flammable atmosphere, to develop within the space.

- (5) "((Removal of)) Removing covers." When covers are removed from enclosed spaces, the opening shall be promptly guarded by a railing, temporary cover, or other barrier ((intended)) designed to prevent an accidental fall through the opening and to protect employees working in the space from objects entering the space.
- (6) "Hazardous atmosphere." Employees may not enter any enclosed space while it contains a hazardous atmosphere,

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unless the entry conforms to the ((generie)) permit-required confined spaces standard in chapter 296-809 WAC ((296-62-145 through 296-62-14543)).

Note: The term "entry" is defined in <u>chapter 296-809</u> WAC ((296-62-14501)).

(7) "Attendants." While work is being performed in the enclosed space, ((a person)) an attendant with first-aid training ((meeting WAC 296-45-125)) shall be immediately available outside the enclosed space to ((render emergency)) provide assistance if ((there is reason to believe that)) a hazard ((may)) exists ((in the space or if a hazard exists)) because of traffic patterns in the area of the opening used for entry. ((That person)) The attendant is not precluded from performing other duties outside the enclosed space if these duties do not distract the attendant from monitoring employees within the space or ensuring that it is safe for employees to enter and exit the space.

Note: See WAC 296-45-215(12) for additional requirements on attendants for work in manholes.

- (8) "Calibration of test instruments." Test instruments used to monitor atmospheres in enclosed spaces shall be kept in calibration((, with)) and shall have a minimum accuracy of + or 10 percent.
- (9) "Testing for oxygen deficiency." Before an employee enters an enclosed space, the ((internal)) atmosphere in the enclosed space shall be tested for oxygen deficiency with a direct-reading meter or similar instrument, capable of collection and immediate analysis of data samples without the need for off_site evaluation. If continuous forced air ventilation is provided, testing is not required provided that the procedures used ensure that employees are not exposed to the hazards posed by oxygen deficiency.
- (10) "Testing for flammable gases and vapors." Before an employee enters an enclosed space, the internal atmosphere shall be tested for flammable gases and vapors with a direct-reading meter or similar instrument capable of collection and immediate analysis of data samples without the need for off_site evaluation. This test shall be performed after the oxygen testing and ventilation required by subsection (9) of this section demonstrate that there is sufficient oxygen to ensure the accuracy of the test for flammability.
- (11) "Ventilation and monitoring for flammable gases or vapors." If flammable gases or vapors are detected or if an oxygen deficiency is found, forced air ventilation shall be used to maintain oxygen at a safe level and to prevent a hazardous concentration of flammable gases and vapors from accumulating. A continuous monitoring program to ensure that no increase in flammable gas or vapor concentration above safe levels occurs may be followed in lieu of ventilation((5)) if flammable gases or vapors are initially detected at safe levels.

Note: See the definition of hazardous atmosphere for guidance in determining whether ((or not a given)) a specific concentration of a substance is ((eonsidered to be)) hazardous.

(12) "Specific ventilation requirements." If continuous forced air ventilation is used, it shall begin before entry is made and shall be maintained long enough <u>for the employer</u> to ((ensure)) <u>be able to demonstrate</u> that a safe atmosphere exists before employees are allowed to enter the work area.

The forced air ventilation shall be so directed as to ventilate the immediate area where employees are present within the enclosed space and shall continue until all employees leave the enclosed space.

- (13) "Air supply." The air supply for the continuous forced air ventilation shall be from a clean source and may not increase the hazards in the enclosed space.
- (14) "Open flames." If open flames are used in enclosed spaces, a test for flammable gases and vapors shall be made immediately before the open flame device is used and at least once per hour while the device is used in the space. Testing shall be conducted more frequently if conditions present in the enclosed space indicate that once per hour is insufficient to detect hazardous accumulations of flammable gases or vapors.

Note:

See the definition of hazardous atmosphere for guidance in determining whether ((or not a given)) a specific concentration of a substance is ((eonsidered to be)) hazardous.

AMENDATORY SECTION (Amending WSR 99-09-080, filed 4/20/99, effective 8/1/99)

WAC 296-45-215 Underground electrical installations. This section provides additional requirements for work on underground electrical installations.

- (1) Protective barriers, or approved guards and warning signs must be erected before removing manhole covers or making excavations in places accessible to vehicular or pedestrian traffic.
- (2) Whenever an opening is made in the street, it shall be properly guarded or covered until same is closed and whenever an obstruction is left in the roadway after dark, it shall be marked with approved lights, flares or similar devices.
- (3) Access. A ladder or other climbing device shall be used to enter and exit a manhole or subsurface vault exceeding 4 feet (122 cm) in depth. No employee may climb into or out of a manhole or vault by stepping on cables or hangers.
- (4) When work is to be performed in a manhole or unvented vault:
- (a) No entry shall be permitted unless the atmosphere is found to be safe by testing for the presence of explosive or potentially hazardous gases or fumes.
- (b) No entry shall be permitted unless the atmosphere has been found safe by testing for oxygen deficiency or forced ventilation is provided.
- (c) When unsafe conditions are detected, by testing or other means, the work area shall be ventilated and otherwise made safe before entry.
- (d) Provisions shall be made for a continuous supply of air as provided for in Part L, chapter 296-62 WAC.
- (e) When forced ventilation is not used a method of monitoring said manhole or vault so as to prevent the occurrence of oxygen deficiency due to work being performed in said manhole or vault, and to detect the presence of any explosive gases or fumes which may occur while the employees are working in said manhole or vault.
- (5) When open flames are used or smoking is permitted in manholes, adequate mechanical forced air ventilation shall be used.

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- (6) Before using open flames in a manhole or excavation in an area where combustible gases or liquids may be present, such as near a gasoline service station, the atmosphere of the manhole or excavation shall be tested and found safe or cleared of the combustible gases or liquids prior to the entry.
- (7) When work is to be performed in manholes containing any wires or appliances carrying electrical current, they shall be in a sanitary condition.
- (8) Care shall be taken to prevent the possibility of vehicles or pedestrians coming in contact with the wires and equipment.
- (9) Lowering equipment into manholes. Equipment used to lower materials and tools into manholes or vaults shall be capable of supporting the weight to be lowered and shall be checked for defects before use. Before tools or materials are lowered into the opening for a manhole or vault, each employee working in the manhole or vault shall be clear of the area directly under the opening.
- (10) Materials shall not be thrown into or out of manholes but shall be placed in the proper receptacle and hoisted in and out by means of a rope.
- (11) Tools and materials shall not be left on the ground around or near the manhole opening where they might be pushed or otherwise fall into the hole.
 - (12) Attendants for manholes.
- (a) An attendant shall be kept at the surface when there is any hazard to the employees in the manhole and the attendant should not leave the manhole unwatched until such time as all employees are out and the cover has been replaced.
- (b) While work is being performed in a manhole containing energized electric equipment, an employee with first aid and CPR training meeting WAC 296-45-125(1) shall be available on the surface in the immediate vicinity to render emergency assistance.

((Note 1:)) <u>Notes:</u> • An attendant may also be required under WAC 296-45-205(7). One person may serve to fulfill both requirements. However, attendants required under WAC 296-45-205(7) are not permitted to enter the manhole.

((Note 2:))

- Employees entering manholes containing unguarded, uninsulated energized lines or parts of electric equipment operating at 50 volts or more are required to be qualified electrical employees under WAC ((296-45-325 (1) through (4))) 296-45-065.
- (c) No work shall be permitted to be done in any manhole or subway on any energized wire, cable or appliance carrying more than 300 volts of electricity by less than two qualified ((persons)) electrical employees who shall at all times, while performing such work, be in the same manhole or subway in which work is being done. This rule shall not apply to work on telephone, telegraph or signal wires or cables.
- (d) For the purpose of inspection, housekeeping, taking readings, or similar work, an employee working alone may enter, for brief periods of time, a manhole where energized cables or equipment are in service, if the employer can demonstrate that the employee will be protected from all electrical hazards
- (e) Reliable communications, through two-way radios or other equivalent means, shall be maintained among all employees involved in the job.

- (13) Cable in manholes or underground vaults shall be accessible to employees and a clear working space shall be maintained at all times; and/or approved protective guards, barriers, etc., when installed shall be considered as providing adequate working clearance for cables over 5 k.v. If a manhole and/or underground vault is determined to have an electrical or structural hazard, no work shall be done in the manhole and/or vault until the unsafe condition is corrected or deenergized.
- (14) No work shall be performed on cables or equipment unless they have been properly identified by an approved method.
- (15) Duct rods. If duct rods are used, they shall be installed in the direction presenting the least hazard to employees. An employee shall be stationed at the far end of the duct line being rodded to ensure that the required minimum approach distances are maintained.
- (16) Multiple cables. When multiple cables are present in a work area, the cable to be worked shall be identified by electrical means, unless its identity is obvious by reason of distinctive appearance or location or by other readily apparent means of identification. Cables other than the one being worked shall be protected from damage.
- (17) Before cutting into a high voltage cable or opening a high voltage splice, the cable shall be deenergized then clearance obtained, tested and then grounded in an approved manner. The cable to be worked on shall be identified by tags or equivalent means.
- (18) Moving cables. Energized cables that are to be moved shall be inspected for defects.
- (19) Insulated platforms or other protective devices shall be provided when work is to be done on energized wires or equipment in manholes.
- (20) Furnaces shall always be placed in a secure, level position on the downhill side of the manhole to avoid spillage of hot metals or compounds into the manhole.
- (21) Pulling underground cable. When pulling cable(s) all employees shall be made aware of the hazard of being caught in the sheaves, lashings or winch gears. All employees shall stand clear of the pulling line when the pull is begun or when the line is under tension. This rule applies to all work performed by means of a winch.
- (22) Fishing conduit or ducts. When fishing conduit or ducts, it shall first be determined that the fish tape or wires will not contact any energized line or equipment.
- (23) WAC 296-45-335 on clearances shall be complied with. Also WAC 296-45-345 and/or WAC 296-45-355 on grounding shall be complied with.
- (24) Defective cables. Where a cable in a manhole has one or more abnormalities that could lead to or be an indication of an impending fault, the defective cable shall be deenergized before any employee may work in the manhole, except when service load conditions and a lack of feasible alternatives require that the cable remain energized. In that case, employees may enter the manhole provided they are protected from the possible effects of a failure by shields or other devices that are capable of containing the adverse effects of a fault in the joint.

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Note:

Abnormalities such as oil or compound leaking from cables or joints, broken cable sheaths or joint sleeves, hot localized surface temperatures of cables or joints, or joints that are swollen beyond normal tolerance are presumed to lead to or be an indication of an impending fault.

(25) Sheath continuity. When work is performed on buried cable or on cable in manholes, metallic sheath continuity shall be maintained by bonding across the opening (or by equivalent means), or the cable sheath shall be treated as energized.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-225 Underground residential distribution (URD). (1) General.

- (a) Each employee shall be knowledgeable of the equipment provided for their use and shall at all times use this equipment only for the purpose intended.
- (b) U.R.D. cables which are properly insulated for the voltages to which they are energized shall be considered as an effective barrier to protect the employees and table ((one)) two need not apply.
- (i) Workers will take adequate precautions to avoid physical contact with energized U.R.D. cable by using approved procedures and/or protective devices.
- (ii) When handling energized U.R.D. primary cables, the work shall be done with approved tools and/or procedures by two qualified <u>electrical</u> employees. Switching is exempt from this rule.
- (iii) When energized terminators or load-break elbows are handled by a hot stick, there shall be two qualified <u>electrical</u> employees at the scene.
- (c) When energized pad-mounted transformers or similar equipment are to be left unlocked and open, they shall be attended by a ((qualified)) <u>designated</u> employee.
- (d) Approved tools and procedures shall be used to remove any debris, vines, weeds, etc., from an underground system.
- (e) A primary and secondary system neutral on any energized circuit shall not be opened under any circumstances except for testing.
- (f) Primary and secondary neutrals shall be firmly connected and grounded before the circuit or equipment is energized.
- (g) Where different phases are in the same vault, enclosures, or parked in some manner that they could be looped, these phases shall be marked or identified.
 - (h) Bayonet fuses:
- (i) Bayonet fuses shall not be closed into suspected faults or overloads.
- (ii) Submersible U.G. transformer installations will require other methods of energizing or deenergizing and bayonet fuses shall not be used for this purpose.
- (iii) Bayonet fuses shall only be operated after padmount transformers have been properly vented.
- (iv) Bayonet fuses shall only be operated in accordance with manufacturing design and rating capabilities.

- (2) Working on cables.
- (a) Before any work is to be performed on underground cables and apparatus carrying high voltage, they shall be deenergized with the following exceptions:
- (i) Replacing fuses, operating switches, closing or opening load-break elbows, when approved protective devices are used.
- (ii) Work in the high-voltage compartment of padmounted transformers and similar equipment installed above ground, provided the work is done by approved methods.
- (b) Only one energized conductor shall be worked on at any one time, and protective means shall be used to insulate or isolate it from all others.
- (c) When work is to be performed in manholes containing any wires or appliances carrying electrical current, they shall be in a sanitary condition.

AMENDATORY SECTION (Amending WSR 03-17-071, filed 8/19/03, effective 11/1/03)

WAC 296-45-255 Protective equipment. (1) Rubber protective equipment must be in accordance with and tested as follows:

Item	Standard
Rubber Insulating Gloves	(ASTM) D 120-2002
Rubber Matting for Use	(ASTM) D 178-2001
Around Electrical Apparatus	
Rubber Insulating Blankets	(ASTM) D 1048-1999
Rubber Insulating Hoods	(ASTM) D 1049-2002
Rubber Insulating Line Hose	(ASTM) D 1050-1999
Rubber Insulating Sleeves	(ASTM) D 1051-2002

- (2) No protective equipment or material other than rubber shall be used: Provided, That such other nonconductive equipment may be used if it provides equal or better (dielectric) electrical and mechanical protection than rubber protective equipment: Provided, That the employer obtain before placing in service, manufacturer's data or other data to demonstrate that such nonrubber protective equipment provided equal or better electrical and mechanical protection than approved rubber equipment.
- (3) Protective equipment shall not be used at voltages in excess of that for which the manufacturer has supplied data to the employer demonstrating that it is fit for such voltages.
- (4) No protective equipment shall be modified, altered, or used for purposes other than those for which it is designed unless and until the manufacturer has, in writing, agreed or suggested that there be such modification, alteration, or use.
- (5) Each rubber glove before it is used shall be inspected for defects and an approved air test performed. If, upon inspection, rubber gloves are either defective or appear to be defective, they shall not be used.
- (6) Before being placed in service, all rubber protective equipment shall be numbered and records kept for test purposes and assignment.
- (7) Rubber protective equipment shall not be used unless it has been dielectrically tested within six months and bears

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marking or identification of the date of the test or the expiration date.

(8) Protector gloves must be worn over insulating gloves.

Exception:

Protector gloves need not be used with Class 0 gloves, under limited-use conditions, where small equipment and parts manipulation necessitate unusually high finger dexterity.

Note:

Extra care is needed in the visual examination of the glove and in the avoidance of handling sharp objects.

- (9) Rubber gloves when not in use shall be carried in an approved bag provided and designed for that purpose. It shall be provided by the employer and made available to the employees.
- (10) Approved rubber gloves and carrying bag shall be assigned to each employee who works with, or is exposed to energized parts.
- (11) Rubber protective equipment shall not be vulcanized or patched.
- (12) A compartment or box shall be provided on each electric line truck, which box or compartment shall be used for storing rubber protective equipment. No equipment shall be stored in said compartment or box which can or could cause damage to the rubber equipment or goods placed in the compartment or box. Additionally, a separate container or compartment shall be provided for rubber blankets.
- (13) Line hose shall not be doubled on themselves at any time. All blankets before storage must be wiped clean and rolled, not folded, before being placed in the container or box.
- (14) Protective line equipment of material other than rubber shall be kept clean and visually inspected before each use
- (15) If protective line equipment of material other than rubber is found to be substantially defective or unsuitable for the purpose for which it is designed and intended, said protective line equipment shall not be used for personal protection of employees as may be required in Table ((+)) 2 of this chapter. Said protective line equipment shall be marked defective but may be otherwise used unless the defect or damage to said protective line equipment creates additional safety hazards.

AMENDATORY SECTION (Amending WSR 09-05-071, filed 2/17/09, effective 4/1/09)

WAC 296-45-25505 Personal protective equipment. (1) General. Personal protective equipment (PPE) shall meet the requirements of chapter 296-24 WAC, Part L and the PPE requirements in chapter 296-800 WAC. PPE required by these chapters or a hazard assessment will be provided by the employer at no cost to the employee.

- (2) All protective hats shall be in accordance with the specifications of ANSI ((Z89.2-1971 Edition Industrial Protective Helmets for Electrical Workers)) Z89.1-2014, American National Standard for Industrial Head Protection Type II, Class ((B)) E, and shall be worn at the job site by employees who are exposed to overhead or electrical hazards.
- (3) ((Wearing apparel.)) Goggles, hearing protection, respirators, rubber gloves, and other such personal protective

devices shall not be interchanged among employees unless they have been sanitized.

AMENDATORY SECTION (Amending WSR 13-04-073, filed 2/4/13, effective 4/1/13)

- WAC 296-45-25510 Fall protection. (1) Personal fall arrest ((equipment)) systems shall meet the requirements of chapter 296-155 WAC, Part C-1, Fall protection requirements for construction.
- (2) ((Specific requirements for lineman's belts, safety straps and lanyards.
- (a) All fabric used for safety straps must withstand an A.C. dielectric test of not less than 25,000 volts per foot "dry" for 3 minutes, without visible deterioration.
- (b) All fabric and leather used must be tested for leakage current and must not exceed 1 milliampere when a potention of 3,000 volts is applied to the electrodes positioned 12 inches apart.
- (e) Direct current tests may be permitted in lieu of alternating current tests.
 - (d) The cushion part of the body belt must:
 - (i) Contain no exposed rivets on the inside;
 - (ii) Be at least three (3) inches in width;
- (iii) Be at least five thirty-seconds (5/32) inch thick, if made of leather; and
- (iv) Have pocket tabs that extended at least 1 1/2 inches down and three (3) inches back of the inside of circle of each D ring for riveting on plier or tool pockets. On shifting D belts, this measurement for pocket tabs must be taken when the D ring section is centered.
- (e) A maximum of four (4) tool loops must be so situated on the body belt that four (4) inches of the body belt in the center of the back, measuring from D ring to D ring, must be free of tool loops, and any other attachments.
- (f) Suitable copper, steel, or equivalent liners must be used around bar of D rings to prevent wear between these members and the leather or fabric enclosing them.
- (g) All stitching must be of a minimum 42-pound weight nylon or equivalent thread and must be lock stitched. Stitching parallel to an edge must not be less than three-sixteenths (3/16) inch from edge of narrowest member caught by the thread. The use of cross stitching on leather is prohibited.
- (h) The keeper of snaphooks must have a spring tension that will not allow the keeper to begin to open with a weight of 2 1/2 pounds or less, but the keeper of snaphooks must begin to open with a weight of four (4) pounds, when the weight is supported on the keeper against the end of the nose.
- (i) Testing of lineman's safety straps, body belts and lanyards must be in accordance with the following procedure:
- (i) Attach one end of the safety strap or lanyard to a rigid support, the other end must be attached to a 250-pound canvas bag of sand;
- (ii) Allow the 250-pound canvas bag of sand to free fall 4 feet for (safety strap test) and 6 feet for (lanyard test); in each case stopping the fall of the 250-pound bag;
- (iii) Failure of the strap or lanyard must be indicated by any breakage, or slippage sufficient to permit the bag to fall free of the strap or lanyard. The entire "body belt assembly" must be tested using one D ring. A safety strap or lanyard

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must be used that is capable of passing the "impact loading test" and attached as required in (i)(i) of this subsection. The body belt must be secured to the 250 pound bag of sand at a point to simulate the waist of a man and allowed to drop as stated in (i)(ii) of this subsection. Failure of the body belt must be indicated by any breakage, or slippage sufficient to permit the bag to fall free of the body belt.

- (3) Body belts, safety straps, lanyards, lifelines, and body harnesses shall be inspected before use each day to determine that the equipment is in safe working condition. Defective equipment may not be used.
- (4) Employees shall not wear climbers while doing work where they are not required. Employees shall not continue to wear their climbers while working on the ground; except for momentary or short periods of time on the ground.
- (5) Employees, when working from a hook ladder, must either belt themselves securely to the ladder, attach themselves to the structures by means of a safety line, or belt themselves to ladder safety equipment, which shall consist of a safety rope or belting threaded through the rungs or secured to the ladder at intervals of not more than three feet.
- (6) Before an employee throws his/her weight on a belt, the employee shall determine that the snap or fasteners are properly engaged.
- (7) Safety straps shall not be placed around poles above the cross-arm except where it is not possible for the strap to slide or be slipped over the top of the pole by inadvertence of the employee. Neither end of the strap shall be allowed to hang loose or dangle while the employee is ascending or descending poles or other structures.
- (8) Body belts and safety straps shall not be stored with sharp-edged tools or near sharp objects. When a body belt, safety strap and climbers are kept in the same container, they shall be stored in such a manner as to avoid cutting or puneturing the material of the body belt or safety strap with the gaffs or climbers.
- (9) Employees shall not attach metal hooks or other metal devices to body belts. Leather straps or rawhide thongs shall have hardwood or fibre crossbars. Leather straps and rawhide thongs shall not have metal or other conductive crossbars on them.
- (10) Climbing gaffs shall be kept properly sharpened and shall be at least 1-1/8 inches in length.
- (11) Lifelines shall be protected against being cut or abraded.
- (12) Fall arrest equipment, work positioning equipment, or travel restricting equipment shall be used by employees working at elevated locations more than 4 feet (1.2 m) above the ground on poles, towers, or similar structures if other fall protection has not been provided. Fall protection equipment is not required to be used by a qualified employee elimbing or changing location on poles, towers, or similar structures, unless conditions, such as, but not limited to, ice, high winds, the design of the structure (for example, no provision for holding on with hands), or the presence of contaminants on the structure, could cause the employee to lose his or her grip or footing.

- Note 1: This subsection applies to structures that support overheadelectric power generation, transmission, and distribution linesand equipment. It does not apply to portions of buildings, suchas loading docks, to electric equipment, such as transformersand capacitors, nor to aerial lifts. Requirements for fall protection associated with walking and working surfaces are contained in chapter 296-155 WAC, Part C-1, Fall protectionrequirements for construction requirements for fall protectionassociated with aerial lifts are contained in chapter 296-869-WAC, Elevating work platforms.
- Note 2: Employees undergoing training are not considered "qualifiedemployees" for the purposes of this provision. Unqualifiedemployees (including trainees) are required to use fall protection any time they are more than 4 feet (1.2 m) above theground.
- (13) The following requirements apply to personal fall arrest systems:
- (a) When stopping or arresting a fall, personal fall arrest systems shall limit the maximum arresting force on an employee to 1800 pounds (8 kN) if used with a body harness.
- (b) Personal fall arrest systems shall be rigged such that an employee can neither free fall more than 6 feet (1.8 m) nor contact any lower level.
- (14) If vertical lifelines or droplines are used, not more than one employee may be attached to any one lifeline.
- (15) Snaphooks may not be connected to loops made in webbing-type lanyards.
- (16) Snaphooks may not be connected to each other.)) Personal fall arrest equipment used by employees who are exposed to hazards from flames or electric arcs, as determined by the employer under WAC 296-45-325(13), shall be capable of passing a drop test equivalent to that required by subsection (3)(1) of this section after exposure to an electric arc with a heat energy of 40±5 cal/cm².
- (3) Body belts and positioning straps for work-positioning equipment shall meet the following requirements:
- (a) Hardware for body belts and positioning straps shall meet the following requirements:
- (i) Hardware shall be made of drop-forged steel, pressed steel, formed steel, or equivalent material.
 - (ii) Hardware shall have a corrosion-resistant finish.
- (iii) Hardware surfaces shall be smooth and free of sharp edges.
- (b) Buckles shall be capable of withstanding an 8.9 kilonewton (2,000 pound-force) tension test with a maximum permanent deformation no greater than 0.4 millimeters (0.0156 inches).
- (c) D-rings shall be capable of withstanding a 22 kilonewton (5,000 pound-force) tensile test without cracking or breaking.
- (d) Snaphooks shall be capable of withstanding a 22 kilonewton (5,000 pound-force) tension test without failure.
- Note: Distortion of the snaphook sufficient to release the keeper is considered to be tensile failure of a snaphook.
- (e) Top grain leather or leather substitute may be used in the manufacture of body belts and positioning straps; however, leather and leather substitutes may not be used alone as a load-bearing component of the assembly.
- (f) Plied fabric used in positioning straps and in loadbearing parts of body belts shall be constructed in such a way that no raw edges are exposed and the plies do not separate.

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- (g) Positioning straps shall be capable of withstanding the following tests:
- (i) A dielectric test of 819.7 volts, AC, per centimeter (25,000 volts per foot) for three minutes without visible deterioration;
- (ii) A leakage test of 98.4 volts, AC, per centimeter (3,000 volts per foot) with a leakage current of no more than 1 mA;

Note: Positioning straps that pass direct-current tests at equivalent voltages are considered as meeting this requirement.

- (iii) Tension tests of 20 kilonewtons (4,500 poundsforce) for sections free of buckle holes and of 15 kilonewtons (3,500 pounds-force) for sections with buckle holes:
- (iv) A buckle-tear test with a load of 4.4 kilonewtons (1,000 pounds-force); and
 - (v) A flammability test in accordance with Table 1.

Table 1 - Flammability Test

Test Method	Criteria for Passing the Test
Vertically suspend a 500 mm (19.7 inch) length of strapping supporting a 100 kg (220.5 lb) weight.	Any flames on the positioning strap shall self extinguish. The positioning strap shall
Use a butane or propane burner with a 76 mm (3 inch) flame.	continue to support the 100 kg (220.5 lb) mass.
Direct the flame to an edge of the strapping at a distance of 25 mm (1 inch).	
Remove the flame after 5 seconds.	
Wait for any flames on the positioning strap to stop burning.	

- (h) The cushion part of the body belt shall contain no exposed rivets on the inside and shall be at least 76 millimeters (3 inches) in width.
- (i) Tool loops shall be situated on the body of a body belt so that the 100 millimeters (4 inches) of the body belt that is in the center of the back, measuring from D-ring to D-ring, is free of tool loops and any other attachments.
- (j) Copper, steel, or equivalent liners shall be used around the bars of D-rings to prevent wear between these members and the leather or fabric enclosing them.
- (k) Snaphooks shall be of the locking type meeting the following requirements:
- (i) The locking mechanism shall first be released, or a destructive force shall be placed on the keeper, before the keeper will open.
- (ii) A force in the range of 6.7 N (1.5 lbf) to 17.8 N (4 lbf) shall be required to release the locking mechanism.
- (iii) With the locking mechanism released and with a force applied on the keeper against the face of the nose, the keeper may not begin to open with a force of 11.2 N (2.5 lbf)

- or less and shall begin to open with a maximum force of 17.8 N (4 lbf).
- (l) Body belts and positioning straps shall be capable of withstanding a drop test as follows:
- (i) The test mass shall be rigidly constructed of steel or equivalent material with a mass of 100 kg (220.5 lbm). For work-positioning equipment used by employees weighing more than 140 kg (310 lbm) fully equipped, the test mass shall be increased proportionately (that is, the test mass must equal the mass of the equipped worker divided by 1.4).
- (ii) For body belts, the body belt shall be fitted snugly around the test mass and shall be attached to the test-structure anchorage point by means of a wire rope.
- (iii) For positioning straps, the strap shall be adjusted to its shortest length possible to accommodate the test and connected to the test-structure anchorage point at one end and to the test mass on the other end.
- (iv) The test mass shall be dropped an unobstructed distance of 1 meter (39.4 inches) from a supporting structure that will sustain minimal deflection during the test.
- (v) Body belts shall successfully arrest the fall of the test mass and shall be capable of supporting the mass after the test.
- (vi) Positioning straps shall successfully arrest the fall of the test mass without breaking, and the arrest force may not exceed 17.8 kilonewtons (4,000 pounds-force). Additionally, snaphooks on positioning straps may not distort to such an extent that the keeper would release.

Note:

When used by employees weighing no more than 140 kg (310 lbm) fully equipped, body belts and positioning straps that conform to American Society of Testing and Materials *Standard Specifications for Personal Climbing Equipment*, ASTM F887-12^{e1}, are deemed to be in compliance with (1) of this sub-

section.

- (4) The following requirements apply to the care and use of personal fall protection equipment.
- (a) Work-positioning equipment shall be inspected before use each day to determine that the equipment is in safe working condition. Work-positioning equipment that is not in safe working condition may not be used.

Note: Work-Positioning Equipment Inspection Guidelines are located in Appendix E of this chapter.

(b) Personal fall arrest systems shall be used in accordance with chapter 296-155 WAC, Part C-1.

Note:

Fall protection equipment rigged to arrest falls is considered a fall arrest system and must meet the applicable requirements for the design and use of those systems. Fall protection equipment rigged for work positioning is considered work-positioning equipment and must meet the applicable requirements for the design and use of that equipment.

- (c) The employer shall ensure that employees use fall protection systems as follows:
- (i) Each employee working from an aerial lift shall use a fall restraint system or a personal fall arrest system.
- (ii) Except as provided in (c)(iii) of this subsection, each employee in elevated locations more than 1.2 meters (4 feet) above the ground on poles, towers, or similar structures shall use a personal fall arrest system, work-positioning equipment, or fall restraint system, as appropriate, if the employer

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has not provided other fall protection meeting chapter 296-155 WAC, Part C-1.

(iii) Each qualified electrical employee climbing or changing location on poles, towers, or similar structures must use fall protection equipment unless the employer can demonstrate that climbing or changing location with fall protection is infeasible or creates a greater hazard than climbing or changing location without it.

Notes:

- These subsections apply to structures that support overhead electric power transmission and distribution lines and equipment. They do not apply to portions of buildings, such as loading docks, or to electric equipment, such as transformers and capacitors. Chapter 296-155 WAC, Part C-1 contains the duty to provide fall protection associated with walking and working surfaces.
- Until the employer ensures that employees are proficient in climbing and the use of fall protection under WAC 296-45-065(8), the employees are not considered "qualified electrical employees" for the purposes of (c)(ii) and (iii) of this subsection. These subsections require unqualified employees (including trainees) to use fall protection any time they are more than 1.2 meters (4 feet) above the ground.
- (d) Work-positioning systems shall be rigged so that an employee can free fall no more than 0.6 meters (2 feet).
- (e) Anchorages for work-positioning equipment shall be capable of supporting at least twice the potential impact load of an employee's fall, or 13.3 kilonewtons (3,000 poundsforce), whichever is greater.

Note:

Wood-pole fall-restriction devices meeting American Society of Testing and Materials *Standard Specifications for Personal Climbing Equipment*, ASTM F887-12^{e1}, are deemed to meet the anchorage-strength requirement when they are used in accordance with manufacturers' instructions.

- (f) Unless the snaphook is a locking type and designed specifically for the following connections, snaphooks on work-positioning equipment may not be engaged:
 - (i) Directly to webbing, rope, or wire rope;
 - (ii) To each other;
- (iii) To a D-ring to which another snaphook or other connector is attached;
 - (iv) To a horizontal lifeline; or
- (v) To any object that is incompatibly shaped or dimensioned in relation to the snaphook such that accidental disengagement could occur should the connected object sufficiently depress the snaphook keeper to allow release of the object.
- (5) Employees shall not wear climbers while doing work where they are not required. Employees shall not continue to wear their climbers while working on the ground; except for momentary or short periods of time on the ground.
- (6) Employees, when working from a hook ladder, must either belt themselves securely to the ladder, attach themselves to the structures by means of a safety line, or belt themselves to ladder safety equipment, which shall consist of a safety rope or belting threaded through the rungs or secured to the ladder at intervals of not more than three feet.
- (7) Before an employee throws their weight on a belt, the employee shall determine that the snap or fasteners are properly engaged.
- (8) Safety straps shall not be placed around poles above the cross-arm except where it is not possible for the strap to

- slide or be slipped over the top of the pole by inadvertence of the employee. Neither end of the strap shall be allowed to hang loose or dangle while the employee is ascending or descending poles or other structures.
- (9) Body belts and safety straps shall not be stored with sharp-edged tools or near sharp objects. When a body belt, safety strap and climbers are kept in the same container, they shall be stored in such a manner as to avoid cutting or puncturing the material of the body belt or safety strap with the gaffs or climbers.
- (10) Employees shall not attach metal hooks or other metal devices to body belts. Leather straps or rawhide thongs shall have hardwood or fibre crossbars. Leather straps and rawhide thongs shall not have metal or other conductive crossbars on them.
- (11) Climbing gaffs shall be kept properly sharpened and shall be at least 1-1/8 inches in length.
- (12) Lifelines shall be protected against being cut or abraded.
- (13) Fall arrest equipment, work positioning equipment, or travel restricting equipment shall be used by employees working at elevated locations more than 4 feet (1.2 m) above the ground on poles, towers, or similar structures if other fall protection has not been provided.

AMENDATORY SECTION (Amending WSR 01-11-038, filed 5/9/01, effective 9/1/01)

- WAC 296-45-275 Ladders, platforms, and manhole steps. (1) General. Requirements for ladders contained in chapter ((296-24)) 296-876 WAC((, Part J-1, and WAC 296-800-290)) apply, except as specifically noted in subsection (2) of this section.
- (2) Special ladders and platforms. Portable ladders and platforms used on structures or conductors in conjunction with overhead line work need not meet chapter ((296-24)) 296-876 WAC((, Part J-1, chapter 296-155 WAC, Part J-or WAC 296-800-290)). However, these ladders and platforms shall meet the following requirements:
- (a) Ladders and platforms shall be secured to prevent their becoming accidentally dislodged.
- (b) Ladders and platforms may not be loaded in excess of the working loads for which they are designed.
- (c) Ladders and platforms may be used only in applications for which they were designed.
- (d) In the configurations in which they are used, ladders and platforms shall be capable of supporting without failure at least 2.5 times the maximum intended load.
- (e) All ladders shall be handled and stored in such a manner as to prevent damage to the ladder.
- (f) When ascending or descending a ladder, the employee shall face the ladder and have free use of both hands.
- (g) All defective ladders shall be taken out of service and labeled as defective.
- (h) When a ladder is being used which is not fixed or otherwise secured, there shall be an attendant to hold the ladder and watch traffic when the work is being done on streets, alleys, sidewalks, or in industrial plants or other places where

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there exists the possibility of accidental contact with the ladder by third persons or vehicles.

- (i) When working on the ladder, employees shall, where possible, tie the top of the ladder to a substantial object to prevent falling unless the ladder is equipped with approved hooks which may be used for the same purpose.
- (j) Portable ladders shall not be moved with employees on the ladder.
- (k) No employee shall ascend or descend a rolling ladder while it is moving.
- (l) No employee shall stand on the top two steps of a step ladder.
- (m) No employee shall use a step ladder as a straight ladder.
- (n) Ladders shall always be placed on a secure footing with both legs resting firmly on the lower surface.
- (o) Ladders made by fastening cleats or similar devices across a single rail shall not be used.
- (3) Conductive ladders. Portable metal ladders and other portable conductive ladders may not be used near exposed energized lines or equipment. However, in specialized high-voltage work, conductive ladders shall be used where the employer can demonstrate that nonconductive ladders would present a greater hazard than conductive ladders.

Note: A greater electrical hazard would be static electricity such as might be found in extra high voltage substations.

(4) All conductive or metal ladders shall be prominently marked and identified as being conductive and shall be grounded when used near energized lines or equipment.

Note: See chapter ((296-24)) <u>296-876</u> WAC for additional ladder requirements.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-295 Gasoline engine power chain saws.

- (1) Each chain saw placed into initial service after February 9, 1995, shall be equipped with a chain brake and shall otherwise meet the requirements of the ANSI ((B175.1-1991)) B175.1-2012 "Safety Requirements for Gasoline-Powered Chain Saws." Each chain saw placed into service before February 9, 1995, shall be equipped with a protective device that minimizes chain saw kickback, i.e., reduced kickback bar, chains, bar tip guard or chain brake. No chain-saw kickback device shall be removed or otherwise disabled.
- (2) Gasoline-engine power saw operations shall meet the requirements of WAC ((296-54-515)) 296-54-537(10).
- (3) The chain saw shall be operated and adjusted in accordance with the manufacturer's instructions.
- (4) The employer must ensure that each chain saw, including any chain saw provided by an employee, is inspected before initial use during each workshift. At a minimum, the inspection shall include the following:
 - (a) Chain-saw chains, to assure proper adjustment;
- (b) Chain-saw mufflers, to assure that they are operational and in place;
- (c) Chain brakes and nose shielding devices, to assure that they are in place and function properly;
- (5) The chain saw shall be fueled at least 10 feet (3 m) from any open flame or other source of ignition.

- (6) The chain saw shall be started at least 10 feet (3 m) from the fueling area.
- (7) The chain saw shall be started on the ground or where otherwise firmly supported. Drop-starting a chain saw is prohibited
- (8) The chain saw shall be started with the chain brake engaged.
- (9) The chain saw shall be held with the thumbs and fingers of both hands encircling the handles during operation unless the employer demonstrates that a greater hazard is posed by keeping both hands on the chain saw in that particular situation.
- (10) The chain-saw operator shall be certain of footing before starting to cut. The chain saw shall not be used in a position or at a distance that could cause the operator to become off-balance, to have insecure footing, or to relinquish a firm grip on the saw.
- (11) Prior to felling any tree, the chain saw operator shall clear away brush or other potential obstacles which might interfere with cutting the tree or using the retreat path.
- (12) The chain saw shall not be used to cut directly overhead.
- (13) The chain saw shall be carried in a manner that will prevent operator contact with the cutting chain and muffler.
- (14) The chain saw shall be shut off or at idle before the feller starts their retreat.
- (15) The chain saw shall be shut down or the chain brake shall be engaged whenever a saw is carried further than 50 feet (15.2 m). The chain saw shall be shut down or the chain brake shall be engaged when a saw is carried less than 50 feet if conditions such as, but not limited to, the terrain, underbrush and slippery surfaces, may create a hazard for an employee.

Note:

When an employee working aloft in trees or on poles when supported by climbing spurs and climbing belt, or when an employee is working from a vehicle mounted elevating and rotating work platform meeting the requirements of chapter 296-869 WAC, Elevating work platforms, leg protection covering the full length of the thigh to the top of the boot on each leg to protect against contact with a moving chain saw is not required.

- (16) Each power saw weighing more than 15 pounds (6.8 kilograms, service weight) that is used in trees shall be supported by a separate line, except when work is performed from an aerial lift and except during topping or removing operations where no supporting limb will be available, and the following:
- (a) Each power saw shall be equipped with a control that will return the saw to idling speed when released;
- (b) Each power saw shall be equipped with a clutch and shall be so adjusted that the clutch will not engage the chain drive at idling speed;
- (c) Drop starting of saws over 15 pounds (6.8 kg) is permitted outside of the bucket of an aerial lift only if the area below the lift is clear of personnel;
- (d) A power saw engine may be started and operated only when all employees other than the operator are clear of the saw;
- (e) A power saw may not be running when the saw is being carried up into a tree by an employee; and

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(f) Power saw engines shall be stopped for all cleaning, refueling, adjustments, and repairs to the saw or motor, except as the manufacturer's servicing procedures require otherwise.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

- WAC 296-45-305 Live-line tools. (1) Design of tools. Live-line tool rods, tubes, and poles shall be designed and constructed to withstand the following minimum tests:
- (a) 100,000 volts per foot (3281 volts per centimeter) of length for 5 minutes if the tool is made of fiberglass-reinforced plastic (FRP); or
- (b) 75,000 volts per foot (2461 volts per centimeter) of length for 3 minutes if the tool is made of wood; or
- (c) Other tests that the employer can demonstrate are equivalent.

Note:

Live-line tools using rod and tube that meet ASTM ((F711-89)) F711-02 (2013), Standard Specification for Fiberglass-Reinforced Plastic (FRP) Rod and Tube Used in Live-Line Tools, conform to subsection (1)(a) of this section.

- (2) Condition of tools.
- (a) Each live-line tool shall be wiped clean and visually inspected for defects before use each day.
- (b) If any defect or contamination that could adversely affect the insulating qualities or mechanical integrity of the live-line tool is present after wiping, the tool shall be removed from service and examined and tested according to this section before being returned to service.
- (c) Live-line tools used for primary employee protection shall be removed from service every two years and whenever required under this ((subsection)) section for examination, cleaning, repair, and testing as follows:
 - (i) Each tool shall be thoroughly examined for defects.
- (ii) If a defect or contamination that could adversely affect the insulating qualities or mechanical integrity of the live-line tool is found, the tool shall be repaired and refinished or shall be permanently removed from service. If no such defect or contamination is found, the tool shall be cleaned and waxed.
- (iii) The tool shall be tested in accordance with this section under the following conditions:
 - (A) After the tool has been repaired or refinished; and
- (B) After the examination if repair or refinishing is not performed, unless the tool is made of FRP rod or foam-filled FRP tube and the employer can demonstrate that the tool has no defects that could cause it to fail in use.
- (iv) The test method used shall be designed to verify the tool's integrity along its entire working length and, if the tool is made of fiberglass-reinforced plastic, its integrity under wet conditions.
- (v) The voltage applied during the tests shall be as follows:
- (A) 75,000 volts per foot (2461 volts per centimeter) of length for one minute if the tool is made of fiberglass; or
- (B) 50,000 volts per foot (1640 volts per centimeter) of length for one minute if the tool is made of wood; or
- (C) Other tests that the employer can demonstrate are equivalent.

Note:

Guidelines for the examination, cleaning, repairing, and in-service testing of live-line tools are contained in the Institute of Electrical and Electronics Engineers Guide for In-Service Maintenance and Electrical Testing of Live-Line Tools, IEEE Std. ((978-1984)) 516-2009.

(d) Live-line tools and rope shall be stored and maintained and used in such a manner as to prevent damage. Live-line tools and ropes shall not be used for purposes other than line work.

AMENDATORY SECTION (Amending WSR 05-17-038, filed 8/9/05, effective 10/1/05)

WAC 296-45-315 Materials handling and storage. (1) General. Material handling and storage shall conform to the requirements of chapter 296-24 WAC, Part D.

- (2) Materials storage near energized lines or equipment. In areas not restricted to qualified ((persons)) electrical employees only, materials or equipment may not be stored closer to energized lines or exposed energized parts of equipment than the following distances plus an amount providing for the maximum sag and side swing of all conductors and providing for the height and movement of material handling equipment:
- (a) For lines and equipment energized at 50 kV or less, the distance is 10 feet (305 cm).
- (b) For lines and equipment energized at more than 50 kV, the distance is 10 feet (305 cm) plus 4 inches (10 cm) for every 10 kV over 50 kV.
- (c) In areas restricted to qualified <u>electrical</u> employees, material may not be stored within the working space about energized lines or equipment.

Note: Requirements for the size of the working space are contained in WAC 296-45-475(1) and 296-45-48515.

- (3) Prior to unloading steel, poles, crossarms and similar materials, the load shall be thoroughly examined to determine if the load has shifted, binders or stakes have broken or the load is otherwise hazardous to employees. The hoist rope shall not be wrapped around the load. This provision shall not apply to electric construction crews when setting or removing poles.
 - (4) Pole handling.
- (a) During pole hauling operations, all loads shall be secured to prevent displacement, and a red flag shall be displayed at the trailing end of the longest pole.
- (b) While loading and unloading materials, roadways shall not be blocked unless approved traffic control is used.
- (c) When hauling poles during darkness, illuminated warning devices shall be attached to the trailing end of the longest pole in accordance with the state of Washington motor vehicle code.
- (d) Framing. During framing operations, employees must not work under a pole or a structure suspended by a crane, A-frame or similar equipment unless the pole or structure is adequately supported.
- (5) Tag lines. When necessary to control loads, tag lines or other approved devices shall be used.
- (6) Oil filled equipment. During construction or repair of oil filled equipment, the oil may be stored in temporary con-

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tainers other than those required by WAC 296-155-270, such as pillow tanks.

(7) Storage of tools and materials. All tools and materials shall be stored in a safe and orderly manner in yards for equipment and other areas.

AMENDATORY SECTION (Amending WSR 05-17-038, filed 8/9/05, effective 10/1/05)

- WAC 296-45-325 Working on or near exposed energized parts. This section applies to work on exposed live parts, or near enough to them, to expose the employee to any hazard they present.
- (1) General. Only qualified <u>electrical</u> employees may work on or with exposed energized lines or parts of equipment. Only qualified <u>electrical</u> employees may work in areas containing unguarded, uninsulated energized lines or parts of equipment operating at 50 volts or more. Electric lines and equipment shall be considered and treated as energized unless the provisions of WAC 296-45-175 through 296-45-17565 or 296-45-335 have been followed.
- (2) Except as provided in subsection (3) of this section, at least two qualified <u>electrical</u> employees shall be present while the following types of work are being performed:
- (a) Installation, removal, or repair of lines that are energized at more than 600 volts;
- (b) Installation, removal, or repair of deenergized lines if an employee is exposed to contact with other parts energized at more than 600 volts;
- (c) Installation, removal, or repair of equipment, such as transformers, capacitors, and regulators, if an employee is exposed to contact with parts energized at more than 600 volts;
- (d) Work involving the use of mechanical equipment, other than insulated aerial lifts, near parts energized at more than 600 volts; and
- (e) Other work that exposes an employee to electrical hazards greater than or equal to those posed by operations that are specifically listed in subsection (2)(a) through (d) of this section.

((Note 1:))
Notes:

• One <u>qualified electrical</u> employee will serve principally as a standby person who must be so located that they may physically reach the other <u>qualified electrical</u> employee in the event of an accident either with their hand or with a hot stick twelve feet or less in length. The standby <u>person</u> will be so positioned as to be able to observe the other employee, their bodily movements, and verbally warn of any impending dangers. In no case when working in pairs will <u>qualified electrical</u> employees work simultaneously on energized wires or parts of different phases or polarity;

((Note 2:))

• When installing or removing a hot line clamp connection on a multiphase system, it is permissible for the second <u>qualified</u> <u>electrical</u> employee to stand by at the lower controls of the aerial lift provided the connection or disconnection does not interrupt or pick up <u>the</u> load. The hot line clamp and connecting jumper must be constructed so it cannot make contact with any other energized parts. The work must not be performed above lines or apparatus energized at more than 600 V.

- ((Note 3:))

 In cases of necessity the standby person may temporarily assist the other qualified electrical employee provided that they both work on wires or parts of the same phase or polarity. Both qualified electrical employees shall so position themselves so that the presence of the second person does not increase the hazard.
- (3) The provisions of WAC 296-45-325(2) do not apply to (a) through (e) of this subsection. In addition to the requirements of subsection (4) of this section, a qualified <u>electrical</u> employee working under this subsection (3), must position themselves so that ((he/she is)) they are neither within reach of nor otherwise exposed to contact with energized parts.
 - (a) When re-fusing circuits or equipment with a hot stick.
- (b) When operating switches by means of operating handle or switch sticks.
- (c) When installing or removing a hot line clamp connection with an approved hot stick on a single-phase line or apparatus, providing that the connection or disconnection does not interrupt or pick up a load.

((Note 1:)) • The hot line clamp and connecting jumper must be con-Structed so that it cannot make contact with any other energized parts.

((Note 2:)) • On a multiphase feed this applies only when one single-phase line or apparatus is present on the load side.

- (d) When installing or removing by hot stick simple load metering devices provided the connection does not interrupt or pickup load.
- (e) Emergency repairs to the extent necessary to safeguard the general public.
- (4) "Minimum approach distances." The employer shall ensure that no employee approaches or takes any conductive object closer to exposed energized parts than set forth in Table ((1 through Table 4)) 2, unless:
- (a) The employee is insulated from the energized part (insulating gloves or insulating gloves and sleeves worn in accordance with subsection (6) of this section are considered insulation of the employee only with regard to the energized part upon which work is being performed); or
- (b) The energized part is insulated from the employee and from any other conductive object at a different potential.

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<u>Table 2</u> AC Live Work Minimum Approach Distance

	Distance to Employee					
Voltage in Kilovolts Phase to Phase*	<u>Ph</u>	ase to Grou	<u>ınd</u>	Phase to Phase		
	(m) (ft-1/10) (ft-in)			<u>(m)</u>	(ft-1/10)	(ft-in)
Table 2-A For Voltages of 72.5 KV and Less (12.3.4)						
<u>0</u> <u>to 0.050</u>		not specifie	<u>d</u>	not specified		
<u>0.051</u> <u>to 0.300</u>	avoid contact			avoid contact		
<u>0.301</u> to <u>0.750</u>	0.33	1.09	(1'-2")	0.33	<u>1.09</u>	(1'-2")
<u>0.751</u> <u>to 5</u>	0.63	<u>2.07</u>	(2'-1")	0.63	<u>2.07</u>	(2'-1")
<u>5.1</u> <u>to 15.0</u>	0.65	<u>2.14</u>	(2'-2")	0.68	<u>2.24</u>	(2'-3")
<u>15.1</u> <u>to 36</u>	0.77	<u>2.53</u>	(2'-7")	<u>0.89</u>	<u>2.92</u>	(3'-0")
<u>36.1</u> <u>to 46.0</u>	<u>0.84</u>	<u>2.76</u>	(2'-10")	0.98	<u>3.22</u>	(3'-3")
<u>46.1</u> <u>to 72.5</u>	1.00**	3.29**	(3'-3")	<u>1.20</u>	<u>3.94</u>	(4'-0")

Employers may use the minimum approach distances in this table provided the worksite is at an elevation of 900 meters (3,000 feet) or less. If employees will be working at elevations greater than 900 meters (3,000 feet) above mean sea level, the employer shall determine minimum approach distances by multiplying the distances in this table by the correction factor in Table 3 below. A corresponding to the altitude of the work.

⁴The 46.1 to 72.5 kV phase-to-ground 3-3 distance contains a 1-3 electrical component and a 2-0 inadvertent movement component.

Table 2-B For Voltages of 72.6 KV (1.2.3)						
<u>72.6</u> <u>to 121</u>	1.13**	3.71**	(3'-9")	<u>1.42</u>	<u>4.66</u>	(4'-8")
<u>121.1</u> <u>to 145.0</u>	<u>1.30</u>	<u>4.27</u>	<u>(4'-4")</u>	<u>1.64</u>	<u>5.38</u>	<u>(5'-5")</u>
<u>145.1</u> <u>to 169.0</u>	<u>1.46</u>	<u>4.79</u>	<u>(4'-10")</u>	<u>1.94</u>	<u>6.36</u>	<u>(6'-5")</u>
<u>169.1</u> to 242.0	<u>2.01</u>	<u>6.59</u>	(6'-8")	3.08	<u>10.10</u>	(10'-2")
<u>242.1</u> <u>to 362.0</u>	<u>3.41</u>	<u>11.19</u>	(11'-3")	<u>5.52</u>	<u>18.11</u>	(18'-2")
<u>362.1</u> <u>to 420.0</u>	<u>4.25</u>	<u>13.94</u>	<u>(14'-0")</u>	<u>6.81</u>	22.34	(22'-5")
<u>420.1</u> <u>to 550.0</u>	<u>5.07</u>	<u>16.63</u>	(16'-8")	<u>8.24</u>	<u>27.03</u>	(27'-1")
<u>550.1</u> <u>to 800.0</u>	6.88	<u>22.57</u>	(22'-7")	11.38	<u>37.34</u>	(37'-5")

Employers may use the minimum approach distances in this table provided the worksite is at an elevation of 900 meters (3,000 feet) or less. If employees will be working at elevations greater than 900 meters (3,000 feet) above mean sea level, the employer shall determine minimum approach distances by multiplying the distances in this table by the correction factor in Table 3 below. A corresponding to the altitude of the work.

²Employers may use the phase-to-phase minimum approach distances in this table provided that no insulated tool spans the gap and no large conductive object is in the gap.

²The 72.6 to 121 kV phase-to-ground 3-2 distance contains a 2-2 electrical component and a 1-0 inadvertent movement component.

Note: The clear live-line tool distance shall equal or exceed the values for the indicated voltage ranges.

Table 3 - Altitude Correction Facto	ors	1,201 to 1,500	1.05
Altitude above sea		1,501 to 1,800	1.08
<u>level (m)</u>		1,801 to 2,100	<u>1.11</u>
0000	<u>A</u>	2,101 to 2,400	<u>1.14</u>
0 to 900	<u>1.00</u>	2,401 to 2,700	<u>1.17</u>
901 to 1,200	<u>1.02</u>	2,701 to 3,000	1.20

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²For single-phase systems, use voltage-to-ground.

²For single-phase lines off three phase systems, use the phase-to-phase voltage of the system.

3,001 to 3,600		<u>1.25</u>
3,601 to 4,200	<u></u>	<u>1.30</u>
4,201 to 4,800		<u>1.35</u>
4,801 to 5,400		1.39
5,401 to 6,000		<u>1.44</u>

- ((Note 1:))

 WAC 296-45-475 (5)(a) and 296-45-48525(1) contain

 requirements for the guarding and isolation of live parts. Parts

 of electric circuits that meet these two provisions are not considered as "exposed" unless a guard is removed or an employee

 enters the space intended to provide isolation from the live
- ((Note 2:)) When an employee is required to work on or within reach of any unprotected conductors that are or may become energized at more than 50 volts and less than 600 volts between phases, they shall take the following precautions:
- ((4÷)) __ They shall wear approved insulating gloves or insulating gloves and sleeves during the time they are working on such conductor((5)); or
- ((2÷)) <u>-</u> They shall cover, with approved devices, any adjacent unprotected conductor that could be touched by any part of their body, and use insulated tools.
- ((3÷)) __Cables which are properly insulated for the voltages to which they are energized, shall be considered as an effective barrier to protect the employees and Table ((+)) 2 need not apply.
 Appendix A of this chapter contains additional information relating to working on exposed energized parts.
 - (5) Initial determination.
- (a) Before any work is performed, the location of energized lines and their condition, the location and condition of energized equipment, the condition of the poles, the location of circuits and equipment including power communication lines, CATV and fire alarm circuits, shall be determined as shall any other particular hazard of a particular work site.
- (b) No work shall be performed on energized lines or parts until the voltage of such equipment and lines is determined.
- (6) Type of insulation. If the employee is to be insulated from energized parts by the use of insulating gloves (under subsection (4) of this section), insulating sleeves shall also be used. However, insulating sleeves need not be used under the following conditions:
- (a) If exposed energized parts on which work is not being performed are insulated from the employee; and
- (b) If such insulation is placed from a position not exposing the employee's upper arm to contact with other energized parts.
- (7) Working position. The employer shall ensure that each employee, to the extent that other safety-related conditions at the worksite permit, works in a position from which a slip or shock will not bring the employee's body into contact with exposed, uninsulated parts energized at a potential different from the employee.
- (8) Making connections. The employer shall ensure that connections are made as follows:
- (a) In connecting deenergized equipment or lines to an energized circuit by means of a conducting wire or device, an employee shall first attach the wire to the deenergized part;

- (b) When disconnecting equipment or lines from an energized circuit by means of a conducting wire or device, an employee shall remove the source end first; and
- (c) When lines or equipment are connected to or disconnected from energized circuits, loose conductors shall be kept away from exposed energized parts.
- (9) Rubber gloves can only be used on 5,000 volts or less between phases.
- (10) It shall not be permissible to consider one part of a high voltage switch or disconnect as deenergized for the purpose of doing work on it if the remainder of the switch or disconnect remains energized unless approved barriers are erected which will prevent employees who are doing the work on such equipment from coming in direct contact with the energized parts.
- (11) Conductor support tools such as link sticks, strain carriers, and insulator cradles may be used: Provided, That the clear insulation is at least as long as the insulator string or the minimum distance specified in Table (($\frac{1}{2}$)) $\frac{2}{2}$ for the operating voltage.
 - (12) Apparel.
- (a) When work is performed within reaching distance of exposed energized parts of equipment, the employer shall ensure that each employee removes or renders nonconductive all exposed conductive articles, such as key or watch chains, rings, or wrist watches or bands, unless such articles do not increase the hazards associated with contact with the energized parts.
- (b) ((The employer shall train each employee who is exposed to the hazards of flames or electric arcs in the hazards involved.
- (c) The employer shall ensure that each employee who is exposed to the hazards of flames or electric arcs does not wear clothing that, when exposed to flames or electric arcs, eould increase the extent of injury that would be sustained by the employee.

Note: Clothing made from the following types of fabrics, either alone or in blends, is prohibited by this subsection, unless the employer can demonstrate that the fabric has been treated to withstand the conditions that may be encountered or that the clothing is worn in such a manner as to eliminate the hazard involved: Acetate, nylon, polyester, rayon.

- (d))) Workers shall wear clothing appropriate to the season and the kind of work being performed. Shirts or jumpers must have full length sleeves that are rolled down. Protective hard hats and eye protection shall be worn when working on or near live parts or while climbing poles.
 - (13) Protection from flames and electric arcs.
- (a) The employer shall assess the workplace to identify employees exposed to hazards from flames or from electric arcs.
- (b) For each employee exposed to hazards from electric arcs, the employer shall make a reasonable estimate of the incident heat energy to which the employee would be exposed.

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Notes:

- Appendix D of this chapter provides guidance on estimating available heat energy. The department will deem employers following the guidance in Appendix D to be in compliance with (b) of this subsection. An employer may choose a method of calculating incident heat energy not included in Appendix D if the chosen method reasonably predicts the incident energy to which the employee would be exposed.
- This subsection does not require the employer to estimate the incident heat energy exposure for every job task performed by each employee. The employer may make broad estimates that cover multiple system areas provided the employer uses reasonable assumptions about the energy-exposure distribution throughout the system and provided the estimates represent the maximum employee exposure for those areas. For example, the employer could estimate the heat energy just outside a substation feeding a radial distribution system and use that estimate for all jobs performed on that radial system.
- (c) The employer shall ensure that each employee who is exposed to hazards from flames or electric arcs does not wear clothing that could melt onto their skin or that could ignite and continue to burn when exposed to flames or the heat energy estimated under (b) of this subsection.

Note:

This subsection prohibits clothing made from acetate, nylon, polyester, rayon and polypropylene, either alone or in blends, unless the employer demonstrates that the fabric has been treated to withstand the conditions that may be encountered by the employee or that the employee wears the clothing in such a manner as to eliminate the hazard involved.

- (d) The employer shall ensure that the outer layer of clothing worn by an employee, except for clothing not required to be arc rated under (e)(i) through (v) of this subsection, is flame resistant under any of the following conditions:
- (i) The employee is exposed to contact with energized circuit parts operating at more than 600 volts;
- (ii) An electric arc could ignite flammable material in the work area that, in turn, could ignite the employee's clothing:
- (iii) Molten metal or electric arcs from faulted conductors in the work area could ignite the employee's clothing; or

Note:

This subsection does not apply to conductors that are capable of carrying, without failure, the maximum available fault current for the time the circuit protective devices take to interrupt the fault.

- (iv) The incident heat energy estimated under (b) of this subsection exceeds 2.0 cal/cm².
- (e) The employer shall ensure that each employee exposed to hazards from electric arcs wears protective clothing and other protective equipment with an arc rating greater than or equal to the heat energy estimated under (b) of this subsection whenever that estimate exceeds 2.0 cal/cm². This protective equipment shall cover the employee's entire body, except as follows:
- (i) Arc-rated protection is not necessary for the employee's hands when the employee is wearing rubber insulating gloves with protectors or, if the estimated incident energy is no more than 14 cal/cm², heavy-duty leather work gloves with a weight of at least 407 gm/m²(12 oz/yd²);
- (ii) Arc-rated protection is not necessary for the employee's feet when the employee is wearing heavy-duty work shoes or boots;

- (iii) Arc-rated protection is not necessary for the employee's head when the employee is wearing head protection meeting WAC 296-800-16055 if the estimated incident energy is less than 9 cal/cm² for exposures involving single-phase arcs in open air or 5 cal/cm² for other exposures;
- (iv) The protection for the employee's head may consist of head protection meeting WAC 296-800-16055 and a face-shield with a minimum arc rating of 8 cal/cm² if the estimated incident-energy exposure is less than 13 cal/cm² for exposures involving single-phase arcs in open air or 9 cal/cm² for other exposures; and
- (v) For exposures involving singlephase arcs in open air, the arc rating for the employee's head and face protection may be 4 cal/cm² less than the estimated incident energy.

Note: See Appendix D of this chapter for further information on the selection of appropriate protection.

- (14) Fuse handling. When fuses must be installed or removed with one or both terminals energized at more than 300 volts or with exposed parts energized at more than 50 volts, the employer shall ensure that tools or gloves rated for the voltage are used. When expulsion-type fuses are installed with one or both terminals energized at more than 300 volts, the employer shall ensure that each employee wears eye protection meeting the requirements of WAC 296-45-25505(1), uses a tool rated for the voltage, and is clear of the exhaust path of the fuse barrel.
- (((14))) (15) Covered (noninsulated) conductors. The requirements of this section which pertain to the hazards of exposed live parts also apply when work is performed in the proximity of covered (noninsulated) wires.
- (((15))) (16) Noncurrent-carrying metal parts. Noncurrent-carrying metal parts of equipment or devices, such as transformer cases and circuit breaker housings, shall be treated as energized at the highest voltage to which they are exposed, unless the employer inspects the installation and determines that these parts are grounded before work is performed.
- (((16))) <u>(17)</u> Opening circuits under load. Devices used to open circuits under load conditions shall be designed to interrupt the current involved.

((Table 1: AC Live Work Minimum Approach Distance

Distance to employee

		1 2		
Phase to	ground	Phase to Phase		
(m)	(ft-in)	(m)	(ft-in)	
not spe	ecified	not sp	ecified	
avoid c	ontact	avoid contact		
0.31	1-0	0.31	1-0	
0.65	2-2	-0.67	2-3	
0.77	2-7	-0.86	2-10	
0.84	2-9	-0.96	3-2	
1.00**	3-3**	1.20	3-11	
0.95**	3-2**	1.29	4-3	
1.09	3-7	1.50	4-11	
1.22	-4-0	1.71	-5-8	
1.59	-5-3	2.27	-7-6	
2.59	-8-6	-3.80	12-6	
3.42	-11-3	-5.50	18-1	
	(m) not spec avoid c 0.31 0.65 0.77 0.84 1.00** 0.95** 1.09 1.22 1.59 2.59	not specified avoid contact 0.31	(m) (ft-in) (m) not specified avoid contact 0.31	

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Distance to employee

Voltage in kilovolts phase to	Phase to ground		Phase	to Phase
phase*	(m)	(ft-in)	(m)	(ft-in)
765 to 800	4.53	14-11	7.91	26-0

*For single-phase systems, use the highest voltage available.

For single-phase lines off three phase systems, use the phase-to-phase-voltage of the system.

**The 46.1 to 72.5 kV phase-to-ground 3-3 distance contains a 1-3 electrical component and a 2-0 inadvertent movement component while the 72.6 to 121 kV phase-to-ground 3-2 distance contains a 2-2 electrical component and a 1-0 inadvertent movement component.

Note 1: These distances take into consideration the highest switchingsurge an employee will be exposed to on any system with air as the insulating medium and the maximum voltages shown.

Note 2: The clear live-line tool distance shall equal or exceed the values for the indicated voltage ranges.

Note 3: See Appendix B to this section for information on how the minimum approach distances listed in the tables were derived.))

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-335 Deenergizing lines and equipment for employee protection. (1) Application. This section applies to the deenergizing of transmission and distribution lines and equipment for the purpose of protecting employees. Control of hazardous energy sources used in the generation of electric energy is covered in WAC 296-45-175. Conductors and parts of electric equipment that have been deenergized under procedures other than those required by WAC 296-45-175 or 296-45-335, as applicable, shall be treated as energized.

- (2) "General."
- (a) If a system operator is in charge of the lines or equipment and their means of disconnection, all of the requirements of subsection (3) of this section shall be observed, in the order given.
- (b) If no system operator is in charge of the lines or equipment and their means of disconnection, one employee in the crew shall be designated as being in charge of the clearance. All of the requirements of subsection (3) of this section apply, in the order given, except as provided in subsection (2)(c) of this section. The employee in charge of the clearance shall take the place of the system operator, as necessary.
- (c) If only one crew will be working on the lines or equipment and if the means of disconnection is accessible and visible to and under the sole control of the employee in charge of the clearance, subsection (3)(a), (c), and (d) of this section do not apply. Additionally, tags required by the remaining provisions of subsection (3) of this section need not be used.
- (d) Any disconnecting means that are accessible to persons outside the employer's control (for example, the general public) shall be rendered inoperable while they are open for the purpose of protecting employees.
 - (3) Deenergizing lines and equipment.
- (a) In all cases, switching orders must be given directly to the employees in charge of operating the switches by the system operator who has jurisdiction and such communications must be repeated back word for word to the speaker.

When requesting clearance on lines under the control of the system operator, a person requesting the clearance shall obtain the name of the system operator to whom the request was made and the system operator shall obtain the name of the person requesting the clearance; and assure that the person is qualified to receive such a clearance. A ((designated)) qualified electrical employee shall make a request of the system operator to have the particular section of line or equipment deenergized. The ((designated)) qualified electrical employee becomes the employee in charge (as this term is used in subsection (2)(b) of this section) and is responsible for the clearance. In giving a clearance, the system operator shall make certain that the person to whom the clearance is given is fully aware of the extent or the limits of the clearance.

- (b) All switches, disconnectors, jumpers, taps, and other means through which known sources of electric energy may be supplied to the particular lines and equipment to be deenergized shall be opened. Such means shall be rendered inoperable, unless its design does not so permit, and tagged to indicate that employees are at work.
- (c) Automatically and remotely controlled switches that could cause the opened disconnecting means to close shall also be tagged at the point of control. The automatic or remote control feature shall be rendered inoperable, unless its design does not so permit.
- (d) Tags shall prohibit operation of the disconnecting means and shall indicate that employees are at work.
- (e) After the applicable requirements in subsection (3)(a) through (d) of this section have been followed and the employee in charge of the work has been given a clearance by the system operator, the lines and equipment to be worked shall be tested to ensure that they are deenergized.
- (4) The system operator shall order clearance tags printed on red cardboard, or equivalent, not less than 2-1/4 inches by 4-1/2 inches, attached to all switches opened or checked open to provide clearance on any line or equipment for employees to work thereon.
- (5) Clearance tags attached to substation control devices and to line switches beyond the switchyard of any substation; indicating the limits of the clearance involved; shall state the designation of the switch opened or checked open and tagged; the name of the person to whom the clearance is to be issued; the date and time the switch was opened or checked open; the name of the dispatcher ordering the switching and tagging; and the name of the person doing the switching and tagging.
- (6) Protective grounds shall be installed as required by WAC 296-45-345.
- (7) After the applicable requirements of subsection (3)(a) through (d) of this section have been followed, the lines and equipment involved may be worked as deenergized.
- (8) If two or more independent crews will be working on the same lines or equipment, each crew shall independently comply with the requirements in subsection (3) of this section.
- (9) To transfer the clearance, the employee in charge (or, if the employee in charge is forced to leave the worksite due to illness or other emergency, the employee's supervisor) shall inform the system operator; employees in the crew shall

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be informed of the transfer; and the new employee in charge shall be responsible for the clearance.

- (10) To release a clearance, the employee in charge shall:
- (a) Notify employees under his or her direction that the clearance is to be released;
- (b) Determine that all employees in the crew are clear of the lines and equipment;
- (c) Determine that all protective grounds installed by the crew have been removed; and
- (d) Report this information to the system operator and release the clearance.
- (11) The person releasing a clearance shall be the same person that requested the clearance, unless responsibility has been transferred under subsection (9) of this section.
- (12) Tags may not be removed unless the associated clearance has been released under subsection (10) of this section
- (13) Only after all protective grounds have been removed, after all crews working on the lines or equipment have released their clearances, after all employees are clear of the lines and equipment, and after all protective tags have been removed from a given point of disconnection, may action be initiated to reenergize the lines or equipment at that point of disconnection.
- (14) To meet unforeseen conditions, it will be permissible to tag isolated switches for the system operator and issue clearances against this tag. In tagging out inter-utility tie lines, the open switches on the foreign end of the line shall be tagged for the foreign system operator requesting the outage who will issue clearances to individuals of the organization against this tag.
- (15) Network protectors. The employer need not use the tags mentioned in subsection (3)(d) and (e) of this section on a network protector for work on the primary feeder for the network protector's associated network transformer when the employer can demonstrate all of the following conditions:
- (a) Every network protector is maintained so that it will immediately trip open if closed when a primary conductor is deenergized;
- (b) Employees cannot manually place any network protector in a closed position without the use of tools, and any manual override position is blocked, locked, or otherwise disabled; and
- (c) The employer has procedures for manually overriding any network protector that incorporate provisions for determining, before anyone places a network protector in a closed position, that: The line connected to the network protector is not deenergized for the protection of any employee working on the line; and (if the line connected to the network protector is not deenergized for the protection of any employee working on the line) the primary conductors for the network protector are energized.
- (16) Metal-clad, draw-out switchgear of over 600 volts in which the physical separation of the disconnecting parts is not visible may be used to clear a line or equipment, provided the switchgear is equipped with:
- (a) A positive positioning means to insure that the disconnecting contacts are separated;
- (b) An isolating shutter which moves into place between the separated contact for circuit isolation; and

- (c) A mechanically((-)) connected indicating means to show that the shutter is in place.
- $((\frac{(16)}{(17)}))$ In all other cases, only a visible break of all phases shall be regarded as clearing a line or equipment.
- (((17))) (<u>18)</u> No person shall make contact with a circuit or equipment that has not been taken out of service to be worked on until ((he/she has)) they have the circuit or equipment cleared and tagged for themselves or is working directly under the supervision of one who has the circuit or equipment cleared and tagged for themselves.

<u>AMENDATORY SECTION</u> (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

- WAC 296-45-345 Grounding for the protection of employees. (1) Application. This section applies to the grounding of transmission and distribution lines and equipment for the purpose of protecting employees. Subsection (4) of this section also applies to the protective grounding of other equipment as required elsewhere in this section.
- (2) General. For the employee to work lines or equipment as deenergized, the lines or equipment shall be deenergized under the provisions of WAC 296-45-335 and shall be grounded as specified in subsections (3) through (9) of this section. However, if the employer can demonstrate that installation of a ground is impracticable or that the conditions resulting from the installation of a ground would present greater hazards than working without grounds, the lines and equipment may be treated as deenergized provided all of the following conditions are met:
- (a) The lines and equipment have been deenergized under the provisions of WAC 296-45-335.
- (b) There is no possibility of contact with another energized source.
 - (c) The hazard of induced voltage is not present.
- (3) Equipotential zone. Temporary protective grounds and bonding jumpers shall be placed at such locations and arranged in such a manner as to prevent each employee from being exposed to hazardous differences in electrical potential.

Note: This may require bonding equipment together.

- (4) Protective grounding equipment.
- (a) Protective grounding equipment shall be capable of conducting the maximum fault current that could flow at the point of grounding for the time necessary to clear the fault. This equipment shall have an ampacity greater than or equal to that of No. 2 AWG copper.
- (b) Grounding jumpers shall have approved ferrules and grounding clamps that provide mechanical support for jumper cables independent of the electrical connection.

Note: Guidelines for protective grounding equipment are contained in American Society for Testing and Materials Standard Specifications for Temporary Grounding Systems to be Used on Deenergized Electric Power Lines and Equipment, ASTM ((F855-1990)) F855-2015.

(c) Protective grounds shall have an impedance low enough to cause immediate operation of protective devices in case of accidental energizing of the lines or equipment.

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- (5) Testing. Before any ground is installed, lines and equipment shall be tested and found absent of nominal voltage, unless a previously installed ground is present.
- (a) Inspection before use: Grounding equipment shall be given a visual inspection and all mechanical connections shall be checked for tightness before each use.
- (b) Ground surface cleaning: The surface to which the ground is to be attached shall be clean before the grounding clamp is installed; otherwise, a self-cleaning clamp shall be used.
- (6) Order of connection. ((When a ground is to be attached to a line or to equipment, the ground-end connection shall be attached first, and then the other end shall be attached by means of a live-line tool.)) The employer shall ensure that, when an employee attaches a ground to a line or to equipment, the employee attaches the ground-end connection first and then attaches the other end by means of a live-line tool. For lines or equipment operating at 600 volts or less, the employer may permit the employee to use insulating equipment other than a live-line tool if the employer ensures that the line or equipment is not energized at the time the ground is connected or if the employer can demonstrate that each employee is protected from hazards that may develop if the line or equipment is energized.
- (7) "Order of removal." When a ground is to be removed, the grounding device shall be removed from the line or equipment using a live-line tool before the ground-end connection is removed.
- (8) "Additional precautions." When work is performed on a cable at a location remote from the cable terminal, the cable may not be grounded at the cable terminal if there is a possibility of hazardous transfer of potential should a fault occur.
- (9) Removal of grounds for test. Grounds may be removed temporarily during tests. During the test procedure, the employer shall ensure that each employee uses insulating equipment and is isolated from any hazards involved, and the employer shall institute any additional measures as may be necessary to protect each exposed employee in case the previously grounded lines and equipment become energized.
- (10) Conductor separation: In cases where the conductor separation at any pole or structure is so great as to make it impractical to apply shorts on all conductors, and where only one conductor is to be worked on, only that conductor which is to be worked on needs to be grounded.
- (11) Ground personnel: In cases where ground rods or pole grounds are utilized for personal protective grounding, personnel working on the ground should maintain sufficient distance from such equipment or utilize other approved procedures designed to prevent "touch-and step potential" hazards.

Note: See ((the Appendix for tables)) Appendix B of this chapter for protection from step and touch potentials.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-355 Underground grounding. (1) Grounding. A capacitance charge can remain in the high voltage cables after it has been disconnected from the circuit and

- a static-type arc can occur when grounds are applied to such cables
- (2) When work is to be done on cables or equipment of a high-voltage underground system, precautions to prevent back-feed shall be taken. This shall include either isolating or grounding of the secondary conductors.
- (3) After grounding the cable, if the worker is to work on cable between terminations, ((he/she)) they must first spike the cable or use other approved methods of testing. If the cable is to be cut, it shall be cut only with approved hot cutters.
- (4) Additional precautions. When work is performed on a cable at a location remote from the cable terminal, the cable may not be grounded at the cable terminal if there is a possibility of hazardous transfer of potential should a fault occur.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-365 Testing and test facilities. (1) Application. This section provides for safe work practices for high-voltage and high-power testing performed in laboratories, shops, and substations, and in the field and on electric transmission and distribution lines and equipment. It applies only to testing involving interim measurements utilizing high voltage, high power, or combinations of both, and not to testing involving continuous measurements as in routine metering, relaying, and normal line work.

Note:

Routine inspection and maintenance measurements made by qualified <u>electrical</u> employees are considered to be routine line work and are not included in the scope of this section, as long as the hazards related to the use of intrinsic high-voltage or high-power sources require only the normal precautions associated with routine operation and maintenance work required in the other subsections of this section. Two typical examples of such excluded test work procedures are "phasing-out" testing and testing for a "no-voltage" condition.

- (2) General requirements.
- (a) The employer shall establish and enforce work practices for the protection of each worker from the hazards of high-voltage or high-power testing at all test areas, temporary and permanent. Such work practices shall include, as a minimum, test area guarding, grounding, and the safe use of measuring and control circuits. A means providing for periodic safety checks of field test areas shall also be included.
- (b) Employees shall be trained in safe work practices upon their initial assignment to the test area, with periodic reviews and updates provided as required by subsections of this section.
 - (3) Guarding of test areas.
- (a) Permanent test areas shall be guarded by walls, fences, or barriers designed to keep employees out of the test areas.
- (b) In field testing, or at a temporary test site where permanent fences and gates are not provided, one of the following means shall be used to prevent unauthorized employees from entering:
- (i) The test area shall be guarded by the use of distinctively colored safety tape that is supported approximately waist high and to which safety signs are attached;

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- (ii) The test area shall be guarded by a barrier or barricade that limits access to the test area to a degree equivalent, physically and visually, to the barricade specified in this section; or
- (iii) The test area shall be guarded by one or more test observers stationed so that the entire area can be monitored.
- (c) The barriers required by this section shall be removed when the protection they provide is no longer needed.
- (d) Guarding shall be provided within test areas to control access to test equipment or to apparatus under test that may become energized as part of the testing by either direct or inductive coupling, in order to prevent accidental employee contact with energized parts.
 - (4) Grounding practices.
- (a) The employer shall establish and implement safe grounding practices for the test facility.
- (i) All conductive parts accessible to the test operator during the time the equipment is operating at high voltage shall be maintained at ground potential except for portions of the equipment that are isolated from the test operator by guarding.
- (ii) Wherever ungrounded terminals of test equipment or apparatus under test may be present, they shall be treated as energized until determined by tests to be deenergized.
- (b) Visible grounds shall be applied, either automatically or manually with properly insulated tools, to the high-voltage circuits after they are deenergized and before work is performed on the circuit or item or apparatus under test. Common ground connections shall be solidly connected to the test equipment and the apparatus under test.
- (c) In high-power testing, an isolated ground-return conductor system shall be provided so that no intentional passage of current, with its attendant voltage rise, can occur in the ground grid or in the earth. However, an isolated ground-return conductor need not be provided if the employer can demonstrate that both the following conditions are met:
- (i) An isolated ground-return conductor cannot be provided due to the distance of the test site from the electric energy source; and
- (ii) Employees are protected from any hazardous step and touch potentials that may develop during the test.

Note: See Appendix B of this chapter for information on measures that can be taken to protect employees from hazardous step and touch potentials.

- (d) In tests in which grounding of test equipment by means of the equipment grounding conductor located in the equipment power cord cannot be used due to increased hazards to test personnel or the prevention of satisfactory measurements, a ground that the employer can demonstrate affords equivalent safety shall be provided, and the safety ground shall be clearly indicated in the test set up.
- (e) When the test area is entered after equipment is deenergized, a ground shall be placed on the high-voltage terminal and any other exposed terminals.
- (i) High capacitance equipment or apparatus shall be discharged through a resistor rated for the available energy.
- (ii) A direct ground shall be applied to the exposed terminals when the stored energy drops to a level at which it is safe to do so.

- (f) If a test trailer or test vehicle is used in field testing, its chassis shall be grounded. Protection against hazardous touch potentials with respect to the vehicle, instrument panels, and other conductive parts accessible to employees shall be provided by bonding, insulation, or isolation.
 - (5) Control and measuring circuits.
- (a) Control wiring, meter connections, test leads and cables may not be run from a test area unless they are contained in a grounded metallic sheath and terminated in a grounded metallic enclosure or unless other precautions are taken that the employer can demonstrate as ensuring equivalent safety.
- (b) Meters and other instruments with accessible terminals or parts shall be isolated from test personnel to protect against hazards arising from such terminals and parts becoming energized during testing. If this isolation is provided by locating test equipment in metal compartments with viewing windows, interlocks shall be provided to interrupt the power supply if the compartment cover is opened.
- (c) The routing and connections of temporary wiring shall be made secure against damage, accidental interruptions and other hazards. To the maximum extent possible, signal, control, ground, and power cables shall be kept separate.
- (d) If employees will be present in the test area during testing, a test observer shall be present. The test observer shall be capable of implementing the immediate deenergizing of test circuits for safety purposes.
 - (6) Safety check.
- (a) Safety practices governing employee work at temporary or field test areas shall provide for a routine check of such test areas for safety at the beginning of each series of tests.
- (b) The test operator in charge shall conduct these routine safety checks before each series of tests and shall verify at least the following conditions:
- (i) That barriers and guards are in workable condition and are properly placed to isolate hazardous areas;
- (ii) That system test status signals, if used, are in operable condition;
- (iii) That test power disconnects are clearly marked and readily available in an emergency;
 - (iv) That ground connections are clearly identifiable;
- (v) That personal protective equipment is provided and used;
- (vi) That signal, ground, and power cables are properly separated.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-375 Mechanical equipment, including aerial manlift equipment. (1) General requirements.

(a) Other applicable requirements. Mechanical equipment shall be operated in accordance with applicable requirements in other chapters, including chapter 296-155 WAC, Parts L, M, and R, and chapter 296-869 WAC, except that WAC 296-155-605 (1)(h) and 296-155-77100 (1)(h) do not apply to operations performed by qualified electrical employees.

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(b) The critical safety components of mechanical elevating and rotating equipment shall receive a thorough visual inspection and operational test before use on each shift.

Note:

Critical safety components of mechanical elevating and rotating equipment are components whose failure would result in a free fall or free rotation of the boom.

- (((b))) (c) No vehicular equipment having an obstructed view to the rear may be operated on off-highway job sites where any employee is exposed to the hazards created by the moving vehicle, unless:
- (i) The vehicle has a reverse signal alarm audible above the surrounding noise level; or
- (ii) The vehicle is backed up only when a designated employee signals that it is safe to do so.
- (((e))) (d) The operator of an electric line truck may not leave ((his or her)) their position at the controls while a load is suspended, unless the employer can demonstrate that no employee (including the operator) might be endangered.
- (((d))) (e) Rubber-tired, self-propelled scrapers, rubber-tired front-end loaders, rubber-tired dozers, wheel-type agricultural and industrial tractors, crawler-type tractors, crawler-type loaders, and motor graders, with or without attachments, shall have rollover protective structures that meet the requirements of chapter 296-155 WAC, Part V.
 - (2) Outriggers.
- (a) Vehicular equipment, if provided with outriggers, shall be operated with the outriggers extended and firmly set as necessary for the stability of the specific configuration of the equipment. Outriggers may not be extended or retracted outside of clear view of the operator unless all employees are outside the range of possible equipment motion.
- (b) If the work area or the terrain precludes the use of outriggers, the equipment may be operated only within its maximum load ratings for the particular configuration of the equipment without outriggers.
- (3) Applied loads. Mechanical equipment used to lift or move lines or other material shall be used within its maximum load rating and other design limitations for the conditions under which the work is being performed.
- (4) Hydraulic fluids. All hydraulic fluids used for the insulated section of derrick trucks, aerial lifts, and hydraulic tools which are used on or around energized lines or equipment shall be of the insulating type.
- (5) Mechanical adjustment or repairs shall not be attempted or performed in the field except by a person qualified to perform such work.
- (6) Malfunction or needed repairs of manlift equipment shall be reported to the employee responsible for such repairs as soon as is reasonably possible. Use of equipment which is known to be in need of repairs or is malfunctioning is prohibited when such deficiency creates an unsafe operating condition.
- (7) When any aerial manlift equipment is parked for operation at the job site, the brakes shall be set. Wheel chocks shall be used to prevent accidental movement while parked on an incline
- (8) Employees shall not sit or stand on the basket edge, stand on materials placed in or across the basket, or work from a ladder set inside the basket.

- (9) The basket shall not be rested on a fixed object(s) so that the weight of the boom is either totally or partially supported by the basket.
 - (10) Operations near energized lines or equipment.
- (a) Mechanical equipment shall be operated so that the minimum approach distances of Table ((1 through Table 4)) 2, located in WAC 296-45-325, are maintained from exposed energized lines and equipment. However, the insulated upper portion excluding the basket/bucket of an aerial lift operated by a qualified electrical employee in the lift is exempt from this requirement.
- (b) A designated employee other than the equipment operator shall observe the approach distance to exposed lines and equipment and give timely warnings before the minimum approach distance required by subsection (10)(a) of this section is reached, unless the employer can demonstrate that the operator can accurately determine that the minimum approach distance is being maintained.
- (c) If, during operation of the mechanical equipment, the equipment could become energized, the operation shall also comply with at least one of the following:
- (i) The energized lines exposed to contact shall be covered with insulating protective material that will withstand the type of contact that might be made during the operation.
- (ii) The equipment shall be insulated for the voltage involved. The equipment shall be positioned so that its uninsulated portions cannot approach the lines or equipment any closer than the minimum approach distances specified in Table ((1 through 4)) 2, located in WAC 296-45-325.
- (iii) Each employee shall be protected from hazards that might arise from equipment contact with the energized lines. The measures used shall ensure that employees will not be exposed to hazardous differences in potential. Unless the employer can demonstrate that the methods in use protect each employee from the hazards that might arise if the equipment contacts the energized line, the measures used shall include all of the following techniques:
- (A) Using the best available ground to minimize the time the lines remain energized;
- (B) Bonding <u>mechanical</u> equipment together to minimize potential differences;
- (C) Providing ground mats to extend areas of equipotential; and
- (D) Employing insulating protective equipment or barricades to guard against any remaining hazardous potential differences.

Note:

Appendix B of this chapter contains information on hazardous step and touch potentials and on methods of protecting employees from hazards resulting from such potentials.

- (11) While working in aerial equipment, employees shall wear a full body harness and a lanyard attached to the boom or basket, in a secure manner.
- (12) No component of aerial devices shall be operated from the ground without permission from the employee in the basket except in case of emergency.
- (13) Operating levers or controls shall be kept clear of tools, materials or obstructions.
- (14) Employees shall not climb into or out of the basket or platform while it is elevated or change from one basket to another on dual basket equipment, except in case of emer-

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gency or when the employees involved agree that this is the safest way to perform the work. This exception shall not be used to circumvent safety rules.

- (15) Existing safety rules governing the use of hot line tools, rubber and other protective equipment and safe work practices while performing work from poles or structures shall also apply to work done from aerial manlift equipment.
- (16) The basket shall be kept clean and all tools not in use shall be secured or removed.
- (17) Approved warning light shall be operating when the boom leaves the cradle. This light shall be visible to approaching traffic when the boom is in position over any traveled area.
- (18) All aerial manlift equipment shall have both upper and lower controls (except ladder trucks need not have upper controls). The upper controls shall not be capable of rendering the lower controls inoperative. The lower controls should be located at or near the base of the aerial structure. If the lower controls are used, the operator shall have a view of the elevated employee(s) or there shall be communication between the operator and the employee in the elevated aerial structure: Provided, That no employee shall be raised, lowered, or moved into or from the elevated position in any aerial manlift equipment unless there is another employee, not in the elevated aerial structure, available at the site to operate the lower controls, except as follows:
- (a) Where there is a fixed method permanently attached to or part of the equipment which will permit an employee to descend from the elevated position without lowering the elevated structure; or
- (b) Where there is a system which will provide operation from the elevated position in the event of failure or malfunction of the primary system.

Note: This section shall not be interpreted as an exception to any other rule in this chapter.

- (19) Controls in aerial manlift equipment shall be protected from accidental operation. Controls of the outriggers shall also be protected from accidental operation. Such protection may be by guarding or equivalent means.
- (20) The manufacturer's recommended maximum load limit shall be posted at a conspicuous place near each set of controls and shall be kept in a legible condition.
- (21) The manufacturer's operator's instructional manual shall be kept on the vehicle.
- (22) Operating instructions, proper sequence and maintenance procedures prescribed by the manufacturer for operation of the equipment shall be followed.

AMENDATORY SECTION (Amending WSR 05-17-038, filed 8/9/05, effective 10/1/05)

- **WAC 296-45-385 Overhead lines.** This section provides additional requirements for work performed on or near overhead lines and equipment.
 - (1) General.
- (a) Before elevated structures and adjacent structures, such as poles or towers of the adjacent supporting poles, structures, and conductor supporting hardware, are subjected to such stresses as climbing or the installation or removal of equipment may impose, the employer shall ascertain that the

structures are capable of sustaining the additional or unbalanced stresses. If the pole or other structure cannot withstand the loads which will be imposed, it shall be braced or otherwise supported so as to prevent failure.

Note:

Appendix C of this chapter contains test methods that can be used in ascertaining whether a wood pole is capable of sustaining the forces that would be imposed by an employee climbing the pole. This ((paragraph)) section also requires the employer to ascertain that the pole can sustain all other forces that will be imposed by the work to be performed.

- (b) When poles are set, moved, or removed near exposed energized overhead conductors, the pole may not contact the conductors.
- (c) When a pole is set, moved, or removed near an exposed energized overhead conductor, the employer shall ensure that each employee wears electrical protective equipment or uses insulated devices when handling the pole and that no employee contacts the pole with uninsulated parts of ((his or her)) their body.
- (d) To protect employees from falling into holes into which poles are to be placed, the holes shall be attended by employees or physically guarded whenever anyone is working nearby.
- (2) Installing and removing overhead lines. The following provisions apply to the installation and removal of overhead conductors or cable.
- (a) The employer shall use the tension stringing method, barriers, or other equivalent measures to minimize the possibility that conductors and cables being installed or removed will contact energized power lines or equipment.
- (b) When conductors are being strung in or removed, they shall be kept under positive control to prevent accidental contact with energized circuit.
- (c) The protective measures required by WAC 296-45-375 (10)(c) for mechanical equipment shall also be provided for conductors, cables, and pulling and tensioning equipment when the conductor or cable is being installed or removed close enough to energized conductors that any of the following failures could energize the pulling or tensioning equipment or the wire or cable being installed or removed:
 - (i) Failure of the pulling or tensioning equipment;
 - (ii) Failure of the wire or cable being pulled; or
- (iii) Failure of the previously installed lines or equipment.
- (d) When conductors being installed or removed cross over energized conductors in excess of 600 volts, rope nets or guard structures must be installed unless provision is made to isolate or insulate the worker or the energized conductor. Where the design of the circuit-interrupting devices protecting the lines so permits, the automatic-reclosing feature of these devices must be made inoperative. In addition, the line being strung must be grounded on either side of the crossover or considered and worked as energized.
- (e) Before lines are installed parallel to existing energized lines, the employer shall make a determination of the approximate voltage to be induced in the new lines, or work shall proceed on the assumption that the induced voltage is hazardous. Unless the employer can demonstrate that the lines being installed are not subject to the induction of a haz-

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ardous voltage or unless the lines are treated as energized, ((the following requirements also apply:

- (i) Each bare conductor shall be grounded in increments so that no point along the conductor is more than 2 miles (3.22 km) from a ground.
- (ii) The grounds required in subsection (2)(e)(i) of this section shall be left in place until the conductor installation is completed between dead ends.
- (iii) The grounds required in subsection (2)(e)(i) of this section shall be removed as the last phase of aerial cleanup.
- (iv) If employees are working on bare conductors, grounds shall also be installed at each location where these employees are working, and grounds shall be installed at all open dead end or catch off points or the next adjacent structure.
- (v) If two bare conductors are to be spliced, the conductors shall be bonded and grounded before being spliced)) temporary protective grounds shall be placed at such locations and arranged in such a manner that the employer can demonstrate will prevent exposure of each employee to hazardous differences in electric potential.

Notes:

- If the employer takes no precautions to protect employees from hazards associated with involuntary reactions from electric shock, a hazard exists if the induced voltage is sufficient to pass a current of 1 milliampere through a 500-ohm resistor. If the employer protects employees from injury due to involuntary reactions from electric shock, a hazard exists if the resultant current would be more than 6 milliamperes.
- Appendix B of this chapter contains guidelines for protecting employees from hazardous differences in electric potential as required by this section.
- (f) Reel handling equipment, including pulling and tensioning devices, shall be in safe operating condition and shall be leveled and aligned.
- (g) Load ratings of stringing lines, pulling lines, conductor grips, load-bearing hardware and accessories, rigging, and hoists may not be exceeded.
- (h) Each pull must be snubbed or dead ended at both ends before subsequent pulls.
- (3) Pulling lines and accessories shall be inspected prior to each use and replaced or repaired when damaged or when there is a reasonable basis to doubt the dependability of such lines or accessories.
- (4) Conductor grips may not be used on wire rope, unless the grip is specifically designed for this application.
- (5) Reliable communications, through two-way radios or other equivalent means, shall be maintained between the reel tender and the pulling rig operator.
- (6) The pulling rig may only be operated when it is safe to do so.

Note:

Examples of unsafe conditions include employees in locations prohibited by subsection (7) of this section, conductor and pulling line hang-ups, and slipping of the conductor grip.

- (7) While the conductor or pulling line is being pulled (in motion) with a power-driven device, employees are not permitted directly under overhead operations or on the cross arm, except as necessary to guide the stringing sock or board over or through the stringing sheave.
 - (8) Live-line bare-hand work is prohibited.

- (9) When winches, trucks, or tractors are being used to raise poles, materials, to pull in wires, to pull slack or in any other operation, there shall be an operator at the controls unless the machinery or process is stopped.
- (10) Leadworkers shall designate an employee to give signals when required.
- (11) Raising poles, towers or fixtures in the close proximity of high voltage conductors shall be done under the supervision of a qualified <u>electrical</u> employee.
- (12) Employees shall not crawl over insulator strings but shall use a platform or other approved device to work from when making dead ends or doing other work beyond strings of insulators, at such distance that they cannot reach the work from the pole or fixture. While working on the platform or other device, they shall be secured with safety straps or a rope to prevent falling. The provision of this subsection does not apply to extra high voltage bundle conductors when the use of such equipment may produce additional hazard. Climbing over dead end assemblies is permissible only after they have been completed and pinned in the final position.
- (13) Towers and structures. The following requirements apply to work performed on towers or other structures which support overhead lines.
- (a) The employer shall ensure that no employee is under a tower or structure while work is in progress, except where the employer can demonstrate that such a working position is necessary to assist employees working above.
- (b) Tag lines or other similar devices shall be used to maintain control of tower sections being raised or positioned, unless the employer can demonstrate that the use of such devices would create a greater hazard.
- (c) The loadline may not be detached from a member or section until the load is safely secured.
- (d) No one ((must)) shall be permitted to remain in the footing while equipment is being spotted for placement.
- (e) A designated employee must be utilized to determine that required clearance is maintained in moving equipment under or near energized lines.
- (14) All conductors, subconductors, and overhead ground conductors must be bonded to the tower at any isolated tower where it may be necessary to complete work on the transmission line.
- (15) A transmission clipping crew shall have a minimum of two structures clipped in between the crew and the conductor being sagged.
- (16) While on patrol at night and operating a motor vehicle on public ((highways)) roadways, there shall be two employees, at least one of whom shall be a ((journey level lineworker or otherwise)) qualified electrical employee. If repair to line or equipment is found to be of such nature as to require two ((lineworkers)) qualified electrical employees, work shall not proceed until additional help has been obtained provided that in cases of emergency where delay would increase the danger to life, limb, or substantial property, one employee may clear the hazard without assistance.
- (17) Except during emergency restoration procedures, work shall be discontinued when adverse weather conditions would make the work hazardous in spite of the work practices required by this section.

Note:

((-))Thunderstorms in the immediate vicinity, high winds, snow storms, and ice storms are examples of adverse weather conditions that are presumed to make this work too hazardous to perform, except under emergency conditions.

AMENDATORY SECTION (Amending WSR 99-09-080, filed 4/20/99, effective 8/1/99)

WAC 296-45-455 Line-clearance tree-trimming operations. This section provides additional requirements for line-clearance tree-trimming operations and for equipment used in these operations.

This section does not apply to qualified <u>electrical</u> employees.

- (1) Before an employee climbs, enters, or works around any tree, a determination shall be made of the nominal voltage of electric power lines posing a hazard to employees. However, a determination of the maximum nominal voltage to which an employee will be exposed may be made instead, if all lines are considered as energized at this maximum voltage.
- (2) There shall be a second line-clearance tree trimmer within normal (((that is)), unassisted(())) voice communication under any of the following conditions:
- (a) If a line-clearance tree trimmer is to approach more closely than 10 feet (305 cm) any conductor or electrical apparatus energized at more than 600 volts; or
- (b) If branches or limbs being removed are closer to lines energized at more than 600 volts than the distances listed in Table ((1, Table 4, and Table 5)) 2, located in WAC 296-45-325; or
- (c) If roping is necessary to remove branches or limbs ((from)) near such conductors or apparatus.
- (3) Line-clearance tree trimmers shall maintain the minimum approach distances from energized conductors given in Table ((1, Table 4, and Table 5)) 2, located in WAC 296-45-325.
- (4) Branches that are contacting exposed energized conductors or equipment or that are within the distances specified in Table ((1, Table 4, and Table 5)) 2, located in WAC 296-45-325 may be removed only through the use of insulating equipment.

Note:

A tool constructed of a material that the employer can demonstrate has insulating qualities meeting WAC 296-45-305(1) are considered as insulated under this section if the tool is clean and dry.

- (5) Ladders, platforms, and aerial devices may not be brought closer to an energized part than the distances listed in Table ((1, Table 4, and Table 5)) 2, located in WAC 296-45-325.
- (6) Line-clearance tree-trimming work may not be performed when adverse weather conditions make the work hazardous in spite of the work practices required by this section. Each employee performing line-clearance tree-trimming work in the aftermath of a storm or under similar emergency conditions shall be trained in the special hazards related to this type of work.

Note:

Thunderstorms in the immediate vicinity, high winds, snow storms, and ice storms are examples of adverse weather conditions that are presumed to make line-clearance tree-trimming work too hazardous to perform safely.

(7) A tree trimmer may climb out of a basket into a tree or from a tree back into the basket so long as he is properly tied into the tree during the entire maneuver and the employer can demonstrate that this is the safest way to perform the work.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

- **WAC 296-45-45505 Brush chippers.** (1) Brush chippers shall be equipped with a locking device in the ignition system.
- (2) Access panels for maintenance and adjustment of the chipper blades and associated drive train shall be in place and secure during operation of the equipment. Servicing and maintenance shall be performed according to chapter 296-803 WAC, Lockout/tagout (control of hazardous energy).
- (3) Brush chippers not equipped with a mechanical infeed system shall be equipped with an infeed hopper of length sufficient to prevent employees from contacting the blades or knives of the machine during operation.
- (4) Trailer chippers detached from trucks shall be chocked or otherwise secured.
- (5) Each employee in the immediate area of an operating chipper feed table shall wear personal protective equipment as required by ((Subpart I)) WAC 296-45-25505 of this ((Part)) chapter.

<u>AMENDATORY SECTION</u> (Amending WSR 09-10-077, filed 5/5/09, effective 7/1/09)

- WAC 296-45-475 Substations. This section provides additional requirements for substations and for work performed in them.
- (1) Access and working space. Sufficient access and working space shall be provided and maintained about electric equipment to permit ready and safe operation and maintenance of such equipment.

Note:

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Guidelines for the dimensions of access and working space about electric equipment in substations are contained in American National Standard-National Electrical Safety Code, ANSI ((C2-1997)) C2-2012. Installations meeting the ANSI provisions comply with WAC 296-45-475(1). An installation that does not conform to this ANSI standard will, nonetheless, be considered as complying with WAC 296-45-475(1) if the employer can demonstrate that the installation provides ready and safe access based on the following evidence:

- (a) That the installation conforms to the edition of ANSI C2 that was in effect at the time the installation was made;
- (b) That the configuration of the installation enables employees to maintain the minimum approach distances required by WAC 296-45-325(5) while they are working on exposed, energized parts; and
- (c) That the precautions taken when work is performed on the installation provide protection equivalent to the protection that would be provided by access and working space meeting ANSI (($\frac{C2-1997}{2}$)) $\frac{C2-2012}{2}$.

- (d) Precaution must be taken to prevent accidental operation of relays or other protective devices due to jarring, vibration, or improper wiring.
- (2) Draw-out-type circuit breakers. When draw-out-type circuit breakers are removed or inserted, the breaker shall be in the open position. The control circuit shall also be rendered inoperative, if the design of the equipment permits.
- (3) Substation fences. Conductive fences around substations must be grounded. When a substation fence must be expanded or removed fence continuity must be maintained and bonding must be used to prevent electrical discontinuity. A temporary fence affording similar protection when the site is unattended, must be provided. Adequate interconnection with ground must be maintained between temporary fence and permanent fence.
- (4) Guarding of rooms containing electric supply equipment.
- (a) Rooms and spaces in which electric supply lines or equipment are installed shall meet the requirements of subsection (4)(b) through (e) of this section under the following conditions:
- (i) If exposed live parts operating at 50 to 150 volts to ground are located within 8 feet of the ground or other working surface inside the room or space;
- (ii) If live parts operating at 151 to 600 volts and located within 8 feet of the ground or other working surface inside the room or space are guarded only by location, as permitted under subsection (5)(a) of this section; or
- (iii) If live parts operating at more than 600 volts are located within the room or space, unless:
- (A) The live parts are enclosed within grounded, metalenclosed equipment whose only openings are designed so that foreign objects inserted in these openings will be deflected from energized parts; or
- (B) The live parts are installed at a height above ground and any other working surface that provides protection at the voltage to which they are energized corresponding to the protection provided by an 8-foot height at 50 volts.
- (b) The rooms and spaces shall be so enclosed within fences, screens, partitions, or walls as to minimize the possibility that unqualified persons will enter.
- (c) Signs warning unqualified persons to keep out shall be displayed at entrances to the rooms and spaces.
- (d) Entrances to rooms and spaces that are not under the observation of an attendant shall be kept locked.
- (e) Unqualified persons may not enter the rooms or spaces while the electric supply lines or equipment are energized.
 - (5) Guarding of energized parts.
- (a) Guards shall be provided around all live parts operating at more than 150 volts to ground without an insulating covering, unless the location of the live parts gives sufficient horizontal or vertical or a combination of these clearances to minimize the possibility of accidental employee contact.

Note:

Guidelines for the dimensions of clearance distances about electric equipment in substations are contained in American National Standard-National Electrical Safety Code, ANSI ((C2-1997)) C2-2012. Installations meeting the ANSI provisions comply with subsection (5)(a) of this section. An installation that does not conform to this ANSI standard will, nonetheless, be considered as complying with subsection (5)(a) of this section if the employer can demonstrate that the installation provides sufficient clearance based on the following evidence:

- (i) That the installation conforms to the edition of ANSI C2 that was in effect at the time the installation was made;
- (ii) That each employee is isolated from energized parts at the point of closest approach; and
- (iii) That the precautions taken when work is performed on the installation provide protection equivalent to the protection that would be provided by horizontal and vertical clearances meeting ANSI ((C2-1997)) C2-2012.
- (b) Except for fuse replacement and other necessary access by qualified ((persons)) electrical employees, the guarding of energized parts within a compartment shall be maintained during operation and maintenance functions to prevent accidental contact with energized parts and to prevent tools or other equipment from being dropped on energized parts.
- (c) When guards are removed from energized equipment, barriers shall be installed around the work area to prevent employees who are not working on the equipment, but who are in the area, from contacting the exposed live parts.
 - (6) Substation entry.
- (a) Upon entering an attended substation, each employee other than those regularly working in the station shall report his or her presence to the employee in charge in order to receive information on special system conditions affecting employee safety.
- (b) The job briefing required by WAC 296-45-135 shall cover such additional subjects as the location of energized equipment in or adjacent to the work area and the limits of any deenergized work area.
- (c) Nonqualified persons may only approach exposed energized electrical equipment located in substations or switch yards up to the distances set forth in Table((s-1 through 4)) 2, located in WAC 296-45-325, when under the direct supervision of a qualified ((person)) electrical employee acting as a safety watch. The safety watch will make sure that the nonqualified person does not encroach or take conductive objects closer to exposed energized parts than set forth in Table((s-1 through 4)) 2, located in WAC 296-45-325.
- (i) Nonqualified persons must have hazard recognition training and attend a documented tailgate meeting prior to entering the substation.
- (ii) The safety watch must be a qualified <u>electrical</u> employee as defined by WAC 296-45-035.
- (iii) The safety watch will have the responsibility and authority to monitor work on a continuous basis and/or stop work until the hazard is eliminated or protected.
- (iv) The safety watch will maintain a direct line of sight and voice communications with all nonqualified persons under their direct supervision. If the safety watch cannot meet these requirements, additional safety watches must be

assigned or work must be stopped. Each safety watch will monitor no more than four persons.

(v) The safety watch will perform no other duties while acting as a safety watch.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-48515 Access and working space. Sufficient access and working space shall be provided and maintained about electric equipment to permit ready and safe operation and maintenance of such equipment.

Note:

Guidelines for the dimensions of access and workspace about electric equipment in generating stations are contained in American National Standard-National Electrical Safety Code, ANSI ((C2-1997)) C2-2012. Installations meeting the ANSI provisions comply with this section. An installation that does not conform to this ANSI standard will, nonetheless, be considered as complying with this section if the employer can demonstrate that the installation provides ready and safe access based on the following evidence:

- (1) That the installation conforms to the edition of ANSI C2 that was in effect at the time the installation was made;
- (2) That the configuration of the installation enables employees to maintain the minimum approach distances required by this section while they work on exposed, energized parts; and
- (3) That the precautions taken when work is performed on the installation provide protection equivalent to the protection that would be provided by access and working space meeting ANSI ((C2-1997)) C2-2012.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-48525 Guarding of energized parts. (1) Guards shall be provided around all live parts operating at more than 150 volts to ground without an insulating covering, unless the location of the live parts gives sufficient horizontal or vertical or a combination of these clearances to minimize the possibility of accidental employee contact.

Note:

Guidelines for the dimensions of clearance distances about electric equipment in generating stations are contained in American National Standard-National Electrical Safety Code, ANSI ((C2-1997)) C2-2012. Installations meeting the ANSI provisions comply with this section. An installation that does not conform to this ANSI standard will, nonetheless, be considered as complying with this section if the employer can demonstrate that the installation provides sufficient clearance based on the following evidence:

- (a) That the installation conforms to the edition of ANSI C2 that was in effect at the time the installation was made;
- (b) That each employee is isolated from energized parts at the point of closest approach; and
- (c) That the precautions taken when work is performed on the installation provide protection equivalent to the protection that would be provided by horizontal and vertical clearances meeting ANSI ((C2-1997)) C2-2012.
- (2) Except for fuse replacement or other necessary access by qualified ((persons)) electrical employees, the guarding of energized parts within a compartment shall be

maintained during operation and maintenance functions to prevent accidental contact with energized parts and to prevent tools or other equipment from being dropped on energized parts.

(3) When guards are removed from energized equipment, barriers shall be installed around the work area to prevent employees who are not working on the equipment, but who are in the area, from contacting the exposed live parts.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

- WAC 296-45-545 Trolley maintenance, jumpering or bypassing. (1) Energized trolley wire shall be jumpered when it is to be opened or cut.
- (2) Reaching over trolley wire(s) or system(s). ((Lineworkers)) Qualified electrical employees shall not reach over trolley wire(s) unless properly protected by line hose or rubber blanket.
- (3) Reaching across sectional insulators. ((Lineworkers)) Qualified electrical employees shall not reach across section insulator(s), insulated spacer(s) or insulated approach.
- (4) Polarity on either side of sectionalizing breakers. Since the polarity on both sides of a sectionalizing insulator may be different, it is required that prior to performance of work, tests be performed with approved testing equipment to determine whether or not the polarity is the same or different on one side of the sectional insulator as compared with the other.
- (5) Working on hangers. More than one truck crew shall not work on hangers attached to the same span at the same time, without rubber protection.
- (6) Workers on hangers of opposite polarity. Trolley hangers and ears of opposite polarity shall not be worked on at the same time when trolley wire is energized.
- (7) Checking electric switches. When electric switches are checked for operation, making it necessary to short circuit the contactor to each trolley wire, tools with insulated handles shall be used.
- (8) Short circuit due to use of noninsulated or conductive long handled tools. When a hazard of short circuit exists, due to use of noninsulated or conductive long handled tools, approved protective rubber equipment shall be used as provided in this chapter.
- (9) Trolley feeders. When work is to be performed on street railway trolley feeders where it is necessary for workers to work from metal or other grounded poles or fixtures or on poles or fixtures on which grounds are maintained, the feeders shall be deenergized unless the poles or fixtures are insulated before the work is started with approved protective devices in such manner that employees cannot become grounded while working on the feeders, and employees shall wear approved rubber gloves.
- (10) Truck driver shall remain at tower controls while workers are working on towers except when the aerial manlift equipment has been properly chocked to prevent uncontrolled movement. Tower trucks shall be equipped with a reliable signaling device between the employees working on the tower and the truck driver.

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- (11) Working on truck towers. Employees shall not stand on tower gates or railings. Work shall not be done from plank(s) placed on tower railings.
- (12) Tower truck railings. Towers shall have standard railings and toeboards around the tower and all railings shall be constructed of wood, fiberglass or other nonmetallic material. All railings shall be a vertical height of not less than 36 inches or more than 42 inches from the floor of the platform to the upper surface of the top rail. Intermediate railings shall be midway between the floor and the underside of the top rail. Tower gates shall be so constructed as to prevent accidental opening.
- (13) Tower truck decks shall be kept clear of tools, wire and other materials and tools shall be kept in proper storage area when not in use.
- (14) ((Lineworkers)) Qualified electrical employees shall not wear climbers or spurs while working on a tower truck.

NEW SECTION

WAC 296-45-902 Appendix A—Working on exposed energized parts—Nonmandatory.

Note:

This appendix is identical to 29 C.F.R. 1910.269 Appendix B, Working on Exposed Energized Parts, however all references to live-line barehand work have been deleted since it is prohibited in Washington state.

I. Introduction

Electric utilities design electric power generation, transmission, and distribution installations to meet National Electrical Safety Code (NESC), ANSI C2, requirements. Electric utilities also design transmission and distribution lines to limit line outages as required by system reliability criteria¹ and to withstand the maximum overvoltage's impressed on the system. Conditions such as switching surges, faults, and lightning can cause overvoltages. Electric utilities generally select insulator design and lengths and the clearances to structural parts so as to prevent outages from contaminated line insulation and during storms. Line insulator lengths and structural clearances have, over the years, come closer to the minimum approach distances used by workers. As minimum approach distances and structural clearances converge, it is increasingly important that system designers and system operating and maintenance personnel understand the concepts underlying minimum approach distances.

The information in this appendix will assist employers in complying with the minimum approach-distance requirements contained in § 1910.269(1)(3) and (q)(3). Employers must use the technical criteria and methodology presented in this appendix in establishing minimum approach distances in accordance with § 1910.269(1)(3)(i) and Table R-3 and Table R-8. This appendix provides essential background information and technical criteria for the calculation of the required minimum approach distances for live-line work on electric power generation, transmission, and distribution installations.

Unless an employer is using the maximum transient overvoltage's specified in Table R-9 for voltages over 72.5 kilovolts, the employer must use persons knowledgeable in the techniques discussed in this appendix, and competent in

the field of electric transmission and distribution system design, to determine the maximum transient overvoltage.

II. General

A. *Definitions*. The following definitions from § 1910.269(x) relate to work on or near electric power generation, transmission, and distribution lines and equipment and the electrical hazards they present.

Exposed. . . . Not isolated or guarded.

Guarded. Covered, fenced, enclosed, or otherwise protected, by means of suitable covers or casings, barrier rails or screens, mats, or platforms, designed to minimize the possibility, under normal conditions, of dangerous approach or inadvertent contact by persons or objects.

Note to the definition of "guarded": Wires that are insulated, but not otherwise protected, are not guarded.

Insulated. Separated from other conducting surfaces by a dielectric (including air space) offering a high resistance to the passage of current.

Note to the definition of "insulated": When any object is said to be insulated, it is understood to be insulated for the conditions to which it normally is subjected. Otherwise, it is, for the purpose of this section, uninsulated.

Isolated. Not readily accessible to persons unless special means for access are used.

Statistical sparkover voltage. A transient overvoltage level that produces a 97.72-percent probability of sparkover (that is, two standard deviations above the voltage at which there is a 50-percent probability of sparkover).

Statistical withstand voltage. A transient overvoltage level that produces a 0.14-percent probability of sparkover (that is, three standard deviations below the voltage at which there is a 50-percent probability of sparkover).

B. *Installations energized at 50 to 300 volts*. The hazards posed by installations energized at 50 to 300 volts are the same as those found in many other workplaces. That is not to say that there is no hazard, but the complexity of electrical protection required does not compare to that required for high voltage systems. The employee must avoid contact with the exposed parts, and the protective equipment used (such as rubber insulating gloves) must provide insulation for the voltages involved.

C. Exposed energized parts over 300 volts AC. Paragraph (l)(3)(i) of § 1910.269 requires the employer to establish minimum approach distances no less than the distances computed by Table R-3 for AC systems so that employees can work safely without risk of sparkover.²

Unless the employee is using electrical protective equipment, air is the insulating medium between the employee and energized parts. The distance between the employee and an energized part must be sufficient for the air to withstand the maximum transient overvoltage that can reach the worksite under the working conditions and practices the employee is using. This distance is the minimum air insulation distance, and it is equal to the electrical component of the minimum approach distance.

Normal system design may provide or include a means (such as lightning arrestors) to control maximum anticipated transient overvoltage's, or the employer may use temporary devices (portable protective gaps) or measures (such as preventing automatic circuit breaker reclosing) to achieve the

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same result. Paragraph (1)(3)(ii) of § 1910.269 requires the employer to determine the maximum anticipated per-unit transient overvoltage, phase-to-ground, through an engineering analysis or assume a maximum anticipated per-unit transient overvoltage, phase-to-ground, in accordance with Table R-9, which specifies the following maximums for ac systems:

72.6 to 420.0 kilovolts-3.5 per unit

420.1 to 550.0 kilovolts-3.0 per unit

550.1 to 800.0 kilovolts-2.5 per unit

See paragraph IV.A.2, later in this appendix, for additional discussion of maximum transient overvoltages.

D. *Types of exposures*. Employees working on or near energized electric power generation, transmission, and distribution systems face two kinds of exposures: Phase-to-ground and phase-to-phase. The exposure is phase-to-ground with respect to an energized part, when the employee is at ground potential.

III. Determination of Minimum Approach Distances for AC Voltages Greater Than 300 Volts

A. Voltages of 301 to 5,000 volts. Test data generally forms the basis of minimum air insulation distances. The lowest voltage for which sufficient test data exists is 5,000 volts, and these data indicate that the minimum air insulation distance at that voltage is 20 millimeters (1 inch). Because the minimum air insulation distance increases with increasing voltage, and, conversely, decreases with decreasing voltage, an assumed minimum air insulation distance of 20 millimeters will protect against sparkover at voltages of 301 to 5,000 volts. Thus, 20 millimeters is the electrical component of the minimum approach distance for these voltages.

B. Voltages of 5.1 to 72.5 kilovolts. For voltages from 5.1 to 72.5 kilovolts, the Occupational Safety and Health Administration bases the methodology for calculating the electrical component of the minimum approach distance on Institute of Electrical and Electronic Engineers (IEEE) Standard 4-1995, Standard Techniques for High-Voltage Testing. Table 1 lists the critical sparkover distances from that standard as listed in IEEE Std 516-2009, IEEE Guide for Maintenance Methods on Energized Power Lines.

TABLE 1 SPARKOVER DISTANCE FOR ROD-TO-ROD GAP					
60 Hz Rod-to-Rod spark- over (kV peak)	Gap spacing from IEEE Std 4-1995 (cm)				
25	2				
36	3				
46	4				
53	5				
60	6				
70	8				
79	10				
86	12				
95	14				
104	16				
112	18				

TABLE 1 SPARKOVER DISTANCE FOR ROD-TO-ROD GAP					
60 Hz Rod-to-Rod spark- over (kV peak) Gap spacing from IEEE 4-1995 (cm)					
120	20				
143	25				
167	30				
192	35				
218	40				
243	45				
270	50				
322	60				

Source: IEEE Std 516-2009.

To use this table to determine the electrical component of the minimum approach distance, the employer must determine the peak phase-to-ground transient overvoltage and select a gap from the table that corresponds to that voltage as a withstand voltage rather than a critical sparkover voltage. To calculate the electrical component of the minimum approach distance for voltages between 5 and 72.5 kilovolts, use the following procedure:

- 1. Divide the phase-to-phase voltage by the square root of 3 to convert it to a phase-to-ground voltage.
- 2. Multiply the phase-to-ground voltage by the square root of 2 to convert the rms value of the voltage to the peak phase-to-ground voltage.
- 3. Multiply the peak phase-to-ground voltage by the maximum per-unit transient overvoltage, which, for this voltage range, is 3.0, as discussed later in this appendix. This is the maximum phase-to-ground transient overvoltage, which corresponds to the withstand voltage for the relevant exposure.³
- 4. Divide the maximum phase-to-ground transient overvoltage by 0.85 to determine the corresponding critical sparkover voltage. (The critical sparkover voltage is 3 standard deviations (or 15 percent) greater than the withstand voltage.)
- 5. Determine the electrical component of the minimum approach distance from Table 1 through interpolation.

Table 2 illustrates how to derive the electrical component of the minimum approach distance for voltages from 5.1 to 72.5 kilovolts, before the application of any altitude correction factor, as explained later.

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TABLE 2 CALCULATING THE ELECTRICAL COMPONENT OF MAD 751 V TO 72.5 KV								
Maximum system phase-to-phase voltage (kV)								
Step	15	36	46	72.5				
1. Divide by $\sqrt{3}$	8.7	20.8	26.6	41.9				
2. Multiply by $\sqrt{2}$	12.2 29.4 37.6 59.3							
3. Multiply by 3.0	36.7	88.2	112.7	177.6				
4. Divide by 0.85	43.2	103.7	132.6	208.9				
5. Interpolate from Table 1								
Electrical component of MAD (cm)	3.72	15.93	22.74	38.25				

C. Voltages of 72.6 to 800 kilovolts. For voltages of 72.6 kilovolts to 800 kilovolts, this section bases the electrical component of minimum approach distances, before the application of any altitude correction factor, on the following formula:

Equation 1 - For voltages of 72.6 kV to 800 kV

$$D = 0.3048(C + a) V_{L-G}T$$

Where:

D = Electrical component of the minimum approach distance in air in meters;

C = A correction factor associated with the variation of gap sparkover with voltage;

a = A factor relating to the saturation of air at system voltages of 345 kilovolts or higher;⁴

 V_{L-G} = Maximum system line-to-ground rms voltage in kilovolts - It should be the "actual" maximum, or the normal highest voltage for the range (for example, 10 percent above the nominal voltage); and

T = Maximum transient overvoltage factor in per unit.

In Equation 1, C is 0.01: (1) For phase-to-ground exposures that the employer can demonstrate consist only of air across the approach distance (gap) and (2) for phase-to-phase exposures if the employer can demonstrate that no insulated tool spans the gap and that no large conductive object is in the gap. Otherwise, C is 0.011.

In Equation 1, the term a varies depending on whether the employee's exposure is phase-to-ground or phase-to-phase and on whether objects are in the gap. The employer must use the equations in Table 3 to calculate a. Sparkover test data with insulation spanning the gap form the basis for the equations for phase-to-ground exposures, and sparkover test data with only air in the gap form the basis for the equations for phase-to-phase exposures. The phase-to-ground equations result in slightly higher values of a, and, consequently, produce larger minimum approach distances, than the phase-to-phase equations for the same value of $V_{\rm peak}$.

TABLE 3 EQUATIONS FOR CALCULATING THE SURGE FACTOR, $oldsymbol{a}$					
Phase-to-ground exposures					
$V_{Peak} = T_{L-G}V_{L-G}\sqrt{2} \dots$ $a \dots \dots$	635 kV or less 0	635.1 to 915 kV (V _{Peak} - 635)/140,000	915.1 to 1,050 kV (<i>V</i> _{Peak} -645)/135,000		
$V_{Peak} = T_{L-G}V_{L-G}\sqrt{2}$	More than 1,050 kV	1			
a	(V _{Peak} -675)/125,000				
Phase-to-phase exposures ¹					
$V_{Peak} = (1.35T_{L-G} + 0.45)V_{L-G}\sqrt{2}$	630 kV or less 0	630.1 to 848 kV (<i>V</i> _{Peak} - 848.1 to 1,131 kV (<i>V</i> _{Peak} - 630)/155,000 633.6)/152,207			
$V_{Peak} = (1.35T_{L-G} + 0.45)V_{L-G}\sqrt{2}$. 1,131.1 to 1,485 kV $(V_{Peak} - 628)/153,846$ More than 1,485 kV $(V_{Peak} - 350.5)/203,666$					

¹Use the equations for phase-to-ground exposures (with V_{Peak} for phase-to-phase exposures) unless the employer can demonstrate that no insulated tool spans the gap and that no large conductive object is in the gap.

In Equation 1, T is the maximum transient overvoltage factor in per unit. As noted earlier, § 1910.269(1)(3)(ii) requires the employer to determine the maximum anticipated per-unit transient overvoltage, phase-to-ground, through an

engineering analysis or assume a maximum anticipated perunit transient overvoltage, phase-to-ground, in accordance with Table R-9. For phase-to-ground exposures, the employer uses this value, called T_{L-G} , as T in Equation 1. IEEE Std 516-2009 provides the following formula to calculate the phase-to-phase maximum transient overvoltage, T_{L-L} , from T_{L-G} :

$$T_{L-L} = 1.35T_{L-G} + 0.45$$

For phase-to-phase exposures, the employer uses this value as T in Equation 1.

D. Provisions for inadvertent movement. The minimum approach distance must include an "adder" to compensate for the inadvertent movement of the worker relative to an energized part or the movement of the part relative to the worker. This "adder" must account for this possible inadvertent movement and provide the worker with a comfortable and safe zone in which to work. Employers must add the distance for inadvertent movement (called the "ergonomic component of the minimum approach distance") to the electrical component to determine the total safe minimum approach distances used in live-line work.

The Occupational Safety and Health Administration based the ergonomic component of the minimum approach distance on response time-distance analysis. This technique uses an estimate of the total response time to a hazardous incident and converts that time to the distance traveled. For example, the driver of a car takes a given amount of time to respond to a "stimulus" and stop the vehicle. The elapsed time involved results in the car's traveling some distance before coming to a complete stop. This distance depends on the speed of the car at the time the stimulus appears and the reaction time of the driver.

In the case of live-line work, the employee must first perceive that he or she is approaching the danger zone. Then, the worker responds to the danger and must decelerate and stop all motion toward the energized part. During the time it takes to stop, the employee will travel some distance. This is the distance the employer must add to the electrical component of the minimum approach distance to obtain the total safe minimum approach distance.

At voltages from 751 volts to 72.5 kilovolts,⁵ the electrical component of the minimum approach distance is smaller than the ergonomic component. At 72.5 kilovolts, the electrical component is only a little more than 0.3 meters (1 foot). An ergonomic component of the minimum approach distance must provide for all the worker's unanticipated movements. At these voltages, workers generally use rubber insulating gloves; however, these gloves protect only a worker's hands and arms. Therefore, the energized object must be at a safe approach distance to protect the worker's face. In this case, 0.61 meters (2 feet) is a sufficient and practical ergonomic component of the minimum approach distance.

For voltages between 72.6 and 800 kilovolts, employees must use different work practices during energized line work. Generally, employees use live-line tools (hot sticks) to perform work on energized equipment. These tools, by design, keep the energized part at a constant distance from the employee and, thus, maintain the appropriate minimum approach distance automatically.

The location of the worker and the type of work methods the worker is using also influence the length of the ergonomic component of the minimum approach distance. In this higher voltage range, the employees use work methods that more tightly control their movements than when the workers perform work using rubber insulating gloves. The worker, therefore, is farther from the energized line or equipment and must be more precise in his or her movements just to perform the work. For these reasons, this section adopts an ergonomic component of the minimum approach distance of 0.31 m (1 foot) for voltages between 72.6 and 800 kilovolts.

Table 4 summarizes the ergonomic component of the minimum approach distance for various voltage ranges.

TABLE 4 ERGONOMIC COMPONENT OF MINIMUM APPROACH DISTANCE				
Voltaga ranga (I-V)	Distance			
Voltage range (kV)	m	ft		
0.301 to 0.750	0.31 1.0			
0.751 to 72.5	0.61 2.0			
72.6 to 800	0.31	1.0		

Note:

The employer must add this distance to the electrical component of the minimum approach distance to obtain the full minimum approach distance.

The ergonomic component of the minimum approach distance accounts for errors in maintaining the minimum approach distance (which might occur, for example, if an employee misjudges the length of a conductive object he or she is holding), and for errors in judging the minimum approach distance. The ergonomic component also accounts for inadvertent movements by the employee, such as slipping. In contrast, the working position selected to properly maintain the minimum approach distance must account for all of an employee's reasonably likely movements and still permit the employee to adhere to the applicable minimum approach distance. (See Figure 1.) Reasonably likely movements include an employee's adjustments to tools, equipment, and working positions and all movements needed to perform the work. For example, the employee should be able to perform all of the following actions without straying into the minimum approach distance:

- Adjust his or her hardhat;
- Maneuver a tool onto an energized part with a reasonable amount of overreaching or underreaching;
- Reach for and handle tools, material, and equipment passed to him or her; and
- Adjust tools, and replace components on them, when necessary during the work procedure.

The training of qualified employees required under § 1910.269(a)(2), and the job planning and briefing required under § 1910.269(c), must address selection of a proper working position.

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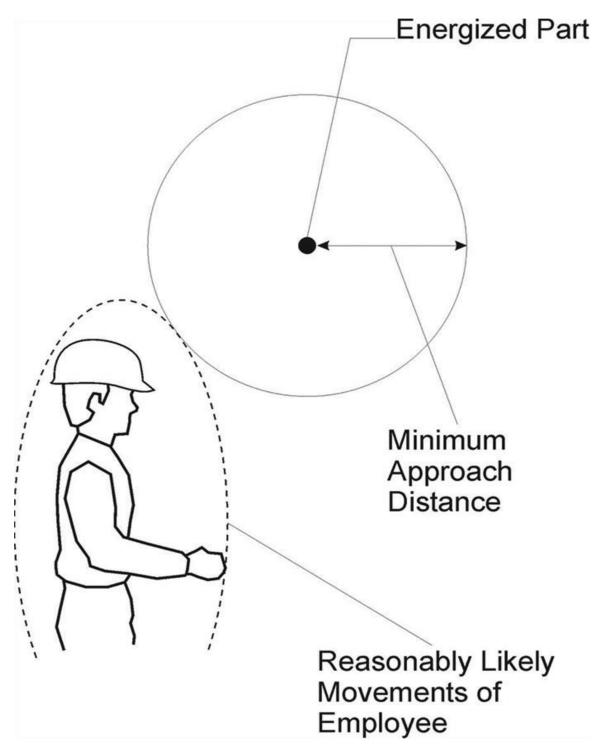


Figure 1 - Maintaining the Minimum Approach Distance

- E. *Miscellaneous correction factors*. Changes in the air medium that forms the insulation influences the strength of an air gap. A brief discussion of each factor follows.
- 1. *Dielectric strength of air*. The dielectric strength of air in a uniform electric field at standard atmospheric conditions is approximately 3 kilovolts per millimeter.⁶

The pressure, temperature, and humidity of the air, the shape, dimensions, and separation of the electrodes, and the

characteristics of the applied voltage (wave shape) affect the disruptive gradient.

2. Atmospheric effect. The empirically determined electrical strength of a given gap is normally applicable at standard atmospheric conditions (20°C, 101.3 kilopascals, 11 grams/cubic centimeter humidity). An increase in the density (humidity) of the air inhibits sparkover for a given air gap. The combination of temperature and air pressure that results in the lowest gap sparkover voltage is high temperature and

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low pressure. This combination of conditions is not likely to occur. Low air pressure, generally associated with high humidity, causes increased electrical strength. An average air pressure generally correlates with low humidity. Hot and dry working conditions normally result in reduced electrical strength. The equations for minimum approach distances in Table R-3 assume standard atmospheric conditions.

3. *Altitude*. The reduced air pressure at high altitudes causes a reduction in the electrical strength of an air gap. An employer must increase the minimum approach distance by about 3 percent per 300 meters (1,000 feet) of increased altitude for altitudes above 900 meters (3,000 feet). Table R-5 specifies the altitude correction factor that the employer must use in calculating minimum approach distances.

IV. Determining Minimum Approach Distances

- A. Factors Affecting Voltage Stress at the Worksite.
- 1. System voltage (nominal). The nominal system voltage range determines the voltage for purposes of calculating minimum approach distances. The employer selects the range in which the nominal system voltage falls, as given in the relevant table, and uses the highest value within that range in per unit calculations.
- 2. Transient overvoltages. Operation of switches or circuit breakers, a fault on a line or circuit or on an adjacent circuit, and similar activities may generate transient overvoltages on an electrical system. Each overvoltage has an associated transient voltage wave shape. The wave shape arriving at the site and its magnitude vary considerably.

In developing requirements for minimum approach distances, the Occupational Safety and Health Administration considered the most common wave shapes and the magnitude of transient overvoltages found on electric power generation, transmission, and distribution systems. The equations in Table R-3 for minimum approach distances use per-unit maximum transient overvoltages, which are relative to the nominal maximum voltage of the system. For example, a maximum transient overvoltage value of 3.0 per unit indicates that the highest transient overvoltage is 3.0 times the nominal maximum system voltage.

3. *Typical magnitude of overvoltages*. Table 5 lists the magnitude of typical transient overvoltages.

TABLE 5 MAGNITUDE OF TYPICAL TRANSIENT OVERVOLTAGES			
Cause	Magnitude (per unit)		
Energized 200-mile line without closing resistors	3.5		
Energized 200-mile line with one-step closing resistor	2.1		
Energized 200-mile line with multistep resistor	2.5		
Reclosing with trapped charge one-step resistor	2.2		
Opening surge with single restrike	3.0		
Fault initiation unfaulted phase	2.1		

TABLE 5 MAGNITUDE OF TYPICAL TRANSIENT OVERVOLTAGES			
Cause	Magnitude (per unit)		
Fault initiation adjacent circuit	2.5		
Fault clearing	1.7 to 1.9		

- 4. Standard deviation-air-gap withstand. For each air gap length under the same atmospheric conditions, there is a statistical variation in the breakdown voltage. The probability of breakdown against voltage has a normal (Gaussian) distribution. The standard deviation of this distribution varies with the wave shape, gap geometry, and atmospheric conditions. The withstand voltage of the air gap is three standard deviations (3s) below the critical sparkover voltage. (The critical sparkover voltage is the crest value of the impulse wave that, under specified conditions, causes sparkover 50 percent of the time. An impulse wave of three standard deviations below this value, that is, the withstand voltage, has a probability of sparkover of approximately 1 in 1,000.)
- 5. Broken Insulators. Tests show reductions in the insulation strength of insulator strings with broken skirts. Broken units may lose up to 70 percent of their withstand capacity. Because an employer cannot determine the insulating capability of a broken unit without testing it, the employer must consider damaged units in an insulator to have no insulating value. Additionally, the presence of a live-line tool alongside an insulator string with broken units may further reduce the overall insulating strength. The number of good units that must be present in a string for it to be "insulated" as defined by § 1910.269(x) depends on the maximum overvoltage possible at the worksite.
- B. Minimum Approach Distances Based on Known, Maximum-Anticipated Per-Unit Transient Overvoltages.
- 1. Determining the minimum approach distance for AC systems. Under § 1910.269(1)(3)(ii), the employer must determine the maximum anticipated per-unit transient overvoltage, phase-to-ground, through an engineering analysis or must assume a maximum anticipated per-unit transient overvoltage, phase-to-ground, in accordance with Table R-9. When the employer conducts an engineering analysis of the system and determines that the maximum transient overvoltage is lower than specified by Table R-9, the employer must ensure that any conditions assumed in the analysis, for example, that employees block reclosing on a circuit or install portable protective gaps, are present during energized work. To ensure that these conditions are present, the employer may need to institute new livework procedures reflecting the conditions and limitations set by the engineering analysis.
- 2. Calculation of reduced approach distance values. An employer may take the following steps to reduce minimum approach distances when the maximum transient overvoltage on the system (that is, the maximum transient overvoltage without additional steps to control overvoltages) produces unacceptably large minimum approach distances:
- Step 1. Determine the maximum voltage (with respect to a given nominal voltage range) for the energized part.
- Step 2. Determine the technique to use to control the maximum transient overvoltage. (See paragraphs IV.C and IV.D of this appendix.) Determine the maximum transient

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overvoltage that can exist at the worksite with that form of control in place and with a confidence level of 3s. This voltage is the withstand voltage for the purpose of calculating the appropriate minimum approach distance.

- Step 3. Direct employees to implement procedures to ensure that the control technique is in effect during the course of the work.
- Step 4. Using the new value of transient overvoltage in per unit, calculate the required minimum approach distance from Table R-3.
- C. Methods of Controlling Possible Transient Overvoltage Stress Found on a System.
- 1. *Introduction*. There are several means of controlling overvoltages that occur on transmission systems. For example, the employer can modify the operation of circuit breakers or other switching devices to reduce switching transient overvoltages. Alternatively, the employer can hold the overvoltage to an acceptable level by installing surge arresters or portable protective gaps on the system. In addition, the employer can change the transmission system to minimize the effect of switching operations. Section 4.8 of IEEE Std 516-2009 describes various ways of controlling, and thereby reducing, maximum transient overvoltages.
- 2. Operation of circuit breakers.7 The maximum transient overvoltage that can reach the worksite is often the result of switching on the line on which employees are working. Disabling automatic reclosing during energized line work, so that the line will not be reenergized after being opened for any reason, limits the maximum switching surge overvoltage to the larger of the opening surge or the greatest possible fault-generated surge, provided that the devices (for example, insertion resistors) are operable and will function to limit the transient overvoltage and that circuit breaker restrikes do not occur. The employer must ensure the proper functioning of insertion resistors and other overvoltage-limiting devices when the employer's engineering analysis assumes their proper operation to limit the overvoltage level. If the employer cannot disable the reclosing feature (because of system operating conditions), other methods of controlling the switching surge level may be necessary.

Transient surges on an adjacent line, particularly for double circuit construction, may cause a significant overvoltage on the line on which employees are working. The employer's engineering analysis must account for coupling to adjacent lines.

3. Surge arresters. The use of modern surge arresters allows a reduction in the basic impulse-insulation levels of much transmission system equipment. The primary function of early arresters was to protect the system insulation from the effects of lightning. Modern arresters not only dissipate lightning-caused transients, but may also control many other system transients caused by switching or faults.

The employer may use properly designed arresters to control transient overvoltages along a transmission line and thereby reduce the requisite length of the insulator string and possibly the maximum transient overvoltage on the line.⁸

4. Switching restrictions. Another form of overvoltage control involves establishing switching restrictions, whereby the employer prohibits the operation of circuit breakers until certain system conditions are present. The employer restricts

switching by using a tagging system, similar to that used for a permit, except that the common term used for this activity is a "hold-off" or "restriction." These terms indicate that the restriction does not prevent operation, but only modifies the operation during the livework activity.

D. Minimum Approach Distance Based on Control of Maximum Transient Overvoltage at the Worksite.

When the employer institutes control of maximum transient overvoltage at the worksite by installing portable protective gaps, the employer may calculate the minimum approach distance as follows:

- Step 1. Select the appropriate withstand voltage for the protective gap based on system requirements and an acceptable probability of gap sparkover.⁹
- Step 2. Determine a gap distance that provides a withstand voltage¹⁰ greater than or equal to the one selected in the first step.¹¹
- Step 3. Use 110 percent of the gap's critical sparkover voltage to determine the phase-to-ground peak voltage at gap sparkover ($V_{PPG\ Peak}$).
- Step 4. Determine the maximum transient overvoltage, phase-to-ground, at the worksite from the following formula:

$$T = \frac{V_{PPGPeak}}{V_{L-G}\sqrt{2}}.$$

Step 5. Use this value of T^{12} in the equation in Table R-3 to obtain the minimum approach distance. If the worksite is no more than 900 meters (3,000 feet) above sea level, the employer may use this value of T to determine the minimum approach distance from Table 14 through Table 21.

Note: All rounding must be to the next higher value (that is, always round up).

Sample protective gap calculations.

Problem: Employees are to perform work on a 500-kilo-volt transmission line at sea level that is subject to transient overvoltages of 2.4 p.u. The maximum operating voltage of the line is 550 kilovolts. Determine the length of the protective gap that will provide the minimum practical safe approach distance. Also, determine what that minimum approach distance is:

Step 1. Calculate the smallest practical maximum transient overvoltage (1.25 times the crest phase-to-ground voltage):¹³

$$550kV \times \frac{\sqrt{2}}{\sqrt{3}} \times 1.25 = 561kV$$
.

This value equals the withstand voltage of the protective gap.

Step 2. Using test data for a particular protective gap, select a gap that has a critical sparkover voltage greater than or equal to:

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$$561kV \div 0.85 = 660kV$$

For example, if a protective gap with a 1.22-m (4.0-foot) spacing tested to a critical sparkover voltage of 665 kilovolts (crest), select this gap spacing.

Step 3. The phase-to-ground peak voltage at gap sparkover (VPPG Peak) is 110 percent of the value from the previous step:

$$665kV \times 1.10 = 732kV$$

This value corresponds to the withstand voltage of the electrical component of the minimum approach distance.

Step 4. Use this voltage to determine the worksite value of *T*:

$$T = \frac{732}{564} = 1.7 \, p.u.$$

Step 5. Use this value of *T* in the equation in Table R-3 to obtain the minimum approach distance, or look up the minimum approach distance in Table 14 through Table 21:

$$MAD = 2.29 \text{ m} (7.6 \text{ ft}).$$

- E. Location of Protective Gaps.
- 1. Adjacent structures. The employer may install the protective gap on a structure adjacent to the worksite, as this practice does not significantly reduce the protection afforded by the gap.
- 2. Terminal stations. Gaps installed at terminal stations of lines or circuits provide a level of protection; however, that level of protection may not extend throughout the length of the line to the worksite. The use of substation terminal gaps raises the possibility that separate surges could enter the line at opposite ends, each with low enough magnitude to pass the terminal gaps without sparkover. When voltage surges occur simultaneously at each end of a line and travel toward each

other, the total voltage on the line at the point where they meet is the arithmetic sum of the two surges. A gap installed within 0.8 km (0.5 mile) of the worksite will protect against such intersecting waves. Engineering studies of a particular line or system may indicate that employers can adequately protect employees by installing gaps at even more distant locations. In any event, unless using the default values for T from Table R-9, the employer must determine T at the worksite.

- 3. Worksite. If the employer installs protective gaps at the worksite, the gap setting establishes the worksite impulse insulation strength. Lightning strikes as far as 6 miles from the worksite can cause a voltage surge greater than the gap withstand voltage, and a gap sparkover can occur. In addition, the gap can sparkover from overvoltages on the line that exceed the withstand voltage of the gap. Consequently, the employer must protect employees from hazards resulting from any sparkover that could occur.
- F. Disabling automatic reclosing. There are two reasons to disable the automatic-reclosing feature of circuit-interrupting devices while employees are performing live-line work:
- To prevent reenergization of a circuit faulted during the work, which could create a hazard or result in more serious injuries or damage than the injuries or damage produced by the original fault;
- To prevent any transient overvoltage caused by the switching surge that would result if the circuit were reenergized.

However, due to system stability considerations, it may not always be feasible to disable the automatic-reclosing feature.

V. Minimum Approach-Distance Tables

A. *Legacy tables*. Employers may use the minimum approach distances in Table 6 through Table 13 until March 31, 2015.

TABLE MINIMUM APPROACH DISTANCE		IBER 31, 2014			
	Phase-to-gro	und exposure	Phase-to-pha	ase exposure	
Voltage range phase to phase (kV)	m	ft	m	ft	
0.05 to 1.0	Avoid	Contact	Avoid	Avoid Contact	
1.1 to 15.0	0.64	2.10	0.66	2.20	
15.1 to 36.0	0.72	2.30	0.77	2.60	
36.1 to 46.0	0.77	2.60	0.85	2.80	
46.1 to 72.5	0.90	3.00	1.05	3.50	
72.6 to 121	0.95	3.20	1.29	4.30	
138 to 145	1.09	3.60	1.50	4.90	
161 to 169	1.22	4.00	1.71	5.70	
230 to 242	1.59	5.30	2.27	7.50	
345 to 362	2.59	8.50	3.80	12.50	
500 to 550	3.42	11.30	5.50	18.10	
765 to 800	4.53	14.90	7.91	26.00	

Note: The clear live-line tool distance must equal or exceed the values for the indicated voltage ranges.

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TABLE 7 MINIMUM APPROACH DISTANCES UNTIL MARCH 31, 2015-72.6 TO 121.0 KV WITH OVERVOLTAGE FACTOR					
	Phase-to-gro	Phase-to-ground exposure		ase exposure	
T (p.u.)	m	ft	m	ft	
2.0	0.74	2.42	1.09	3.58	
2.1	0.76	2.50	1.09	3.58	
2.2	0.79	2.58	1.12	3.67	
2.3	0.81	2.67	1.14	3.75	
2.4	0.84	2.75	1.17	3.83	
2.5	0.84	2.75	1.19	3.92	
2.6	0.86	2.83	1.22	4.00	
2.7	0.89	2.92	1.24	4.08	
2.8	0.91	3.00	1.24	4.08	
2.9	0.94	3.08	1.27	4.17	
3.0	0.97	3.17	1.30	4.25	

Note 1: The employer may apply the distance specified in this table only where the employer determines the maximum anticipated per-unit transient overvoltage by engineering analysis. (Table 6 applies otherwise.)

Note 2: The distances specified in this table are the air and live-line tool distances.

TABLE MINIMUM APPROACH DISTANCES UNTIL M OVERVOLTAGI	IARCH 31, 2015-	121.1 TO 145.0 KV	WITH		
m ()	Phase-to-gro	Phase-to-ground exposure		Phase-to-ground exposure	
T (p.u.)	m	ft	m	ft	
2.0	0.84	2.75	1.24	4.08	
2.1	0.86	2.83	1.27	4.17	
2.2	0.89	2.92	1.30	4.25	
2.3	0.91	3.00	1.32	4.33	
2.4	0.94	3.08	1.35	4.42	
2.5	0.97	3.17	1.37	4.50	
2.6	0.99	3.25	1.40	4.58	
2.7	1.02	3.33	1.42	4.67	
2.8	1.04	3.42	1.45	4.75	
2.9	1.07	3.50	1.47	4.83	
3.0	1.09	3.58	1.50	4.92	

Note 1: The employer may apply the distance specified in this table only where the employer determines the maximum anticipated per-unit transient overvoltage by engineering analysis. (Table 6 applies otherwise.)

Note 2: The distances specified in this table are the air and live-line tool distances.

TABLE 9 MINIMUM APPROACH DISTANCES UNTIL MARCH 31, 2015-145.1 TO 169.0 KV WITH OVERVOLTAGE FACTOR					
T (p.u.)	Phase-to-ground exposure		Phase-to-phase exposure		
	m	ft	m	ft	
2.0	0.91	3.00	1.42	4.67	
2.1	0.97	3.17	1.45	4.75	
2.2	0.99	3.25	1.47	4.83	

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TABLE 9 MINIMUM APPROACH DISTANCES UNTIL MARCH 31, 2015-145.1 TO 169.0 KV WITH OVERVOLTAGE FACTOR					
	Phase-to-ground exposure		Phase-to-phase exposure		
T (p.u.)	m	ft	m	ft	
2.3	1.02	3.33	1.50	4.92	
2.4	1.04	3.42	1.52	5.00	
2.5	1.07	3.50	1.57	5.17	
2.6	1.12	3.67	1.60	5.25	
2.7	1.14	3.75	1.63	5.33	
2.8	1.17	3.83	1.65	5.42	
2.9	1.19	3.92	1.68	5.50	
3.0	1.22	4.00	1.73	5.67	

Note 1: The employer may apply the distance specified in this table only where the employer determines the maximum anticipated per-unit transient overvoltage by engineering analysis. (Table 6 applies otherwise.)

Note 2: The distances specified in this table are the air and live-line tool distances.

TABLE 10 MINIMUM APPROACH DISTANCES UNTIL MARCH 31, 2015-169.1 TO 242.0 KV WITH OVERVOLTAGE FACTOR T (p.u.) Phase-to-ground exposure Phase

T (n)	Phase-to-ground exposure		Phase-to-ground exposure	
T (p.u.)	m	ft	m	ft
2.0	1.17	3.83	1.85	6.08
2.1	1.22	4.00	1.91	6.25
2.2	1.24	4.08	1.93	6.33
2.3	1.30	4.25	1.98	6.50
2.4	1.35	4.42	2.01	6.58
2.5	1.37	4.50	2.06	6.75
2.6	1.42	4.67	2.11	6.92
2.7	1.47	4.83	2.13	7.00
2.8	1.50	4.92	2.18	7.17
2.9	1.55	5.08	2.24	7.33
3.0	1.60	5.25	2.29	7.50

Note 1: The employer may apply the distance specified in this table only where the employer determines the maximum anticipated per-unit transient overvoltage by engineering analysis. (Table 6 applies otherwise.)

Note 2: The distances specified in this table are the air and live-line tool distances.

TABLE 11
MINIMUM APPROACH DISTANCES UNTIL MARCH 31, 2015-242.1 TO 362.0 KV WITH
OVERVOLTAGE FACTOR

T (p.u.)	Phase-to-ground exposure		Phase-to-ground exposure	
	m	ft	m	ft
2.0	1.60	5.25	2.62	8.58
2.1	1.65	5.42	2.69	8.83
2.2	1.75	5.75	2.79	9.17
2.3	1.85	6.08	2.90	9.50
2.4	1.93	6.33	3.02	9.92
2.5	2.03	6.67	3.15	10.33
2.6	2.16	7.08	3.28	10.75

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TABLE 11 MINIMUM APPROACH DISTANCES UNTIL MARCH 31, 2015-242.1 TO 362.0 KV WITH OVERVOLTAGE FACTOR					
Phase-to-ground exposure Phase-to-ground					
T (p.u.)	m	ft	m	ft	
2.7	2.26	7.42	3.40	11.17	
2.8	2.36	7.75	3.53	11.58	
2.9	2.49	8.17	3.68	12.08	
3.0	2.59	8.50	3.81	12.50	

Note 1: The employer may apply the distance specified in this table only where the employer determines the maximum anticipated per-unit transient overvoltage by engineering analysis. (Table 6 applies otherwise.)

Note 2: The distances specified in this table are the air and live-line tool distances.

TABLE MINIMUM APPROACH DISTANCES UNTIL M OVERVOLTAGE	IARCH 31, 2015-3	362.1 TO 552.0 KV	WITH	
T(")	Phase-to-gro	ound exposure	Phase-to-gro	und exposure
T (p.u.)	m	ft	m	ft
1.5	1.83	6.00	2.24	7.33
1.6	1.98	6.50	2.67	8.75
1.7	2.13	7.00	3.10	10.17
1.8	2.31	7.58	3.53	11.58
1.9	2.46	8.08	4.01	13.17
2.0	2.67	8.75	4.52	14.83
2.1	2.84	9.33	4.75	15.58
2.2	3.02	9.92	4.98	16.33
2.3	3.20	10.50	5.23	17.17
2.4	3.43	11.25	5.51	18.08

Note 1: The employer may apply the distance specified in this table only where the employer determines the maximum anticipated per-unit transient overvoltage by engineering analysis. (Table 6 applies otherwise.)

Note 2: The distances specified in this table are the air and live-line tool distances.

TABLE 13 MINIMUM APPROACH DISTANCES UNTIL MARCH 31, 2015-552.1 TO 800.0 KV WITH OVERVOLTAGE FACTOR				
Phase-to-ground exposure Phase-to-ground exposure				und exposure
T (p.u.)	m	ft	m	ft
1.5	2.95	9.67	3.68	12.08
1.6	3.25	10.67	4.42	14.50
1.7	3.56	11.67	5.23	17.17
1.8	3.86	12.67	6.07	19.92
1.9	4.19	13.75	6.99	22.92
2.0	4.55	14.92	7.92	26.00

Note 1: The employer may apply the distance specified in this table only where the employer determines the maximum anticipated per-unit transient overvoltage by engineering analysis. (Table 6 applies otherwise.)

Note 2: The distances specified in this table are the air and live-line tool distances.

B. Alternative minimum approach distances. Employers may use the minimum approach distances in Table 14 through Table 21 provided that the employer follows the notes to those tables.

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TABLE AC MINIMUM APPROACH DIS		121.0 KV		
T ()	Phase-to-ground exposure		Phase-to-ground exposure	
T (p.u.)	m	ft	m	ft
1.5	0.67	2.2	0.84	2.8
1.6	0.69	2.3	0.87	2.9
1.7	0.71	2.3	0.90	3.0
1.8	0.74	2.4	0.93	3.1
1.9	0.76	2.5	0.96	3.1
2.0	0.78	2.6	0.99	3.2
2.1	0.81	2.7	1.01	3.3
2.2	0.83	2.7	1.04	3.4
2.3	0.85	2.8	1.07	3.5
2.4	0.88	2.9	1.10	3.6
2.5	0.90	3.0	1.13	3.7
2.6	0.92	3.0	1.16	3.8
2.7	0.95	3.1	1.19	3.9
2.8	0.97	3.2	1.22	4.0
2.9	0.99	3.2	1.24	4.1
3.0	1.02	3.3	1.27	4.2
3.1	1.04	3.4	1.30	4.3
3.2	1.06	3.5	1.33	4.4
3.3	1.09	3.6	1.36	4.5
3.4	1.11	3.6	1.39	4.6
3.5	1.13	3.7	1.42	4.7

TABLE 15 AC MINIMUM APPROACH DISTANCES-121.1 TO 145.0 KV				
T (; -)	Phase-to-ground exposure		Phase-to-ground exposure	
T (p.u.)	m	ft	m	ft
1.5	0.74	2.4	0.95	3.1
1.6	0.76	2.5	0.98	3.2
1.7	0.79	2.6	1.02	3.3
1.8	0.82	2.7	1.05	3.4
1.9	0.85	2.8	1.08	3.5
2.0	0.88	2.9	1.12	3.7
2.1	0.90	3.0	1.15	3.8
2.2	0.93	3.1	1.19	3.9
2.3	0.96	3.1	1.22	4.0
2.4	0.99	3.2	1.26	4.1
2.5	1.02	3.3	1.29	4.2
2.6	1.04	3.4	1.33	4.4
2.7	1.07	3.5	1.36	4.5
2.8	1.10	3.6	1.39	4.6
2.9	1.13	3.7	1.43	4.7

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TABLE AC MINIMUM APPROACH DIST		145.0 KV		
T (n)	Phase-to-ground exposure		Phase-to-ground exposure	
T (p.u.)	m	m ft		ft
3.0	1.16	3.8	1.46	4.8
3.1	1.19	3.9	1.50	4.9
3.2	1.21	4.0	1.53	5.0
3.3	1.24	4.1	1.57	5.2
3.4	1.27	4.2	1.60	5.2
3.5	1.30	4.3	1.64	5.4

TABLE AC MINIMUM APPROACH DIST		169.0 KV		
T ()	Phase-to-ground exposure Phase-to-ground		und exposure	
T (p.u.)	m	ft	m	ft
1.5	0.81	2.7	1.05	3.4
1.6	0.84	2.8	1.09	3.6
1.7	0.87	2.9	1.13	3.7
1.8	0.90	3.0	1.17	3.8
1.9	0.94	3.1	1.21	4.0
2.0	0.97	3.2	1.25	4.1
2.1	1.00	3.3	1.29	4.2
2.2	1.03	3.4	1.33	4.4
2.3	1.07	3.5	1.37	4.5
2.4	1.10	3.6	1.41	4.6
2.5	1.13	3.7	1.45	4.8
2.6	1.17	3.8	1.49	4.9
2.7	1.20	3.9	1.53	5.0
2.8	1.23	4.0	1.57	5.2
2.9	1.26	4.1	1.61	5.3
3.0	1.30	4.3	1.65	5.4
3.1	1.33	4.4	1.70	5.6
3.2	1.36	4.5	1.76	5.8
3.3	1.39	4.6	1.82	6.0
3.4	1.43	4.7	1.88	6.2
3.5	1.46	4.8	1.94	6.4

TABLE 17 AC MINIMUM APPROACH DISTANCES-169.1 TO 242.0 KV					
T (* v.)	Phase-to-ground exposure		Phase-to-ground exposure		
T (p.u.)	m	m ft		ft	
1.5	1.02	3.3	1.37	4.5	
1.6	1.06	3.5	1.43	4.7	
1.7	1.11	3.6	1.48	4.9	
1.8	1.16	3.8	1.54	5.1	
1.9	1.21	4.0	1.60	5.2	
2.0	1.25	4.1	1.66	5.4	

TABLE 17 AC MINIMUM APPROACH DISTANCES-169.1 TO 242.0 KV					
T(au)	Phase-to-ground exposure		Phase-to-ground exposure		
T (p.u.)	m	m ft		ft	
2.1	1.30	4.3	1.73	5.7	
2.2	1.35	4.4	1.81	5.9	
2.3	1.39	4.6	1.90	6.2	
2.4	1.44	4.7	1.99	6.5	
2.5	1.49	4.9	2.08	6.8	
2.6	1.53	5.0	2.17	7.1	
2.7	1.58	5.2	2.26	7.4	
2.8	1.63	5.3	2.36	7.7	
2.9	1.67	5.5	2.45	8.0	
3.0	1.72	5.6	2.55	8.4	
3.1	1.77	5.8	2.65	8.7	
3.2	1.81	5.9	2.76	9.1	
3.3	1.88	6.2	2.86	9.4	
3.4	1.95	6.4	2.97	9.7	
3.5	2.01	6.6	3.08	10.1	

TABLE : AC MINIMUM APPROACH DIST) 362.0 KV			
T(-,-)	Phase-to-gro	und exposure	Phase-to-ground exposure		
T (p.u.)	m	ft	m	ft	
1.5	1.37	4.5	1.99	6.5	
1.6	1.44	4.7	2.13	7.0	
1.7	1.51	5.0	2.27	7.4	
1.8	1.58	5.2	2.41	7.9	
1.9	1.65	5.4	2.56	8.4	
2.0	1.72	5.6	2.71	8.9	
2.1	1.79	6.1	2.87	9.4	
2.2	1.87	6.1	3.03	9.9	
2.3	1.97	6.5	3.20	10.5	
2.4	2.08	6.8	3.37	11.1	
2.5	2.19	7.2	3.55	11.6	
2.6	2.29	7.5	3.73	12.2	
2.7	2.41	7.9	3.91	12.8	
2.8	2.52	8.3	4.10	13.5	
2.9	2.64	8.7	4.29	14.1	
3.0	2.76	9.1	4.49	14.7	
3.1	2.88	9.4	4.69	15.4	
3.2	3.01	9.9	4.90	16.1	
3.3	3.14	10.3	5.11	16.8	
3.4	3.27	10.7	5.32	17.5	
3.5	3.41	11.2	5.52	18.1	

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TABLE AC MINIMUM APPROACH DIS) 420.0 KV			
T(n)	Phase-to-gro	ound exposure	Phase-to-ground exposure		
T (p.u.)	m	ft	m	ft	
1.5	1.53	5.0	2.40	7.9	
1.6	1.62	5.3	2.58	8.5	
1.7	1.70	5.6	2.75	9.0	
1.8	1.78	5.8	2.94	9.6	
1.9	1.88	6.2	3.13	10.3	
2.0	1.99	6.5	3.33	10.9	
2.1	2.12	7.0	3.53	11.6	
2.2	2.24	7.3	3.74	12.3	
2.3	2.37	7.8	3.95	13.0	
2.4	2.50	8.2	4.17	13.7	
2.5	2.64	8.7	4.40	14.4	
2.6	2.78	9.1	4.63	15.2	
2.7	2.93	9.6	4.87	16.0	
2.8	3.07	10.1	5.11	16.8	
2.9	3.23	10.6	5.36	17.6	
3.0	3.38	11.1	5.59	18.3	
3.1	3.55	11.6	5.82	19.1	
3.2	3.72	12.2	6.07	19.9	
3.3	3.89	12.8	6.31	20.7	
3.4	4.07	13.4	6.56	21.5	
3.5	4.25	13.9	6.81	22.3	

TABLE 20 AC MINIMUM APPROACH DISTANCES-420.1 TO 550.0 KV					
T(2.11)	Phase-to-gro	ound exposure	Phase-to-ground exposure		
T (p.u.)	m	ft	m	ft	
1.5	1.95	6.4	3.46	11.4	
1.6	2.11	6.9	3.73	12.2	
1.7	2.28	7.5	4.02	13.2	
1.8	2.45	8.0	4.31	14.1	
1.9	2.62	8.6	4.61	15.1	
2.0	2.81	9.2	4.92	16.1	
2.1	3.00	9.8	5.25	17.2	
2.2	3.20	10.5	5.55	18.2	
2.3	3.40	11.2	5.86	19.2	
2.4	3.62	11.9	6.18	20.3	
2.5	3.84	12.6	6.50	21.3	
2.6	4.07	13.4	6.83	22.4	
2.7	4.31	14.1	7.18	23.6	
2.8	4.56	15.0	7.52	24.7	
2.9	4.81	15.8	7.88	25.9	

TABLE 20 AC MINIMUM APPROACH DISTANCES-420.1 TO 550.0 KV					
T (2 11)	Phase-to-ground exposure		Phase-to-ground exposure		
T (p.u.)	m	ft	m	ft	
3.0	5.07	16.6	8.24	27.0	

TABLE 21 AC MINIMUM APPROACH DISTANCES-550.1 TO 800.0 KV						
T (n)	Phase-to-gro	und exposure	Phase-to-gro	Phase-to-ground exposure		
T (p.u.)	m	ft	m	ft		
1.5	3.16	10.4	5.97	19.6		
1.6	3.46	11.4	6.43	21.1		
1.7	3.78	12.4	6.92	22.7		
1.8	4.12	13.5	7.42	24.3		
1.9	4.47	14.7	7.93	26.0		
2.0	4.83	15.8	8.47	27.8		
2.1	5.21	17.1	9.02	29.6		
2.2	5.61	18.4	9.58	31.4		
2.3	6.02	19.8	10.16	33.3		
2.4	6.44	21.1	10.76	35.3		
2.5	6.88	22.6	11.38	37.3		

Notes to Table 14 through Table 21:

- 1. The employer must determine the maximum anticipated per-unit transient overvoltage, phase-to-ground, through an engineering analysis, as required by § 1910.269(l)(3)(ii), or assume a maximum anticipated per-unit transient overvoltage, phase-to-ground, in accordance with Table R-9
- 2. For phase-to-phase exposures, the employer must demonstrate that no insulated tool spans the gap and that no large conductive object is in the gap.

The worksite must be at an elevation of 900 meters (3,000 feet) or less above sea level.

¹Federal, state, and local regulatory bodies and electric utilities set reliability requirements that limit the number and duration of system outages.

³The withstand voltage is the voltage at which sparkover is not likely to occur across a specified distance. It is the voltage taken at the 3s point below the sparkover voltage, assuming that the sparkover curve follows a normal distribution.

⁴Test data demonstrates that the saturation factor is greater than 0 at peak voltages of about 630 kilovolts. Systems operating at 345 kilovolts (or maximum system voltages of 362 kilovolts) can have peak maximum transient overvoltages exceeding 630 kilovolts. Table R-3 sets equations for calculating a based on peak voltage.

⁵For voltages of 50 to 300 volts, Table R-3 specifies a minimum approach distance of "avoid contact." The minimum approach distance for this voltage range contains neither an electrical component nor an ergonomic component.

⁶For the purposes of estimating arc length, § 1910.269 generally assumes a more conservative dielectric strength of 10 kilovolts per 25.4 millimeters, consistent with assumptions made in consensus standards such as the National Electrical Safety Code (IEEE C2-2012). The more conservative value accounts for variables such as electrode shape, wave shape, and a certain amount of overvoltage.

⁷The detailed design of a circuit interrupter, such as the design of the contacts, resistor insertion, and breaker timing control, are beyond the scope of this appendix. The design of the system generally accounts for these features. This appendix only discusses features that can limit the maximum switching transient overvoltage on a system.

⁸Surge arrester application is beyond the scope of this appendix. However, if the employer installs the arrester near the worksite, the application would be similar to the protective gaps discussed in paragraph IV.D of this appendix.

⁹The employer should check the withstand voltage to ensure that it results in a probability of gap flashover that is acceptable from a system outage perspective. (In other words, a gap sparkover will produce a system outage. The employer should determine whether such an outage will impact overall system performance to an acceptable degree.) In general, the withstand voltage should be at least 1.25 times the maximum crest operating voltage.

¹⁰The manufacturer of the gap provides, based on test data, the critical sparkover voltage for each gap spacing (for example, a critical sparkover voltage of 665 kilovolts for a gap spacing of 1.2 meters). The withstand voltage for the gap is equal to 85 percent of its critical sparkover voltage.

¹¹Switch steps 1 and 2 if the length of the protective gap is known.

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²Sparkover is a disruptive electric discharge in which an electric arc forms and electric current passes through air.

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-903 Appendix B—Protection from step and touch potentials—Nonmandatory.

<u>Protection from Hazardous Differences in Electric Potential</u>

I. "Introduction"

((When a ground fault occurs on a power line, voltage is impressed on the "grounded" object faulting the line. The voltage to which this object rises depends largely on the voltage on the line, on the impedance of the faulted conductor, and on the impedance to "true," or "absolute," ground represented by the object. If the object causing the fault represents a relatively large impedance, the voltage impressed on it is essentially the phase-to-ground system voltage. However, even faults to well grounded transmission towers or substation structures can result in hazardous voltages. "The degree of the hazard depends upon the magnitude of the fault current and the time of exposure.

Footnote(1)

This appendix provides information primarily withrespect to employee protection from contact between equipment being used and an energized power line. The information presented is also relevant to ground faults to transmission towers and substation structures; however, grounding systems for these structures should bedesigned to minimize the step and touch potentialsinvolved.))

Current passing through an impedance impresses voltage across that impedance. Even conductors have some, albeit low, value of impedance. Therefore, if a "grounded" object, such as a crane or deenergized and grounded power line, results in a ground fault on a power line, voltage is impressed on that grounded object. The voltage impressed on the grounded object depends largely on the voltage on the line, on the impedance of the faulted conductor, and on the impedance to "true," or "absolute," ground represented by the object. If the impedance of the object causing the fault is relatively large, the voltage impressed on the object is essentially the phase-to-ground system voltage. However, even faults to grounded power lines or to well-grounded transmission towers or substation structures (which have relatively low values of impedance to ground) can result in hazardous voltages.2 In all cases, the degree of the hazard depends on the magnitude of the current through the employee and the time of exposure. This document discusses methods of protecting workers against the possibility that grounded objects. such as cranes and other mechanical equipment, will contact energized power lines and that deenergized and grounded power lines will become accidentally energized.

II. "Voltage-gradient distribution"

A. Voltage-gradient distribution curve.

((The dissipation of voltage from a grounding electrode (or from the grounded end of an energized grounded object) is called the ground potential gradient. Voltage drops associ-

ated with this dissipation of voltage are called ground potentials. Figure A is a typical voltage-gradient distribution curve (assuming a uniform soil texture). This graph shows that voltage decreases rapidly with increasing distance from the grounding electrode.)) Absolute, or true, ground serves as a reference and always has a voltage of 0 volts above ground potential. Because there is an impedance between a grounding electrode and absolute ground, there will be a voltage difference between the grounding electrode and absolute ground under ground-fault conditions. Voltage dissipates from the grounding electrode (or from the grounding point) and creates a ground potential gradient. The voltage decreases rapidly with increasing distance from the grounding electrode. A voltage drop associated with this dissipation of voltage is a ground potential. Figure A is a typical voltage-gradient distribution curve (assuming a uniform soil texture).

 $^{^{12}}$ IEEE Std 516-2009 states that most employers add 0.2 to the calculated value of T as an additional safety factor.

¹³To eliminate sparkovers due to minor system disturbances, the employer should use a withstand voltage no lower than 1.25 p.u. Note that this is a practical, or operational, consideration only. It may be feasible for the employer to use lower values of withstand voltage.

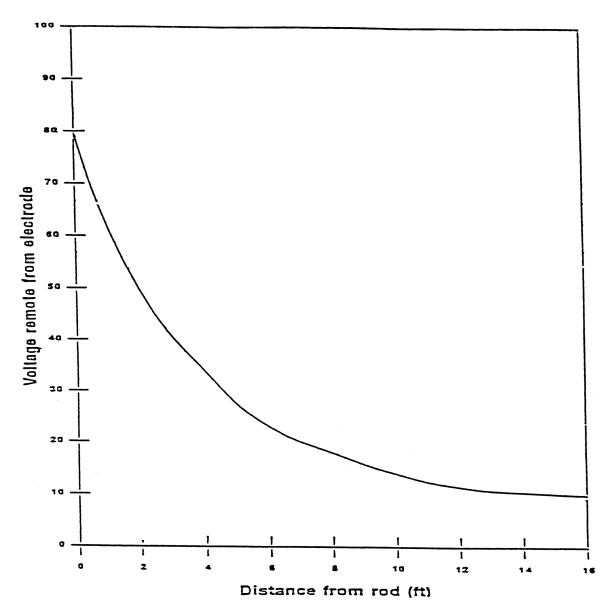


Figure A - Typical Voltage-Gradient Distribution Curve

B. Step and touch potentials. Figure A also shows that workers are at risk from step and touch potentials. Step potential is the voltage between the feet of a person standing near an energized grounded object (the electrode). In Figure A, the step potential is equal to the difference in voltage between two points at different distances from the electrode (where the points represent the location of each foot in relation to the electrode). A person could be at risk of injury during a fault simply by standing near the object.

Touch potential is the voltage between the energized grounded object (again, the electrode) and the feet of a person in contact with the object. In Figure A, the touch potential is equal to the difference in voltage between the electrode (which is at a distance of 0 meters) and a point some distance away from the electrode (where the point represents the location of the feet of the person in contact with the object). The touch potential could be nearly the full voltage across the grounded object if that object is grounded at a point remote from the place where the person is in contact with it. For example, a crane grounded to the system neutral and that contacts an energized line would expose any person in contact with the crane or its uninsulated load line to a touch potential nearly equal to the full fault voltage.

Figure B illustrates step and touch potentials.

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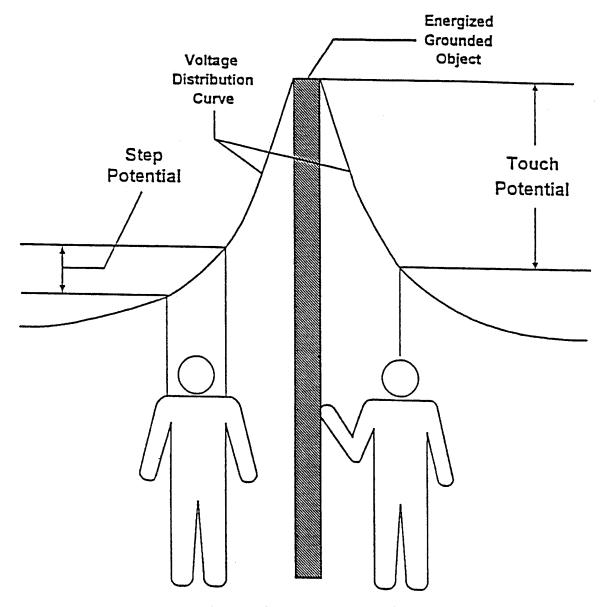


Figure B - Step and Touch Potentials

III. Protecting Workers From Hazardous Differences in Electrical Potential

A. *Definitions*. The following definitions apply to Section III of this document:

Bond. The electrical interconnection of conductive parts designed to maintain a common electric potential.

Bonding cable (bonding jumper). A cable connected to two conductive parts to bond the parts together.

<u>Cluster bar.</u> A terminal temporarily attached to a structure that provides a means for the attachment and bonding of grounding and bonding cables to the structure.

Ground. A conducting connection between an electric circuit or equipment and the earth, or to some conducting body that serves in place of the earth.

<u>Grounding cable (grounding jumper).</u> A cable connected between a deenergized part and ground. Note that grounding cables carry fault current and bonding cables gen-

erally do not. A cable that bonds two conductive parts but carries substantial fault current (for example, a jumper connected between one phase and a grounded phase) is a grounding cable.

Ground mat (grounding grid). A temporarily or permanently installed metallic mat or grating that establishes an equipotential surface and provides connection points for attaching grounds.

B. Analyzing the hazard. The employer can use an engineering analysis of the power system under fault conditions to determine whether hazardous step and touch voltages will develop. The analysis should determine the voltage on all conductive objects in the work area and the amount of time the voltage will be present. Based on the analysis, the employer can select appropriate measures and protective equipment, including the measures and protective equipment outlined in Section III of this document, to protect each

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employee from hazardous differences in electric potential. For example, from the analysis, the employer will know the voltage remaining on conductive objects after employees install bonding and grounding equipment and will be able to select insulating equipment with an appropriate rating, as described in paragraph III.C.2 of this document.

- C. Protecting workers on the ground. The employer may use several methods, including equipotential zones, insulating equipment, and restricted work areas, to protect employees on the ground from hazardous differences in electrical potential.
- 1. An equipotential zone will protect workers within it from hazardous step and touch potentials. (See Figure C.) Equipotential zones will not, however, protect employees located either wholly or partially outside the protected area. The employer can establish an equipotential zone for workers on the ground, with respect to a grounded object, through the use of a metal mat connected to the grounded object. The employer can use a grounding grid to equalize the voltage within the grid or bond conductive objects in the immediate work area to minimize the potential between the objects and between each object and ground. (Bonding an object outside the work area can increase the touch potential to that object, however.) Section III.D of this document discusses equipotential zones for employees working on deenergized and grounded power lines.
- 2. Insulating equipment, such as rubber gloves, can protect employees handling grounded equipment and conductors from hazardous touch potentials. The insulating equipment must be rated for the highest voltage that can be impressed on the grounded objects under fault conditions (rather than for the full system voltage).
- 3. Restricting employees from areas where hazardous step or touch potentials could arise can protect employees not directly involved in performing the operation. The employer must ensure that employees on the ground in the vicinity of transmission structures are at a distance where step voltages would be insufficient to cause injury. Employees must not handle grounded conductors or equipment likely to become energized to hazardous voltages unless the employees are within an equipotential zone or protected by insulating equipment.

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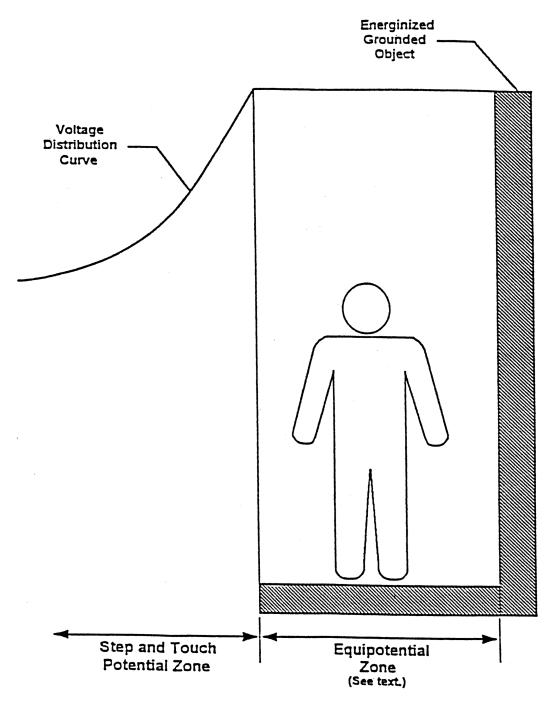


Figure C - Protection from Ground-Potential Gradients

D. Protecting employees working on deenergized and grounded power lines. This Section III.D of this document establishes guidelines to help employers comply with requirements in WAC 296-45-345 for using protective grounding to protect employees working on deenergized power lines. WAC 296-45-345 applies to grounding of transmission and distribution lines and equipment for the purpose of protecting workers. WAC 296-45-345(3) requires temporary protective grounds to be placed at such locations and arranged in such a manner that the employer can demonstrate will prevent exposure of each employee to hazardous differ-

ences in electric potential.³ Sections III.D.1 and III.D.2 of this document provide guidelines that employers can use in making the demonstration required by WAC 296-45-345(3). Section III.D.1 of this document provides guidelines on how the employer can determine whether particular grounding practices expose employees to hazardous differences in electric potential. Section III.D.2 of this document describes grounding methods that the employer can use in lieu of an engineering analysis to make the demonstration required by WAC 296-45-345(3). The department will consider employers that

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comply with the criteria in this document as meeting WAC 296-45-345(3).

Finally, Section III.D.3 of this document discusses other safety considerations that will help the employer comply with other requirements in WAC 296-45-345. Following these guidelines will protect workers from hazards that can occur when a deenergized and grounded line becomes energized.

1. Determining safe body current limits. This Section III.D.1 of this document provides guidelines on how an employer can determine whether any differences in electric potential to which workers could be exposed are hazardous as part of the demonstration required by WAC 296-45-345(3).

Institute of Electrical and Electronic Engineers (IEEE) Standard 1048-2003, IEEE Guide for Protective Grounding of Power Lines, provides the following equation for determining the threshold of ventricular fibrillation when the duration of the electric shock is limited:

$$I=\frac{116}{\sqrt{t}},$$

Where *I* is the current through the worker's body, and *t* is the duration of the current in seconds. This equation represents the ventricular fibrillation threshold for 95.5 percent of the adult population with a mass of 50 kilograms (110 pounds) or more. The equation is valid for current durations between 0.0083 to 3.0 seconds.

To use this equation to set safe voltage limits in an equipotential zone around the worker, the employer will need to assume a value for the resistance of the worker's body. IEEE Std 1048-2003 states that "total body resistance is usually taken as 1000 Ω for determining . . . body current limits." However, employers should be aware that the impedance of a worker's body can be substantially less than that value. For instance, IEEE Std 1048-2003 reports a minimum hand-tohand resistance of 610 ohms and an internal body resistance of 500 ohms. The internal resistance of the body better represents the minimum resistance of a worker's body when the skin resistance drops near zero, which occurs, for example, when there are breaks in the worker's skin, for instance, from cuts or from blisters formed as a result of the current from an electric shock, or when the worker is wet at the points of contact.

Employers may use the IEEE Std 1048-2003 equation to determine safe body current limits only if the employer protects workers from hazards associated with involuntary muscle reactions from electric shock (for example, the hazard to a worker from falling as a result of an electric shock). Moreover, the equation applies only when the duration of the electric shock is limited. If the precautions the employer takes, including those required by applicable standards, do not adequately protect employees from hazards associated with involuntary reactions from electric shock, a hazard exists if the induced voltage is sufficient to pass a current of 1 milliampere through a 500-ohm resistor. (The 500-ohm resistor represents the resistance of an employee. The 1-milliampere current is the threshold of perception.) Finally, if the

employer protects employees from injury due to involuntary reactions from electric shock, but the duration of the electric shock is unlimited (that is, when the fault current at the work location will be insufficient to trip the devices protecting the circuit), a hazard exists if the resultant current would be more than 6 milliamperes (the recognized let-go threshold for workers⁴).

2. Acceptable methods of grounding for employers that do not perform an engineering determination. The grounding methods presented in this section of this document ensure that differences in electric potential are as low as possible and, therefore, meet WAC 296-45-345(3) without an engineering determination of the potential differences. These methods follow two principles: (i) The grounding method must ensure that the circuit opens in the fastest available clearing time, and (ii) the grounding method must ensure that the potential differences between conductive objects in the employee's work area are as low as possible.

WAC 296-45-345(3) does not require grounding methods to meet the criteria embodied in these principles. Instead, the paragraph requires that protective grounds be "placed at such locations and arranged in such a manner that the employer can demonstrate will prevent exposure of each employee to hazardous differences in electric potential." However, when the employer's grounding practices do not follow these two principles, the employer will need to perform an engineering analysis to make the demonstration required by WAC 296-45-345(3).

i. Ensuring that the circuit opens in the fastest available clearing time. Generally, the higher the fault current, the shorter the clearing times for the same type of fault. Therefore, to ensure the fastest available clearing time, the grounding method must maximize the fault current with a low impedance connection to ground. The employer accomplishes this objective by grounding the circuit conductors to the best ground available at the worksite. Thus, the employer must ground to a grounded system neutral conductor, if one is present. A grounded system neutral has a direct connection to the system ground at the source, resulting in an extremely low impedance to ground. In a substation, the employer may instead ground to the substation grid, which also has an extremely low impedance to the system ground and, typically, is connected to a grounded system neutral when one is present. Remote system grounds, such as pole and tower grounds, have a higher impedance to the system ground than grounded system neutrals and substation grounding grids; however, the employer may use a remote ground when lower impedance grounds are not available. In the absence of a grounded system neutral, substation grid, and remote ground, the employer may use a temporary driven ground at the worksite.

In addition, if employees are working on a three-phase system, the grounding method must short circuit all three phases. Short circuiting all phases will ensure faster clearing and lower the current through the grounding cable connecting the deenergized line to ground, thereby lowering the voltage across that cable. The short circuit need not be at the worksite; however, the employer must treat any conductor that is not grounded at the worksite as energized because the

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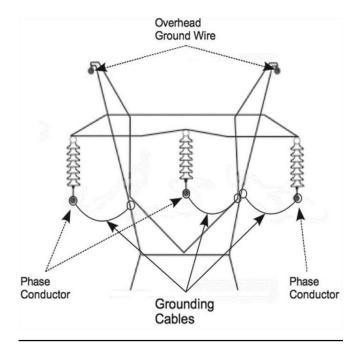
WSR 16-10-082

ungrounded conductors will be energized at fault voltage during a fault.

ii. Ensuring that the potential differences between conductive objects in the employee's work area are as low as possible. To achieve as low a voltage as possible across any two conductive objects in the work area, the employer must bond all conductive objects in the work area. This section of this document discusses how to create a zone that minimizes differences in electric potential between conductive objects in the work area.

The employer must use bonding cables to bond conductive objects, except for metallic objects bonded through metal-to-metal contact. The employer must ensure that metal-to-metal contacts are tight and free of contamination, such as oxidation, that can increase the impedance across the connection. For example, a bolted connection between metal lattice tower members is acceptable if the connection is tight and free of corrosion and other contamination. Figure D shows how to create an equipotential zone for metal lattice towers.

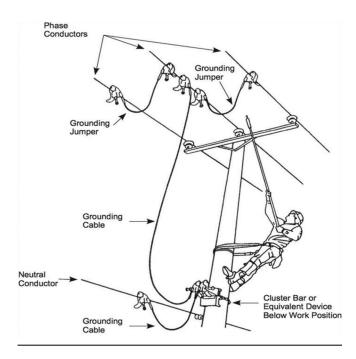
Wood poles are conductive objects. The poles can absorb moisture and conduct electricity, particularly at distribution and transmission voltages. Consequently, the employer must either: (1) Provide a conductive platform, bonded to a grounding cable, on which the worker stands or (2) use cluster bars to bond wood poles to the grounding cable. The employer must ensure that employees install the cluster bar below, and close to, the worker's feet. The inner portion of the wood pole is more conductive than the outer shell, so it is important that the cluster bar be in conductive contact with a metal spike or nail that penetrates the wood to a depth greater than or equal to the depth the worker's climbing gaffs will penetrate the wood. For example, the employer could mount the cluster bar on a bare pole ground wire fastened to the pole with nails or staples that penetrate to the required depth. Alternatively, the employer may temporarily nail a conductive strap to the pole and connect the strap to the cluster bar. Figure E shows how to create an equipotential zone for wood poles.



Notes:

- 1. Employers must ground overhead ground wires that are within reach of the employee.
 - 2. The grounding cable must be as short as practicable; therefore, the attachment points between the grounding cable and the tower may be different from that shown in the figure.

Figure D - Equipotential Zone for Metal Lattice Tower



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Figure E - Equipotential Grounding for Wood Poles

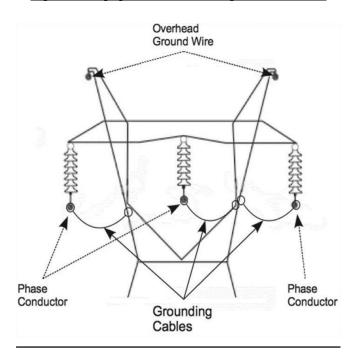


Figure reprinted with permission from Hubbell Power Systems, Inc. (Hubbell)

OSHA revised the figure from Hubbell's original.

For underground systems, employers commonly install grounds at the points of disconnection of the underground cables. These grounding points are typically remote from the manhole or underground vault where employees will be working on the cable. Workers in contact with a cable grounded at a remote location can experience hazardous potential differences if the cable becomes energized or if a fault occurs on a different, but nearby, energized cable. The fault current causes potential gradients in the earth, and a potential difference will exist between the earth where the worker is standing and the earth where the cable is grounded. Consequently, to create an equipotential zone for the worker, the employer must provide a means of connecting the deenergized cable to ground at the worksite by having the worker stand on a conductive mat bonded to the deenergized cable. If the cable is cut, the employer must install a bond across the opening in the cable or install one bond on each side of the opening to ensure that the separate cable ends are at the same potential. The employer must protect the worker from any hazardous differences in potential any time there is no bond between the mat and the cable (for example, before the worker installs the bonds).

- 3. Other safety-related considerations. To ensure that the grounding system is safe and effective, the employer should also consider the following factors:²
- i. Maintenance of grounding equipment. It is essential that the employer properly maintain grounding equipment. Corrosion in the connections between grounding cables and clamps and on the clamp surface can increase the resistance of the cable, thereby increasing potential differences. In addi-

tion, the surface to which a clamp attaches, such as a conductor or tower member, must be clean and free of corrosion and oxidation to ensure a low-resistance connection. Cables must be free of damage that could reduce their current-carrying capacity so that they can carry the full fault current without failure. Each clamp must have a tight connection to the cable to ensure a low resistance and to ensure that the clamp does not separate from the cable during a fault.

ii. Grounding cable length and movement. The electromagnetic forces on grounding cables during a fault increase with increasing cable length. These forces can cause the cable to move violently during a fault and can be high enough to damage the cable or clamps and cause the cable to fail. In addition, flying cables can injure workers. Consequently, cable lengths should be as short as possible, and grounding cables that might carry high fault current should be in positions where the cables will not injure workers during a fault.

Notes:

¹This document generally uses the term "grounded" only with respect to grounding that the employer intentionally installs, for example, the grounding an employer installs on a deenergized conductor. However, in this case, the term "grounded" means connected to earth, regardless of whether or not that connection is intentional.

²Thus, grounding systems for transmission towers and substation structures should be designed to minimize the step and touch potentials involved.

²The protective grounding required by WAC 296-45-345 limits to safe values the potential differences between accessible objects in each employee's work environment. Ideally, a protective grounding system would create a true equipotential zone in which every point is at the same electric potential. In practice, current passing through the grounding and bonding elements creates potential differences. If these potential differences are hazardous, the employer may not treat the zone as an equipotential zone.

⁴Electric current passing through the body has varying effects depending on the amount of the current. At the let-go threshold, the current overrides a person's control over his or her muscles. At that level, an employee grasping an object will not be able to let go of the object. The let-go threshold varies from person to person; however, the recognized value for workers is 6 milliamperes.

⁵This document only discusses factors that relate to ensuring an equipotential zone for employees. The employer must consider other factors in selecting a grounding system that is capable of conducting the maximum fault current that could flow at the point of grounding for the time necessary to clear the fault, as required by WAC 296-45-345(4)(a). IEEE Std 1048-2003 contains guidelines for selecting and installing grounding equipment that will meet WAC 296-45-345(4)(a).

AMENDATORY SECTION (Amending WSR 98-07-009, filed 3/6/98, effective 5/6/98)

WAC 296-45-905 Appendix C—Methods of inspecting and testing wood poles—Nonmandatory.

I. "Introduction"

When ((work is to be performed)) employees are to perform work on a wood pole, it is important to determine the condition of the pole before employees climb it ((is elimbed)). The weight of the employee, the weight of equipment ((being)) to be installed, and other working stresses

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(such as the removal or retensioning of conductors) can lead to the failure of a defective pole or ((one)) a pole that is not designed to handle the additional stresses. (1) For these reasons, it is essential that ((an inspection and test of the condition of a wood pole be performed before it is climbed)), before an employee climbs a wood pole, the employer ascertains that the pole is capable of sustaining the stresses of the work. The determination that the pole is capable of sustaining these stresses includes an inspection of the condition of the pole.

Footnote⁽¹⁾

((A properly guyed pole in good condition should, at a minimum, be able to handle the weight of an employee elimbing it.)) If the employer finds the pole ((is found)) to be unsafe to climb or to work from, ((it must be secured)) the employer must secure the pole so that it does not fail while an employee is on it.

The <u>employer can secure the</u> pole ((<u>ean be secured</u>)) by a line truck boom, by ropes or guys, or by lashing a new pole alongside it. If a new one is lashed alongside the defective pole, <u>employees should</u> work ((<u>should be performed</u>)) from the new one.

II. "Inspection of wood poles"

((Wood poles should be inspected by)) A qualified electrical employee should inspect wood poles for the following conditions:⁽²⁾

Footnote(2)

The presence of any of these conditions is an indication that the pole may not be safe to climb or to work from. The employee performing the inspection must be qualified to make a determination as to whether or not it is safe to perform the work without taking additional precautions.

A. General condition.

((The pole should be inspected for)) Buckling at the ground line ((and for)) or an unusual angle with respect to the ground((. Buckling and odd angles)) may indicate that the pole has rotted or is broken.

B. Cracks.

((The pole should be inspected for cracks.)) Horizontal cracks perpendicular to the grain of the wood may weaken the pole. Vertical ((ones)) cracks, although not normally considered to be a sign of a defective pole, can pose a hazard to the climber, and the employee should keep his or her gaffs away from them while climbing.

C. Holes.

Hollow spots and woodpecker holes can reduce the strength of a wood pole.

D. Shell rot and decay.

Rotting and decay are cutout hazards and are possible indications of the age and internal condition of the pole.

E. Knots.

One large knot or several smaller ones at the same height on the pole may be evidence of a weak point on the pole.

F. Depth of setting.

Evidence of the existence of a former ground line substantially above the existing ground level may be an indication that the pole is no longer buried to a sufficient extent.

G. Soil conditions.

Soft, wet, or loose soil <u>around the base of the pole</u> may <u>indicate that the pole will</u> not support any change((s of)) <u>in</u> stress ((on the pole)).

H. Burn marks.

Burning from transformer failures or conductor faults could damage the pole so that it cannot withstand <u>changes in</u> mechanical stress ((changes)).

III. "Testing of wood poles"

The following tests are recognized as acceptable methods of testing wood poles:

A. Hammer test.

Rap the pole sharply with a hammer weighing about 3 pounds (1.4 kg), starting near the ground line and continuing upwards circumferentially around the pole to a height of approximately 6 feet (1.8 meters). The hammer will produce a clear sound and rebound sharply when striking sound wood. Decay pockets will be indicated by a dull sound or a less pronounced hammer rebound. Also, prod the pole as near the ground line as possible using a pole prod or a screwdriver with a blade at least 5 inches (127 millimeters) long. If substantial decay is ((encountered)) present, the pole is ((eonsidered)) unsafe.

B. Rocking test.

Apply a horizontal force to the pole and attempt to rock it back and forth in a direction perpendicular to the line. Exercise caution ((must be exercised)) to avoid causing power lines to swing together. Apply the force ((may be applied)) to the pole either by pushing with a pike pole or pulling the pole with a rope. If the pole cracks during the test, it ((shall be considered)) is unsafe.

NEW SECTION

WAC 296-45-906 Appendix D—Protection from flames and electric arcs—Nonmandatory.

I. Introduction

WAC 296-45-325(13) addresses protecting employees from flames and electric arcs. This section requires employers to: (1) Assess the workplace for flame and electric-arc hazards (WAC 296-45-325 (13)(a)); (2) estimate the available heat energy from electric arcs to which employees would be exposed (WAC 296-45-325 (13)(b)); (3) ensure that employees wear clothing that will not melt, or ignite and continue to burn, when exposed to flames or the estimated heat energy (WAC 296-45-325 (13)(c)); and (4) ensure that employees wear flame-resistant clothing¹ and protective clothing and other protective equipment that has an arc rating greater than or equal to the available heat energy under certain conditions (WAC 296-45-325 (13)(d) and (e)). This appendix contains information to help employers estimate available heat energy as required by WAC 296-45-325 (13)(b), select protective clothing and other protective equipment with an arc rating suitable for the available heat energy as required by WAC 296-45-325 (13)(e), and ensure that employees do not wear flammable clothing that could lead to burn injury as addressed by WAC 296-45-325 (13)(c) and

II. Assessing the Workplace for Flame and Electric-Arc Hazards

WAC 296-45-325 (13)(a) requires the employer to assess the workplace to identify employees exposed to hazards from flames or from electric arcs. This provision ensures that the employer evaluates employee exposure to flames and

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electric arcs so that employees who face such exposures receive the required protection. The employer must conduct an assessment for each employee who performs work on or near exposed, energized parts of electric circuits.

A. Assessment Guidelines.

Sources electric arcs. Consider possible sources of electric arcs, including:

- Energized circuit parts not guarded or insulated;
- Switching devices that produce electric arcs in normal operation;
- Sliding parts that could fault during operation (for example, rack-mounted circuit breakers); and
- Energized electric equipment that could fail (for example, electric equipment with damaged insulation or with evidence of arcing or overheating).

Exposure to flames. Identify employees exposed to hazards from flames.

Factors to consider include:

- The proximity of employees to open flames; and
- For flammable material in the work area, whether there is a reasonable likelihood that an electric arc or an open flame can ignite the material.

Probability that an electric arc will occur. Identify employees exposed to electric-arc hazards. The department

will consider an employee exposed to electric-arc hazards if there is a reasonable likelihood that an electric arc will occur in the employee's work area, in other words, if the probability of such an event is higher than it is for the normal operation of enclosed equipment. Factors to consider include:

- For energized circuit parts not guarded or insulated, whether conductive objects can come too close to or fall onto the energized parts;
- For exposed, energized circuit parts, whether the employee is closer to the part than the minimum approach distance established by the employer (as permitted by WAC 296-45-325(4));
- Whether the operation of electric equipment with sliding parts that could fault during operation is part of the normal operation of the equipment or occurs during servicing or maintenance; and
- For energized electric equipment, whether there is evidence of impending failure, such as evidence of arcing or overheating.

B. Examples.

Table 1 provides task-based examples of exposure assessments.

EX	TABLE 1 AMPLE ASSESSMENTS FOR VARIOUS TASKS	
Task		Is employee exposed to flame or electric arc hazard?
Normal operation of enclosed equipment, such as closing or opening a switch.	The employer properly installs and maintains enclosed equipment, and there is no evidence of impending failure.	No.
	There is evidence of arcing or overheating	Yes.
	Parts of the equipment are loose or sticking, or the equipment otherwise exhibits signs of lack of maintenance.	Yes.
Servicing electric equipment, such as racki	ng in a circuit breaker or replacing a switch	Yes.
Inspection of electric equipment with exposed energized parts.	The employee is not holding conductive objects and remains outside the minimum approach distance established by the employer.	No.
	The employee is holding a conductive object, such as a flashlight, that could fall or otherwise contact energized parts (irrespective of whether the employee maintains the minimum approach distance).	Yes.
	The employee is closer than the minimum approach distance established by the employer (for example, when wearing rubber insulating gloves or rubber insulating gloves and sleeves).	Yes.
Using open flames, for example, in wiping	g cable splice sleeves	Yes.

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III. Protection Against Burn Injury

A. Estimating Available Heat Energy.

Calculation methods. WAC 296-45-325 (13)(b) provides that, for each employee exposed to an electric-arc hazard, the employer must make a reasonable estimate of the heat energy to which the employee would be exposed if an arc occurs. Table 2 lists various methods of calculating values of available heat energy from an electric circuit. The department does not endorse any of these specific methods. Each method requires the input of various parameters, such as fault current, the expected length of the electric arc, the distance from the arc to the employee, and the clearing time for the fault (that is, the time the circuit protective devices take to open the circuit and clear the fault). The employer can precisely determine some of these parameters, such as the fault current and the clearing time, for a given system. The employer will need to estimate other parameters, such as the length of the arc and the distance between the arc and the employee, because such parameters vary widely.

TABLE 2 METHODS OF CALCULATING INCIDENT HEAT ENERGY FROM AN ELECTRIC ARC

- 1. Standard for Electrical Safety Requirements for Employee Workplaces, NFPA 70E-2012, Annex D, "Sample Calculation of Flash Protection Boundary."
- 2. Doughty, T.E., Neal, T.E., and Floyd II, H.L., "Predicting Incident Energy to Better Manage the Electric Arc Hazard on 600 V Power Distribution Systems," *Record of Conference Papers IEEE IAS 45th Annual Petroleum and Chemical Industry Conference*, September 28-30, 1998.
- 3. Guide for Performing Arc-Flash Hazard Calculations, IEEE Std 1584-2002, 1584a-2004 (Amendment 1 to IEEE Std 1584-2002), and 1584b-2011 (Amendment 2: Changes to Clause 4 of IEEE Std 1584-2002).*
- ARCPRO, a commercially available software program developed by Kinectrics, Toronto, ON, CA.

The amount of heat energy calculated by any of the methods is approximately inversely proportional to the square of the distance between the employee and the arc. In other words, if the employee is very close to the arc, the heat energy is very high; but if the employee is just a few more centimeters away, the heat energy drops substantially. Thus, estimating the distance from the arc to the employee is key to protecting employees.

The employer must select a method of estimating incident heat energy that provides a reasonable estimate of incident heat energy for the exposure involved. Table 3 shows which methods provide reasonable estimates for various exposures.

TABLE 3 SELECTING A REASONABLE INCIDENT-ENERGY CALCULATION METHOD ¹									
Incident-energy calculation	600 V and Less ² 601 V to 15 kV ² More than 15 k				kV				
method	1Ф	3Фа	3ФЬ	o 1Φ 3Φa 3Φb 1Φ 3Φa			3Фа	3ФЬ	
NFPA 70E-2012 Annex D (Lee									
equation)	Y-C	Y	N	Y-C	Y-C	N	N^3	N^3	N^3
Doughty, Neal, and Floyd	Y-C	Y	Y	N	N	N	N	N	N
IEEE Std 1584b-2011	Y	Y	Y	Y	Y	Y	N	N	N
ARCPRO	Y	N	N	Y	N	N	Y	Y ⁴	Y ⁴

Key:

1Ф: Single-phase arc in open air.

3Фа: Three-phase arc in open air.

3Φb: Three-phase arc in an enclosure (box).

Y: Acceptable; produces a reasonable estimate of incident heat energy from this type of electric arc.

N: Not acceptable; does not produce a reasonable estimate of incident heat energy from this type of electric arc.

Y-C: Acceptable; produces a reasonable, but conservative, estimate of incident heat energy from this type of electric arc.

Notes:

¹Although the department will consider these methods reasonable for enforcement purposes when employers use the methods in accordance with this table, employers should be aware that the listed methods do not necessarily result in estimates that will provide full protection from internal faults in transformers and similar equipment or from arcs in underground manholes or vaults.

^{*} This appendix refers to IEEE Std 1584-2002 with both amendments as IEEE Std 1584b-2011.

²At these voltages, the presumption is that the arc is three-phase unless the employer can demonstrate that only one phase is present or that the spacing of the phases is sufficient to prevent a multiphase arc from occurring.

³Although the department will consider this method acceptable for purposes of assessing whether incident energy exceeds 2.0 cal/cm², the results at voltages of more than 15 kilovolts are extremely conservative and unrealistic.

⁴The department will deem the results of this method reasonable when the employer adjusts them using the conversion factors for three-phase arcs in open air or in an enclosure, as indicated in the program's instructions.

Selecting a reasonable distance from the employee to the arc. In estimating available heat energy, the employer must make some reasonable assumptions about how far the employee will be from the electric arc. Table 4 lists reasonable distances from the employee to the electric arc. The distances in Table 4 are consistent with national consensus standards, such as the Institute of Electrical and Electronic Engineers' National Electrical Safety Code, ANSI/IEEE C2-2012, and IEEE Guide for Performing Arc-Flash Hazard Calculations, IEEE Std 1584b-2011. The employer is free to use other reasonable distances, but must consider equipment enclosure size and the working distance to the employee in selecting a distance from the employee to the arc. The department will consider a distance reasonable when the employer bases it on equipment size and working distance.

SELECTING A REASONABLE	TABLE 4 DISTANCE FROM THE EMPLOYEE TO T	THE ELECTRIC ARC
Class of equipment	Single-phase arc mm (inches)	Three-phase arc mm (inches)
Cable	*NA	455 (18)
Low voltage MCCs and panelboards	NA	455 (18)
Low-voltage switchgear	NA	610 (24)
5-kV switchgear	NA	910 (36)
15-kV switchgear	NA	910 (36)
Single conductors in air (up to 46 kilovolts), work with rubber insulating gloves	380 (15)	NA
Single conductors in air, work with live-line tools	MAD - $(2 \times kV \times 2.54)$	NA

^{*} NA = not applicable.

MAD = The applicable minimum approach distance; and

kV = The system voltage in kilovolts.

Selecting a reasonable arc gap. For a single-phase arc in air, the electric arc will almost always occur when an energized conductor approaches too close to ground. Thus, an employer can determine the arc gap, or arc length, for these exposures by the dielectric strength of air and the voltage on the line. The dielectric strength of air is approximately 10 kilovolts for every 25.4 millimeters (1 inch). For example, at 50 kilovolts, the arc gap would be $50 \div 10 \times 25.4$ (or 50×2.54), which equals 127 millimeters (5 inches).

For three-phase arcs in open air and in enclosures, the arc gap will generally be dependent on the spacing between parts energized at different electrical potentials. Documents such as IEEE Std 1584b-2011 provide information on these distances. Employers may select a reasonable arc gap from Table 5, or they may select any other reasonable arc gap based on sparkover distance or on the spacing between (1) live parts at different potentials or (2) live parts and grounded parts (for example, bus or conductor spacings in equipment). In any event, the employer must use an estimate that reasonably resembles the actual exposures faced by the employee.

SI	TABLE 5 ELECTING A REASONABLE ARC GAP	
Class of equipment	Single-phase arc mm (inches)	Three-phase arc mm ¹ (inches)
Cable	NA ²	13 (0.5).
Low voltage MCCs and panelboards	NA	25 (1.0).
Low-voltage switchgear	NA	32 (1.25).
5-kV switchgear	NA	104 (4.0).
15-kV switchgear	NA	152 (6.0).
Single conductors in air (up to 46 kilovolts), work with rubber insulating gloves	51 (2.0)	Phase conductor spacing.
Single conductors in air, work with live-line	Voltage in $kV \times 2.54$	Phase conductor spacing.
tools	(Voltage in $kV \times 0.1$), but no less than 51 mm (2 inches).	

¹Source: IEEE Std 1584b-2011.

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[†] The terms in this equation are:

 $^{^{2}}NA = not applicable.$

Making estimates over multiple system areas. The employer need not estimate the heat-energy exposure for every job task performed by each employee. WAC 296-45-325 (13)(b) permits the employer to make broad estimates that cover multiple system areas provided that: (1) The employer uses reasonable assumptions about the energy-exposure distribution throughout the system, and (2) the estimates represent the maximum exposure for those areas. For example, the employer can use the maximum fault current and clearing time to cover several system areas at once.

Incident heat energy for single-phase-to-ground exposures. Table 6 and Table 7 provide incident heat energy levels for openair, phase-to-ground electric-arc exposures typical for overhead systems.2 Table 6 presents estimates of available energy for employees using rubber insulating gloves to perform work on overhead systems operating at 4 to 46 kilovolts. The table assumes that the employee will be 380 millimeters (15 inches) from the electric arc, which is a reasonable estimate for rubber insulating glove work. Table 6 also assumes that the arc length equals the sparkover distance for the maximum transient overvoltage of each voltage range.³ To use the table, an employer would use the voltage, maximum fault current, and maximum clearing time for a system area and, using the appropriate voltage range and fault-current and clearing time values corresponding to the next higher values listed in the table, select the appropriate heat energy (4, 5, 8, or 12 cal/cm²) from the table. For example, an employer might have a 12,470-volt power line supplying a system area. The power line can supply a maximum fault current of 8 kiloamperes with a maximum clearing time of 10 cycles. For rubber glove work, this system falls in the 4.0-to-15.0-kilovolt range; the next-higher fault current is 10

kA (the second row in that voltage range); and the clearing time is under 18 cycles (the first column to the right of the fault current column). Thus, the available heat energy for this part of the system will be 4 cal/cm² or less (from the column heading), and the employer could select protection with a 5cal/cm² rating to meet WAC 296-45-325 (13)(e). Alternatively, an employer could select a base incident-energy value and ensure that the clearing times for each voltage range and fault current listed in the table do not exceed the corresponding clearing time specified in the table. For example, an employer that provides employees with arc-flash protective equipment rated at 8 cal/cm² can use the table to determine if any system area exceeds 8 cal/cm² by checking the clearing time for the highest fault current for each voltage range and ensuring that the clearing times do not exceed the values specified in the 8-cal/cm² column in the table.

Table 7 presents similar estimates for employees using live-line tools to perform work on overhead systems operating at voltages of 4 to 800 kilovolts. The table assumes that the arc length will be equal to the sparkover distance⁴ and that the employee will be a distance from the arc equal to the minimum approach distance minus twice the sparkover distance.

The employer will need to use other methods for estimating available heat energy in situations not addressed by Table 6 or Table 7. The calculation methods listed in Table 2 and the guidance provided in Table 3 will help employers do this. For example, employers can use IEEE Std 1584b-2011 to estimate the available heat energy (and to select appropriate protective equipment) for many specific conditions, including lowervoltage, phase-to-phase arc, and enclosed arc exposures.

INCIDENT HEAT ENERGY FOR VARIOUS FAULT CUR	TABLE PRENTS CLEAR		D VOI TAGES OF	7 4 0 TO 46 0 KV+	DURRER INSU-
LATING GLOVE EXPOSURES INVO					KUBBEK INSU-
Voltage range (kV) **	Fault cur-	N	Maximum clear	ing time (cycle	s)
	rent (kA)	4 cal/cm ²	5 cal/cm ²	8 cal/cm ²	12 cal/cm ²
4.0 to 15.0	5	46	58	92	138
	10	18	22	36	54
	15	10	12	20	30
	20	6	8	13	19
15.1 to 25.0	5	28	34	55	83
	10	11	14	23	24
	15	7	8	13	20
	20	4	5	9	13
25.1 to 36.0	5	21	26	42	62
	10	9	11	18	26
	15	5	6	10	16
	20	4	4	7	11
36.1 to 46.0	5	16	20	32	48
	10	7	9	14	21
	15	4	5	8	13
	20	3	4	6	9

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Notes:* This table i

This table is for open-air, phase-to-ground electric-arc exposures. It is not for phase-to-phase arcs or enclosed arcs (arc in a box).

† The table assumes that the employee will be 380 mm (15 in.) from the electric arc. The table also assumes the arc length to be the sparkover distance for the maximum transient overvoltage of each voltage range, as follows:

4.0 to 15.0 kV 51 mm (2 in.)

15.1 to 25.0 kV 102 mm (4 in.)

25.1 to 36.0 kV 152 mm (6 in.)

36.1 to 46.0 kV 229 mm (9 in.)

‡ The Occupational Safety and Health Administration calculated the values in this table using the ARCPRO method listed in Table 2.

^{**} The voltage range is the phase-to-phase system voltage.

INCIDENT HEAT ENERGY FOR VARIOUS FAULT C INVOLVING PHASI		RING TIMES, AN		LIVE-LINE TOO	L EXPOSURES
Voltage range (kV) **	Fault cur-		Maximum clear	s)	
	rent (kA)	4 cal/cm ²	5 cal/cm ²	8 cal/cm ²	12 cal/cm ²
4.0 to 15.0	5	197	246	394	591
	10	73	92	147	220
	15	39	49	78	117
	20	24	31	49	73
15.1 to 25.0	5	197	246	394	591
	10	75	94	150	225
	15	41	51	82	122
	20	26	33	52	78
25.1 to 36.0	5	138	172	275	413
	10	53	66	106	159
	15	30	37	59	89
	20	19	24	38	58
36.1 to 46.0	5	129	161	257	386
	10	51	64	102	154
	15	29	36	58	87
	20	19	24	38	57
46.1 to 72.5	20	18	23	36	55
	30	10	13	20	30
	40	6	8	13	19
	50	4	6	9	13
72.6 to 121.0	20	10	12	20	30
	30	6	7	11	17
	40	4	5	7	11
	50	3	3	5	8
121.1 to 145.0	20	12	15	24	35
	30	7	9	15	22
	40	5	6	10	15
	50	4	5	8	11
145.1 to 169.0	20	12	15	24	36
	30	7	9	15	22
	40	5	7	10	16
	50	4	5	8	12

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TABLE 7
INCIDENT HEAT ENERGY FOR VARIOUS FAULT CURRENTS, CLEARING TIMES, AND VOLTAGES: LIVE-LINE TOOL EXPOSURES
INVOLVING PHASE-TO-GROUND ARCS IN OPEN AIR ONLY * † ‡ #

Voltage range (kV) **	Fault cur- rent (kA)	Maximum clearing time (cycles)			
		4 cal/cm ²	5 cal/cm ²	8 cal/cm ²	12 cal/cm ²
169.1 to 242.0	20	13	17	27	40
	30	8	10	17	25
	40	6	7	12	17
	50	4	5	9	13
242.1 to 362.0	20	25	32	51	76
	30	16	19	31	47
	40	11	14	22	33
	50	8	10	16	25
362.1 to 420.0	20	12	15	25	37
	30	8	10	15	23
	40	5	7	11	16
	50	4	5	8	12
420.1 to 550.0	20	23	29	47	70
	30	14	18	29	43
	40	10	13	20	30
	50	8	9	15	23
550.1 to 800.0	20	25	31	50	75
	30	15	19	31	46
	40	11	13	21	32
	50	8	10	16	24

Notes:

72.6 to 121.0 kV 1.02 m.

121.1 to 145.0 kV 1.16 m.

145.1 to 169.0 kV 1.30 m.

169.1 to 242.0 kV 1.72 m.

242.1 to 362.0 kV 2.76 m.

362.1 to 420.0 kV 2.50 m.

420.1 to 550.0 kV 3.62 m.

550.1 to 800.0 kV 4.83 m.

B. Selecting Protective Clothing and Other Protective Equipment.

WAC 296-45-325 (13)(e) requires employers, in certain situations, to select protective clothing and other protective equipment with an arc rating that is greater than or equal to the incident heat energy estimated under WAC 296-45-325 (13)(b). Based on laboratory testing required by ASTM F1506-10a, the expectation is that protective clothing with an arc rating equal to the estimated incident heat energy will be capable of preventing second-degree burn injury to an employee exposed to that incident heat energy from an electric arc. Note that actual electric-arc exposures may be more

or less severe than the estimated value because of factors such as arc movement, arc length, arcing from reclosing of the system, secondary fires or explosions, and weather conditions. Additionally, for arc rating based on the fabric's arc thermal performance value⁵ (ATPV), a worker exposed to incident energy at the arc rating has a 50-percent chance of just barely receiving a second-degree burn. Therefore, it is possible (although not likely) that an employee will sustain a second-degree (or worse) burn wearing clothing conforming to WAC 296-45-325 (13)(e) under certain circumstances. However, reasonable employer estimates and maintaining appropriate minimum approach distances for employees

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^{*} This table is for open-air, phase-to-ground electric-arc exposures. It is not for phase-to-phase arcs or nclosed arcs (arc in a box).e

[†] The table assumes the arc length to be the sparkover distance for the maximum phase-to-ground voltage of each voltage range. The table also assumes that the employee will be the minimum approach distance minus twice the arc length from the electric arc.

[‡] The Occupational Safety and Health Administration calculated the values in this table using the ARCPRO method listed in Table 2.

[#] For voltages of more than 72.6 kV, employers may use this table only when the minimum approach distance established under WAC 296-45-325(4) is greater than or equal to the following values:

^{**} The voltage range is the phase-to-phase system voltage.

should limit burns to relatively small burns that just barely extend beyond the epidermis (that is, just barely a second degree burn). Consequently, protective clothing and other protective equipment meeting WAC 296-45-325 (13)(e) will provide an appropriate degree of protection for an employee exposed to electric-arc hazards.

WAC 296-45-325 (13)(e) does not require arc-rated protection for exposures of 2 cal/cm² or less. Untreated cotton clothing will reduce a 2-cal/cm² exposure below the 1.2- to 1.5-cal/cm² level necessary to cause burn injury, and this material should not ignite at such low heat energy levels. Although WAC 296-45-325 (13)(e) does not require clothing to have an arc rating when exposures are 2 cal/cm² or less, WAC 296-45-325 (13)(d) requires the outer layer of clothing to be flame resistant under certain conditions, even when the estimated incident heat energy is less than 2 cal/cm², as discussed later in this appendix.

Additionally, it is especially important to ensure that employees do not wear undergarments made from fabrics listed in the note to WAC 296-45-325 (13)(c) even when the outer layer is flame resistant or arc rated. These fabrics can melt or ignite easily when an electric arc occurs. Logos and name tags made from nonflame-resistant material can adversely affect the arc rating or the flame resistant characteristics of arc-rated or flame resistant clothing. Such logos and name tags may violate WAC 296-45-325 (13)(c), (d) and (e).

WAC 296-45-325 (13)(e) requires that arc-rated protection cover the employee's entire body, with limited exceptions for the employee's hands, feet, face, and head. WAC 296-45-325 (13)(e)(i) provides that arc-rated protection is not necessary for the employee's hands under the following conditions:

When the employee is wearing rubber insulating gloves with protectors.

When the employee is wearing heavy-duty leather work gloves with a weight of at least 407 gm/m² (12 oz/yd²).

WAC 296-45-325 (13)(e)(ii) provides that arc-rated protection is not necessary for the employee's feet when the employee is wearing heavy-duty work shoes or boots. Finally, WAC 296-45-325 (13)(e)(iii), (iv) and (v) require arc-rated head and face protection as follows:

Exposure	Minimum head and face protection			
	None*	Arc-rated faceshield with a minimum rating of 8 cal/cm ² *	Arc-rated hood or faceshield with balaclava	
Single-phase, open air	2-8 cal/cm ²	9-12 cal/cm ²	13 cal/cm ² or higher †.	
Three-phase	2-4 cal/cm ²	5-8 cal/cm ²	9 cal/cm ² or higher ‡.	

^{*} These ranges assume that employees are wearing hardhats meeting the specifications in WAC 296-800-16055 or 296-155-205, as applicable.

IV. Protection Against Ignition

WAC 296-45-325 (13)(c) prohibits clothing that could melt onto an employee's skin or that could ignite and continue to burn when exposed to flames or to the available heat energy estimated by the employer under WAC 296-45-325 (13)(b). Meltable fabrics, such as acetate, nylon, polyester, and polypropylene, even in blends, must be avoided. When these fibers melt, they can adhere to the skin, thereby transferring heat rapidly, exacerbating burns, and complicating treatment. These outcomes can result even if the meltable fabric is not directly next to the skin. The remainder of this section focuses on the prevention of ignition.

WAC 296-45-325 (13)(e) generally requires protective clothing and other protective equipment with an arc rating greater than or equal to the employer's estimate of available heat energy. As explained earlier in this appendix, untreated cotton is usually acceptable for exposures of 2 cal/cm² or less. If the exposure is greater than that, the employee generally must wear flame-resistant clothing with a suitable arc

rating in accordance with WAC 296-45-325 (13)(d) and (e). However, even if an employee is wearing a layer of flame-resistant clothing, there are circumstances under which flammable layers of clothing would be uncovered, and an electric arc could ignite them. For example, clothing ignition is possible if the employee is wearing flammable clothing under the flame-resistant clothing and the underlayer is uncovered because of an opening in the flame-resistant clothing. Thus, for purposes of WAC 296-45-325 (13)(c), it is important for the employer to consider the possibility of clothing ignition even when an employee is wearing flame-resistant clothing with a suitable arc rating.

Under WAC 296-45-325 (13)(c), employees may not wear flammable clothing in conjunction with flame-resistant clothing if the flammable clothing poses an ignition hazard.⁷ Although outer flame-resistant layers may not have openings that expose flammable inner layers, when an outer flame-resistant layer would be unable to resist breakopen,⁸ the next (inner) layer must be flame-resistant if it could ignite.

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[†] The arc rating must be a minimum of 4 cal/cm² less than the estimated incident energy. Note that WAC 296-45-325 (13)(e)(v) permits this type of head and face protection, with a minimum arc rating of 4 cal/cm² less than the estimated incident energy, at any incident energy level.

[‡] Note that WAC 296-45-325 (13)(e) permits this type of head and face protection at any incident energy level.

Nonflame-resistant clothing can ignite even when the heat energy from an electric arc is insufficient to ignite the clothing. For example, nearby flames can ignite an employee's clothing; and, even in the absence of flames, electric arcs pose ignition hazards beyond the hazard of ignition from incident energy under certain conditions. In addition to requiring flame-resistant clothing when the estimated incident energy exceeds 2.0 cal/cm², WAC 296-45-325 (13)(d) requires flame-resistant clothing when: The employee is exposed to contact with energized circuit parts operating at more than 600 volts (WAC 296-45-325 (13)(d)(i)), an electric arc could ignite flammable material in the work area that, in turn, could ignite the employee's clothing (WAC 296-45-325 (13)(d)(ii)), and molten metal or electric arcs from faulted conductors in the work area could ignite the employee's clothing (WAC 296-45-325 (13)(d)(iii)). For example, grounding conductors can become a source of heat energy if they cannot carry fault current without failure. The employer must consider these possible sources of electric arcs9 in determining whether the employee's clothing could ignite under WAC 296-45-325 (13)(d)(iii).

- ¹ Flame-resistant clothing includes clothing that is inherently flame resistant and clothing chemically treated with a flame retardant. (See ASTM F1506-10a, Standard Performance Specification for Flame Resistant Textile Materials for Wearing Apparel for Use by Electrical Workers Exposed to Momentary Electric Arc and Related Thermal Hazards, and ASTM F1891-12 Standard Specification for Arc and Flame Resistant Rainwear.)
- ² The Occupational Safety and Health Administration used metric values to calculate the clearing times in Table 6 and Table 7. An employer may use English units to calculate clearing times instead even though the results will differ slightly.
- ³ The Occupational Safety and Health Administration based this assumption, which is more conservative than the arc length specified in Table 5, on Table 410-2 of the 2012 NESC.
- ⁴ The dielectric strength of air is about 10 kilovolts for every 25.4 millimeters (1 inch). Thus, the employer can estimate the arc length in millimeters to be the phase-to-ground voltage in kilovolts multiplied by 2.54 (or voltage (in kilovolts) × 2.54).
- ⁵ ASTM F1506-10a defines "are thermal performance value" as "the incident energy on a material or a multilayer system of materials that results in a 50% probability that sufficient heat transfer through the tested specimen is predicted to cause the onset of a second-degree skin burn injury based on the Stoll [footnote] curve, cal/cm²." The footnote to this definition reads: "Derived from: Stoll, A. M., and Chianta, M. A., 'Method and Rating System for Evaluations of Thermal Protection,' Aerospace Medicine, Vol 40, 1969, pp. 1232-1238 and Stoll, A. M., and Chianta, M. A., 'Heat Transfer through Fabrics as Related to Thermal Injury,' Transactions-New York Academy of Sciences, Vol 33(7), Nov. 1971, pp. 649-670."
- 6 See WAC 296-45-325 (13)(d)(i), (ii) and (iii) for conditions under which employees must wear flame-resistant clothing as the outer layer of clothing even when the incident heat energy does not exceed 2 cal/cm².
- 7 WAC 296-45-325 (13)(c) prohibits clothing that could ignite and continue to burn when exposed to the heat energy estimated under WAC 296-45-325 (13)(b).
- 8 Breakopen occurs when a hole, tear, or crack develops in the exposed fabric such that the fabric no longer effectively blocks incident heat energy.
- 9 Static wires and pole grounds are examples of grounding conductors that might not be capable of carrying fault current without failure. Grounds that can carry the maximum available fault current are not a concern, and employers need not consider such grounds a possible electric arc source.

NEW SECTION

WAC 296-45-907 Appendix E—Work-positioning equipment inspection guidelines—Nonmandatory.

I. Body Belts

Inspect body belts to ensure that:

- A. The hardware has no cracks, nicks, distortion, or corrosion:
 - B. No loose or worn rivets are present;
 - C. The waist strap has no loose grommets;
 - D. The fastening straps are not 100-percent leather; and
- E. No worn materials that could affect the safety of the user are present.

II. Positioning Straps

Inspect positioning straps to ensure that:

- A. The warning center of the strap material is not exposed;
- B. No cuts, burns, extra holes, or fraying of strap material is present;
 - C. Rivets are properly secured;
 - D. Straps are not 100-percent leather; and
 - E. Snaphooks do not have cracks, burns, or corrosion.

III. Climbers

Inspect pole and tree climbers to ensure that:

A. Gaffs are at least as long as the manufacturer's recommended minimums (generally 32 and 51 millimeters (1.25 and 2.0 inches) for pole and tree climbers, respectively, measured on the underside of the gaff);

Note: Gauges are available to assist in determining whether gaffs are long enough and shaped to easily penetrate poles or trees.

- B. Gaffs and leg irons are not fractured or cracked;
- C. Stirrups and leg irons are free of excessive wear;
- D. Gaffs are not loose;
- E. Gaffs are free of deformation that could adversely affect use:
 - F. Gaffs are properly sharpened; and
 - G. There are no broken straps or buckles.

NEW SECTION

WAC 296-45-908 Appendix F—Other Applicable safety and health Washington administrative codes.

Chapter 296-24 WAC, General safety and health standards;

Chapter 296-27 WAC, Recordkeeping and reporting;

Chapter 296-32 WAC, Safety standards for telecommunications;

Chapter 296-36 WAC, Safety standards—Compressed air work;

Chapter 296-37 WAC, Standards for commercial diving operations;

Chapter 296-52 WAC, Safety standards for possession, handling, and use of explosives;

Chapter 296-54 WAC, Safety standards—Logging operations;

Chapter 296-56 WAC, Safety standards—Longshore, stevedore and waterfront related operations;

Chapter 296-59 WAC, Safety standards for ski area facilities and operations;

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Chapter 296-62 WAC, General occupational health standards:

Chapter 296-63 WAC, Right to know fee assessment;

Chapter 296-65 WAC, Asbestos removal and encapsulation;

Chapter 296-67 WAC, Safety standards for process safety management of highly hazardous chemicals;

Chapter 296-78 WAC, Safety standards for sawmills and woodworking operations;

Chapter 296-79 WAC, Safety Standards for pulp, paper, and paperboard mills and converters;

Chapter 296-99 WAC, Safety standards for grain handling facilities;

Chapter 296-115 WAC, Safety requirements for charter

Chapter 296-155 WAC, Safety standards for construction work;

Chapter 296-301 WAC, Safety standards for the textile industry;

Chapter 296-303 WAC, Safety standards for laundry machinery and operations;

Chapter 296-304 WAC, Safety standards for ship repairing, shipbuilding, and shipbreaking;

Chapter 296-305 WAC, Safety standards for firefighters;

Chapter 296-307 WAC, Safety standards for agriculture;

Chapter 296-360 WAC, Discrimination, pursuant to RCW 49.17.160:

Chapter 296-800 WAC, Safety and health core rules;

Chapter 296-802 WAC, Employee medical and exposure records:

Chapter 296-803 WAC, Lockout/tagout (control of hazardous energy);

Chapter 296-806 WAC, Machine safety;

Chapter 296-807 WAC, Portable power tools;

Chapter 296-809 WAC, Confined spaces;

Chapter 296-811 WAC, Fire brigades;

Chapter 296-816 WAC, Protecting trade secrets;

Chapter 296-817 WAC, Hearing loss prevention (noise);

Chapter 296-818 WAC, Abrasive blasting;

Chapter 296-823 WAC, Occupational exposure to bloodborne pathogens;

Chapter 296-824 WAC, Emergency response;

Chapter 296-826 WAC, Anhydrous ammonia;

Chapter 296-828 WAC, Hazardous chemicals in laboratories;

Chapter 296-829 WAC, Helicopters used as lifting machines;

Chapter 296-832 WAC, Late night retail worker crime prevention;

Chapter 296-833 WAC, Temporary housing for workers;

Chapter 296-835 WAC, Dipping and coating operations (dip tanks);

Chapter 296-839 WAC, Content and distribution of material safety data sheets (MSDSs) and label information;

Chapter 296-841 WAC, Airborne contaminants;

Chapter 296-842 WAC, Respirators;

Chapter 296-843 WAC, Hazardous waste operations;

Chapter 296-848 WAC, Arsenic;

Chapter 296-849 WAC, Benzene;

Chapter 296-855 WAC, Ethylene oxide;

Chapter 296-856 WAC, Formaldehyde;

Chapter 296-860 WAC, Railroad clearances and walkways in private rail yards and plants;

Chapter 296-863 WAC, Forklifts and other powered industrial trucks:

Chapter 296-864 WAC, Split (multi-piece) rim and single-piece rim wheels;

Chapter 296-865 WAC, Motor vehicles;

Chapter 296-869 WAC, Elevating work platforms; Chapter 296-870 WAC, Powered platforms;

Chapter 296-874 WAC, Scaffolds;

Chapter 296-876 WAC, Ladders, portable and fixed;

Chapter 296-878 WAC, Safety standards for window cleaning;

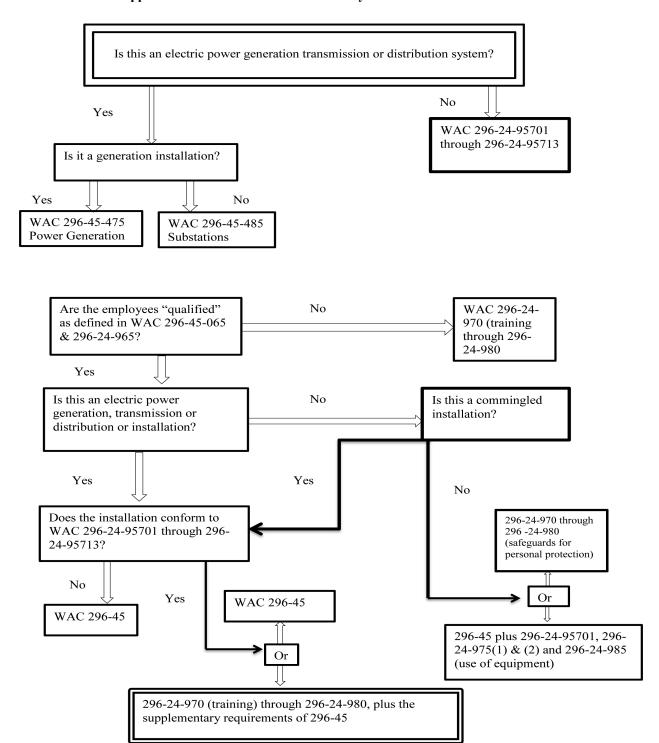
Chapter 296-900 WAC, Administrative rules:

Chapter 296-901 WAC, Globally harmonized system for hazard communication.

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NEW SECTION

WAC 296-45-909 Appendix G-Flow chart-Nonmandatory.



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NEW SECTION

WAC 296-45-910 Appendix H—Reference documents. The references contained below provide information that can be helpful in understanding and complying with the requirements contained in this chapter. The national consensus standards referenced below contain detailed specifications that employers may follow in complying with the more performance-based requirements of this chapter. Except as specifically noted in this chapter, however, the department will not necessarily deem compliance with the national consensus standards to be compliant with the provisions of this chapter.

ANSI/SIA A92.2-2009, American National Standard for Vehicle-Mounted Elevating and Rotating Aerial Devices.

ANSI Z133-2012, American National Standard Safety Requirements for Arboricultural Operations-Pruning, Trimming, Repairing, Maintaining, and Removing Trees, and Cutting Brush.

ANSI/IEEE Std 935--1989, *IEEE Guide on Terminology for Tools and Equipment to Be Used in Live Line Working.*

ASME B20.1-2012, Safety Standard for Conveyors and Related Equipment.

ASTM D120-09, Standard Specification for Rubber Insulating Gloves.

ASTM D149-09 (2013), Standard Test Method for Dielectric Breakdown Voltage and Dielectric Strength of Solid Electrical Insulating Materials at Commercial Power Frequencies.

ASTM D178-01 (2010), *Standard Specification for Rubber Insulating Matting.*

ASTM D1048-12, *Standard Specification for Rubber Insulating Blankets.*

ASTM D1049-98 (2010), *Standard Specification for Rubber Insulating Covers.*

ASTM D1050-05 (2011), Standard Specification for Rubber Insulating Line Hose.

ASTM D1051-08, Standard Specification for Rubber Insulating Sleeves.

ASTM F478-09, *Standard Specification for In-Service Care of Insulating Line Hose and Covers.*

ASTM F479-06 (2011), Standard Specification for In-Service Care of Insulating Blankets.

ASTM F496-08, Standard Specification for In-Service Care of Insulating Gloves and Sleeves.

ASTM F711-02 (2007), Standard Specification for Fiberglass-Reinforced Plastic (FRP) Rod and Tube Used in Live Line Tools.

ASTM F712-06 (2011), Standard Test Methods and Specifications for Electrically Insulating Plastic Guard Equipment for Protection of Workers.

ASTM F819-10, Standard Terminology Relating to Electrical Protective Equipment for Workers.

ASTM F855-09, Standard Specifications for Temporary Protective Grounds to Be Used on De-energized Electric Power Lines and Equipment.

ASTM F887-12^{e1}, Standard Specifications for Personal Climbing Equipment.

ASTM F914/F914M-10, Standard Test Method for Acoustic Emission for Aerial Personnel Devices Without Supplemental Load Handling Attachments.

ASTM F1116-03 (2008), Standard Test Method for Determining Dielectric Strength of Dielectric Footwear.

ASTM F1117-03 (2008), Standard Specification for Dielectric Footwear.

ASTM F1236-96 (2012), Standard Guide for Visual Inspection of Electrical Protective Rubber Products.

ASTM F1430/F1430M-10, Standard Test Method for Acoustic Emission Testing of Insulated and Non-Insulated Aerial Personnel Devices with Supplemental Load Handling Attachments.

ASTM F1505-10, *Standard Specification for Insulated and Insulating Hand Tools.*

ASTM F1506-10a, Standard Performance Specification for Flame Resistant and Arc Rated Textile Materials for Wearing Apparel for Use by Electrical Workers Exposed to Momentary Electric Arc and Related Thermal Hazards.

ASTM F1564-13, Standard Specification for Structure-Mounted Insulating Work Platforms for Electrical Workers.

ASTM F1701-12, Standard Specification for Unused Polypropylene Rope with Special Electrical Properties.

ASTM F1742-03 (2011), *Standard Specification for PVC Insulating Sheeting.*

ASTM F1796-09, Standard Specification for High Voltage Detectors-Part 1 Capacitive Type to be Used for Voltages Exceeding 600 Volts AC.

ASTM F1797-09^{E1}, Standard Test Method for Acoustic Emission Testing of Insulated and Non-Insulated Digger Derricks.

ASTM F1825-03 (2007), Standard Specification for Clampstick Type Live Line Tools.

ASTM F1826-00 (2011), Standard Specification for Live Line and Measuring Telescoping Tools.

ASTM F1891-12, Standard Specification for Arc and Flame Resistant Rainwear.

ASTM F1958/F1958M-12, Standard Test Method for Determining the Ignitability of Non-flame-Resistant Materials for Clothing by Electric Arc Exposure Method Using Mannequins.

ASTM F1959/F1959M-12, Standard Test Method for Determining the Arc Rating of Materials for Clothing.

IEEE Stds 4-1995, 4a-2001(Amendment to IEEE Standard Techniques for High-Voltage Testing), IEEE Standard Techniques for High-Voltage Testing.

IEEE Std 62-1995, *IEEE Guide for Diagnostic Field Testing of Electric Power Apparatus-Part 1: Oil Filled Power Transformers, Regulators, and Reactors.*

IEEE Std 80-2000, Guide for Safety in AC Substation Grounding.

IEEE Std 100-2000, The Authoritative Dictionary of IEEE Standards Terms Seventh Edition.

IEEE Std 516-2009, *IEEE Guide for Maintenance Methods on Energized Power Lines*.

IEEE Std 524-2003, *IEEE Guide to the Installation of Overhead Transmission Line Conductors.*

IEEE Std 957-2005, *IEEE Guide for Cleaning Insulators.*

IEEE Std 1048-2003, *IEEE Guide for Protective Grounding of Power Lines.*

IEEE Std 1067-2005, *IEEE Guide for In-Service Use, Care, Maintenance, and Testing of Conductive Clothing for Use on Voltages up to 765 kV AC and* \pm 750 kV DC.

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IEEE Std 1307-2004, *IEEE Standard for Fall Protection for Utility Work.*

IEEE Stds 1584-2002, 1584a-2004 (Amendment 1 to IEEE Std 1584-2002), and 1584b-2011 (Amendment 2: Changes to Clause 4 of IEEE Std 1584-2002), IEEE Guide for Performing Arc-Flash Hazard Calculations.

IEEE C2-2012, National Electrical Safety Code.

NFPA 70E-2012, *Standard for Electrical Safety in the Work-place.*

REPEALER

The following section of the Washington Administrative Code is repealed:

WAC 296-45-901 Appendix A—Nonmandatory.

WSR 16-10-083 PERMANENT RULES DEPARTMENT OF LABOR AND INDUSTRIES

[Filed May 3, 2016, 10:59 a.m., effective June 3, 2016]

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

Purpose: The purpose of this rule making is to adopt amended sections of chapter 296-62 WAC, General occupational health standards, Part R, Hazardous drugs, which increased clarification and streamlined to conform to the federal global harmonization rule requirements. Also, references, formatting and minor housekeeping changes were made throughout the chapter listed above. Language is being adopted as proposed.

Citation of Existing Rules Affected by this Order: Amending WAC 296-62-50010 Definitions, 296-62-50025 Engineering controls, 296-62-50030 Personal protective equipment (PPE), 296-62-50035 Safe handling practices, 296-62-50045 Spill control, and 296-62-50050 Training.

Statutory Authority for Adoption: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060.

Adopted under notice filed as WSR 16-03-059 on January 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 6, Repealed 0.

Number of Sections Adopted on the Agency's Own Initiative: New 0, Amended 6, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 6, 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: May 3, 2016.

Joel Sacks Director

AMENDATORY SECTION (Amending WSR 12-02-053, filed 1/3/12, effective 1/1/14)

WAC 296-62-50010 Definitions. Biological safety cabinet means a ventilated cabinet for compounding pharmaceutical ingredients, personnel, product, and environmental protection having an open front with inward airflow for personnel protection, downward high-efficiency air (HEPA)-filtered laminar airflow for product protection, and HEPA-filtered exhausted air for environmental protection. For a complete description of the different types of biologic safety cabinets see the Centers for Disease Control and Prevention (CDC)/National Institutes of Health (NIH) document *Primary Containment for Biohazards: Selection, Installation and Use of Biological Safety Cabinets*.

Chemotherapy glove means a medical glove that has been approved by the Food and Drug Administration (FDA) and that meets the permeability standards of the American Society for Testing Materials (ASTM) Standard D6978 - 05.

Closed system drug-transfer device means a drugtransfer device that mechanically prohibits the transfer of environmental contaminants into the system and the escape of hazardous drug or vapor concentrations outside of the system

Decontamination means inactivation, neutralization, or removal of toxic agents, usually by chemical means.

Engineering controls means devices designed to eliminate or reduce worker exposure to hazards. Examples include biological safety cabinets, laboratory fume hoods, containment isolators, safer sharps devices, and safety interlocks.

Hazardous drugs means any drug identified as hazardous by the National Institute for Occupational Safety and Health (NIOSH) at the Centers for Disease Control (CDC) or any drug that meets at least one of the following six criteria:

- · Carcinogenicity.
- Teratogenicity or developmental toxicity.
- Reproductive toxicity in humans.
- Organ toxicity at low doses in humans or animals.
- Genotoxicity.
- New drugs that mimic existing hazardous drugs in structure and toxicity.

Health care facilities means all hospitals, clinics, nursing homes, laboratories, offices or similar places where a health care provider provides health care to patients. For purposes of this chapter this includes veterinary medicine, retail pharmacies, home health care agencies and also those research laboratories in settings where a health care provider provides health care to patients. It does not include the drug manufacturing sector or research laboratories where health care providers do not provide health care to patients.

HEPA filter means a high-efficiency particulate air filter rated 99.97% efficient in capturing 0.3-micron-diameter particles.

• **Isolator** means a device that is sealed or is supplied with air through a microbially retentive filtration system (HEPA minimum) and may be reproducibly decontaminated.

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When closed, an isolator uses only decontaminated interfaces (when necessary) or rapid transfer ports (RTPs) for materials transfer. When open, it allows for the ingress and/or egress of materials through defined openings that have been designed and validated to preclude the transfer of contaminants or unfiltered air to adjacent environments. An isolator can be used for aseptic processing, for containment of potent compounds, or for simultaneous asepsis and containment. Some isolator designs allow operations within the isolator to be conducted through attached rubber gloves without compromising asepsis and/or containment.

- **Aseptic isolator:** A ventilated isolator designed to exclude external contamination from entering the critical zone inside the isolator.
- Aseptic containment isolator: A ventilated isolator designed to meet the requirements of both an aseptic isolator and a containment isolator.
- **Containment isolator:** A ventilated isolator designed to prevent the toxic materials processed inside it from escaping to the surrounding environment.
- ((Material safety data sheet (MSDS) means a summary provided by the manufacturer to describe the chemical properties and hazards of specific chemicals and ways in which workers can protect themselves from exposure to these chemicals.))

Occupational exposure means reasonably anticipated inhalation, skin, ingestion, or injection contact with hazardous drugs as a result of the performance of an employee's duties. Some drugs defined as hazardous may not pose a significant risk of occupational exposure because of their dosage formulation (for example, coated tablets or capsules that are administered to patients without modifying the formulation). However, they may pose a risk if altered (for example, if tablets are crushed or dissolved, or if capsules are pierced or opened).

<u>Safety data sheet (SDS)</u> means a summary provided by the manufacturer to describe the chemical properties and hazards of specific chemicals and ways in which workers can protect themselves from exposure to these chemicals.

Ventilated cabinet means a type of engineering control designed for purposes of worker protection. These devices are designed to minimize worker exposures by controlling emissions of airborne contaminants through the following:

- The full or partial enclosure of a potential contaminant source.
- The use of airflow capture velocities to capture and remove airborne contaminants near their point of generation.
- The use of air pressure relationships that define the direction of airflow into the cabinet.

Examples of ventilated cabinets include biological safety cabinets and containment isolators.

AMENDATORY SECTION (Amending WSR 12-02-053, filed 1/3/12, effective 1/1/14 and (2) effective 1/1/15)

- WAC 296-62-50025 Engineering controls. (1) Evaluate and implement appropriate engineering controls to eliminate or minimize employee exposure. Examples of engineering controls include, but are not limited to:
 - (a) Closed system transfer devices.

- (b) Safer sharps devices.
- (c) Safety interlocks.
- (d) Ventilated cabinets.
- (2) Ventilated cabinets.
- (a) Prepare (e.g., mix, compound, crush) hazardous drugs inside an appropriate ventilated cabinet or barrier isolators designed to prevent ((release into the work environment. When asepsis is not required, a Class I biosafety cabinet or isolator intended for containment applications may be sufficient)) worker exposure.
- (i) Alternate precautions may be used where the hazard assessment determines a low occupational exposure risk while preparing hazardous drugs other than chemotherapy agents (e.g., crushing and splitting tablets, drawing medication into a syringe). These may include, but are not limited to, temporarily designating a preparation area, use of appropriate personal protective equipment, and instituting cleaning procedures.
- (ii) Chemotherapy drugs must be prepared in an appropriate ventilated cabinet with the exception of circumstances where the employer can document evidence of a clinical need (e.g., there is a nonroutine need to provide chemotherapy treatment, compounding services are not readily available, and it is in the best interest of the patient to provide local care). In such circumstances alternate precautions must be instituted as described above.
- (b) ((Equip ventilated cabinets with a continuous monitoring device to confirm adequate airflow before each use.
- (c) Use filtering media that is approved by the cabinet manufacturer and is appropriate for the agent being captured, such as a high-efficiency particulate air filter (HEPA filter) for exhaust, and where feasible, exhaust one hundred percent of the filtered air to the outside unless the employer can provide an evidence-based justification to do otherwise.
- (d) Install the outside exhaust so that the exhausted air is not pulled back into the building by the heating, ventilating, and air conditioning systems or by the windows, doors, or other points of entry.
- (e) Place fans downstream of the filter so that contaminated duets are maintained under negative pressure.
- (f) Do not use a ventilated cabinet that recirculates air inside the cabinet or exhausts air back into the room environment unless the hazardous drug(s) in use will not volatilize while they are being handled or after they are captured by the filter.
- (g))) Hazardous drugs that volatilize must be handled only in a ventilated cabinet that captures the volatilized material to prevent employee exposure, or in a ventilated cabinet that does not recirculate air inside the cabinet or exhausts air back into the room environment.
- (c) Install and maintain the ventilation equipment determined by your hazard assessment in accordance with:
- (i) The ventilation equipment manufacturer's design, instructions, and precautions;
- (ii) Appropriate and most current national safety and industry standards.

Note: The following are examples of industry standards related to installing and maintaining ventilation equipment. There may be other industry standards in addition to those listed below:

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- (A) Center for Disease Control/National Institute for Health: Primary Containment for Biohazards: Selection, Installation and Use of Biological Safety Cabinets (CDC/NIH).
- (B) National Sanitation Foundation/American National Standards Institute Standard 49, (NSF/ANSI) Class II (laminar flow) Biosafety Cabinetry.
 - (C) U.S. Pharmacopeial Convention (USP).
 - (D) American Glove Box Standards.
- (iii) National Institute of Occupational Safety and Health (NIOSH) "Preventing Occupational Exposure to Antineoplastic and Other Hazardous Drugs in Health Care Settings"; and
 - (iv) Applicable state, federal, and local regulations.
- (d) Develop and implement maintenance and cleaning procedures that ensure the effectiveness and safety of the ventilated cabinet.
- (i) Field-certify biosafety cabinet performance, in accordance with National Sanitation Foundation/American National Standards Institute Standard 49, after installation, relocation, maintenance, repairs to internal components, HEPA filter replacement, and every six months thereafter or as recommended by the manufacturer.
- (ii) Select appropriate performance and test methods for isolators, depending on the type (containment only or aseptic containment), the operating pressure (positive or negative and designed magnitude), and toxicity of the hazardous drug. At a minimum, conduct leak and containment integrity tests in accordance with current American Glovebox Society guidelines. In addition perform a HEPA filter leak test for those isolators that utilize HEPA filtration.
- (iii) Prominently display a current field-certification label on the ventilated cabinet.
- (iv) Make sure that workers performing maintenance are familiar with applicable safety procedures, warned about hazards (e.g., through the provision of material safety data sheet or other equivalent information resources), and trained in appropriate work techniques and PPE needed to minimize exposure.
- (v) Remove all hazardous drugs and chemicals, and decontaminate the ventilated cabinet before beginning maintenance activities.
- (vi) Notify occupants in the affected areas immediately before the maintenance activity begins, and place warning signs on all affected equipment.
- (vii) Deenergize the ventilated cabinet in accordance with chapter 296-803 WAC, Lockout/Tagout (control of hazardous energy).
- (viii) Decontaminate and bag equipment parts removed for replacement or repair before they are taken outside the facility.
- (ix) Seal used filtration media in plastic immediately upon removal, and dispose as contaminated waste.

Note: Consult the following documents for performance test methods and selection criteria for ventilated cabinets:

- (1) Primary Containment for Biohazards: Selection, Installation and Use of Biological Safety Cabinets (CDC/NIH).
- (2) NSF/ANSI 49, Class II (laminar flow) Biosafety Cabinetry.

AMENDATORY SECTION (Amending WSR 12-02-053, filed 1/3/12, effective 1/1/14)

- WAC 296-62-50030 Personal protective equipment (PPE). (1) When there is reasonably anticipated exposure to hazardous drugs each health care facility must conduct a PPE assessment and provide and ensure use of appropriate PPE in accordance with WAC 296-800-160, personal protective equipment (PPE), and chapter 296-842 WAC, Respirators.
- (2) Use appropriate PPE whenever handling body fluids and contaminated laundry.
 - (3) Gloves.
- (a) Use powder-free chemotherapy gloves when handling chemotherapy drugs or when there is potential contact with chemotherapy contaminated items or surfaces.
- (b) Provide latex-free gloves to employees with latex sensitivities.
- (c) Wear two pairs of gloves when there is a significant risk of breakage or contamination or permeation, e.g., during compounding, extended handling periods, and cleaning up large hazardous drug spills.
- (d) Change gloves ((every thirty to sixty minutes)) per glove manufacturer's instruction, type of occupational exposure, or when torn, punctured, or contaminated.
 - (4) Protective clothing.
- (a) Wear gowns whenever there is a reasonable possibility of a hazardous drug splash or spill such as in compounding, preparing and administering hazardous drugs.
- (b) Wear gowns made of polyethylene-coated polypropylene or other nonabsorbent, nonlinting protective material as determined by the PPE hazard assessment. Make sure the gown has a closed front, long sleeves, and elastic or knit cuffs.
- (c) Remove and dispose of gowns at the end of hazardous drug handling activities, when leaving the hazardous drug handling area and as soon as possible when damaged or contaminated.
- (d) If no permeation information is available, change gowns every two to three hours or when contaminated after a splash or spill.
- (5) Face protection. Wear a full-face shield or a mask and eye protection as appropriate when splashes to the eyes, nose, or mouth may occur; examples include cleaning a spill, or performing a procedure such as bladder instillation.
 - (6) Respiratory protection.
- (a) Use ((N95)) <u>appropriate respiratory protection</u> or equivalent respiratory protection during spill clean up and whenever there is a significant risk of inhalation exposure to hazardous drug particulates.
- (b) Use an appropriate chemical cartridge-type respirator for events such as large spills of volatile hazardous drugs, e.g., when an intravenous (IV) bag breaks or a line disconnects.
- (7) Disposable PPE must be discarded into appropriate containers immediately after use or as soon as feasible after contamination. Reusable PPE must be properly cleaned and decontaminated after use or contamination.

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AMENDATORY SECTION (Amending WSR 14-07-086, filed 3/18/14, effective 5/1/14)

WAC 296-62-50035 Safe handling practices. (1) Receiving and storage.

- (a) Label hazardous drug containers in accordance with WAC 296-901-140((-5)) Hazard communication.
- (b) Store and transport hazardous drugs in a manner that minimizes the risk of breakage.
 - (2) Preparation and administration.
- (a) Provide designated work areas for the preparation of hazardous drugs and limit access during preparation.
- (b) Coordinate tasks associated with preparing and administering hazardous drugs for the most effective control of worker exposure.
- (c) Spike and prime the IV tubing and prepare syringes in a manner that most effectively limits occupational exposure.
- (d) Do not remove tubing from an IV bag containing a hazardous drug.
- (e) When drug preparation is completed in a ventilated cabinet:
- (i) Seal the final product in a plastic bag or other sealed container for transport before taking it out of the cabinet.
- (ii) Seal and wipe all waste containers inside the ventilated cabinet before removing them from the cabinet.
- (iii) Remove all outer gloves and sleeve covers and bag them for disposal while inside the cabinet.
 - (3) Waste handling.
- (a) Dispose of pharmaceutical waste in accordance with applicable state and federal regulations.
 - (b) Place disposable items in designated containers.
 - (4) Personal hygiene.
- (a) Prohibit eating or drinking in areas where hazardous drugs are handled.
- (b) ((Wash hands with soap and water before donning gloves, immediately after removal, and whenever hands become contaminated.)) Handwashing.
- (i) Prior to donning gloves, if hands are contaminated, wash with soap and water; and
- (ii) Wash hands with soap and water immediately after removal, and whenever hands become contaminated.

AMENDATORY SECTION (Amending WSR 12-02-053, filed 1/3/12, effective 1/1/14)

- WAC 296-62-50045 Spill control. (((1))) Develop written spill response procedures ((based on the hazardous drugs present and potential spill or release conditions.
 - (2) Spill procedures must include, at a minimum:
- (a) Description of who is authorized to respond and under what circumstances.
 - (b) PPE for various hazardous drugs and spill sizes.
 - (e) Location and use of spill kits or clean-up materials.
- (d) Possible spreading of contamination, and area containment and signage.
- (e) Reporting and evaluating the circumstances surrounding spills and releases.
 - (f) Restricted access to hazardous drug spills.
 - (g) Waste disposal.

(3) Locate spill kits or clean-up materials near all potential spill sources)) in accordance with chapter 296-824 WAC Emergency response and WAC 296-800-150, first-aid summary for emergency washing requirements.

Note:

See chapter 296-824 WAC, Emergency response for requirements regarding response to spills that create significant safety and health risks, and WAC 296-800-150, first-aid summary for emergency washing requirements.

AMENDATORY SECTION (Amending WSR 12-02-053, filed 1/3/12, effective 7/1/14)

- WAC 296-62-50050 Training. (1) Provide <u>effective</u> hazardous drugs training to all employees with occupational exposure at the time of their initial job assignment and ((on a regularly scheduled basis thereafter)) whenever a new hazardous drug or a new process related to handling a hazardous drug that the employees have not previously been trained about is introduced into their work area.
- (2) Include the training elements listed in WAC ((296-800-17030)) 296-901-14016, Inform and train your employees about hazardous chemicals in your workplace.

WSR 16-10-084 PERMANENT RULES DEPARTMENT OF LABOR AND INDUSTRIES

[Filed May 3, 2016, 11:02 a.m., effective July 1, 2016]

Effective Date of Rule: July 1, 2016.

Purpose: This rule updates conversion factors provided in WAC 296-20-135 and maximum daily fees provided in WAC 296-23-220 and 296-23-230 for certain professional health care services for injured workers. Rule changes are necessary to maintain current overall fees for health care services, which are published annually in the medical aid rules and fee schedules.

Citation of Existing Rules Affected by this Order: Amending WAC 296-20-135, 296-23-220, and 296-23-230.

Statutory Authority for Adoption: RCW 51.04.020(1) and 51.04.030.

Adopted under notice filed as WSR 16-05-086 on February 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 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 3, Repealed 0.

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Date Adopted: May 3, 2016.

Joel Sacks Director

AMENDATORY SECTION (Amending WSR 15-09-120, filed 4/21/15, effective 7/1/15)

WAC 296-20-135 Conversion factors. (1) Conversion factors are used to calculate payment levels for services reimbursed under the Washington resource based relative value scale (RBRVS), and for anesthesia services payable with base and time units.

- (2) **Washington RBRVS** services have a conversion factor of \$((59.98)) 61.52. The fee schedules list the reimbursement levels for these services.
- (3) **Anesthesia services** that are paid with base and time units have a conversion factor of ((3.38)) 3.41 per minute, which is equivalent to ((50.70)) 51.15 per 15 minutes. The base units and payment policies can be found in the fee schedules.

AMENDATORY SECTION (Amending WSR 15-09-120, filed 4/21/15, effective 7/1/15)

WAC 296-23-220 Physical therapy rules. Practitioners should refer to WAC 296-20-010 through 296-20-125 for general information and rules pertaining to the care of workers.

Refer to WAC 296-20-132 and 296-20-135 regarding the use of conversion factors.

All supplies and materials must be billed using HCPCS Level II codes. Refer to chapter 296-21 WAC for additional information. HCPCS codes are listed in the fee schedules.

Refer to chapter 296-20 WAC (WAC 296-20-125) and to the department's billing instructions for additional information.

Physical therapy treatment will be reimbursed only when ordered by the worker's attending doctor and rendered by a licensed physical therapist, a physical therapist assistant serving under the direction of a licensed physical therapist as required in RCW 18.74.180 (3)(a), or a licensed athletic trainer serving under the direction of a licensed physical therapist as required in RCW 18.250.010 (4)(a)(v). In addition, physician assistants may order physical therapy under these rules for the attending doctor. Doctors rendering physical therapy should refer to WAC 296-21-290.

The department or self-insurer will review the quality and medical necessity of physical therapy services provided to workers. Practitioners should refer to WAC 296-20-01002 for the department's rules regarding medical necessity and to WAC 296-20-024 for the department's rules regarding utilization review and quality assurance.

The department or self-insurer will pay for a maximum of one physical therapy visit per day. When multiple treatments (different billing codes) are performed on one day, the department or self-insurer will pay either the sum of the individual fee maximums, the provider's usual and customary charge, or \$((124.44)) 125.68 whichever is less. These limits will not apply to physical therapy that is rendered as part of a physical capacities evaluation, work hardening program, or

pain management program, provided a qualified representative of the department or self-insurer has authorized the service

The department will publish specific billing instructions, utilization review guidelines, and reporting requirements for physical therapists who render care to workers.

Use of diapulse or similar machines on workers is not authorized. See WAC 296-20-03002 for further information.

A physical therapy progress report must be submitted to the attending doctor and the department or the self-insurer following twelve treatment visits or one month, whichever occurs first. Physical therapy treatment beyond initial twelve treatments will be authorized only upon substantiation of improvement in the worker's condition. An outline of the proposed treatment program, the expected restoration goals, and the expected length of treatment will be required.

Physical therapy services rendered in the home and/or places other than the practitioner's usual and customary office, clinic, or business facilities will be allowed only upon prior authorization by the department or self-insurer.

No inpatient physical therapy treatment will be allowed when such treatment constitutes the only or major treatment received by the worker. See WAC 296-20-030 for further information.

The department may discount maximum fees for treatment performed on a group basis in cases where the treatment provided consists of a nonindividualized course of therapy (e.g., pool therapy; group aerobics; and back classes).

Biofeedback treatment may be rendered on doctor's orders only. The extent of biofeedback treatment is limited to those procedures allowed within the scope of practice of a licensed physical therapist. See chapter 296-21 WAC for rules pertaining to conditions authorized and report requirements.

Billing codes and reimbursement levels are listed in the fee schedules.

AMENDATORY SECTION (Amending WSR 15-09-120, filed 4/21/15, effective 7/1/15)

WAC 296-23-230 Occupational therapy rules. Practitioners should refer to WAC 296-20-010 through 296-20-125 for general information and rules pertaining to the care of workers.

Refer to WAC 296-20-132 and 296-20-135 for information regarding the conversion factors.

All supplies and materials must be billed using HCPCS Level II codes, refer to the department's billing instructions for additional information.

Occupational therapy treatment will be reimbursed only when ordered by the worker's attending doctor and rendered by a licensed occupational therapist or an occupational therapist assistant serving under the direction of a licensed occupational therapist. In addition, physician assistants may order occupational therapy under these rules for the attending doctor. Vocational counselors assigned to injured workers by the department or self-insurer may request an occupational therapy evaluation. However, occupational therapy treatment must be ordered by the worker's attending doctor or by the physician assistant.

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An occupational therapy progress report must be submitted to the attending doctor and the department or self-insurer following twelve treatment visits or one month, whichever occurs first. Occupational therapy treatment beyond the initial twelve treatments will be authorized only upon substantiation of improvement in the worker's condition. An outline of the proposed treatment program, the expected restoration goals, and the expected length of treatment will be required.

The department or self-insurer will review the quality and medical necessity of occupational therapy services. Practitioners should refer to WAC 296-20-01002 for the department's definition of medically necessary and to WAC 296-20-024 for the department's rules regarding utilization review and quality assurance.

The department will pay for a maximum of one occupational therapy visit per day. When multiple treatments (different billing codes) are performed on one day, the department or self-insurer will pay either the sum of the individual fee maximums, the provider's usual and customary charge, or \$((124.44)) 125.68 whichever is less. These limits will not apply to occupational therapy which is rendered as part of a physical capacities evaluation, work hardening program, or pain management program, provided a qualified representative of the department or self-insurer has authorized the service.

The department will publish specific billing instructions, utilization review guidelines, and reporting requirements for occupational therapists who render care to workers.

Occupational therapy services rendered in the worker's home and/or places other than the practitioner's usual and customary office, clinic, or business facility will be allowed only upon prior authorization by the department or self-insurer

No inpatient occupational therapy treatment will be allowed when such treatment constitutes the only or major treatment received by the worker. See WAC 296-20-030 for further information.

The department may discount maximum fees for treatment performed on a group basis in cases where the treatment provided consists of a nonindividualized course of therapy (e.g., pool therapy; group aerobics; and back classes).

Billing codes, reimbursement levels, and supporting policies for occupational therapy services are listed in the fee schedules.

WSR 16-10-092 PERMANENT RULES LAKE WASHINGTON INSTITUTE OF TECHNOLOGY

 $[Filed\ May\ 3, 2016, 4:01\ p.m., effective\ June\ 3, 2016]$

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

Purpose: Changes to the student code of conduct were necessitated by the federal Campus Sexual Violence Act which requires colleges to explicitly prohibit and define sexual violence. Section 485(f) of the Higher Education Act of 1965 (20 U.S.C. 1092(f) and 34 C.F.R. Part 668 - paragraph 8B[)], and plain language edits.

Citation of Existing Rules Affected by this Order: Amending WAC 495D-121-590 (13), (17), (18)(c), and (19). Statutory Authority for Adoption: RCW 28B.50.140

Statutory Authority for Adoption: RCW 28B.50.140 (13).

Adopted under notice filed as WSR 16-05-025 on February 8, 2016.

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

Number of Sections Adopted at 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 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: May 2, 2016.

Terry Byington Executive Director Government and External Relations

AMENDATORY SECTION (Amending WSR 14-14-047, filed 6/25/14, effective 7/26/14)

WAC 495D-121-590 Student conduct code—Prohibited student conduct. The college may impose disciplinary sanctions against a student who commits, or aids, abets, incites, encourages, or assists another person to commit, an act(s) of misconduct((-,)) which include, but are not limited to, the following:

- (1) **Academic dishonesty.** Any act of academic dishonesty including, but not limited to, cheating, plagiarism, and fabrication.
- (a) Cheating includes any attempt to give or obtain unauthorized assistance relating to the completion of an academic assignment.
- (b) Plagiarism includes taking and using as one's own, without proper attribution, the ideas, writings, or work of another person in completing an academic assignment. Prohibited conduct may also include the unauthorized submission for credit of academic work that has been submitted for credit in another course.
- (c) Fabrication includes falsifying data, information, or citations in completing an academic assignment and also includes providing false or deceptive information to an instructor concerning the completion of an assignment.
- (2) **Other dishonesty.** Any other acts of dishonesty. Such acts include, but are not limited to:
- (a) Forgery, alteration, submission of falsified documents or misuse of any college document, record, or instrument of identification;
- (b) Tampering with an election conducted by or for college students; or

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- (c) Furnishing false information or failing to furnish correct information, in response to the request or requirement of a college officer or employee.
- (3) **Disruptive activity.** Participation in any activity that obstructs or disrupts:
- (a) Any instruction, research, administration, disciplinary proceeding, or other college activity;
- (b) The free flow of pedestrian or vehicular movement on college property or at a college activity;
- (c) Any student's ability to profit from the instructional program; or
- (d) Any activity that is authorized to occur on college property, whether or not actually conducted or sponsored by the college.
- (4) **Assault.** Assault, physical abuse, verbal abuse, threat(s), intimidation, harassment, bullying, stalking or other conduct which harms, threatens, or is reasonably perceived as threatening the health or safety of another person or another person's property. For purposes of this subsection:
- (a) Bullying is physical or verbal abuse, repeated over time, and involving a power imbalance between the aggressor and victim.
- (b) Stalking is intentional and repeated following of another person, which places that person in reasonable fear that the perpetrator intends to injure, intimidate or harass that person. Stalking also includes instances where the perpetrator knows or reasonably should know that the person is frightened, intimidated or harassed, even if the perpetrator lacks such an intent.
- (5) **Imminent danger.** Where the student presents an imminent danger to college property, or to himself or herself, or other students or persons in college facilities on or off campus, or to the education processes of the college.
- (6) Cyber misconduct. Cyberstalking, cyberbullying, or online harassment. Use of electronic communications including, but not limited to, electronic mail, instant messaging, electronic bulletin boards, and social media sites to harass, abuse, bully or engage in other conduct which harms, threatens, or is reasonably perceived as threatening the health or safety of another person. Prohibited activities include, but are not limited to, unauthorized monitoring of another's e-mail communications directly or through spyware, sending threatening e-mails, disrupting electronic communications with spam or by sending a computer virus, sending false messages to third parties using another's e-mail identity, nonconsensual recording of sexual activity, and nonconsensual distribution of a recording of sexual activity.
- (7) **Property violation.** Attempted or actual damage to, or theft or misuse of, real or personal property or money of:
 - (a) The college or state;
- (b) Any student or college officer, employee, or organization;
 - (c) Any other person or organization; or
- (d) Possession of such property or money after it has been stolen.
 - (8) **Noncompliance.** Failure to comply with:
- (a) The direction of a college officer or employee who is acting in the legitimate performance of his or her duties, including failure to properly identify oneself to such a person when requested to do so;

- (b) A college attendance policy as published in the student handbook or course syllabus; or
- (c) A college rule or policy as set forth in the *Lake Washington Institute of Technology Policies and Procedures Manual* which may be found in the library or online.
- (9) **Weapons.** Possession, holding, wearing, transporting, storage, or presence of any firearm, dagger, sword, knife or other cutting or stabbing instrument, club, martial arts weapons, explosive device, dangerous chemicals, or any other weapon apparently capable of producing bodily harm is prohibited on the college campus, subject to the following exceptions:
- (a) Commissioned law enforcement personnel or legally authorized military personnel while in performance of their duties: or
- (b) A student with a valid concealed weapons permit may store a firearm in his or her vehicle parked on campus in accordance with RCW 9.41.050, provided the vehicle is locked and the weapon is concealed from view; or
- (c) The president or designee may authorize possession of a weapon on campus upon a showing that the weapon is reasonably related to a legitimate pedagogical purpose. Such permission shall be in advance to bringing weapons to the college, in writing, and shall be subject to such terms or conditions incorporated therein.
- (10) **Hazing.** Hazing includes, but is not limited to, any initiation into a student organization or any pastime or amusement engaged in with respect to such an organization that causes, or is likely to cause, bodily danger or physical harm, or serious mental or emotional harm, to any student.
- (11) **Tobacco**, **electronic cigarettes**, **and related products**. The use of tobacco, electronic cigarettes, and related products in any building owned, leased, or operated by the college or in any location where such use is prohibited, including twenty-five feet from entrances, exits, windows that open, and ventilation intakes of any building owned, leased, or operated by the college. "Related products" include, but are not limited to, cigarettes, pipes, bidi, clove cigarettes, waterpipes, hookahs, chewing tobacco, and snuff.
- (12) **Alcohol.** Being observably under the influence of any alcoholic beverage, or otherwise using, possessing, selling, or delivering any alcoholic beverage, except as permitted by law and authorized by the college president.
- (13) **Marijuana.** The use, possession, delivery, sale, or being ((visibly)) observably under the influence of marijuana or the psychoactive compounds found in marijuana and intended for human consumption, regardless of form. While state law permits the recreational use of marijuana, federal law prohibits such use on college premises or in connection with college activities.
- (14) **Drugs.** Being observably under the influence of any legend drug, narcotic drug, or controlled substance as defined in chapters 69.41 and 69.50 RCW, or otherwise using, possessing, delivering, or selling any such drug or substance, except in accordance with a lawful prescription for that student by a licensed health care professional. Being observably under the influence of any lawfully prescribed drug when enrolled in classes that require operation of heavy equipment or other dangerous equipment.

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- (15) **Obstruction.** Obstruction of the free flow of pedestrian or vehicular movement on college property or at a college activity.
- (16) **Disorderly conduct.** Conduct which is disorderly, lewd, obscene, or a breach of peace on college premises or at college sponsored activities.
- (17) **Discrimination.** Discriminatory action which harms or adversely affects any member of the college community because of her/his race; color; national origin; sensory, mental, or physical disability; age (((40+))); religion; creed; genetic information; sexual orientation; gender identity; veteran's status; or any other legally protected classification.
- (18) **Sexual misconduct.** The term "sexual misconduct" includes sexual harassment, sexual intimidation, and sexual violence.
- (a) **Sexual harassment**. The term "sexual harassment" means unwelcome conduct of a sexual nature, including unwelcome sexual advances, requests for sexual favors, and other verbal, nonverbal, or physical conduct of a sexual nature that is sufficiently serious as to deny or limit, and that does deny or limit, based on sex, the ability of a student to participate in or benefit from the college's educational program or that creates an intimidating, hostile, or offensive environment for other campus community members.
- (b) **Sexual intimidation.** The term "sexual intimidation" incorporates the definition of "sexual harassment" and means threatening or emotionally distressing conduct based on sex including, but not limited to, nonconsensual recording of sexual activity or the distribution of such recording.
- (c) Sexual violence. ((The term "sexual violence" incorporates the definition of "sexual harassment" and means a physical sexual act perpetrated without clear, knowing, and voluntary consent, such as committing a sexual act against a person's will, exceeding the scope of consent, or where the person is incapable of giving consent including rape, sexual assault, sexual battery, sexual coercion, sexual exploitation, or gender- or sex-based stalking. The term further includes acts of dating or domestic violence. A person may be incapable of giving consent by reason of age, threat or intimidation, lack of opportunity to object, disability, drug or alcohol consumption, or other cause.)) "Sexual violence" is a type of sexual discrimination and harassment. Nonconsensual sexual intercourse, nonconsensual sexual contact, domestic violence, dating violence, and stalking are all types of sexual violence.
- (i) Nonconsensual sexual intercourse is any sexual intercourse (anal, oral, or vaginal), however slight, with any object, by a person upon another person, that is without consent and/or by force. Sexual intercourse includes anal or vaginal penetration by a penis, tongue, finger, or object, or oral copulation by mouth to genital contact or genital to mouth contact.
- (ii) Nonconsensual sexual contact is any intentional sexual touching, however slight, with any object, by a person upon another person that is without consent and/or by force. Sexual touching includes any bodily contact with the breasts, groin, mouth, or other bodily orifice of another individual, or any other bodily contact in a sexual manner.

- (iii) Domestic violence includes asserted violent misdemeanor and felony offenses committed by the victim's current or former spouse, current or former cohabitant, person similarly situated under domestic or family violence law, or anyone else protected under domestic or family violence law.
- (iv) Dating violence means violence by a person who has been in a romantic or intimate relationship with the victim. Whether there was such relationship will be gauged by its length, type, and frequency of interaction.
- (v) Stalking means intentional and repeated harassment or following of another person, which places that person in reasonable fear that the perpetrator intends to injure, intimidate, or harass that person. Stalking also includes instances where the perpetrator knows or reasonably should know that the person is frightened, intimidated, or harassed, even if the perpetrator lacks such intent.
- (vi) Consent: Knowing, voluntary and clear permission by word or action, to engage in mutually agreed upon sexual activity. Each party has the responsibility to make certain that the other has consented before engaging in the activity. For consent to be valid, there must be at the time of the act of sexual intercourse or sexual contact actual words or conduct indicating freely given agreement to have sexual intercourse or sexual contact.

A person cannot consent if he or she is unable to understand what is happening or is disoriented, helpless, asleep or unconscious for any reason, including due to alcohol or other drugs. An individual who engages in sexual activity when the individual knows, or should know, that the other person is physically or mentally incapacitated has engaged in nonconsensual conduct.

<u>Intoxication is not a defense against allegations that an individual has engaged in nonconsensual sexual conduct.</u>

- (19) **Harassment.** Unwelcome and offensive conduct, including verbal, nonverbal, or physical conduct, that is directed at a person because of such person's protected status and that is sufficiently serious as to deny or limit, and that does deny or limit, the ability of a student to participate in or benefit from the college's educational program or that creates an intimidating, hostile, or offensive environment for other campus community members. Protected status includes a person's race; color; national origin; sensory, mental, or physical disability; age (((40+))); religion; creed; genetic information; sexual orientation; gender identity; veteran's status; or any other legally protected classification. See "Sexual misconduct" for the definition of "sexual harassment." Harassing conduct may include, but is not limited to, physical conduct, verbal, written, social media and electronic communications.
- (20) **Retaliation.** Retaliation against any individual for reporting, providing information, exercising one's rights or responsibilities, or otherwise being involved in the process of responding to, investigating, or addressing allegations or violations of federal, state or local law, or college policies including, but not limited to, student conduct code provisions prohibiting discrimination and harassment.
- (21) **Misuse of information resources.** Theft or other misuse of computer time or other electronic information resources of the college. Such misuse includes, but is not limited to:

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- (a) Unauthorized use of such resources or opening of a file, message, or other item;
- (b) Unauthorized duplication, transfer, or distribution of a computer program, file, message, or other item;
- (c) Unauthorized use or distribution of someone else's password or other identification;
- (d) Use of such time or resources to interfere with someone else's work;
- (e) Use of such time or resources to send, display, or print an obscene or abusive message, text, or image;
- (f) Use of such time or resources to interfere with normal operation of the college's computing system or other electronic information resources;
- (g) Use of such time or resources in violation of applicable copyright or other law;
- (h) Adding to or otherwise altering the infrastructure of the college's electronic information resources without authorization:
- (i) Failure to comply with the college's acceptable use policy.
- (22) **Breach of campus safety.** Safety violation includes any nonaccidental conduct that interferes with or otherwise compromises any college policy, equipment, or procedure relating to the safety and security of the campus community. Breaching campus safety or security includes, but is not limited to:
- (a) Unauthorized access to college facilities; intentionally damaging door locks; unauthorized possession of college keys or access cards; duplicating college keys or access cards; or propping open of exterior doors;
- (b) Tampering with fire safety equipment, such as fire extinguishers, smoke detectors, alarm pull stations or emergency exits;
- (c) Placement of equipment or vehicles, including bicycles, so as to obstruct the means of access to/from college buildings;
- (d) Entering or remaining in any closed college facility or entering after the closing time of the college facility without permission of a college official;
- (e) Operation of any motor vehicle on college property in an unsafe manner or in a manner which is reasonably perceived as threatening the health or safety of another person.
- (23) **Abuse of procedures.** Abuse or misuse of any of the procedures relating to student complaints or misconduct including, but not limited to:
 - (a) Failure to obey a subpoena;
 - (b) Falsification or misrepresentation of information;
- (c) Disruption or interference with the orderly conduct of a proceeding;
- (d) Interfering with someone else's proper participation in a proceeding;
- (e) Destroying or altering potential evidence or attempting to intimidate or otherwise improperly pressure a witness or potential witness;
- (f) Attempting to influence the impartiality of, or harassing or intimidating, a student conduct committee member;
- (g) Failure to comply with any disciplinary sanction(s) imposed under this student conduct code.

- (24) **Violation of laws.** Violation of any federal, state, or local law, rule, or regulation or other college rules or policies, including college traffic and parking rules.
- (25) **Ethical violation.** The breach of any generally recognized and published code of ethics or standards of professional practice that governs the conduct of a particular profession for which the student is taking a course or is pursuing as an educational goal or major.

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

WSR 16-10-104 PERMANENT RULES DEPARTMENT OF REVENUE

[Filed May 4, 2016, 10:19 a.m., effective June 6, 2016]

Effective Date of Rule: June 6, 2016.

Purpose: WAC 458-20-101 Tax registration and tax reporting, explains the process of submitting a business license application to become registered with the department of revenue as well as reporting requirements. The rule has been amended to:

- Update terms and formatting;
- Update nonreporting status requirements;
- Identify information required to process a business license application, such as social security number and federal employer identification number of the owner(s);
- Remove references to seasonal tax reporting accounts as they no longer apply; and
- Clarify when a change in ownership or location requires a new business license application.

Citation of Existing Rules Affected by this Order: WAC 458-20-101 Tax registration and tax reporting.

Statutory Authority for Adoption: RCW 82.32.300 and 82.01.060(2).

Adopted under notice filed as WSR 16-07-117 on March 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 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.

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Date Adopted: May 4, 2016.

Kevin Dixon Rules Coordinator

AMENDATORY SECTION (Amending WSR 15-15-025, filed 7/7/15, effective 8/7/15)

WAC 458-20-101 Tax registration and tax reporting. (1) **Introduction.** This rule explains tax registration and tax reporting requirements for the Washington state department of revenue (department) as established in RCW 82.32.030 and 82.32.045. This rule discusses who is required to be registered, and who must file excise tax returns. This rule also discusses changes in ownership requiring a new registration, the administrative closure of taxpayer accounts, and the revocation and reinstatement of a tax reporting account with the department ((of revenue)). Persons required to file tax returns should also refer to WAC 458-20-104 (Small business tax relief based on ((volume)) income of business). Persons with certain ownership structures (e.g., corporations, limited liability companies, limited partnerships, limited liability partnerships, and limited liability limited partnerships) must also register with the office of the secretary of state.

Examples. Examples found in this rule identify a number of facts and then state a conclusion. These examples should be used only as a general guide. The tax results of other situations must be determined after a review of all the facts and circumstances.

- (2) **Persons required to obtain tax registration endorsements.** Except as provided in (a) of this subsection, every person who is engaged in any business activity for which the department ((of revenue)) is responsible for administering and/or collecting a tax or fee, ((shall)) must apply for and obtain a tax registration endorsement with the department ((of revenue)). (See RCW 82.32.030.) This endorsement ((shall be reflected)) is printed on the face of the business person's ((registrations and)) business license((s)) document. The tax registration endorsement is nontransferable, and valid for as long as that person continues in business.
- (a) When registration is not required. Registration under this rule is not required if all of the following conditions are met:
- (i) The person's value of products, gross proceeds of sales, or gross income of the business, from all business activities taxable under chapter 82.04 RCW (business and occupation (B&O) tax), is less than twelve thousand dollars per year;
- (ii) A person's gross income from all business activities taxable under chapter 82.16 RCW (public utility tax), is less than twelve thousand dollars per year;
- (iii) The person is not required to collect or pay to the department ((of revenue)) retail sales tax or any other tax or fee which the department is authorized to administer and/or collect; and
- (iv) The person is not otherwise required to obtain a <u>business</u> license ((or registration)) subject to the business license application procedure provided in chapter 19.02 RCW. For the purposes of this rule, the term "<u>business</u> license ((or registration))" means any agency permit, license, certificate, approval, registration, charter, or any form or per-

- mission required by law, including agency rule, to engage in any activity.
- (b) <u>Tax registration endorsement.</u> The term "tax registration endorsement," as used in this rule, has the same meaning as the term "tax registration" or "certificate of registration" used in Title 82 RCW and other rules in chapter 458-20 WAC.
- (c) <u>Person.</u> The term "person" has the meaning given in RCW 82.04.030 and WAC 458-20-203.
- (d) **Tax reporting account number.** The term "tax reporting account number" as used in this rule, is the number used to identify persons registered with the department ((of revenue)).
- (3) **Requirement to file tax returns.** Persons registered with the department must file tax returns and remit the appropriate taxes to the department, unless they are placed on an "active nonreporting" status by the department.
- (a) <u>Active nonreporting status requirements.</u> The department may relieve any person of the requirement to file returns by placing the person in an active nonreporting status if all of the following conditions are met:
- (i) The person's value of products (RCW 82.04.450), gross proceeds of sales (RCW 82.04.070), or gross income of the business (RCW 82.04.080), from all business activities taxable under chapter 82.04 RCW (((business and occupation)) B&O tax), is less than:
 - (A) Twenty-eight thousand dollars per year; or
- (B) Forty-six thousand six hundred sixty-seven dollars per year for persons generating at least fifty percent of their gross amount from activities taxable under RCW 82.04.255 (real estate brokerage services), RCW 82.04.290 (2)(a) (service and other activities B&O tax classification), and RCW 82.04.285 (operating contests of chance);
- (ii) The person's gross income (RCW 82.16.010) from all business activities taxable under chapter 82.16 RCW (public utility tax) is less than twenty-four thousand dollars per year; and
- (iii) The person is not required to collect or pay to the department retail sales tax or any other tax or fee the department is authorized to collect.
- (b) Notification of active nonreporting status. The department will notify those persons it places on an active nonreporting status. (((\cdot))A person may request to be placed on an active nonreporting status if the conditions of (a) of this subsection are met.((\cdot)))
- (c) Responsibility to notify department about change in status. Persons placed on an active nonreporting status by the department are required to timely notify the department if their business activities do not meet any of the conditions explained in (a) of this subsection. These persons will be removed from an active nonreporting status, and must file tax returns and remit appropriate taxes to the department, beginning with the first period in which they do not qualify for an active nonreporting status.
- (d) Obligation to file a tax return. Persons that have not been placed on an active nonreporting status by the department must continue to file tax returns and remit the appropriate taxes.
- (4) ((Examples: The following examples identify a number of facts and then state a conclusion. These examples

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should be used only as a general guide. The status of each situation must be determined after a review of all facts and circumstances.) (a) **Example 1.** Bob Brown is starting a book-keeping service. Income generated from this activity is taxable under the service and other activities B&O tax classification. The gross income of the business is expected to be less than twelve thousand dollars per year. Bob's only income is earned from his bookkeeping activity. Due to the nature of the business activities, Bob is not required to pay or collect any other tax or fee which the department is authorized to collect. Bob has no other need to file a business license application.

Bob Brown is not required to apply for and obtain a tax registration endorsement with the department ((of revenue)). The conditions under which a business person may engage in business activities without obtaining the tax registration endorsement have been met. However, if Bob Brown in some future period has gross income exceeding twelve thousand dollars per year, he will be required to obtain a tax registration endorsement. If Bob's gross income exceeds ((twenty-eight thousand)) forty-six thousand six hundred sixty-seven dollars per year (because Bob generates all of his gross income under the service and other activities B&O tax classification), he will be required to file tax returns and remit the appropriate taxes.

(b) **Example 2.** Cindy Smith is opening a business to sell children's books ((written for children)) to local customers at retail. The gross proceeds of sales are expected to be less than twelve thousand dollars per year.

Cindy Smith must apply for and obtain a tax registration endorsement with the department ((of revenue)). While gross income is expected to be less than twelve thousand dollars per year, Cindy Smith is required to collect and remit retail sales tax.

- (c) Example 3. Alice Smith operates a taxicab service with an average gross income of eighteen thousand dollars per year. She also owns a management consulting service with an average gross income of fifteen thousand dollars per year. Assume that Alice is not required to collect or pay to the department any other tax or fee the department is authorized to collect. Alice qualifies for an active nonreporting status because her taxicab income is less than the twenty-four thousand dollar threshold for the public utility tax((5)) and her consulting income is less than the ((twenty-four)) forty-six thousand six hundred sixty-seven dollar threshold for the ((business and occupation ())B&O(())) tax. If the department ((of revenue)) does not first place her on an active nonreporting status, she may request the department to do so.
- (5) **Out-of-state businesses.** <u>Out-of-state businesses</u> <u>may have to obtain a tax registration endorsement with the department.</u>
- (a) **B&O** and public utility taxes. The B&O and public utility taxes are imposed on the act or privilege of engaging in business activity within Washington. RCW 82.04.220 and 82.16.020. Out-of-state persons who have established sufficient nexus in Washington to be subject to Washington's B&O or public utility taxes must obtain a tax registration endorsement with this department if they do not satisfy the conditions expressed in subsection (2)(a) of this rule.

- (b) Retail sales and use taxes. Out-of-state persons required to collect Washington's retail sales or use tax((, or who have elected to collect Washington's use tax, even though not statutorily required to do so,)) under RCW 82.04.067 must obtain a tax registration endorsement. Out-of-state persons who are not statutorily required to collect Washington's use tax, may elect to obtain a tax registration endorsement.
- (c) Other relevant rules for out-of-state persons. Out-of-state persons making sales into or doing business within Washington should also refer to the following rules in chapter 458-20 WAC for a discussion of their tax reporting responsibilities:
 - (((a) WAC 458-20-103 (Time and place of sale);
- (b))) (i) WAC 458-20-193 (((Inbound and outbound)) Interstate sales of tangible personal property(()));
- $((\frac{(e)}{(e)}))$ (ii) WAC 458-20-193D $((\frac{e}{(e)}))$ Transportation, communication, public utility activities, or other services in interstate or foreign commerce $((\frac{1}{2}))$;
- $((\frac{d}{d}))$ (iii) WAC 458-20-194 (($\frac{d}{d}$)) Doing business inside and outside the state(($\frac{d}{d}$)); ((and
- (e))) (iv) WAC 458-20-19401 Minimum nexus thresholds for apportionable activities; and
- (v) WAC 458-20-221 ((())Collection of use tax by retailers and selling agents(())).
- (6) **Registration procedure.** The state of Washington initiated the unified business identifier (UBI) program to simplify the registration and licensing requirements imposed on the state's business community. Completion of the business license application and payment of the applicable fee(s) enables a person to register or license with several state agencies and cities, including the department of revenue, using a single form. The person will be assigned one unified business identifier number, which will be used for all state agencies and cities participating in the UBI program. The department may assign the unified business identifier number as the tax-payer's revenue tax reporting account number, or it may assign a different or additional number as the revenue tax reporting account number.
- (a) <u>Business license application</u>. Persons completing the business license application will be issued a ((registrations and)) <u>business</u> license((s)) document. The face of this document will list the registrations and licenses (endorsements) which have been obtained.
- (b) <u>Fees.</u> The department ((of revenue)) does not charge a <u>separate</u> registration fee for issuing a tax registration endorsement. Persons required to complete a business license application may, however, be subject to other fees.
- (c) Forms and submission. While the UBI program is administered by the department ((of revenue)), business license applications are available ((at any participating UBI service provider location. The following agencies of the state of Washington participate in the UBI program (see RCW 19.02.050 for a more complete listing of participating agencies):
 - (i) The office of the secretary of state;
 - (ii) The department of licensing;
 - (iii) The department of employment security;
 - (iv) The department of labor and industries;
 - (v) The department of revenue.

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- (7))) online from the state of Washington's business licensing service web site at bls.dor.wa.gov.
- (7) **Registration application.** The state of Washington requires the following items to process business license applications:
 - (a) Purpose or reason for application.
 - (b) The registration endorsement(s) that are needed.
- (c) Owner information which includes, but is not limited to, the type of business; the business name and open date; the business contact information; and the address, date of birth, Social Security number (if the person is an individual) or federal employer identification number (FEIN) (if the person is an entity) and other contact information for all governing persons which includes the owners, members, officers, and partners. This same information may also be needed for spouses.
- (d) Location and business information which includes, but is not limited to, location of business, type of business activities, FEIN (except for sole proprietorships that do not have employees), and estimated income and bank account information.
- (8) **Temporary revenue registration certificate.** A temporary revenue registration certificate may be issued to any person who operates a business of a temporary nature.
- (a) Temporary businesses, for the purposes of registration, are those with((÷
- (i))) definite, predetermined dates of operation for no more than two events each year with each event lasting no longer than one month((; or
- (ii) Seasonal dates of operation lasting no longer than three months. However, persons engaging in business activities on a seasonal basis every year should refer to subsection (8) of this rule)).
- (b) Each temporary registration certificate is valid for a single event. Persons that subsequently make sales into Washington may incur additional tax liability. Refer to WAC 458-20-193 (((Inbound and outbound)) Interstate sales of tangible personal property) for additional information on tax reporting requirements. It may be required that a tax registration endorsement be obtained, in lieu of a temporary registration certificate. See subsection (2) of this rule.
- (c) Temporary revenue registration certificates may be obtained by ((making application at any participating UBI agency office, or by completing a seasonal registration form.
- (8) Seasonal revenue tax reporting accounts. Persons engaging in seasonal business activities which do not exceed two quarterly reporting periods each calendar year may be eligible for a tax reporting account with a seasonal reporting status. This is a permanent account until closed by the tax-payer. The taxpayer must specify in which quarterly reporting periods he or she will be engaging in taxable business activities. The quarterly reporting periods in which the tax-payer is engaging in taxable business activities may or may not be consecutive, but the same quarterly period or periods must apply each year. The taxpayer is not required to be engaging in taxable business activities during the entire period.

The department will provide and the taxpayer will be required to file tax returns only for the quarterly reporting periods specified by the taxpayer. Examples of persons which may be eligible for the seasonal reporting status include per-

- sons operating Christmas tree and/or fireworks stands. Persons engaging in taxable business activities in more than two quarterly reporting periods in a calendar year will not qualify for the seasonal reporting status)) following registration instructions on the department's web site at dor.wa.gov.
- (9) **Display of ((registrations and))** <u>business</u> **license((s)) document.** The taxpayer is required to display the ((registrations and)) <u>business</u> license((s)) document in a conspicuous place at the business location for which it is issued
- (10) **Multiple locations.** A ((registrations and)) <u>business</u> license((s)) document is required for each place of business ((at which)) <u>where</u> a taxpayer engages in business activities for which the department ((of revenue)) is responsible for administering and/or collecting a tax or fee, and any main office or principal place of business from which excise tax returns are to be filed. This requirement applies to locations both within and without the state of Washington.
- (a) <u>Place of business.</u> For the purposes of this subsection, the term "place of business" means:
- (i) Any separate establishment, office, stand, cigarette vending machine, or other fixed location; or
- (ii) Any vessel, train, or the like, ((at any of which)) where the taxpayer solicits or makes sales of tangible personal property, or contracts for or renders services in this state or otherwise transacts business with customers.
- (b) Multiple locations with a single excise tax return. A taxpayer wishing to report all tax liability on a single excise tax return may request a separate ((registrations and)) business license((s)) document for each location. The original ((registrations and)) business license((s)) document shall be retained for the main office or principal place of business from which the returns are to be filed, with additional documents obtained for all branch locations. All ((registrations and)) business license((s)) documents will reflect the same tax reporting account number.
- (c) <u>Multiple locations</u> with separate excise tax returns. A taxpayer desiring to file a separate excise tax return covering a branch location, or a specific construction contract, may apply for and receive a separate revenue tax reporting account number. A ((registrations and)) <u>business</u> license((s)) document will be issued for each tax reporting account number and will represent a separate account.
- (d) <u>Application required for each location's business license document.</u> A business license application must be completed to obtain a separate ((registrations and)) <u>business</u> license((s)) document, or revenue tax reporting account number, for a new location.
- (11) Change in ownership. When a change in ownership of a business occurs, the new owner must generally apply for and obtain a new ((registrations and licenses document)) unified business identifier by filing a business license application and requesting all applicable license endorsements. A new business license document will be issued reflecting the ownership of the new business. The original business license document must be destroyed, and any further use of the tax reporting account number of the previous owner(s) for tax purposes is prohibited.

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- (a) <u>Change in ownership.</u> A "change in ownership," for purposes of registration, occurs ((upon)) when, but is not limited to:
- (i) The sale of a business by one individual, firm or corporation to another individual, firm or corporation;
 - (ii) The dissolution of a partnership;
- (iii) The withdrawal, substitution, or addition of one or more partners where the general partnership continues as a business organization and the change in the composition of the partners is equal to or greater than fifty percent;
- (iv) Incorporation of a business previously operated as a partnership or sole proprietorship;
- (v) Changing from a corporation to a partnership or sole proprietorship; or
- (vi) Changing from a corporation, partnership or sole proprietorship to a limited liability company or a limited liability partnership.
- (b) <u>Situations that are not a change in ownership.</u> For the purposes of registration, a "change in ownership" does not occur upon:
- (i) The sale of all or part of the common stock of a corporation;
- (ii) The transfer of assets to an assignee for the benefit of creditors or upon the appointment of a receiver or trustee in bankruptcy;
- (iii) The death of a sole proprietor where there will be a continuous operation of the business by the executor, administrator, or trustee of the estate or, where the business was owned by a marital community or registered domestic partnership, by the surviving spouse or surviving domestic partner of the deceased owner;
- (iv) The withdrawal, substitution, or addition of one or more partners where the general partnership continues as a business organization and the change in the composition of the partners is less than fifty percent; or
- (v) A change in the trade name under which the business is conducted.
- (c) <u>Situations where a new business license application may still be required.</u> While changes in a business entity may not result in a "change in ownership," the completion of a new business license application may be required to reflect the changes in the registered account.
- (12) **Change in location.** Whenever the place of business is moved to a new location, the taxpayer must notify the department of the change. Although a new business license application may not be required to notify the department of a location change, some endorsements and licenses will require a new business license and reapproval of the license endorsements at the new location. A new ((registrations and)) business license((s)) document will be issued to reflect the change in location.
- (13) Lost ((registrations and)) <u>business</u> license((s)) documents. If any ((registrations and)) <u>business</u> license((s)) document is lost, destroyed or defaced as a result of accident or of natural wear and tear, a new document will be issued upon request.
- (14) **Administrative closure of taxpayer accounts.** The department may, upon written notification to the taxpayer, close the taxpayer's tax reporting account and rescind its tax registration endorsement whenever the taxpayer has reported

no gross income and there is no indication of taxable activity for two consecutive years.

The taxpayer may request, within thirty days of notification of closure, that the account remain open. A taxpayer may also request that the account remain open on an "active non-reporting" status if the requirements of subsection (3)(a) of this rule are met. The request shall be reviewed by the department and if found to be warranted, the department will immediately reopen the account. The following are acceptable reasons for continuing as an active account:

- (a) The taxpayer is engaging in business activities in Washington which may result in tax liability.
- (b) The taxpayer is required to collect or pay to the department ((of revenue)) a tax or fee which the department is authorized to administer and/or collect.
- (c) The taxpayer has in fact been liable for excise taxes during the previous two years.
- (15) **Reopening of taxpayer accounts.** A business person choosing to resume business activities ((for which)) where the department ((of revenue)) is responsible for administering and/or collecting a tax or fee, may request a previously closed account be reopened. The business person must complete a new business license application. When an account is reopened a new ((registrations and)) business license((s)) document, reflecting a current tax registration endorsement, ((shall)) will be issued. Persons requesting the reopening of an account ((which)) that had previously been closed due to a revocation action should refer to subsection (16) of this rule.
- (16) Revocation and reinstatement of tax registration endorsements. Actions to revoke tax registration endorsements must be conducted by the department pursuant to the provisions of chapter 34.05 RCW, the Administrative Procedure Act, and the taxpayers bill of rights of chapter 82.32A RCW. Persons should refer to WAC 458-20-10001, Adjudicative proceedings—Brief adjudicative proceedings—Wholesale and retail cigarette license revocation/suspension—Certificate of registration (tax registration endorsement) revocation, for an explanation of the procedures and processes pertaining to the revocation of tax registration endorsements.
- (a) The department ((of revenue)) may, by order, revoke a tax registration endorsement if:
- (i) Any tax warrant issued under the provisions of RCW 82.32.210 is not paid within thirty days after it has been filed with the clerk of the superior court; or
- (ii) The taxpayer is delinquent, for three consecutive reporting periods, in the transmission to the department of retail sales tax collected by the taxpayer; or
 - (iii) Either:
- (A) The taxpayer was convicted of violating RCW 82.32.290(4) and continues to engage in business without fully complying with RCW 82.32.290 (4)(b)(i) through (iii); or
- (B) A person convicted of violating RCW 82.32.290(4) is an owner, officer, director, partner, trustee, member, or manager of the taxpayer, and the person and taxpayer have not fully complied with RCW 82.32.290 (4)(b)(i) through (iii).

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For purposes of (a)(iii) of this subsection, the terms "manager," "member," and "officer" mean the same as defined in RCW 82.32.145.

- (b) The revocation order will be, if practicable, posted in a conspicuous place at the main entrance to the taxpayer's place of business. The department may also post a copy of the revocation order in any public facility, as may be allowed by the public entity that owns or occupies the facility. The revocation order posted at the taxpayer's place of business must remain posted until the tax registration endorsement has been reinstated or the taxpayer has abandoned the premises. A revoked endorsement will not be reinstated until:
- (i) The amount due on the warrant has been paid, or satisfactory arrangements for payment have been approved by the department, and the taxpayer has posted with the department a bond or other security in an amount not exceeding one-half the estimated average annual liability of the taxpayer; or
- (ii) The taxpayer and, if applicable, the owner, officer, director, partner, trustee, member, or manager of the taxpayer who was convicted of violating RCW 82.32.290(4) are in full compliance with RCW 82.32.290 (4)(b)(i) through (iii), if the tax registration endorsement was revoked as described in (a)(iii) of this subsection.
- (c) It is unlawful for any taxpayer to engage in business after its tax registration endorsement has been revoked.
- (17) **Penalties for noncompliance.** The law provides that any person engaging in any business activity, for which registration with the department ((of revenue)) is required, ((shall)) <u>must</u> obtain a tax registration endorsement.
- (a) The failure to obtain a tax registration endorsement prior to engaging in any taxable business activity constitutes a gross misdemeanor.
- (b) Engaging in business after a tax registration endorsement has been revoked by the department constitutes a Class C felony.
- (c) Any tax found to have been due, but delinquent, and any tax unreported as a result of fraud or misrepresentation, may be subject to penalty as provided in chapter 82.32 RCW, WAC 458-20-228 and 458-20-230.

WSR 16-10-112 PERMANENT RULES SUPERINTENDENT OF PUBLIC INSTRUCTION

[Filed May 4, 2016, 11:08 a.m., effective June 4, 2016]

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

Purpose: Amending these rules will allow schools to offer state-funded full-day kindergarten to only a portion of kindergartners enrolled at a school due to lack of classroom space.

Citation of Existing Rules Affected by this Order: Amending WAC 392-122-420, 392-122-423, 392-122-424, and 392-122-425.

Statutory Authority for Adoption: RCW 28A.150.290. Adopted under notice filed as WSR 16-06-129 on March 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 4, 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 4, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: April 28, 2016.

Randy Dorn State Superintendent of Public Instruction

AMENDATORY SECTION (Amending WSR 09-11-018, filed 5/8/09, effective 6/8/09)

WAC 392-122-420 Full-day kindergarten program —Authority. The authority for WAC 392-122-420 through 392-122-426 is:

- (1) RCW 28A.150.290(1); and
- (2) RCW 28A.150.315((; and
- (3) RCW 28A.150.370)).

<u>AMENDATORY SECTION</u> (Amending WSR 13-12-008, filed 5/23/13, effective 6/23/13)

- WAC 392-122-423 Full-day kindergarten program —Determination of eligibility. Except as provided in subsection (3) of this section, determination for eligibility for full-day kindergarten (FDK) programs is based on an individual school's poverty percentage from the prior school year.
- (1) Two weeks after the legislature adopts the state Operating Appropriations Act for the subsequent school year, the superintendent of public instruction shall develop and publish an eligibility list for FDK for the subsequent school year, pursuant to the legislative limitation parameters in the annual budget bill. Should the governor veto all or a portion of the funding for FDK, the superintendent of public instruction shall modify the eligibility list as needed.
- (2) A school's poverty percentage is determined by the school's free and reduced priced lunch percentage eligibility for students in kindergarten through sixth grade from the prior school year's October 1st CEDARS report as of March 31st.
- (3) <u>Beginning in the 2016-17 school year, all schools that include kindergarten students will be eligible to receive state funds for full-day kindergarten.</u>
- (4) Funding amounts per school shall be calculated in accordance with the state Operating Appropriations Act and WAC 392-121-400.

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

WAC 392-122-424 Full-day kindergarten program—Letter of acceptance and approvals. (1) School districts with eligible schools or charter schools that intend to provide a FDK program shall submit a letter of acceptance to the superintendent of public instruction in accordance with a timeline established by the superintendent of public instruction. This letter of acceptance must include the following:

- (a) Assurances that the school shall comply with all program requirements outlined in RCW 28A.150.315(1);
- (b) ((Assurances that the district or charter school can provide the full-day kindergarten program for all children of parents who request it in each eligible school; and
- (e))) Any other requirements as established by the office of superintendent of public instruction; and
- (c) In the 2016-17 school year, full-day kindergarten funding is available for schools in which, due to the lack of space/capacity, not all students are able to be served with a full-day kindergarten program. When selecting students for these full-day classrooms, school districts must prioritize students from low income families and consider other students who likely receive the greatest benefits from full-day kindergarten.
- (2) The superintendent shall approve the letters of acceptance that have met the requirements in subsection (1) of this section. If, after approving all of the letters of acceptance that were received that met the requirements in subsection (1) of this section, the superintendent determines that additional funding will be available, the superintendent shall notify charter schools and school districts with schools that have the next highest levels of free and reduced price lunch eligibility that they are eligible.
- (3) The eligibility for FDK is determined based upon an individual building's student poverty and may not transfer to other buildings or students within a school district.

AMENDATORY SECTION (Amending WSR 09-11-018, filed 5/8/09, effective 6/8/09)

WAC 392-122-425 Full-day kindergarten program—Subsequent determination of eligible schools. Prior to the 2016-17 school year, after consideration of the funding requirement of all submitted applications, the school projected FTE and subject to the amount of remaining funding available, the office of superintendent of public instruction may publish a subsequent list of additional eligible schools that may apply for the FDK program. Eligibility on this list shall be ranked in order of decreasing poverty percentage, in the manner outlined in WAC 392-122-423.

Upon program approval for the full-day kindergarten program, a school shall remain eligible for funding in subsequent school years regardless of changes in the school's percentage of students eligible for FRPL as long as all other program requirements are fulfilled.

WSR 16-10-114 PERMANENT RULES SUPERINTENDENT OF PUBLIC INSTRUCTION

[Filed May 4, 2016, 11:10 a.m., effective September 1, 2016]

Effective Date of Rule: September 1, 2016.

Purpose: The purpose of these rule amendments is to restrict the use of personal communication devices while operating a school bus, restrict the distribution of edible items on a school bus, and other technical corrections were made.

Citation of Existing Rules Affected by this Order: Amending WAC 392-145-021, 392-145-031, 392-145-041, 392-145-060, and 392-145-070.

Statutory Authority for Adoption: RCW 46.61.380.

Adopted under notice filed as WSR 16-07-135 on March 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 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 5, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: April 29, 2016.

Randy Dorn State Superintendent of Public Instruction

AMENDATORY SECTION (Amending WSR 07-05-058, filed 2/20/07, effective 11/1/07)

WAC 392-145-021 General operating requirements. The following operating procedures are required to assure maximum passenger safety:

- (1) No school bus shall be operated unless each passenger aboard has been provided with a safe seat of sufficient size to accommodate each passenger within the seat compartment. There shall be no auxiliary seating accommodations such as temporary or folding jump seats in any school bus. Students shall remain seated while the school bus is in
- (2) Passengers in school buses equipped with seat belts shall be required to wear them properly adjusted whenever the school bus is in motion.
- (3) Heavy, sharp, bulky, and/or other articles which may be hazardous in the event of an accident or an emergency stop shall not be transported unsecured in the passenger area of any school bus. Specific attention is directed to items such as skis, ski poles, vaulting poles, large musical instruments, riser platforms, etc. In no case will items be secured in such a

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manner as to impede access to any exit. Items which shall not be transported within the passenger area of a school bus include all forms of animal life (except service animals), firearms, weapons, breakable containers, flammables, and all other articles which could adversely affect the safety of the school bus and passengers.

Teachers and all other school district staff members shall be annually notified that students shall not be requested to transport prohibited items between home and school on a school bus.

(4) When a teacher, coach, or other ((eertificated)) staff member is assigned to accompany students on a school bus, such person shall be responsible for the behavior of the students in his or her charge and shall ensure that passengers comply with state rules, and district policies and procedures for student transportation. However, the school bus driver shall have final authority and responsibility.

AMENDATORY SECTION (Amending WSR 07-05-058, filed 2/20/07, effective 11/1/07)

WAC 392-145-031 General school bus driver requirements. The following are school bus driver requirements:

- (1) School bus drivers shall wear a properly adjusted seat belt whenever the school bus is in motion.
- (2) School bus drivers shall immediately report any suspected malfunction or needed repair of the school bus in their charge.
- (3) A school bus driver shall only allow individuals authorized under the provisions of chapter 392-144 WAC to operate the school bus with passengers on board. No person except the driver shall be allowed to sit in the driver's seat.
- (4) Except in accordance with district policy no school bus driver shall leave the driver's seat without first securing the school bus by setting the parking brake, placing the transmission in the manufacturer's recommended position, shutting off the engine, and removing the key from the ignition switch. The keys shall be kept in the driver's or other authorized school official's possession.
- (5) All school bus drivers shall meet the qualifications established in chapter 392-144 WAC prior to transporting students.
- (6) Except in accordance with district policy, a school bus driver shall not use a personal electronic device for personal communications while operating a school bus, except for the use of such devices to report illegal activity, summon medical or other emergency help, or prevent injury to a person or property, as permitted under RCW 46.61.667. For the purpose of this section, operating a school bus is defined as when the school bus engine is running.
- (7) Except in accordance with district policy, a school bus driver shall not distribute anything edible to students riding the bus.

AMENDATORY SECTION (Amending WSR 07-05-058, filed 2/20/07, effective 11/1/07)

WAC 392-145-041 Pretrip and posttrip requirements. The following are requirements to assure safety and security of the school bus during operation:

- (1) Motor fuel shall not be put into the tank while the engine is running or while passengers are on the school bus. School bus drivers, prior to commencement of any trip, shall assure that the school bus has sufficient fuel to prevent the school bus from running out of fuel.
- (2) School bus drivers, prior to commencement of any trip, shall assure that the mirrors, windshield and rear window(s) of the school bus are clean.
- (3) Prior to commencement of and during any trip, with passengers aboard, every school bus driver shall ensure there are no articles in the following areas that could impede normal movement, visibility, or emergency egress: The service entrance step well; the entire main aisle from front to rear; the aisles or passage ways to any emergency door; the entire shelf area between the rearmost passenger seats and the rear emergency window (if so equipped).
- (4) Tools and other miscellaneous articles shall be carried in appropriate compartments. They shall not be carried loose upon the floor or dashboard area of the school bus.
- (5) School bus drivers shall be certain that all brakes, lights, stop signs, warning signal lamps, and other safety devices are working properly before starting on any trip and shall assure that the school bus is equipped with a fully stocked first-aid kit, three reflective triangles, a body fluid clean-up kit and a fire extinguisher certified to be in good working order.
- (6) School bus drivers shall check the latch, safety lock, and warning system for all emergency exits prior to each trip and no school bus shall be operated with passengers aboard unless all the emergency exits are functioning properly.
- (7) At the end of each trip or route segment, the school bus driver shall thoroughly check the school bus to ((insure)) ensure that no students are left on the school bus. Additionally, the school bus driver shall take reasonable action to ((insure)) ensure that any articles left behind by students are safe, secure, and dealt with according to district policy.

AMENDATORY SECTION (Amending WSR 07-05-058, filed 2/20/07, effective 11/1/07)

WAC 392-145-060 Loading and unloading procedures. The following procedures are required to assure maximum student safety:

- (1) A school bus driver shall not order or allow a student to depart the school bus other than at his or her regular stop unless permission is first obtained in accordance with district policy.
- (2) School bus drivers shall pick up only the students and persons designated by an authorized school district administrator.
- (3) School bus drivers shall have the primary responsibility for the safety of passengers while they are boarding the school bus, while they are on the school bus, and while they are disembarking the school bus and crossing the roadway. If passengers must cross the road, the driver shall make every reasonable effort to ((insure)) ensure that they cross safely and that they pass in front of the school bus and never behind the school bus. The driver shall likewise ((insure)) ensure that passengers boarding or disembarking from the school bus are within his/her view at all times.

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- (4) Prior to stopping the school bus on the roadway for the purpose of loading or unloading passengers, school bus drivers shall activate the alternating flashing amber lamps by means of a master sequencing switch. The driver shall activate the alternating flashing amber lamps:
- (a) No less than one hundred feet and no more than three hundred feet from the school bus stop where the posted speed limit is thirty-five miles per hour or less; and
- (b) No less than three hundred feet and no more than five hundred feet from the school bus stop where the posted speed limit is more than thirty-five miles per hour.
- (5) No school bus shall pull over to the left-hand side of the road to load or unload passengers.
- (6) The stop sign and alternately flashing red lamps shall be activated whenever a school bus is stopped on any portion of a traveled roadway to load or unload school children. Simultaneously flashing amber hazard lamps shall be activated whenever a school bus is stopped off the roadway to load or unload school children.
- (7) Whenever school children have to cross the roadway, the school bus shall stop on the roadway and display the stop sign and alternately flashing red lamps. A school bus driver shall not allow school children to cross any roadway having three or more marked traffic lanes or any highway divided into separate roadways as provided in RCW 46.61.150.
- (8) The stop sign and alternately flashing red lamps on a school bus shall not be used while the school bus is moving or to indicate that the school bus is going to stop.
- (9) While loading and unloading passengers on a traveled portion of the roadway, the school bus driver shall activate the alternating flashing red lights by means of a sequencing switch prior to opening the passenger load door.
- (10) The school bus driver shall set the parking brake and place the transmission in neutral or park prior to loading or unloading passengers. When it is possible, the school bus driver shall maintain light pressure on the service brake to activate the brake lamps when loading or unloading passengers.
- (11) The school bus driver shall assure that all students are seated or secure prior to releasing the brake.
- (12) In any case in which a school bus passes a stopped school bus which is loading and unloading students off the traveled portion of the roadway, the passing school bus shall reduce speed and proceed with caution.

AMENDATORY SECTION (Amending WSR 14-15-049, filed 7/11/14, effective 8/11/14)

- WAC 392-145-070 Rail grade crossings. The following requirements apply to drivers of school buses during rail grade crossings:
- (1) All school buses shall stop at all rail grade crossings except:
- (a) Where traffic is controlled by a police officer or flagger;
- (b) Where a functioning traffic control signal is transmitting a green light;
- (c) Where the tracks are used exclusively for a streetcar or industrial switching purposes;

- (d) Where the utilities and transportation commission has approved the installation of an "exempt" sign; or
- (e) Where the crossing is abandoned and is marked with a sign indicating it is out-of-service.
- (2) In order to lessen the potential for collisions, school bus drivers shall use simultaneously flashing amber hazard lamps within two hundred feet prior to stopping for a rail grade crossing.
- (3) The school bus driver shall open the door and driver window to listen for approaching trains.
- (4) Drivers shall take reasonable action to ((insure)) ensure that passengers are quiet and shall turn off all noise making devices such as fans and radios while listening for approaching trains.
- (5) Drivers shall not proceed until the door is closed, visibility is clear, and the school bus can safely proceed across and completely clear the rail grade.
- (6) Drivers shall not change gears of a school bus equipped with a manual transmission while the school bus is crossing a rail grade.

WSR 16-10-115 PERMANENT RULES SUPERINTENDENT OF PUBLIC INSTRUCTION

[Filed May 4, 2016, 11:13 a.m., effective June 4, 2016]

Effective Date of Rule: Thirty-one days after filing.
Purpose: Several sections of chapter 392-169 WAC require updating to address the following:

- Add to the definition of running start program the language from ESSHB [E2SHB] 1546.
- Remove language that addresses the running start in the high school model.
- Add language regarding students who are disenrolled from a nonresident district after a rescindment of their choice transfer and plan to only take running start classes to allow a college to report their running start enrollment to the nonresident district.

WAC 392-169-005 requires joint agreement with the office of superintendent of public instruction, state board of [for] community and technical colleges (SBCTC), and Washington student achievement council (WSAC). Both SBCTC and WSAC have reviewed and approved the proposed changes.

Citation of Existing Rules Affected by this Order: Amending WAC 392-169-005, 392-169-015, 392-169-020, 392-169-025, 392-169-030, 392-169-055, and 392-169-100.

Statutory Authority for Adoption: RCW 28A.600.390.

Adopted under notice filed as WSR 16-07-134 on March 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.

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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 7, Repealed 0.

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

Date Adopted: May 2, 2016.

Randy Dorn Superintendent of Public Instruction

AMENDATORY SECTION (Amending WSR 95-09-042, filed 4/14/95, effective 5/15/95)

WAC 392-169-005 Authority. The authority for this chapter is RCW 28A.600.390, which authorizes the superintendent of public instruction, the state board for community and technical colleges, and the ((higher education coordinating board)) Washington student achievement council to jointly develop and adopt rules governing RCW 28A.600.300 through 28A.600.380, and 28A.150.260 and 28A.150.290 which authorize the superintendent of public instruction to adopt rules governing basic education allocation moneys. The rules set forth in this chapter have been jointly developed and agreed upon by the three agencies, and adopted and codified in separate chapters of the Washington Administrative Code by each of the three agencies. The rules may be modified only by agreement of all three agencies.

AMENDATORY SECTION (Amending WSR 95-09-042, filed 4/14/95, effective 5/15/95)

WAC 392-169-015 Running start program—Definition. As used in this chapter, the terms "running start" and "running start program" mean the part-time to full-time equivalent enrollment under this chapter of eligible eleventh and twelfth grade high school students in an institution of higher education for the purpose of earning at least high school credit to be awarded by a school district, and such additional college level or university level credit as may be awarded by the institution of higher education. A running start program's course must be open for registration to matriculated students at the participating institution of higher education and may not be a course consisting solely of high school students in a high school classroom.

AMENDATORY SECTION (Amending WSR 95-09-042, filed 4/14/95, effective 5/15/95)

WAC 392-169-020 Eligible student—Definition. As used in this chapter, the term "eligible student" means any person, including a person who is otherwise attending a private school or receiving home-based instruction, who meets each of the following conditions:

- (1) The person is under the age of twenty-one years of age as of September 1 of the school year.
- (2) The person is eligible by reason of his or her residence or other criterion established by law to enroll in the school district through which the person seeks to obtain the award of running start program high school credit. See RCW 28A.225.160 (residents of a school district), RCW 28A.225.-170 (residents of the United States and Indian Reservations), RCW 28A.225.210 (residents of "nonhigh" school districts), and RCW 28A.225.220 ("choice" students). Note: A running start student who changes his or her school district of residence, including after a rescindment of a choice transfer agreement following enrollment in running start, solely for the purpose of attending an institution of higher education under this chapter shall be deemed to have retained his or her residence in the school district of initial running start enrollment for high school graduation, funding and other purposes under this chapter.
- (3) The person is eligible under the grade placement policies of the school district through which the person seeks to obtain running start program high school credit to be in the eleventh or the twelfth grade.
- (4) The person has not as of the beginning of the school year earned the credits required for the award of a high school diploma by the school district through which the person seeks to obtain the award of running start program high school credit.
- (5) The person has not as of the beginning of the school year received a high school diploma or its equivalent. Note: A general education development certificate is not considered to be the equivalent of a high school diploma for purposes of this subsection.
- (6) The person's running start program enrollment to date is below the applicable eleventh or twelfth grade running start enrollment limitations established under WAC 392-169-055.

AMENDATORY SECTION (Amending WSR 14-22-079, filed 11/3/14, effective 12/4/14)

WAC 392-169-025 Full-time equivalent (FTE) running start enrollment—Definition. For the purposes of this chapter and chapter 392-121 WAC, "full-time equivalent (FTE) running start enrollment" (i.e., college or university enrollment) means the FTE of running start students on an enrollment count date when each student's FTE is determined subject to the limitations of WAC 392-169-022, 392-169-055 and 392-169-115 as follows:

- (1) FTE for running start enrollment is the result of ((multiplying the quotient of)) dividing a student's enrolled college credits ((divided)) by fifteen ((and the quotient of three divided by the number of months the running start class is provided)). For Washington State University classes offered at the college campus only, the FTE for running start enrollment is the result of dividing a student's enrolled college semester credits by fifteen.
- (2) The sum of the results of running start enrollment under subsection (1) of this section at all colleges shall not exceed 1.00 FTE per student on any count day except for the

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month of January or 1.00 annual average FTE in any school year.

AMENDATORY SECTION (Amending WSR 14-22-079, filed 11/3/14, effective 12/4/14)

WAC 392-169-030 Annual average full-time equivalent (AAFTE) running start enrollment—Definition. For purposes of this chapter and chapter 392-121 WAC, "annual average full-time equivalent (AAFTE) running start enrollment" means((:

- (1) For running start classes offered at the college campus,)) the sum of the AAFTE of all running start students for a school year when each running start student's AAFTE equals the sum of the student's running start FTE enrollment on the nine running start count dates divided by nine.
- (((2) For running start classes offered in the high school setting, the sum of the AAFTE of all running start students for a school year when each running start student's AAFTE equals the sum of the student's running start FTE enrollment on the ten running start count dates divided by ten.))

AMENDATORY SECTION (Amending WSR 14-22-079, filed 11/3/14, effective 12/4/14)

- WAC 392-169-055 Enrollment—Extent and duration of running start enrollment. Running start program enrollment under this chapter is limited as follows (and as may be further limited for academic reasons under WAC 392-169-057):
- (1) An eligible student who enrolls in grade eleven may enroll in an institution of higher education while in the eleventh grade for no more than the course work equivalent to one academic year of enrollment as an annual average full-time equivalent running start student (i.e., three college or university quarters as a full-time equivalent college or university student, two semesters as a full-time equivalent college or university student, or nine months as a full-time equivalent technical college student((, or ten months as a full-time equivalent student taking running start elasses in the high school setting))).
- (2) An eligible student who enrolls in grade twelve may enroll in an institution of higher education while in the twelfth grade for no more than the course work equivalent to one academic year of enrollment as an annual average full-time equivalent running start student (i.e., three college or university quarters as a full-time equivalent community college or university student, two semesters as a full-time equivalent college or university student, or nine months as a full-time technical college student((, or ten months as a full-time equivalent student taking running start classes in the high school setting))).
- (3) Enrollment in an institution of higher education is limited to the fall, winter and spring <u>college</u> quarters, <u>and</u> the fall and spring <u>college</u> semesters((, and the district standard school year (September through June))).
- (4) As a general rule a student's eligibility for running start program enrollment terminates at the end of the student's twelfth grade regular academic year, notwithstanding the student's failure to have enrolled in an institution of higher education to the full extent permitted by subsections (1) and (2)

of this section: Provided, That a student who has failed to meet high school graduation requirements as of the end of the student's twelfth grade regular academic year (September through June) due to the student's absence, the student's failure of one or more courses, or another similar reason may continue running start program enrollment for the sole and exclusive purpose of completing the particular course or courses required to meet high school graduation requirements, subject to the enrollment limitation established by subsection (2) of this section.

AMENDATORY SECTION (Amending WSR 14-22-079, filed 11/3/14, effective 12/4/14)

WAC 392-169-100 Running start enrollment count dates. Enrollment count dates for the running start program shall be as follows:

- (1) For community and technical colleges and for Central Washington University and Eastern Washington University ((elasses offered at the college campus)), the first college or university day of each of the months of October through June; and
- (2) For Washington State University ((classes offered at the college campus)), the first university day of each of the months of September through May.
- (((3) For running start classes offered at the high school setting, the first instructional day of each of the months September through June.))

WSR 16-10-116 PERMANENT RULES SUPERINTENDENT OF PUBLIC INSTRUCTION

[Filed May 4, 2016, 11:13 a.m., effective June 4, 2016]

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

Purpose: This rule-making order amends WAC 392-122-107 and 392-122-710. The purpose of the amendments is to address the additional June count day that went into effect for the 2012-13 school year and changed the special education and transitional bilingual funding to a nine month average of reported enrollment.

Citation of Existing Rules Affected by this Order: Amending WAC 392-122-107 and 392-122-710.

Statutory Authority for Adoption: RCW 28A.150.290.

Adopted under notice filed as WSR 16-07-151 on March 23, 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 2, 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: May 2, 2016.

Randy Dorn Superintendent of Public Instruction

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

WAC 392-122-107 Definition—Report 1220. "Report 1220" means the school district's and charter school's special education allocation report calculated and prepared by the superintendent of public instruction using the district's or charter school's ((eight-month)) nine-month average annual headcount enrollment as submitted on Form P-223H for the school year and for the 1994-95 school year the ratios and percentages established in the LEAP document for state special education program allocation as defined in WAC 392-122-105. For the purpose of special education allocations, the district's or charter school's ((eight-month)) nine-month average annual headcount enrollment shall be the average of the enrollments for the first school day of ((the second reporting month and the subsequent seven months)) October through June.

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

WAC 392-122-710 Distribution of state moneys for the transitional bilingual program. The superintendent of public instruction shall apportion to districts or charter schools for the state transitional bilingual program the amount calculated per district in WAC 392-122-705 according to the apportionment schedule provided in RCW 28A.510.-250. Monthly payments to districts and charter schools shall be adjusted during the year to reflect changes in the district's or charter school's reported eligible students as reported on the P223, monthly report of school district enrollment form. For the purpose of transitional bilingual allocations, the district's or charter school's ((eight-month)) ninemonth average annual headcount enrollment of eligible students as defined in WAC 392-160-005(3) and 392-160-015 shall be the average of such enrollment for the first school day of ((the second reporting month and the subsequent seven months)) October through June.

WSR 16-10-117 PERMANENT RULES SUPERINTENDENT OF PUBLIC INSTRUCTION

[Filed May 4, 2016, 11:14 a.m., effective June 4, 2016]

Effective Date of Rule: Thirty-one days after filing. Purpose: The 2015-17 Biennial Appropriations Act expanded the current K-1 high poverty compliance method-

ology for teacher allocations to grades K-3 at all schools serving those grades. This rule-making order amends K-1 high poverty rules to align them with the biennial budget language.

Citation of Existing Rules Affected by this Order: Amending WAC 392-140-915, 392-140-923 and 392-140-932; and repealing WAC 392-140-921 and 392-140-933.

Statutory Authority for Adoption: RCW 28A.150.290 and 84.52.0531.

Adopted under notice filed as WSR 16-06-126 on March 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 5, 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 5, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 0, Repealed 0.

Date Adopted: April 28, 2016.

Randy Dorn State Superintendent of Public Instruction

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

WAC 392-140-915 High poverty funding—Process and definition of eligible schools. For the purposes of this section, an eligible school is a school administered by a public school district board or a public charter school board in which the free and reduced priced lunch percentage for students in grades K-6 exceeds fifty percent within the school building. Schools administered by school districts that are part of a district that receives any type of K-6 small school funding or the school does not receive remote and necessary funding are not eligible schools under this section. If a school is determined to be eligible, the K-3 full-time equivalent enrollment as reported to the office of superintendent of public instruction on the P-223 will be used to generate funding at an enhanced class size as determined by the legislature. subject to funding provided in the Omnibus Appropriations Act.

CEDARS data as of October of the previous school year will be used to determine school eligibility. A CEDARS extract of October 1st data will be pulled on March 31st to be used as the basis for K-3 high poverty funding eligibility for the subsequent school year. The list of eligible schools will be published by mid April. No changes to CEDARS data made after March 31st will be considered, and appeals will not be allowed.

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Funding of K-3 high poverty schools will be based upon budgeted K-3 enrollment in eligible high poverty schools as stated in a district's or charter school's F-203 from September through December. Funding based on average annual full-time equivalent enrollment reported in final approved eligible schools will begin in January and continue through August. Districts and charter schools must meet the legislative compliance requirements of the K-1 high poverty funding in order to retain the full allotment.

NEW SECTION

WAC 392-140-916 K-3 class size funding. Elementary teacher allocations based on the prototypical schools formula provided in RCW 28A.150.260 and the Omnibus Appropriations Act for grades K-3 at nonhigh poverty and high poverty schools will be based upon budgeted K-3 enrollment at both nonhigh poverty and high poverty schools as stated in the district's F-203 revenue estimate from September through December for the year budgeted. Districts will also input their estimated K-3 and K-3 high poverty weighted average class size for purposes of funding from September through December. K-3 enrollment will not include student full-time equivalent (FTE) enrolled in alternative learning experience programs. Funding based on actual average annual FTE enrollment reported in the P-223 will begin in January and will continue through August. Districts must meet the legislative compliance requirements of both K-3 and K-3 high poverty class size funding in order to generate the full allotment.

AMENDATORY SECTION (Amending WSR 14-12-004, filed 5/21/14, effective 6/21/14)

WAC 392-140-923 ((K-1 high poverty)) K-3 class size—Enrollment. ((School level enrollment by grade at each of the high poverty eligible schools will be considered from the current school year October 1 CEDARS data inclusive of changes through the enrollment count day in January, March, and June.)) Grade level K-3 high poverty and non-high poverty enrollment from a district's P-223 reporting will be considered in the compliance calculations for the months of January, March, and June. All students in ALE programs will be excluded from the compliance calculation. ((First grade and full day kindergarten students will be considered a 1.0 FTE, while half day kindergartners will be considered a 0.5 FTE.))

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

WAC 392-140-932 ((K-1 high poverty)) K-3 class size—Teachers. The superintendent of public instruction shall include in the calculation of high poverty class size compliance those teachers reported on the S-275 at the eligible schools that are coded in programs 01 ((and 79)) to grade group K ((Θ F)), 1, 2, or 3, and are reported in one of the following duty roots:

- Duty Root 31 Elementary homeroom teacher;
- Duty Root 33 Other teacher:
- Duty Root 34 Elementary specialist teacher;

- Duty Root 52 Substitute teacher;
- Duty Root 63 Contractor teacher.

S-275 data as of the published apportionment cutoff dates in January, March, and June will be considered in the calculation.

Program 21 special education teachers coded to grade K ((or 1 at the eligible schools)), 1, 2, or 3 multiplied by the annual percentage of students in special education instruction used in determination of a district's or charter school's 3121 revenue will be included.

Teachers coded to program 02 alternative learning experience shall be excluded.

NEW SECTION

WAC 392-140-934 K-3 class size—Supplemental FTE teachers. As used in this chapter, "supplemental full-time equivalent teachers" means the net change in full-time equivalent teachers after October 1st of the school year not reflected in report S-275. Teachers, for the purpose of this section, are defined in WAC 392-140-932. Supplemental full-time equivalent teachers are determined as follows:

- (1) Determine the teacher FTE that would be reported for each employee for the school year on report S-275 if the current data were submitted for the October 1st snapshot as required in the S-275 instructions and subtract the teacher FTE as of October 1st actually reported for the employee on the school district's most current report S-275.
- (2) Include decreases as well as increases in staff after October 1st and not reflected in report S-275. Decreases include terminations, retirements, unpaid leave, and reassignment of staff.

Supplemental teacher FTE must be reported to the office of superintendent of public instruction prior to the published S-275 apportionment cutoff dates in January, March, and June to be considered. Supplemental teacher FTE must be reported by individual grade level K, 1, 2, and 3, as well as separately for nonhigh poverty and high poverty schools.

NEW SECTION

WAC 392-140-936 K-3 demonstrated class size—High poverty schools. Demonstrated class size across all high poverty eligible schools will be calculated by dividing the total teachers and supplemental teacher FTE for the individual grade levels of K, 1, 2, or 3, as described in WAC 392-140-932 into the calculated combined total enrollment across all high poverty schools in the individual grade levels of K, 1, 2, or 3.

NEW SECTION

WAC 392-140-939 K-3 demonstrated class size—Nonhigh poverty schools. Demonstrated class size across all nonhigh poverty eligible schools will be calculated by dividing the total teachers and supplemental teacher FTE for the individual grade levels of K, 1, 2, or 3, as described in WAC 392-140-932 into the calculated combined total enrollment across all nonhigh poverty schools in the individual grade levels of K, 1, 2, or 3.

Permanent

NEW SECTION

WAC 392-140-942 Weighted average class size—High poverty schools. A K-3 high poverty weighted average class size will be calculated by first multiplying the high poverty enrollment in each of the grades K, 1, 2, or 3 by the demonstrated class size for each respective grade as defined in WAC 392-140-937. The result of those four separate calculations by grade will be summed, and the total will be divided by total K-3 high poverty enrollment as described in WAC 392-140-923, which will result in K-3 high poverty weighted average class size.

A K-3 high poverty max funded class size enhancement will be calculated first by taking the high poverty enrollment in each of grades K, 1, 2, or 3 by the class sizes provided in the Omnibus Appropriations Act. The result of those four separate calculations by grade will be summed, and that total will be divided by the total K-3 high poverty enrollment as described in WAC 392-140-923, which will result in the K-3 high poverty max funded class size enhancement for a specific district.

Districts will generate apportionment funding based on the greater of the K-3 high poverty weighted average class size or the K-3 high poverty max funded class size enhancement. For the months of September through December, districts will generate K-3 high poverty apportionment funding based on the class size input into their F-203 revenue estimate. Beginning in January the results of the most recent compliance calculation will be utilized for apportionment purposes through the end of the school year.

NEW SECTION

WAC 392-140-945 Weighted average class size—Nonhigh poverty schools. A K-3 nonhigh poverty weighted average class size will be calculated by first multiplying the nonhigh poverty enrollment in each of the grades K, 1, 2, or 3 by the demonstrated class size for each respective grade as defined in WAC 392-140-937. The result of those four separate calculations by grade will be summed, and the total will be divided by total K-3 nonhigh poverty enrollment as described in WAC 392-140-923, which will result in K-3 nonhigh poverty weighted average class size.

A K-3 nonhigh poverty max funded class size enhancement will be calculated first by taking the nonhigh poverty enrollment in each of grades K, 1, 2, or 3 by the class sizes provided in the Omnibus Appropriations Act. The result of those four separate calculations by grade will be summed, and that total will be divided by the total K-3 nonhigh poverty enrollment as described in WAC 392-140-923, which will result in the K-3 nonhigh poverty max funded class size enhancement for a specific district.

Districts will generate apportionment funding based on the greater of the K-3 nonhigh poverty weighted average class size or the K-3 nonhigh poverty max funded class size enhancement. For the months of September through December, districts will generate K-3 nonhigh poverty apportionment funding based on the class size input into their F-203 revenue estimate. Beginning in January the results of the most recent compliance calculation will be utilized for apportionment purposes through the end of the school year.

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 392-140-921 K-1 high poverty class size compliance.

WAC 392-140-933 K-1 demonstrated class size.

WSR 16-10-122 PERMANENT RULES DEPARTMENT OF RETIREMENT SYSTEMS

[Filed May 4, 2016, 11:58 a.m., effective June 4, 2016]

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

Purpose: RCW 41.26.476, enacted in 2010, invalidates a clause in WAC 415-104-380 concerning shared leave. This amendment strikes the invalid clause.

Citation of Existing Rules Affected by this Order: Amending WAC 415-104-380.

Statutory Authority for Adoption: RCW 41.50.050(5).

Adopted under notice filed as WSR 16-06-097 on March 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 0, Repealed 0.

Date Adopted: May 4, 2016.

Marcie Frost Director

AMENDATORY SECTION (Amending WSR 97-01-016, filed 12/6/96, effective 1/6/97)

WAC 415-104-380 Disability payments. (1) Disability leave supplement. Under certain circumstances, LEOFF II members are entitled to a disability leave supplement for periods of disability leave. See RCW 41.04.500 through 41.04.550.

(a) Employer contributions to the disability leave supplement under RCW 41.04.510(3) are not a salary or wage for services rendered and do not qualify as basic salary. Although the payments are paid leave, they are specifically excluded from basic salary by RCW 41.04.525.

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- (b) The member paid portion of the disability leave supplement is funded through use of the member's accumulated sick or vacation leave. This portion of the disability leave supplement is, therefore, basic salary, see WAC 415-104-373. The member will receive only partial service credit for the accumulated leave portion of the disability leave supplement.
- (c) A member may apply to receive full service credit for some periods of duty disability under RCW 41.26.470(3).
- (2) **Workers' compensation.** Payments made to a member under Title 51 RCW are neither a salary or wage for services rendered nor paid leave. The payments are not basic salary for LEOFF II. This is true whether the payments come from the workers' compensation trust fund or from an employers' self-insurance program authorized under Title 51 RCW.
- (3) **Private insurance.** Some employers provide additional disability insurance as a supplement to workers' compensation. Any payment from a third party insurance company is neither paid leave nor payment for services rendered. It does not qualify as basic salary for LEOFF Plan II.
- (4) **Disability leave banks.** If an employer maintains a disability leave bank which may be used to make salary replacement payments for members during periods of disability, such payments are paid leave and qualify as basic salary subject to the provisions of WAC 415-104-373((: Provided, however, That if the leave provided to an employee is based upon leave earned by another employee then it is a form of shared leave and does not qualify as basic salary)).

[135] Permanent