

**SECTION 51****Working Over Water****1. General**

- 1.1. Any person working over or near water, on floating vessels, docks, or where the danger of drowning exists must wear a company-approved Personal Flotation Device (PFD) as described in the Personal Protective Equipment section below.
- 1.2. Before and after each use, the PFD shall be inspected for defects that would alter its strength, buoyancy, or fastening capabilities. Defective PFDs shall not be used.
- 1.3. Company-approved throwable devices, such as 30-inch life ring buoys, with at least 90 feet of line attached, shall be provided and readily available for emergency rescue operations whenever workers are over or near water. Distance between throwable devices shall not exceed 200 feet or 61 meters.
- 1.4. A suitable lifesaving skiff with an adequate outboard motor shall be available at locations where employees are working over or adjacent to water and shall also be readily available for emergency use. The skiff and site rescue team should be capable of retrieving within four minutes a person who has entered the water. This skiff shall be equipped with two oars or paddles, a throwable device with line attached, and any needed equipment for night operation, including searchlights. The rescue skiff and rescue equipment shall be inspected periodically. It will be taken on a maintenance run or rescue drill at least monthly.
- 1.5. Employees must work in pairs and exercise extraordinary care in performing their work. The "Buddy System" will be followed and at least two persons will be in sight of each other at all times.
- 1.6. Cables on cranes and hoists, rigging, boat attachments, and other equipment located over or near water should be inspected frequently and regularly lubricated since environmental conditions at these locations may cause increased corrosion.
- 1.7. A pre-task plan (PSSP / JSA) is required to be completed and signed by all members of the crew that may be working over or near water before the work may begin.

**2. Definitions**

- 2.1. **Personal Flotation Devices** : Also referred to as flotation aids, life vests, or life jackets. Such devices are designed to be worn by personnel working over or near water. Personal Flotation Devices (PFDs) include both inflatable devices and those constructed of inherently buoyant materials. Each type of PFD is classified by its intended use and design features.
- 2.2. **Throwable Device** : Made of an inherently buoyant material (does not include inflatable devices) that is primarily intended for use in calm, inland water, where additional means of rescue is present. Designed to be thrown to a person in the water and grasped and held by the user until rescued. Throwable devices are not designed to be worn. Such devices include buoyant cushions, life ring buoys, and horseshoe buoys.
- 2.3. **Type I PFD**: Classified by the USCG (or equivalent agency) as an off-shore life jacket, this type PFD provides the most buoyancy of all types. It is effective for all waters, especially open, rough, or remote waters where rescue may be delayed. It is designed to turn most

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unconscious wearers in the water to a face-up position. If this type PFD is required for work, it shall also be equipped with a water-activated light and reflective tape.

- 2.4. **Type II PFD:** Classified by the USCG (or equivalent agency) as a near-shore buoyancy vest, this type PFD is intended for calm, inland water or where there is a good chance of quick rescue. Inherently buoyant PFDs of this type will turn some unconscious wearers to a face-up position in the water, but the turning is not as predictable as a Type I.
- 2.5. **Type III PFD:** Classified by the USCG (or equivalent agency) as a flotation aid, this type PFD is good for conscious users in calm, inland water, or where there is a good chance of quick rescue. It is designed so wearers can place themselves in a face-up position in the water. Float coats, fishing vests, and vests designed with features suitable for various sports activities are examples of this type of PFD.
- 2.6. **Type V PFD:** Classified as a special use device, this type PFD may be used only if approved by the USCG or equivalent agency for “Commercial Use” or “Use as A Work Vest”. It is intended for specific activities and may be used only in accordance with the approval conditions on its label. A Type V PFD provides performance of either a Type I, II, or III PFD, as marked on its label. An inflatable PFD is considered a Type V PFD and is designed for continuous wear. Inflatable PFDs are equipped with manual or automatic (water-activated) inflation systems. They provide good flotation with performance characteristics identified on their labels. Inflatables with Type I or II performance characteristics have 11 pounds more buoyancy than a Type I with inherent buoyancy. Inflatables must have regular inspections and proper re-arming and maintenance to ensure proper performance. Under no circumstances should this PFD be used as a safety harness for climbing activity. Some Type V devices provide significant hypothermia protection. Examples include deck suits, work vests, board sailing vests, and life vest with safety harness.
- 2.7. **USCG:** The United States Coast Guard

### 3. Personal Protective Equipment

- 3.1. Every effort shall be made to provide for 100% fall protection for any person working near or over water, whenever outside of a complete guardrail system.
- 3.2. Any person working near or over water where 100% fall protection is provided shall also wear a Type I, II, III, or V PFD, or equivalent. A Type III or V PFD, or equivalent, may be used only if approved for “Commercial Use” or for “Use as A Work Vest”
- 3.3. When 100% fall protection cannot be achieved, any person working near or over water, or on floating vessels, shall wear a PFD rated Type I or equivalent or a Type V water-activated inflatable PFD with a performance rating equivalent to a Type I or Type II device (a minimum of 33 pounds of buoyancy) that maintains the face-up position of the wearer. These types of PFDs shall also be equipped with a water activated light, whistle, and reflective tape.
- 3.4. When open flame activities (e.g., welding, burning, gouging) are required, inflatable vests shall not be worn.

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- 3.5. Do not tie-off to a man basket or an aerial lift that is being used over or adjacent to water if tying off to this equipment would increase the hazard of drowning. In these cases, a Type V PFD that provides a quick release-under-load feature must be used.
- 3.6. Do not attach a PFD and safety harness to boat or equipment that is at risk of sinking or capsizing unless the lanyard is less than 6.5 feet in length and equipped with quick-release-under-load hardware.

#### **4. Dock Work**

The following requirements apply to all personnel assigned work on a dock or similar structure that is located over or adjacent to water.

- 4.1. There must be a means of communication by two-way radio and/or telephone between the dock area and main facility personnel.
- 4.2. A pre-determined distress signal shall be agreed upon in case of emergency.
- 4.3. A log will be maintained at the dock site. Everyone is expected to sign in when arriving and sign out on departure.
- 4.4. Unauthorized personnel are not allowed in the dock area. Employees must check in with their supervisor before going on the dock.
- 4.5. MAPP Corporate HSE Department must be notified before any unusual work activities are conducted on the dock or a vessel.
  - 4.5.1. Unusual: work which does not convey as normal civil, structural, or lobar activities associated with MAPP standard work practices. Ex: Barge unloading, dock repairs, hurricane stand by, etc.

#### **5. Procedures for Abandonment**

Abandonment from a dock by jumping into the water can be particularly hazardous and should be done only if there is no other means of escape. The following rules should be followed in the event the dock must be abandoned.

- 5.1. Make sure PFD is on securely.
- 5.2. Go to the lowest point possible and enter the water on the downstream shoreline side. This will prevent you from being swept into the dock pilings.
- 5.3. Remove hard hat.
- 5.4. Look to see that the way is clear and free of protruding objects.
- 5.5. Place one hand over mouth and nose.
- 5.6. Grasp the PFD over the opposite shoulder with the other hand.
- 5.7. Keep elbows downward tightly against the chest.
- 5.8. Take a deep breath, jump feet first keeping the body erect with legs crossed and feet locked together, and keep eyes on the horizon.

#### **Recommended behavior for victims in cold water**

- 5.9. Try to keep head clear of the water.
- 5.10. Unless land or a structure is in easy reach, holding still on the water is preferable to swimming or other vigorous movement.

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- 5.11. Curl body by tucking in knees and keeping arms close to body for maximum heat conservation.
- 5.12. If there are two or three persons in the water, huddle while waiting for rescue.
- 5.13. Get out of the water and onto a log or other floating debris if possible.
- 5.14. Above all, stay calm and keep alert!

**6. Mobile and Heavy Equipment Operations**

- 6.1. Only skilled, trained, and authorized personnel will be allowed to operate mobile and heavy equipment.
- 6.2. The structural integrity of any dock or other surface onto which mobile and heavy equipment will be used shall be evaluated by a qualified person and determined to be safe.
- 6.3. Due to excessive humidity and corrosive environments typically associated with work over or adjacent to water, routine equipment inspections should be conducted with greater frequency.
- 6.4. Mobile and heavy equipment operators, working over or adjacent to water, must wear PFDs at all times, including while operating equipment.

**7. Training**

- 7.1. Employees working over or near water must be adequately trained in their responsibilities and the safe work practices associated with this task.

**8. References and related documents**

- 29 CFR 1926.106, Working Over or Near Water
- 29 CFR 1926.605, Marine Operations and Equipment
- 29 CFR 1917.95, Personal Protection
- 29 CFR 1917.26, First-Aid and Lifesaving Facilities
- 46 CFR Part 160, USCG-approved PFDs