



# MEMORANDUM

April 30, 2014  
Revised: April 30, 2014

To: Oregon OSHA  
From: Peggy Munsell, Standards and Appeals Manager  
Subject: Working on or over water

**Issue: When working over water in an aerial lift on a construction project, is fall protection equipment required to be worn? Please explain your answer.**

**Discussion:**

Normally, a personal fall protection system is required to be worn when working in an aerial lift. While the wall of the bucket provides the primary fall protection, the personal fall protection system provides additional protection from the potential injuries associated with being catapulted out of the bucket.

There's no exemption in the rule that allows someone to work in an aerial lift over water without being attached by a lanyard. However, in certain conditions, it is possible that using a personal fall protection system can create a greater hazard of drowning. For instance, if there is a mechanical or operational error and the employee and aerial lift land in the water, being tied-off could exacerbate the drowning hazard.

Where there is potential for a greater hazard of drowning, Oregon OSHA considers it a *de minimis* violation of 1926.502(e)(2), 437-003-0502(1), or 1926.502(d)(16)(iii) when employees in an aerial lift who are wearing a body belt (for restraint systems only) or full body harness, appropriate lanyard, and a life vest unhook their lanyard from the boom or basket while working above water under the following conditions:

- 1) The fall distance to the water is unlikely to cause serious injury or death on impact.
- 2) The water's depth is sufficient enough to prevent someone falling from the aerial lift from striking the bottom of the water or objects in the water.
- 3) Provisions of 1926.106 (Working Over or Near Water) are followed.

**Issue: Bridgework and fall protection, skiffs, and other things that float.**

- a) **Is fall protection for work on bridges required at 10 feet or six feet?**
- b) **How do we evaluate if a skiff is immediately available?**

**Discussion:** Fall protection is required when there is a hazard of falling 10 feet or more, except during steel erection activities. There are additional rule requirements when a drowning hazard exists when working on, near, or over water. Review the appropriate standard for specific division requirements. A brief overview and discussion is provided.

### **Division 3 (Construction), Subdivision E, 1926.106, Working Over or Near Water**

**1926.106 (a)** *Employees working over or near water, where the danger of drowning exists, shall be provided with U.S. Coast Guard-approved life jacket or buoyant work vests.*

When continuous fall protection is used, regardless of the fall distance and without exception, the employer has effectively removed the drowning hazard, and life jackets or buoyant work vests are not required. However, there may be activities on the jobsite apart from those where fall protection is used that would necessitate ring buoys and skiffs.

The minimum depth of water *where the danger of drowning exists* is not defined. A drowning hazard could exist when employees are working near or over water that is less than 2 feet deep. For example, when a worker is not using fall protection and falls from 9 feet above the surface of the water: if the worker survives the fall, but is knocked unconscious, a drowning hazard could exist.

**1926.106(c)** *Ring buoys with at least 90 feet of line shall be provided and readily available for emergency rescue operations. Distance between ring buoys shall not exceed 200 feet.*

**1926.106(d)** *At least one lifesaving skiff shall be immediately available at locations where employees are working over or adjacent to water.*

When fall protection (e.g., harness and lanyard) is used 100 percent of the time to prevent drowning, secondary measures such as ring buoys and skiffs, although a minimal violation of the rule, would not necessarily be required because there is no drowning hazard. If a drowning hazard exists for employees working near the water, (at the waters edge, on the bank, or on a lower surface) and fall protection is not used, skiff and ring buoy requirements must be met. The employer must assess the hazards to determine what measures are required. Several relevant factors to consider when determining where a drowning hazard, could exist include the type (e.g., a river, a canal, a stream), depth, absence or presence of a current, height above the water surface, and the use of fall protection.

1926.106 is a performance based standard. If the water is not navigable or is so shallow that rescuers could simply run in (and the skiff would foul on the bottom anyway), a skiff would not be required. A skiff is considered “immediately available” if:

- The skiff is in the water or capable of being quickly launched by one person.
- There is at least one person present in the immediate area at all times when work is being performed. That individual must be specifically designated to respond to water emergencies. Other tasks can be assigned as long as the tasks do not interfere with the ability to quickly reach the skiff and get it underway.

**Working Over or in Water, Division 2 (General Industry), Subdivision I, 437-002-1139, and Division 4, (Agriculture), Subdivision I, 437-004-1075**

These rules apply where the danger of drowning exists and the water is more than 5 feet deep.

- (a) Workers in water must wear a Coast Guard approved or equivalent, wearable personal flotation device (PFD).*
- (b) Workers over water on floating or unstable surfaces must wear a Coast Guard approved or equivalent, wearable personal flotation device (PFD).*
- (c) Piers, docks, wharves and work sites along developed shorelines must have rescue devices available within 200 feet of the water or shoreline work area.*

A rescue device is defined as: *A ring buoy and line, gaff pole, throwable rescue device or other device that serves as a means to rescue somebody from the water without requiring the rescuer to enter the water.*

**Working Underway on Water, Division 2 (General Industry) Subdivision I, 437-002-0139, and Division 4, (Agriculture), Subdivision I, 437-004-1070**

- (a) Workers in boats that are underway must wear a Coast Guard approved or equivalent, wearable personal flotation device (PFD).*
- (b) The PFD must be the right size for the wearer and must be in serviceable condition according to the manufacturer's requirements and recommendations.*

**Division 7 (Forest Activities), Subdivision D, 437-007-0340**

This rule requires Coast Guard approved personal flotation devices when working on or over water.