

## **WAC 296-305-05113 Technical rescue operational specialties.**

**Note:** When chapters of NFPA 1670, Standard on Operations and Training for Technical Rescue Incidents, are required by the following sections, internal references requiring compliance with further NFPAs or additional resources are not included in these requirements.

(1) Structural collapse. Fire departments choosing to operate at the operations or technician level for structural collapse incidents must meet the requirements found in chapter 5 of the 2009 edition of NFPA 1670, Standard on Operations and Training for Technical Rescue Incidents.

(2) Rope rescue.

(a) Fire departments choosing to operate at the operations or technician level for rope rescue incidents must meet the requirements of this section and the nonconflicting portions of chapter 6 of the 2009 edition of NFPA 1670, Standard on Operations and Training for Technical Rescue Incidents.

(b) Fire departments performing rope rescue operations must make sure previously purchased life safety ropes and equipment complies with the 2001 edition of NFPA 1983, Standard on Fire Service Life Safety Rope and System Components. Ropes and equipment purchased after the effective date of this rule must meet the requirements of the 2006 edition of NFPA 1983, Standard on Life Safety Rope and Equipment for Emergency Services.

(c) Life safety rope and rope rescue equipment must be inspected after purchase and prior to placing in service, after each use, and at least semiannually.

(d) Harnesses must be inspected for worn or broken stitching, rivets worn out of holes, and damage from abrasion, cuts, or chemicals.

(e) Descending/ascending hardware must be inspected for wear, cracks, distortion, sharp edges, and ease of operation.

(f) The manufacturer's recommended shelf life of life safety ropes must be followed. If no shelf life is specified, ropes greater than six years old must be taken out of service as a life safety rope.

**Note:** See WAC 296-305-02019, Life safety ropes, harnesses, and hardware protection, for further requirements.

(3) Confined space rescue.

(a) Fire departments choosing to operate at the operations or technician level for confined space rescue incidents must meet the requirements of this section, chapter 296-809 WAC Table 1, and the nonconflicting sections of chapter 7 of the 2009 edition of NFPA 1670, Standard on Operations and Training for Technical Rescue Incidents.

(b) Fire departments must comply with chapter 296-809 WAC for their own confined spaces.

(c) Fire departments which will respond to calls to perform rescue from a permit-required confined space are required to have each member of a rescue team practice making permit space rescues at least every twelve months by means of simulated rescue operations in which they remove dummies, mannequins or actual persons from permit space. A permit is required for the practice permit space entry.

(d) During an actual rescue response, written or verbally recorded hazard sizeup will be allowed in lieu of the written permit requirements in WAC 296-809-50004 and must be completed prior to any entry. This sizeup must include at a minimum:

(i) Recognition and declaration of the situation as a confined space incident.

(ii) Denial of entry to unprotected persons.

(iii) Assessment of all readily available confined space documentation, e.g., MSDSs, any existing permit, plans or blueprints of the space.

(iv) Assessment of number of victim(s), locations and injury conditions.

(v) Discussion with witnesses, supervisors, and other sources of information.

(vi) Assessment of any current or potential space hazards, in particular, any hazard(s) which lead to the necessary rescue.

(vii) Determination and declaration if the situation is a body recovery or a victim rescue.

(e) At confined space incidents, at least two people outside must be equipped with appropriate breathing apparatus to act as the back-up team, which must remain free of the contaminated area in order to rescue disabled firefighters.

(f) Written documentation of the rescue team's training on the fire department's confined space operating procedures, authorized entrant training, and the contracted host's confined space program must be kept. A record of each of the hazard sizeups must be maintained for at least one year.

(g) Anytime firefighters are working inside a confined space, such persons must be provided with SCBA or air line respirator with escape bottle, and must use the equipment unless the safety of the atmosphere can be established by testing and continuous monitoring.

(i) If the service life of the auxiliary air supply is fifteen minutes or less it must not be used for entry into an IDLH atmosphere but it may be used for escape purposes. The auxiliary air supply may be used for entry into an IDLH atmosphere only when the service life of the unit exceeds fifteen minutes and when not more than twenty percent of the noted air supply will be used during entry.

(ii) The maximum length of hose for supplied air respirators is three hundred feet (91 meters). Such hose must be heavy duty nonkinking and NIOSH approved.

(4) Machinery rescue. Fire departments choosing to operate at the operations or technician level for machinery rescue incidents must meet the requirements of this section and the nonconflicting portions of chapter 12 of the 2009 edition of NFPA 1670, Standard on Operations and Training for Technical Rescue Incidents.

(5) Water rescue.

(a) Fire departments choosing to operate at the operations or technician level for water rescue incidents must meet the requirements of this section and the nonconflicting portions of chapter 9 of the 2009 edition of NFPA 1670, Standard on Operations and Training for Technical Rescue Incidents.

(b) Organizations choosing to operate at the operations or technician level for dive rescue incidents must meet the requirements found in chapter 9 of the 2009 edition of NFPA 1670, Standard on Operations and Training for Technical Rescue Incidents.

(c) Fire departments choosing to operate at the operations or technician level for dive recovery incidents must meet the requirements found in chapter 296-37 WAC, Standards for commercial diving operations, and the nonconflicting parts of chapter 9 of the 2009 edition of NFPA 1670, Standard on Operations and Training for Technical Rescue Incidents.

(d) If a manufacturer's specifications are such that an engineer is required for the operation of a vessel, one must be provided.

(e) When fire boats perform rescue activities they must have two dedicated personnel. Any member not specifically required to operate the vessel, e.g., an operator (pilot) or engineer (if required by the manufacturer's specification) may be used as a deck hand. This may include the boat officer if their duties do not include operating the fire boat.

(f) Watercraft load capabilities must not exceed the manufacturer's specifications.

(g) Each fire department must determine the function of their watercraft; firefighting, rescue, or both.

(h) Watercraft operating within navigable waters of the state of Washington (as defined by the United States Coast Guard) must comply with all of the rules of the United States Coast Guard.

(i) Fire boats operating within navigable waters of the state of Washington (as defined by the United States Coast Guard) must have a fully dedicated pilot.

(j) The operator (pilot) of the watercraft is responsible for its safe operation.

(k) Training for all personnel must cover the physical characteristics of the vessel involved and must be included in the employer's accident prevention program.

(i) All assigned personnel must be trained in safe operation of watercraft and the operations the craft is intended to perform.

(ii) All employees involved in water rescue must be trained in water rescue techniques and use Coast Guard approved personal flotation devices, Type III, minimum.

**Exception:** Employees working below deck or in enclosed cabins or when working above, on or alongside still water where flotation would not be achieved, are exempt from this requirement.

(1) All employers operating watercraft in nonnavigable waters must be responsible for training all employees to local hazards.

(6) Trench and excavation rescue.

(a) Fire departments choosing to operate at the operations or technician level for trench and excavation rescue incidents must meet the requirements of this section and nonconflicting portions of chapter 11 of the 2009 edition of NFPA 1670, Standard on Operations and Training for Technical Rescue Incidents.

(b) Employees that directly engage in trench rescue operations must be under the direct supervision of person(s) with adequate training in trench and excavation hazard recognition, equipment use and operational techniques.

(c) Each employee in an excavation must be protected from cave-ins by an adequate protective system except when:

(i) Excavations are made entirely in stable rock; or

(ii) Excavations are less than four feet (1.22 meters) in depth and examination of the ground by a competent person provides no indication of a potential cave-in.

(7) Mine and tunnel rescue.

(a) Fire departments choosing to operate at the operations or technician level for mine and tunnel rescue incidents must meet the requirements of this section and the nonconflicting portions of chapter 14 (Mine and Tunnel Search and Rescue) of the 2009 edition of NFPA 1670, Standard on Operations and Training for Technical Rescue Incidents.

(b) The requirements of this section apply to agencies that provide varying degrees of response to tunnels under construction or other underground excavations formerly classified as mines or tunnels.

(c) The requirements of this section do not apply to operating mines, tourist mines, basements, or subterranean structures that are complete and in use or that meet the definition of a confined space.

(d) Emergency services that are the designated primary provider of rescue services for operational mines and tunnels under construction are required to comply with the nonconflicting portions of chapter 296-155 WAC Part Q, Underground construction.

(e) Members who regularly enter a tunnel under construction as part of their regular duties must receive training meeting the requirements of the safety instruction required by WAC 296-155-730(3).

(f) Regardless of whether an atmospheric hazard is detected, any entrant into a tunnel under construction, mine or any related shaft or excavation must have a means of emergency egress respiratory protection with no less than a thirty minute rated service life immediately available. There must be at least one unit immediately available for each member in the tunnel.

MSHA or NIOSH approved "Self Rescuer" or "Self Contained Self Rescuer" devices fulfill this requirement provided the user has been trained in its use and the device is suitable for the type of potential hazards that may be encountered.

(g) A rescue service entry team must have the ability at a minimum to continuously monitor the air for oxygen, carbon monoxide, hydrogen sulfide, and combustible gasses as well as any other atmospheric contaminants that are known or suspected.

(h) The rescue service entry team must have at least two methods of communication with the surface, one of which must be voice communication.

This requirement may be satisfied by using both the "direct" and "trunked" features of the same radio systems provided adequate equipment is available to the entry team to provide constant simultaneous communication using both methods.

(i) Rescue service entry teams that enter a mine or tunnel with a known atmospheric hazard must have a clearly defined "turnaround" benchmark to ensure adequate egress to an area of refuge or safety.

(j) Each rescue service entry team that enters a mine or tunnel with a known or suspected atmospheric hazard must have at least one source of breathable air independent of each wearer's SCBA to be used in the event of an SCBA failure or "out of air" emergency. This source of air is to be independent of any device brought in for the use of victims.

(k) A backup team with similar size and capabilities as the rescue service entry team must be immediately available to enter the space.

(l) Each member of the organization who is designated as part of the technician level rescue service must practice making mine or tunnel rescues as part of a rescue team no less than once every twelve months. This may be accomplished by means of simulated rescue operations in which the team removes dummies, mannequins, or persons from actual mines and tunnels or from representative mines and tunnels.

Representative mine and tunnels should, with respect to opening size, configuration, and accessibility, simulate the types of mines and tunnels from which rescue is to be performed.

[Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050, and 49.17.060. WSR 18-22-116, § 296-305-05113, filed 11/6/18, effective 12/7/18. Statutory Authority: RCW 49.17.010, 49.17.040, 49.17.050,

49.17.060 and 29 C.F.R. 1910.156, Fire brigades. WSR 13-05-070, § 296-305-05113, filed 2/19/13, effective 1/1/14.]