



RULE-MAKING ORDER PERMANENT RULE ONLY

CR-103P (August 2017) (Implements RCW 34.05.360)

CODE REVISER USE ONLY

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STATE OF WASHINGTON
FILED

DATE: October 02, 2017

TIME: 3:22 PM

WSR 17-20-069

Agency: Department of Labor and Industries

Effective date of rule:

Permanent Rules

- 31 days after filing.
- Other (specify) January 1, 2018 (If less than 31 days after filing, a specific finding under RCW 34.05.380(3) is required and should be stated below)

Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?

- Yes No If Yes, explain:

Purpose: This rulemaking is a result of the department receiving a petition formally requesting the department to update and modify the current Chapter 296-32 WAC, Safety Standards for Telecommunications. This chapter was originally created in 1975. Although there have been partial rule changes over the years (1976 through 2002), a full review of this chapter, in its entirety, has not taken place. Since inception of Chapter 296-32 WAC over 40 years ago, wireless technology in the area of telecommunications has rapidly advanced. Our telecommunication rules have not kept pace with that advancement.

There has been a significant increase in injuries including fatalities since the rule was adopted over 40 years ago, particularly since cell phone technology has appeared and evolved. Therefore, this rulemaking is a very important rulemaking effort. See below for adopted changes:

AMENDED SECTIONS:

WAC 296-32-200 Scope and application.

- Added clarifying language in subsection (1).
- Added subsection (2) relating to the minimum requirements set forth in this chapter for employers to protect employees from the hazards associated with working in the telecommunications industry.
- Added subsection (3) which explains how this chapter is laid out. The three primary parts of this chapter are:
 - Part A: General requirements – This part is intended to convey the areas of responsibility to employers when working on telecommunications facilities or locations of any type.
 - Part B: Requirements that apply to wireline.
 - Part C: Requirements that apply to wireless.
- Subsection (4) is existing WAC.
- Added clarifying language to subsection (5).
- Added clarifying language to subsection (6).
- Added subsection (7) relating to additional requirements located in national consensus standards.
- Added clarifying language to subsection (8).
- Added subsection (9) relating to enforcement.

WAC 296-32-210 Definitions.

- Added definitions for acceptable conditions for access, accessible radiation, adverse weather, anchorage, anti-two block, articulating boom lift/crane, assisted rescue, authorized climber, automatic descent control device, boatswain chair, brakes, cage, capstans, carabiner, carrier, climber attachment anchorage, climbing facilities, communication tower, competent climber, competent rescuer, competent rigger, construction work, contract employer, crew, crew chief/supervisor/foreman, crown block (top block or load block), deceleration distance, direct communications, elevated (high angle) rescue, emergency washing facilities, engineer of record (EOR), engineered hoist system, exit, exit route, exposed live parts, exposed wiring methods, fall arrest, fall arrest system, fall protection equipment, fall protection work plan, fall restraint, fiber-optic cable – communication, fiber-optic cable – supply, field work, first aid, flemish eyes (molly hogan), floor hole, floor opening, foot block, full body harness, gin pole, gross load, grounded, ground-fault circuit-interrupter, guardrails, handrail, hazard, high wind, hoist mechanism or hoist, hoisting, horizontal lifeline, host employer, individual-rung/step ladder, job hazard assessment, ladder, ladder safety device, landing, laser safety officer, length of climb, line clearance tree trimming, lineman’s body belt, listed, load chart, load line, locking snap hook, lockout, lockout device, manual descent control device with automatic lockoff, maximum

intended personnel load/gross load, maximum permissible exposure (MPE), may, mobile crew, multi-use site for towers and antennas, must, nearby facility, NEMA, nonionizing radiation, normally unattended work location, oil sample analysis, one-hundred percent (100%) fall protection, operator (equipment), permissible exposure limits (PELs), personal eyewash units, platform, portable ladder, positioning system, positive locking system, potable water, powered lowering, prime mover, proficient, proof test, pulley, qualified climber, qualified engineer, radio frequency radiation (RFR), rated capacity, record, registered professional engineer (RPE), remote site/worksite, rescue, rescue plan, rescue procedure, rescue system, rescue system – one person, rescue system – two persons, retraining, rigging, rigging plan, rise, riser, rung, safety climb system, safety sleeve, safety watch system, self-retracting lanyard (SRL), shall, should, side plates, side-step ladder, similar structures, single ladder, site/worksite, slings, special-purpose ladder, special tools and equipment, specular reflection, stair railing, stairs or stairway, standard safeguard, static brakes, step, step bolt, structure owner, sub-contractor, tag line and/or trolley line, tagout, tagout device, teardown inspection, through ladder, tie-off anchorage points, time weighted average (TWA), toeboard, tower and tower site, tower construction, tower inspection, tower maintenance work, training program, tread, tread run, tread width, trial lift, two blocking, UL (Underwriters' Laboratories), vertical lifeline, voltage – nominal, watertight, weatherproof, well, winch/hoist, wire rope (cable), and working length.

- Modified the definitions for aerial lifts, aerial splicing platform, aerial tent, alive or live (energized), barricade, barriers, bond, cable, cable sheath, circuit, clearance, climbing space, communication lines, communication plant, competent person, conductor, crewleader or person-in-charge, effectively grounded, emergency, energized, equipment, ground, grounding, ground tent, grounded conductor, grounded systems, grounding electrode conductor (grounding conductor), guard or guarded, insulated, insulation (as applied to cable), joint use, ladder platform, ladder seat, manhole, manhole platform, manlift equipment, microwave transmission, nominal voltage, pole balcony or seat, pole platform, protection from hazardous voltage, protective devices, public highway, qualified employee (person), qualified line-clearance tree trimmer, qualified line-clearance tree trimmer trainee, sheath, system operator/owner, telecommunications center (facility), telecommunications (digger) derricks, telecommunication line truck, telecommunication service, unvented vault, vault, vented vault, voltage communications, voltage electric supply, voltage of an effectively grounded circuit, and voltage of a circuit not effectively grounded.

NEW SECTIONS:

WAC 296-32-195 Foreword.

- Added this section explaining the purpose of this chapter.

WAC 296-32-22505 Incorporation of standards of national organizations.

- Added this section using language from chapters 296-155 WAC and 296-800 WAC.

WAC 296-32-22510 Safe place standard.

- Moved requirements from WAC 296-32-215 to this section.

WAC 296-32-22511 Host employer/contractor responsibilities.

- Added this section using language from chapter 296-45 WAC. Also, added language referencing the applicable national consensus standards.

WAC 296-32-22512 Accident prevention program and safety meetings.

- Added this section using language from chapters 296-45 WAC, 296-155 WAC and 296-800 WAC.
- Moved requirement relating to hazard communication from WAC 296-32-230.

WAC 296-32-22515 First aid.

- Added this section using language from chapters 296-45 WAC, 296-54 WAC, 296-800 WAC and WAC 296-32-230.

WAC 296-32-22520 Remote communication sites.

- Added this section to address work being done at remote communication sites.

WAC 296-32-22525 Training.

- Added this section using language from chapters 296-45 WAC, 296-155 WAC, 296-863 WAC and WAC 296-32-230.
- Added a requirement relating to tasks being performed less often than once per year will necessitate retraining.

WAC 296-32-22530 Employee protection in public work areas.

- Moved requirements from WAC 296-32-240 to this section.

WAC 296-32-22535 Facilities requirements.

- Moved requirements from WAC 296-32-220 to this section.
- Added “face shields” to subsection (5), this came from WAC 296-800-16050.

WAC 296-32-22540 Tools and personal protective equipment – general.

- Moved requirements from WAC 296-32-250 and 296-32-330 to this section.
- Added personal protective equipment – hazard assessment to this section using language from chapter 296-45 WAC and 296-800 WAC.

- Added language relating to the use of any machinery, tool, material, or equipment not in compliance is prohibited using language from chapter 296-155 WAC.
- Added requirements relating to head and foot protection, using language from chapter 296-155 WAC.
- Additional language relating to vehicle-mounted utility generators was added, using language from chapter 296-155 WAC.
- Added fire extinguisher inspection requirements, using language from chapter 296-800 WAC.

WAC 296-32-22545 Capstan and cathead hoists.

- Added this section relating to capstan and cathead hoists.

WAC 296-32-22550 Rubber insulating equipment.

- Moved requirements from WAC 296-32-260 to this section.
- Added an exception relating to protector gloves, using language from chapter 296-45 WAC.
- Added a requirement relating to rubber gloves when not in use shall be carried in an approved bag, using language from chapter 296-45 WAC.

WAC 296-32-22555 General fall protection.

- Added requirements relating to fall protection, using language from chapter 296-155 WAC.
- Added language relating to working in the hour's darkness.

WAC 296-32-22560 Ladders.

- Moved requirements from WAC 296-32-280 to this section.
- Added a requirement relating to aluminum or conductive ladders, using language from chapter 296-876 WAC.
- Added a requirement relating to portable ladders being equipped with locking levelers.

WAC 296-32-22565 Vehicle-mounted material handling devices and other mechanical equipment.

- Moved requirements from WAC 296-32-290 to this section.
- Added language relating to the operator's instructional manual being kept on the vehicle, using language from chapter 296-45 WAC.

WAC 296-32-22570 Communication, roof tops, water towers and other elevated locations.

- Added this section to refer employers to the fall protection requirements located in WAC 296-32-22555.

WAC 296-32-22572 Microwave transmission/radio frequency radiation (RFR) and laser communication – general requirements.

- Added this section relating to potential RFR hazards and laser hazards.

WAC 296-32-22574 Hazardous areas.

- Added this section relating to protection from radiation exposure, using language from chapter 296-62 WAC.
- Added a table relating to the limits for maximum permissible exposures.

WAC 296-32-22576 Optical communications systems (laser).

- Added language relating to lasers, using language from ANSI Z136.

WAC 296-32-22578 Control of hazardous energy.

- Added language relating to the control of hazardous energy, using language from chapter 296-803 WAC.

WAC 296-32-23505 Pole climbing equipment.

- Moved requirements from WAC 296-32-270 to this section.
- Changed “safety belts” to lineman’s belts” to be consistent with current industry practice, using language from chapter 296-45 WAC.
- Added language relating to 100% fall protection, using language consistent with chapter 296-45 WAC.
- Added language relating to snaphooks, using language from chapters 296-45 WAC and 296-155 WAC.
- Wire rope requirements came from manufacturer’s specifications.
- Pulling equipment requirements came from manufacturer’s specifications.

WAC 296-32-23510 Materials handling and storage.

- Moved requirements from WAC 296-32-300 to this section.

WAC 296-32-23512 Cable fault locating and testing.

- Moved requirements from WAC 296-32-310 to this section.

WAC 296-32-23514 Grounding for employee protection – pole lines.

- Moved requirements from WAC 296-32-320 to this section.

WAC 296-32-23516 Overhead lines.

- Moved requirements from WAC 296-32-330 to this section.
- Added language relating to handling suspension strand, using language from chapter 296-45 WAC.

WAC 296-32-23518 Wood or other types of poles.

- Added language relating to testing of wood poles, using language from chapter 296-45 WAC.
- Added language relating to when a pole is not safe to perform the work without taking additional precautions.

- Added language relating to handling poles near energized power conductors, using language from chapter 296-45 WAC.
 - Updated the minimum approach distances in Table 6.
- WAC 296-32-23520 Telecommunications line tree trimming and emergency work.**
- Moved requirements from WAC 296-32-360 to this section.
 - Updated the minimum approach distances in Table 7.
- WAC 296-32-23522 Line patrol and work on aerial plants.**
- Added language relating to line patrol and work on aerial plants from Chapter 296-45 WAC.
- WAC 296-32-23523 Storm work and emergency conditions.**
- Moved requirements from WAC 296-32-360 to this section.
 - Added language relating to when storm damage work can begin.
 - Added language relating to the use of insulated gloves.
- WAC 296-32-23524 Underground lines and cable vaults. Underground/buried communication lines.**
- Added language relating to underground lines and cable vaults, using language from chapter 296-155 WAC.
- WAC 296-32-23526 Directional boring machines.**
- Added language relating to directional boring machines, using language from manufacturer’s specifications.
- WAC 296-32-23528 Manholes, street openings and vaults.**
- Moved requirements from WAC 296-32-340 to this section.
- WAC 296-32-23530 Joint power and telecommunication manholes and vaults.**
- Moved requirements from WAC 296-32-340 to this section.
- WAC 296-32-23532 Ladders for underground access.**
- Moved requirements from WAC 296-32-340 to this section.
- WAC 296-32-23534 Tent heater, torches and open flames.**
- Moved requirements from WAC 296-32-250 and 296-32-340 to this section.
- WAC 296-32-23536 Lead work.**
- Moved requirements from WAC 296-32-250 to this section.
- WAC 296-32-24005 Wireless communications – general requirements.**
- Added general requirements relating to the wireless part of the telecommunications industry such as:
 - Training and training program documentation
 - Telecommunications work on high voltage transmission towers
 - Site specific safety plan
 - Hazard assessment
 - Climbing facilities
 - Communication tower/structure evaluation
 - Added requirements from ANSI/TIA 222G.
- WAC 296-32-24010 Antenna work-radio transmitting stations 3-30 MHZ.**
- Moved requirements from WAC 296-32-320 to this section.
- WAC 296-32-24012 Fall protection.**
- Added requirements relating to fall protection using language from chapters 296-155 WAC and 296-878 WAC.
- WAC 296-32-24014 Work during hours of darkness.**
- Added requirements when climbing towers in the hours of darkness.
- WAC 296-32-24018 Emergency response/rescue requirements.**
- Added requirements relating to emergency response/rescue.
- WAC 296-32-24020 Rigging plan.**
- Added rigging plan requirements from ANSI/ASSE A10.48.
- WAC 296-32-24022 Gin poles – installation.**
- Added gin pole installation requirements from ANSI/ASSE A10.48.
- WAC 296-32-24024 Gin poles – use.**
- Added gin pole use requirements from ANSI/ASSE A10.48.
- WAC 296-32-24026 Gin poles – inspections.**
- Added gin pole inspection requirements from ANSI/ASSE A10.48.
- WAC 296-32-24028 Base mounted hoists used for overhead material lifting and personnel lifting.**
- Added requirements relating to base mounted hoists used for overhead material lifting and personnel lifting from ANSI/ASSE A10.48.
- WAC 296-32-24032 Personnel lifting – general requirements.**
- Added requirements relating to personnel lifting from ASME B30.23.

WAC 296-32-24034 Helicopters used for lifting loads.

- Added requirements relating to using helicopters for lifting loads from ANSI/ASSE A10.48.

REPEALED SECTIONS

WAC 296-32-215 Safe place standard.

- Repealed this section and moved the requirements to WAC 296-32-22510.

WAC 296-32-220 General.

- Repealed this section and moved the requirements to WAC 296-32-22535.

WAC 296-32-230 Training.

- Repealed this section and moved the requirements to WAC 296-32-22525.

WAC 296-32-240 Employee protection in public work areas.

- Repealed this section and moved the requirements to WAC 296-32-22530.

WAC 296-32-250 Tools and personal protective equipment – general.

- Repealed this section and moved the requirements to WAC 296-32-22540.

WAC 296-32-260 Rubber insulating equipment.

- Repealed this section and moved the requirements to WAC 296-32-22550.

WAC 296-32-270 Personal climbing equipment.

- Repealed this section and moved the requirements to WAC 296-32-23505.

WAC 296-32-280 Ladders.

- Repealed this section and moved the requirements to WAC 296-32-22560.

WAC 296-32-290 Vehicle-mounted material handling devices and other mechanical equipment.

- Repealed this section and moved the requirements to WAC 296-32-22565.

WAC 296-32-300 Materials handling and storage.

- Repealed this section and moved the requirements to WAC 296-32-23510.

WAC 296-32-310 Cable fault locating and testing.

- Repealed this section and moved the requirements to WAC 296-32-23512.

WAC 296-32-320 Grounding for employee protection – pole lines.

- Repealed this section and moved the requirements to WAC 296-32-23514.

WAC 296-32-330 Overhead lines.

- Repealed this section and moved the requirements to WAC 296-32-23516.

WAC 296-32-340 Underground lines and cable vaults.

- Repealed this section and moved the requirements to WAC 296-32-23524.

WAC 296-32-350 Microwave transmission.

- Repealed this section and moved the requirements to WAC 296-32-22572.

WAC 296-32-360 Tree trimming – electrical hazards.

- Repealed this section and moved the requirements to WAC 296-32-23520.

WAC 296-32-370 Buried facilities – communications lines and power lines in the same trench.

- Repealed this section, the requirements relating to buried facilities are located in WAC 296-32-23524.

Citation of rules affected by this order:

New: See Purpose (above)
Repealed: See Purpose (above)
Amended: See Purpose (above)
Suspended: N/A

Statutory authority for adoption: RCW 49.17.010, RCW 49.17.040, RCW 49.17.050, RCW 49.17.060

Other authority: Chapter 49.17 RCW

PERMANENT RULE (Including Expedited Rule Making)

Adopted under notice filed as WSR 17-07-105 on March 21, 2017 (date).

Describe any changes other than editing from proposed to adopted version:

WAC 296-32-210 Definitions.

- Modified the definition of “aerial lifts” by updating the ANSI reference to 2015.
- Removed the definition of “alive or live (energized)” for clarity.
- Removed the definition of “authorized climber” for clarity.
- Modified the definition of “cable” for clarity.
- Modified the definition of “clearance” by removing the last phrase “the cleared distance between two objects measured surface to surface” for clarity.
- Modified the definition of “climber attachment anchorage” for clarity.

- Modified the definition of “competent climber” for clarity by removing the last sentence. “A competent climber is responsible for the authorized climbers when working at height”.
- Modified the definition of “crown block (top block or load block)” for clarity.
- Modified the definition of “energized” for clarity.
- Added the words “heel or base block” to the definition of “foot block” for clarity.
- Removed the definition of “ground-fault circuit-interrupter” for clarity.
- Modified the definition of “hoist mechanism or hoist” for clarity.
- Added a definition for “ladder safety system” from 29 CFR 1910 for clarity.
- Added a definition for “line patrol” for clarity.
- Modified the definition for “manlift equipment” by adding the words “or suspended” for clarity.
- Deleted the last sentence in the definition of “manual descent control device with automatic lockoff” for clarity.
- Modified the definition of “protective devices” by adding the words “or equipment” and “electrical” for clarity.
- Removed the definition of “qualified climber” for clarity.
- Added a definition for “rooster head” for clarity.
- Added a definition of “strand” for clarity.
- Added a definition for “TIA maintenance and condition assessment” for clarity.
- Removed the definition of “tie-off anchorage points” for clarity.
- Removed the definition of “tower inspection” for clarity.

WAC 296-32-22515 First aid.

- Removed subsection (3) relating to first aid and CPR training for employees at remote sites for clarity. Renumbered subsections following this subsection.
- Added a note relating to valid first-aid certificates can be in an electronic form for clarity.

WAC 296-32-22535 Facilities requirements.

- Added language from Chapter 296-24 WAC to subsection (2)(a) for clarity that reads, “The width of the working space in front of the equipment must be the width of the equipment or thirty inches, whichever is greater”.

WAC 296-32-22540 Tools and personal protective equipment – general.

- In subsection (2)(a), added a reference to Table X (Employer responsibility for providing PPE), located in Chapter 296-800 WAC, Safety and Health Core Rules.

WAC 296-32-22555 General fall protection.

- In subsection (5)(h), added a reference to the safety watch system and directed the employer to follow the requirements in subsection (10) of this section.
- In subsection (6)(b), changed the fall hazard from four feet to ten feet relating to employees standing in or working in the affected area of a trench or excavation for clarity.

WAC 296-32-22578 Control of hazardous energy.

- In subsection (3), added “or the FCC License Holder” for clarity.

WAC 296-32-23505 Pole climbing equipment.

- In subsection (10), last sentence, changed the word “ladder” to “pole” for clarity.

WAC 296-32-23528 Manholes, street openings and vaults.

- In subsection (1)(b), changed “complete evaluation” to “complete job hazard assessment” for clarity.

WAC 296-32-23532 Ladders for underground access.

- In subsection (2), added the words “and fiberglass” for clarity.

WAC 296-32-24005 Wireless communications – general requirements.

- In subsection (4)(e), added the words “or in-house training” for clarity.
- In subsection (9)(a), this section now reads, “If climbing pegs are missing and/or the safety climb’s condition is outside the manufacturer’s specifications, an alternate means to access the structure must be used”. Removed the language relating to the climbing facility shall be deemed unsafe and not climbed.

WAC 296-32-24010 Antenna work-radio transmitting stations 3-30 MHZ.

- In subsection (1)(d), this section now reads, “Tags the antenna ground switch and verifies with the transmitting technician after the antenna has been grounded”. Removed the language relating to being in the presence of the transmitting technician.

WAC 296-32-24024 Gin poles – use.

- In subsection (1)(c), this section now reads, “Modifications or repairs to the gin pole shall be designed and approved by a professional engineer or a qualified gin pole design professional and the repairs inspected by a qualified person prior to returning to service”. This was changed for clarity.

If a preliminary cost-benefit analysis was prepared under RCW 34.05.328, a final cost-benefit analysis is available by contacting:

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**Note: If any category is left blank, it will be calculated as zero.
No descriptive text.**

**Count by whole WAC sections only, from the WAC number through the history note.
A section may be counted in more than one category.**

The number of sections adopted in order to comply with:

Federal statute:	New	___	Amended	___	Repealed	___
Federal rules or standards:	New	49	Amended	2	Repealed	17
Recently enacted state statutes:	New	___	Amended	___	Repealed	___

The number of sections adopted at the request of a nongovernmental entity:

New	___	Amended	___	Repealed	___
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The number of sections adopted in the agency's own initiative:

New	49	Amended	2	Repealed	17
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The number of sections adopted in order to clarify, streamline, or reform agency procedures:

New	49	Amended	2	Repealed	17
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The number of sections adopted using:

Negotiated rule making:	New	___	Amended	___	Repealed	___
Pilot rule making:	New	___	Amended	___	Repealed	___
Other alternative rule making:	New	___	Amended	___	Repealed	___

Date adopted: October 2, 2017

Name: Joel Sacks

Title: Director

Signature:

