

The image features the OSHA logo prominently in the center. The logo consists of a stylized 'O' with a blue outer ring and a grey inner ring, followed by the letters 'S', 'H', and 'A' in a white, serif font with a slight shadow. The background is a close-up, slightly blurred view of the American flag, showing the stars and stripes in shades of red, white, and blue.

OSHA

adds value to business,
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OSHA's *Commercial Diving Operations* Directive

{See → www.osha.gov}

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Director, Office of Maritime Enforcement

Underwater Intervention 2008

New Orleans, Louisiana – January 28-31, 2008

OSHA's Commercial Diving Operations Directive

Title, Directive Number, Date Issued

- Full Title: 29 CFR 1910.401 – 1910.441, Subpart T (“Commercial Diving Operations”)
- Directive Number: CPL 02-00-143
- Date Issued: August 11, 2006

- Cancels: OSHA Directive STD 01-17-001, October 30, 1978

OSHA's Commercial Diving Operations Directive Significant Changes

- Major revision to the “Main Text” including application, background, inspection guidelines, and general inspection procedures
- Added Appendix A, “Commercial Diving Operations Questions and Answers” to consolidate interpretations of 1910-Subpart T
- Added Appendix B, “Summary of OSHA Authority”

OSHA's Commercial Diving Operations Directive Significant Changes (Continued)

- Added Appendix C, “Exclusions and Exemptions from OSHA’s Commercial Diving Standard”
- Updates guidance and information for Appendix D, “No-Decompression Air Dives”
- Added Appendix E, “Requirements and Duties of a Diving Tender”
- Updates guidance and information for Appendix F, “International Code Flag ‘A’ (Alpha Flag)”

OSHA's Commercial Diving Operations Directive Significant Changes (Continued)

- Added Appendix G, “OSHA Injury and Illness Reporting and Recordkeeping”
- Updated guidance and information for Appendix H, “Comparison of Requirements for Primary Diving Modes”
- Added Appendix I, “Checklist for Commercial Diving Operations”
- Delivers information in web-based format with electronic links to references

OSHA's Commercial Diving Operations Directive

Main Text – Application

- Section XII, Application was expanded to include OSHA outreach efforts such as compliance assistance, cooperative programs, training and education.

OSHA's Commercial Diving Operations Directive

Main Text – Background

- Section XIII, Background was expanded to include court and regulatory actions that impacted 1910-Subpart T
 - 1910.411 *Medical Requirements* (Removed following court case)
 - *Scientific Diving Exemption* (Added Appendix B to Part 1910-Subpart T)
 - *Recreational Diving Instructor Exemption* (Added Appendix C to Part 1910-Subpart T)

OSHA's Commercial Diving Operations Directive

Main Text – General Inspection Procedures

- Section *XV.A, Scope and application*, was updated:
 - SIC codes were matched to NAICS codes
 - Added explanatory “NOTES” and language regarding standard exemptions and exclusions
 - Explanatory language regarding DoD Civilian Divers
 - Added guidance regarding Federal and State Authority (“Maritime” States, and “State Diving Standard” States)

OSHA's Commercial Diving Operations Directive

Main Text – General Inspection Procedures

- Section XV.B, *Definitions*, added explanatory “NOTES” to:
 - ASME Code or equivalent
 - Decompression chamber
 - Dive location
 - Heavy gear
 - Mixed-gas diving
 - Standby diver

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Main Text – General Inspection Procedures

- Section XV.C, *Qualifications of dive team*, was updated to clarify qualification requirements
- Section XV.D, *Safe Practices Manual*, was updated with clarifying language and a “NOTE” was added that the ADCI Consensus Standards for Commercial Diving and Underwater Operations meets the general requirements for the Safe Practices Manual

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Main Text – General Inspection Procedures

- Section XV.E, *Pre-dive procedures*, Section XV.F, *Procedures during dive*, and Section XV.G, *Post dive procedures*, were updated to include:
 - more precise language
 - incorporate standard changes (OSHA 300 Log)
 - clarification “NOTES” were added
 - questions and answers from the 1978 Commercial Diving Operations publication were incorporated into the text language as appropriate

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Main Text – General Inspection Procedures

- Section XV.I, *SCUBA diving*, language was added to clarify:
 - tending line requirements for two divers connected by a “buddy line”
 - added a “NOTE” to clarify “free access to the surface”
 - added clarifying language regarding the required number of dive team members
 - added a “NOTE” to clarify emergency air requirements
 - questions and answers from the 1978 Commercial Diving Operations publication were incorporated into the text language as appropriate

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Main Text – General Inspection Procedures

- Section XV.J, *Surface-supplied air diving*, language was added to clarify:
 - decompression chamber and diving bell requirements
 - added a “NOTE” to clarify tender requirements (100 fsw/decompression)
 - added language regarding the required number of dive team members
 - added a “NOTE” to clarify emergency air requirements
 - added a “NOTE” to clarify “free access to the surface”
 - questions and answers from the 1978 Commercial Diving Operations publication were incorporated into the text language as appropriate

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Main Text – General Inspection Procedures

- Section XV.K, *Mixed Gas Diving*, was updated to include:
 - language regarding the number of dive team members
 - added a “NOTE” to clarify emergency air requirements
 - added a “NOTE” to clarify “free access to the surface”
 - questions and answers from the 1978 Commercial Diving Operations publication were incorporated into the text language as appropriate.

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Main Text – General Inspection Procedures

- Section XV.I, *Liveboating*, was revised to incorporate previously issued interpretations and questions and answers from the 1978 Commercial Diving Operations publication.

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Main Text – General Inspection Procedures

- Section XV.M, *Equipment*, was revised to incorporate previously issued interpretations and questions and answers from the 1978 Commercial Diving Operations publication. Also, several “NOTES” were added to provide technical, procedural and/or operations clarification of standard provisions (e.g., masks and helmets, oxygen safety).

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Main Text – General Inspection Procedures

- Section XV.N, *Recordkeeping*, was updated to reflect current policy and procedures.
- Section XV.O, *Examples of Conditions Which May Restrict or Limit Exposure to Hyperbaric Conditions*, remains unchanged.
- Section XV.P, *Guidelines for Scientific Diving*, was added.
- Section XV.Q, *Alternative Conditions Under 29 CFR 1910.401(a)(3) for Recreational Diving Instructors and Diving Guides*, was added.

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Main Text – General Inspection Procedures

- Section XV.R, *Other Commercial Diving Resources*, provides information regarding the Association of Diving Contractors International (ADCI) and an electronic link to the ADCI web site.

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Appendix A – Questions & Answers

- Appendix A consolidates interpretations that have been issued and that remain valid
- Q&A #1: Bridge inspectors and scientific diving
- Q&A #2, #3: Minimum number of dive team members
- Q&A #4: Schools, training and certifications accepted by OSHA
- Q&A #5: OSHA recognition of ADCI Consensus Standards
- Q&A #6: Minimum operating pressure for SSDS
- Q&A #7: Second stage scuba regulators used in “Hookah Rigs”
- Q&A #8: Employees who own & maintain diving gear

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Appendix A – Questions & Answers (Cont')

- Question #9: Use of oxygen during transport of injured diver & mouthpiece-held demand inhalation valve
- Question #10: Use of detector tubes to sample air
- Question #11: Disposition of diving records when retention period expires
- Question #12: Disposition of diving records if employer goes out of business
- Question #13: Retention periods for commercial diving records

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Appendix B – Summary of OSHA Authority

- Geographical Restrictions
- Appropriation Act Limitations
- OSHA/USCG Authority Over “Inspected” Vessels” and “Uninspected” Vessels
- Federal and State Authority
 - State Plan States with “Maritime” Coverage (CA, WA, MN, VT)
 - State Plan States with a Commercial Diving Standard (CA, OR, WA, HI, MI)

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Appendix C – Exclusions & Exemptions

- Appendix C provides a summary of the history, scope, and application of exclusions & exemptions from OSHA Commercial Diving Standard
- Instructional diving using only SCUBA open-circuit air within “No-D” limits
- Search, rescue and related public-safety diving by or under government control
- Human diving subjects (i.e., experimental)
- Emergency response provision
- Scientific Diving

OSHA's Commercial Diving Operations Directive Appendix D – “No-D” Limits & “Repet” Dive Table

- Information and table were adapted from the U.S. Navy Diving Manual (Rev. 5)
 - Dives less than 20 feet have unlimited bottom times
 - Summarizes all depth & bottom-time combinations for “No-D” limits
 - Provides repetitive-group designation for each depth & bottom-time combination

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Appendix E – Rqmts & Duties of a Diver Tender

- SCUBA divers in currents over 1 knot must be line tended
- SCUBA divers in enclosed/physically confined spaces must be line tended
- SCUBA divers w/o “buddy” must be line tended
- Air-SSDS divers must be tended 100 fsw or less
- Air-SSDS divers must be tended by their own tender for dives deeper than 100 fsw
- Gas-SSDS diver must be tended by their own tender
- Duties of a SSDS Diving Tender are discussed in detail

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Appendix F – International Code Flag “A”

- 29 CFR 1910.421(h) *Warning Signal*, “When diving from surfaces other than vessels in areas capable of supporting marine traffic, a rigid replica of the international code flag “A” at least one meter in height shall be displayed at the dive location in a manner which allows all-round visibility, and shall be illuminated during night diving operations.”

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Appendix G – OSHA Reporting & Recordkeeping

- 29 CFR 1904.39 *Reporting fatalities and multiple hospitalization incidents to OSHA*
- Covers land, U.S. Navigable Waters, and State Territorial Waters (3 NM except 9 NM for Texas, Puerto Rico, & Gulf Coast of Florida)
- There are NO exemptions from Reporting (do not confuse with recordkeeping exemptions)
- Diving Industry Reporting & Recordkeeping

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Appendix H – Table of Primary Diving Modes

- This matrix table provides a summation of the general requirements for SCUBA, Surface-Supplied Air, and Mixed-Gas diving.
- Requirements addressed include:
 - Limits
 - Tender
 - Standby
 - Diver-Carried Reserve
 - Dive-Location Reserve
 - Inwater Stage
 - Chamber
 - Bell
 - Communications

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Appendix I – Checklist for Commercial Diving

- The checklist is in the exact order of the 29 CFR Part 1910 – Subpart T standard.
- The verbiage used in the checklist is the exact verbiage of the 29 CFR Part 1910 – Subpart T standard.
- The checklist is simply the 29 CFR Part 1910 – Subpart T standard in a matrix format so that items can be checked off and comments/remarks/notes recorded.

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OSHA's Web Site

- **OSHA Internet Webpage.** The OSHA webpage provides information and resources regarding compliance assistance, standards and guidance, laws and regulations, enforcement policy, cooperative and state programs, statistics, and much more. This website can be accessed via www.osha.gov.
*Shipyard “Tool Bag” Directive, AUG 2006 can be used to access the SY Fatality Videos (Video #2 has Diving Fatality)
- **OSHA Maritime Webpage.** The OSHA maritime webpage contains materials regarding safety and health information for the maritime industries, which include shipyard related employment (Ship repair, ship building, shipbreaking), longshoring, marine terminals, and commercial diving. The OSHA maritime webpage can be accessed via www.osha.gov (click “Maritime” in the right column).

OSHA's Commercial Diving Operations Directive ??? QUESTIONS ???

QUESTION

OSHA's Commercial Diving Operations Directive

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The background of the image is a close-up, slightly blurred view of the American flag, showing the stars and stripes. The OSHA logo is centered in the upper half of the image. The 'O' is a large, stylized letter with a blue outer ring and a grey inner ring. The letters 'S', 'H', and 'A' are white with a 3D effect and a drop shadow. The 'S' and 'H' are connected to the 'O', and the 'A' is separate.

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