

**SUPPORTING STATEMENT FOR THE
INFORMATION COLLECTION REQUIREMENTS OF THE
COMMERCIAL DIVING OPERATIONS STANDARDS
(29 CFR part 1910, subpart T)¹
Office of Management and Budget (OMB)
Control No. 1218-0069 (April 2008)**

JUSTIFICATION

1. Explain the circumstances that make the collection of information necessary. Identify any legal or administrative requirements that necessitate the collection. Attach a copy of the appropriate section of each statute and regulation mandating or authorizing the collection of information.

The main purpose of the Occupational Safety and Health Act (i.e. “OSH Act” or “Act”) is to “assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources” (29 U.S.C. 651). To achieve this objective, the OSH Act specifically authorizes “the development and promulgation of occupational safety and health standards” (29 U.S.C. 651). Specifically, the Act states that “[t]he Secretary shall set the standard which most adequately assures, to the extent feasible . . . that no employee will suffer material impairment of health or functional capacity . . .” (29 U.S.C. 655).

The OSH Act specifies that “[a]ny standard promulgated under this subsection shall prescribe the use of labels or other appropriate forms of warning as are necessary to insure that employees are apprised of all hazards to which they are exposed, relevant symptoms and appropriate emergency treatment, and proper conditions and precautions of safe use or exposure. Where appropriate, such standard shall also prescribe suitable protective equipment and control or technological procedures to be used in connection with such hazards . . .” (29 U.S.C. 655). The Act continues by stating, “[W]here appropriate, any such standard shall prescribe the type and frequency of medical examinations or other tests . . . in order to most effectively determine whether the health of such employees is adversely affected by such exposure” (29 U.S.C. 655). Finally, the Act requires that “[e]ach employer shall make, keep and preserve, and make available to the Secretary . . . such records . . . as the Secretary . . . may prescribe by regulation as necessary or appropriate for the enforcement of this Act . . .” (29 U.S.C. 657).

Under the authority granted by the OSH Act, the Occupational Safety and Health Administration (“OSHA” or “Agency”) published standards regulating commercial diving operations at 29 CFR part 1910, subpart T; the “Subpart”). The Subpart applies to diving and related support operations conducted by employers involved in general industry, construction, ship repairing, shipbuilding, shipbreaking, and longshoring, and specifies equipment and procedures that prevent injury and death among employees exposed to hazards associated with diving and diving

¹The purpose of this Supporting Statement is to analyze and describe the burden hours and costs associated with provisions of this standard that contain paperwork requirements; this Supporting Statement does not provide information or guidance on how to comply with, or how to enforce, the standards.

support operations. Items 2 and 12 below describe in detail the specific information collection requirements of the Subpart.

2. Indicate how, by whom, and for what purpose the information is to be used. Except for a new collection, indicate the actual use the Agency has made of the information received from the current collection.

The Subpart contains a number of paperwork requirements. The following paragraphs describe these requirements; specify who uses them, and what purpose they serve.

§ 1910.401(b). Description of the requirement. Allows employers to deviate from the requirements of the Subpart to the extent necessary to prevent or minimize a situation that is likely to cause death, serious physical harm, or major environmental damage (but not situations in which purely economic or property damage is likely to occur). They must notify the OSHA Area Director within 48 hours of taking such action; this notification must describe the situation responsible for the deviation and the extent of the deviation from the requirements. On request of the Area Director, employers must submit this information in writing.

Use and purpose. Employers use this provision to respond to unexpected and sudden emergencies that could cause serious injury or death to their employees, or prevent major harm to the environment. Notification allows OSHA to determine that the situation was serious and unusual, required immediate action not specified by the Subpart, and that the response was appropriate to prevent serious injury or death to employees or major harm to the environment.

§§ 1910.410(a)(3) and (a)(4). Description of the requirements. Paragraph (a)(3) requires employers to train all dive team members in cardiopulmonary resuscitation and first aid (i.e., the American Red Cross standard course or equivalent), while paragraph (a)(4) specifies that employers train dive team members exposed to hyperbaric conditions, or who control exposure of other employees to such conditions, in diving-related physics and physiology.

Use and purpose. Ensures that dive team members know how to render emergency first-aid to diving casualties, which improves treatment outcomes. Training dive team members involved in hyperbaric operations in diving-related physics and physiology results in an understanding of how underwater barometric pressure affects the development of diving-related medical conditions such as decompression sickness (the “bends;” referred to hereafter as “DCS”) and air embolism; thereby, enabling them to prevent these conditions.

§§ 1910.420(a) and (b). Description of the requirement. Under paragraph (a), employers must develop and maintain a safe practices manual and make it available to each dive team member at the dive location. Paragraph (b) requires that for each diving mode used at the dive location, the manual must contain: Safety procedures and checklists for diving operations; assignments and responsibilities of the dive team members; equipment procedures and checklists; and emergency procedures for fire, equipment failures, adverse environmental conditions, and medical illness and injury.

Use and purpose. The safe practices manual ensures that dive team members are familiar with the employer's safety and emergency procedures, the functions each member is to perform during diving operations conducted at the dive location, and how these procedures and functions relate to the requirements of the Subpart. This knowledge enables dive team members to perform their diving-related tasks effectively and safely; thereby, reducing the risk of serious injury or death.

§ 1910.421(b). Description of the requirement. Under this provision, employers are to keep at the dive location a list of telephone or call numbers for the following emergency facilities and services: An operational decompression chamber (if such a chamber is not at the dive location); accessible hospitals; available physicians and means of emergency transportation; and the nearest U.S. Coast Guard Rescue Coordination Center.

Use and purpose: This list of telephone and call numbers ensures that emergency facilities and services are available to provide prompt medical care for an injured diver.

§ 1910.421(f). Description of the requirement. Requires employers to brief dive team members on the diving-related tasks they are to perform, safety procedures for the diving mode used at the dive location, any unusual hazards or environmental conditions likely to affect the safety of the diving operation, and any modifications to operating procedures necessitated by the specific diving operation. Before assigning diving-related tasks, employers must ask each dive team member about their current state of physical fitness, and inform the member about the procedure for reporting physical problems or adverse physiological effects during and after the dive.

Use and purpose. This requirement updates the divers' knowledge of the diving operation, including new information regarding diving hazards and environmental conditions that may jeopardize their safety. The assessment of a diver's physical fitness to dive reduces the risk that they will experience medical problems while diving; information about the procedure used to report diving-related medical problems ensures that divers will obtain prompt treatment of these conditions, which will prevent the problems from becoming serious and life-threatening.

§ 1910.421(h). Description of the requirement. If the diving operation occurs in an area capable of supporting marine traffic and occurs from a surface other than a vessel, employers are to display a rigid replica of the international code flag "A" that is at least one meter in height so that it is visible from any direction; the employer must illuminate the flag during night diving operations.

Use and purpose. The flag warns transiting vessels that diving operations are underway and to avoid the diving location, thereby protecting divers from impacting with a vessel while they are underwater or swimming on the surface.

§ 1910.422(e). Description of the requirement. Employers must develop and maintain a depth-time profile for each diver that includes, as appropriate, any breathing gas changes or decompression.

Use and purpose. Informs the diver regarding the depth and time parameters of the dive, which serves as the basis for determining the decompression schedule necessary to avoid diving-related medical problems.

§§ 1910.423(b)(1)(ii) through (b)(2). Description of the requirements. Requires the employer to: Instruct the diver to report any physical symptoms or adverse physiological effects, including symptoms of decompression sickness (DCS); advise the diver of the location of a decompression chamber that is ready for use; and alert the diver to the potential hazards of flying after diving. For any dive outside the no-decompression limits, deeper than 100 feet, or that uses mixed gas in the breathing mixture, the employer must also inform the diver to remain awake and in the vicinity of the decompression chamber that is at the dive location for at least one hour after the dive or any decompression or treatment associated with the dive.

Use and purpose. This information allows the diver to recognize diving-related medical problems, receive prompt treatment for such problems at the available decompression chamber, and alerts them to a condition (i.e., flying) that increases the risk of DCS. For divers involved in dives that increase the risk of DCS (i.e., dives outside the no-decompression limits, deeper than 100 feet, or that use mixed gas in the breathing mixture), informing them to remain awake and near the decompression chamber for one hour after the dive enables them to receive prompt and effective treatment for DCS should it occur.

§ 1910.423(d). Description of the requirement. Paragraph (d)(1) specifies that employers are to record and maintain the following information for each diving operation: The names of dive-team members; date, time, and location; diving modes used; general description of the tasks performed; an estimate of the underwater and surface conditions; and the maximum depth and bottom time for each diver. In addition, for each dive outside the no-decompression limits, deeper than 100 feet, or that uses mixed gas in the breathing mixture, paragraph (d)(2) requires the employer to record and maintain the following information for each diver: Depth-time and breathing gas profiles; decompression table designation (including any modifications); and elapsed time since the last pressure exposure if less than 24 hours or the repetitive dive designation. Under paragraph (d)(3), if the dive results in DCS symptoms, or the employer suspects that a diver has DCS, the employer must record and maintain a description of the DCS symptoms (including the depth and time of symptom onset) and the results of treatment.

Use and purpose. This information permits appropriate and effective treatment of a diver should DCS occur after a dive or should the diver have a relapse of DCS after initial treatment, thereby preventing the condition from resulting in a serious injury or death. Maintaining these records ensures that the information is available for use by: The party involved in treatment if the diver experiences late-onset DCS or a subsequent relapse after treatment; and the employer for assessing the DCS incident (see § 1910.423(e) below).

§ 1910.423(e). Description of the requirement. Requires employers to assess each DCS incident by: Investigating and evaluating it based on the recorded information, consideration of the past

performance of the decompression profile used, and the diver's individual susceptibility to DCS; taking appropriate corrective action to reduce the probability of a DCS recurrence; and, within 45 days of the DCS incident, preparing a written evaluation of this assessment, including any corrective action taken.

Use and purpose. A written assessment enables employers to identify salient variables in existing decompression procedures that may be responsible for the DCS incident, to document modifications of these variables that they believe will reduce the occurrence of DCS, and to evaluate the effectiveness of these modifications during subsequent diving operations. Systematic assessment of decompression procedures in this manner reduces the incidence of DCS, which improves the safety of decompression procedures used by employers and protects divers from the serious and deadly effects of DCS.

§§ 1910.430(a), (b)(4), (c)(1)(iii), (c)(3)(i), (f)(3)(ii), and (g)(2). Description of the requirements. Paragraph (a) contains a general requirement that employers must record by means of tagging or a logging system any work performed on equipment, including any modifications, repairs, tests, calibrations, or maintenance performed on the equipment. This record is to include a description of the work, the name or initials of the individual who performed the work, and the date they completed the work.

Paragraphs (b)(4) and (c)(1)(iii) require employers to test two specific types of equipment, including, respectively: The output of air compressor systems used to supply breathing air to divers for air purity every six months by means of samples taken at the connection to the distribution system; and breathing-gas hoses at least annually at one and one-half times their working pressure. Under paragraph (c)(3)(i), employers must mark each umbilical (i.e., separate lines supplying air and communications to a diver, as well as a safety line, tied together in a bundle), beginning at the diver's end, in 10-foot increments for 100 feet, then in 50-foot increments. Paragraph (f)(3)(ii) mandates that employers regularly inspect and maintain mufflers located in intake and exhaust lines on decompression chambers. According to paragraph (g)(2), employers are to test depth gauges using dead-weight testing, or calibrate the gauges against a master reference gauge; such testing or calibration is to occur every six months or if the employer finds a discrepancy larger than two percent of the full scale between any two equivalent gauges. Employers must make a record of the tests, calibrations, inspections, and maintenance performed on the equipment specified by these paragraphs in accordance with § 1910.430(a).

Use and purpose. The records required by paragraph (a) (and generated by work performed under paragraphs (b)(4), (c)(1)(iii), (f)(3)(ii), and (g)(2)) permit employers and employees to determine the operating condition of diving equipment before placing it in service. By using only equipment that these records demonstrate is in safe working order, employers and employees will prevent severe injury and death during diving operations. Additionally, marking umbilicals as required by paragraph (c)(3)(i) permits diving supervisors and the employees who are tending a diver to determine the diver's depth, which ensures that the diver undergoes proper

decompression as specified by the depth-time profile of the dive; by undergoing proper decompression, the diver avoids DCS.

§§ 1910.440(a)(2) and (b). Description of the requirements. Under paragraph (a)(2) of this provision, employers must record any diving-related injuries or illnesses that result in a dive-team member remaining in hospital for at least 24 hours. This record is to describe the circumstances of the incident and the extent of any injuries or illnesses.

Paragraph (b) of this provision regulates the availability of the records required by the Subpart, including who has access to these records, the retention periods for various records, and, in some cases, the final disposition of the records. Under paragraph (b)(1), employers must make any record required by the subpart available, on request, for inspection and copying to an OSHA compliance officer or to a representative of the National Institute for Occupational Safety and Health (NIOSH). Paragraph (b)(2) specifies that employers are to provide employees, their designated representatives, and OSHA compliance officers with exposure and medical records generated under the Subpart in accordance with § 1910.1020 (“Access to employee exposure and medical records”); these records include safe practices manuals, depth-time profiles, diving records, DCS incident assessments, and hospitalization records. This paragraph also mandates that employers make equipment inspection and testing records available to employees and their designated representative on request.

According to paragraph (b)(3), employers must retain these records for the following periods: Safe practices manuals, current document only; depth-time profiles, until completing the diving record or the DCS incident assessment; diving records, one year, except five years if a DCS incident occurred during the dive; DCS incident assessments, five years; hospitalization records, five years; and equipment inspections and testing records, current tag or log entry until the employer removes the equipment from service. Paragraphs (b)(4) and (b)(5) specify the requirements for disposing of these records. Under paragraph (b)(4), employers are to forward any record with an expired five-year retention period to NIOSH. Paragraph (b)(5) states that employers who cease to do business must transfer records without unexpired retention dates to the successor employer who will retain them for the required period; however, if the employers cease to do business without a successor employer, they must transfer the records to NIOSH.

Use and purpose. The hospitalization records required under paragraph (a)(2) will assist employers and employees, and eventually NIOSH, in determining which depth-time diving profiles and associated decompression procedures are especially hazardous, thereby permitting employers to modify these procedures to prevent DCS and other medical problems. Regarding the record availability requirements of paragraphs (b)(1) and (b)(2), OSHA compliance officers use these records as an efficient means of assessing employer compliance with the major requirements of the Subpart, while NIOSH may compile these records for research purposes. Employees and their designated representatives use the records to assess the safety of an employer’s diving procedures, and to determine if equipment is in safe working order. The record retention periods specified by paragraph (b)(3) reinforce the requirements of paragraphs (b)(1) and (b)(2) by allowing an adequate period to inspect records for compliance

purposes, to review them in determining if equipment is in safe working order, and to analyze them when assessing the safety of existing diving procedures or developing improved procedures. Sending the records to NIOSH as required by paragraph (b)(4) makes them available for research purposes (e.g., assessing the medical effects of decompression procedures); in addition, employers and employees will have continuous access to the records if they need them to evaluate the safety of diving procedures, identify the causes of latent health effects, or for other reasons. The requirements of paragraph (b)(5) ensure that a responsible party (i.e., a successor employer or NIOSH) will make the records available as mandated by paragraphs (b)(1) and (b)(2).

3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological collection techniques or other forms of information technology, e.g., permitting electronic submission of responses, and the basis for the decision for adopting this means of collection. Also describe any consideration of using information technology to reduce burden.

Employers may use any available technology to provide the required information.

4. Describe efforts to identify duplication. Show specifically why any similar information already available cannot be used or modified for use for the purpose(s) described in 2 above.

Both OSHA and the U.S. Coast Guard (USCG) have jurisdiction over diving operations; however, their respective jurisdictions are different, thereby avoiding regulatory duplication. Therefore, the information collection requirements of the Subpart are not duplicated by the USCG or any other source or agency, nor can the USCG or any other source or agency make the required information available to OSHA (i.e., this information is specific to each employer involved and is available only from these employers).

5. If the collection of information impacts small businesses or other small entities (Item 5 of OMB Form 83-1), describe the methods used to reduce the burden.

The information collection requirements specified by the Subpart do not have a significant impact on a substantial number of small entities.

6. Describe the consequence to Federal program or policy activities if the collection is or is not conducted less frequently, and any technical or legal obstacles to reducing the burden.

The Agency believes that the information collection frequencies required by the Subpart are the minimum frequencies necessary to fulfill its mandate “to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources” as specified in the OSH Act at 29 U.S.C. 651. Accordingly, if employers do not perform the required information collections, or delay in providing this information, employees may be at risk of serious injuries or death during diving operations.

7. Explain any special circumstances that would cause an information collection to be conducted in a manner:

- **Requiring respondents to report information to the Agency more often than quarterly;**

- **Requiring respondents to prepare a written response to a collection of information in fewer than 30 days after receipt of it;**
- **Requiring respondents to submit more than an original and two copies of any document;**
- **Requiring respondents to retain records, other than health, medical, government contract, grant-in-aid, or tax records for more than three years;**
- **In connection with a statistical survey that is not designed to produce valid and reliable results that can be generalized to the universe of study;**
- **Requiring the use of statistical data classification that has not been reviewed and approved by OMB;**
- **That includes a pledge of confidentiality that is not supported by authority established in statute or regulation that is not supported by disclosure and data security policies that are consistent with the pledge, or which unnecessarily impedes sharing of data with other agencies for compatible confidential use; or**
- **Requiring respondents to submit proprietary trade secret, or other confidential information unless the Agency can prove that it has instituted procedures to protect the information's confidentiality to the extent permitted by law.**

Section 1910.401(b), allows employers to deviate from the requirements of the Subpart to the extent necessary to prevent or minimize a situation that is likely to cause death, serious physical harm, or major environmental damage (but not situations in which purely economic or property damage is likely to occur). Employers must notify the OSHA Area Director within 48 hours of taking such action. This notification must describe the situation responsible for the deviation and the extent of the deviation from the requirements. On request of the Area Director, employers must submit this information in writing

8. If applicable, provide a copy and identify the date and page number of publication in the Federal Register of the Agency's notice, required by 5 CFR 1320.8(d), soliciting comments on the information collection before submission to OMB. Summarize public comments received in response to that notice and describe actions taken by the Agency in response to those comments specifically address comments received on cost and hour burdens.

As required by the Paperwork Reduction Act of 1995 (44 U.S.C. 3506(c)(2)(A)), OSHA published a notice in the *Federal Register* on February 5, 2008 (73 FR 6744, Docket No. OSHA-2007-0087) requesting public comment to extend the Office of Management and Budget's (OMB) previous approval of the information collection requirements contained in the standard on Commercial Diving Operations (29 CFR part 1910, subpart T). This notice was part of a preclearance consultation program to provide those interested parties the opportunity to comment on OSHA's request for an extension by the Office of Management and Budget (OMB) of a previous approval of the information collection requirements found in the Standard. The Agency received no comments in response to its notice.

9. Explain any decision to provide any payments or gift to respondents, other than reenumeration of contractors or grantees.

The Agency will not provide payments or gifts to the respondents.

10. Describe any assurance of confidentiality provided to respondents and the basis for the assurance in statute, regulation, or Agency policy.

No elements of confidentiality are involved.

11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private. This justification should include the reasons why the Agency considers the questions necessary, the specific uses to be made of the information, the explanation to be given to persons from whom the information is requested, and any steps to be taken to obtain their consent.

The paperwork requirements specified by the Subpart do not involve sensitive information.

12. Provide estimates of the hour burden of the collection of information. The statement should:

- **Indicate the number of respondents, frequency of response, annual hour burden, and an explanation of how the burden was estimated. Unless directed to do so, agencies should not conduct special surveys to obtain information on which to base hour burden estimates. Consultation with a sample (fewer than 10) of potential respondents is desirable. If the hour burden on respondents is expected to vary widely because of differences in activity, size, or complexity, show the range of estimated hour burden, and explain the reasons for the variance. Generally, estimates should not include burden hours for customary and usual business practices.**
- **If this request for approval covers more than one form, provide separate hour burden estimates for each form and aggregate the hour burdens in Item 13 of OMB Form 83-I.**
- **Provide estimates of annualized cost to respondents for the hour burdens for collections of information, identifying and using appropriate wage-rate categories.**

Burden-Hour and Cost Determinations

Table 1 below provides a summary of the annual burden hour and cost estimates for each provision of the Subpart that contains a paperwork requirement (as described under Item 2 above). In the previous ICR, the Agency made these determinations based upon information from an expert in the commercial diving industry who informed OSHA that the industry has about 3,000 diving facilities (with one employer per facility) and 10,000 divers.² The Agency estimates that a diver makes an average of 150 dives annually. The Agency has no new updated information to change these estimated numbers; therefore, it will continue to use the previous numbers.

²Estimates previously obtained from the President of the National Association of Diving Contractors. OSHA staff made all other estimates used in Table 1 unless otherwise indicated.

The costs of labor used in this analysis are estimates of total hourly compensation.³ These estimates are:

Commercial Diver	\$30.56
Tender	\$17.30
Clerical/Secretary	\$19.15

Table 1
Summary of Annual Burden Hour and Cost Estimates
Under Item 12

NOTE: The following footnotes are for Table 1 only

Paperwork Requirement	Time to Perform (Hours)	No. Affected by the Requirement	Total Hours¹	Labor Category	Hourly Wage Rate	Total Cost²
§ 1910.401(b) ³	0.25 (phone) 2.00 (written)	0	0	Commercial Diver	\$0	\$0
§ 1910.410(a)(3) and (a)(4) ⁴	0	0	0	-	\$0	\$0
§ 1910.420(a) and (b)	1.00	300 new facilities	300	Commercial Diver	\$30.56	\$9,168
	.05	3,000 facilities to maintain	150	Commercial Diver	\$30.56	\$4,584
§ 1910.421(b) ⁶	0	0	0	-	\$0	\$0
§ 1910.421(f) ⁶	0	0	0	-	\$0	\$0
§ 1910.421(h) ⁶	0	0	0	-	\$0	\$0
§ 1910.422(e) ⁶	0	0	0	-	\$0	\$0
§ 1910.423(b)(1)(ii) and (b)(2) ⁶	0	0	0	-	\$0	\$0
§ 1910.423(d)(1)	.08	1,500,000 dives	120,000	Tender	\$17.30	\$2,076,000
§ 1910.423(d)(2)	.08	150,000 dives	12,000	Tender	\$17.30	\$207,600
§ 1910.423(d)(3)	.08	16,500 dives	1,320	Commercial Diver	\$30.56	\$40,339
§ 1910.423(e)	1.00	16,500 dives	16,500	Commercial Diver	\$30.56	\$504,240

³Source: Occupational Employment Statistics by Occupation, May 2006, Bureau of Labor Statistics, U.S. Department of Labor. The wage rate includes fringe benefits of 29 percent.

Paperwork Requirement	Time to Perform (Hours)	No. Affected by the Requirement	Total Hours¹	Labor Category	Hourly Wage Rate	Total Cost²
§ 1910.430(a)	.05	180,000 records ⁷	9,000	Tender	\$17.30	\$155,700
§ 1910.430(b)(4)	.05	6,000 records ⁸	300	Tender	\$17.30	\$5,190
§ 1910.430(c)(1)(iii)	.05	20,000 records ⁹	1,000	Tender	\$17.30	\$17,300
§ 1910.430(c)(3)(i) ⁶	0	0	0	-	\$0	\$0
§ 1910.430(f)(3)(ii)	.05	300 records ¹⁰	15	Tender	\$17.30	\$260
§ 1910.430(g)(2)	.05	12,000 records ¹¹	600	Tender	\$17.30	\$10,380
§ 1910.440(a)(2)	.17	165 records ¹²	28	Commercial Diver	\$30.56	\$856
§ 1910.440(b)(1) and (b)(2)	.03	193,135 records ¹³	5,794	Secretary	\$19.15	\$110,955
§ 1910.440(b)(3)	.02	1,904,465 records ¹⁴	38,089	Secretary	\$19.15	\$729,404
§ 1910.440(b)(4) and (b)(5)	.50	601 facilities ¹⁵	301	Secretary	\$19.15	\$5,764
Totals	—	4,002,966	205,397	—	—	\$3,877,740

¹Determined by multiplying the value in “Time to Perform (Hours)” by the value in “No. Affected by the Requirement.”

²Total cost per each requirement determined by multiplying the value in “Total Hours” by the value in “Hourly Wage Rate.”

³During the period covered by the last Information Collection Request (ICR), OSHA staff in the Office of Maritime Enforcement believed that no employers reported deviations from the requirements of the Subpart; therefore, the Agency assumes that this rate will continue.

⁴The Agency considers the requirements to train dive-team members in CPR and first aid, as well as members involved in hyperbaric conditions in diving-related physics and physiology, to be a condition of employment (i.e., this instruction occurs during pre-employment training) and is taking no burden hours for these requirements.

⁵Estimated number of facilities requiring new or replacement safe practices manuals; the Agency assumes that each manual takes about one hour (1.00 hour) to develop.

⁶OSHA considers this requirement to be a usual and customary practice in the industry and, therefore, is taking no burden hours for this requirement.

⁷The Agency assumes that, at each facility, 60 pieces of equipment (other than equipment identified specifically in the Subpart) require modifications, repairs, tests, calibrations, or maintenance each year (i.e., 3,000 facilities x 60 pieces of equipment = 180,000 records). While OSHA believes that modifying, repairing, testing, calibrating, and maintaining equipment is usual and customary for the industry, the requirement to record this work may not be usual and customary; therefore, the Agency is taking only the burden for recording the work performed on the equipment.

⁸With an average of just over three divers per facility, the Agency assumes that each facility has one air-compressor system, and that the employer tests the compressor output twice a year (i.e., 3,000 facilities x 2 tests = 6,000 records). While OSHA believes that testing compressor output in this manner is a usual and customary practice for the industry, recording the test results may not be usual and customary; therefore, the Agency is taking only the burden for recording the test results.

⁹OSHA estimates that each diver has two breathing-gas hoses, one for regular use and a spare, that require testing once a year (i.e., 10,000 divers x 2 hoses x 1 test = 20,000 records). While the Agency believes that testing breathing-gas hoses in this manner is a usual and customary practice for the industry, recording the test results may not be usual and customary; therefore, OSHA is taking only the burden for recording the test results.

¹⁰The Agency assumes that 5% (150) of the facilities have a decompression chamber and that employers perform an inspection-and-maintenance procedure on the mufflers in the intake and exhaust lines of each chamber twice a year (i.e., 150 chambers x 2 procedures = 300 records). While OSHA believes that regularly inspecting and maintaining mufflers on decompression chambers is usual and customary for the industry, making a record of this work may not be usual and customary; therefore, the Agency is taking only the burden for making the record.

¹¹OSHA estimates that each facility has two depth gauges, one for regular use and a spare, and that the employer calibrates each gauge twice a year (i.e., 3,000 facilities x 2 gauges x 2 calibrations = 12,000 records). While the Agency believes that calibrating depth gauges in this manner is a usual and customary practice for the industry, recording the calibration results may not be usual and customary; therefore, OSHA is taking only the burden for recording the calibration results.

¹²The Agency assumes that 1% (165) of the 16,500 dives that result in DCS require hospitalization for at least 24 hours.

¹³The Subpart has the following record requirements: Safe practices manuals, 3,000 (both existing manuals and manuals requiring development under § 1910.420); diving records, 1,666,500; DCS incident assessments, 16,500; hospitalization records, 165; and equipment inspections and testing records, 218,300. (The Agency took no burden for depth-time profiles (§ 1910.422(e)) because these records are temporary; employers maintain them only until the end of a dive, and then replace them with the diving record (§ 1910.423(d)) or the DCS incident assessment (§ 1910.423(e)).) These requirements total 1,904,465 records, or 635 records per facility (i.e., 1,904,465 records ÷ 3,000 facilities). The Agency assumes that employees or their designated representatives request access to 10% (190,447) of these records each year. In addition, OSHA inspects about 42 of the facilities annually (see Item 14 below); the Agency estimates that compliance officers request access to about 10% (64) of the records at each of these facilities, for a yearly total of 2,688 records (i.e., 42 facilities x 64 records). Therefore, the total number of records accessed by employees, their designated representatives, and OSHA compliance officers each year is 193,135 (i.e., 190,447 records + 2,688 records). OSHA estimates that a secretary requires about two minutes (0.03 hour) to make each record available to the requestor.

¹⁴The previous footnote describes the process for determining total records. The Agency assumes that a secretary spends, on average, one minute (0.02 hour) a year maintaining each record.

¹⁵If, as required, employers' ship records with expired retention periods to NIOSH every five years, then 20% (600) of the 3,000 employers will make such a shipment each year. In addition, while NIOSH received no shipments during the last three years from employers who ceased to do business, the Agency nevertheless assumes that one such employer will ship the required records to NIOSH each year during the period covered by this ICR. OSHA believes that a secretary takes about 30 minutes (0.50 hour) to compile the records and prepare them for mailing.

13. Provide an estimate of the total annual cost burden to respondents or recordkeepers resulting from the collection of information. (Do not include the cost of any hour burden shown in Items 12 and 14.)

- The cost estimate should be split into two components: (a) a total capital and start-up cost component annualized over its expected useful life); and (b) a total operation and maintenance and purchase of service component. The estimates should take into account costs associated with generating, maintaining, and disclosing or providing the information. Include descriptions of methods used to estimate major cost factors including system and technology acquisition, expected useful life of capital equipment, the discount rate(s), and the time period over which costs will be incurred. Capital and start-up costs include, among other items, preparations for collecting information such as purchasing computers and software; monitoring, sampling, drilling and testing equipment; and record storage facilities.
- If cost estimates are expected to vary widely, agencies should present ranges of cost burdens and explain the reasons for the variance. The cost of purchasing or contracting out information collection services should be a part of this cost burden estimate. In developing cost burden estimates, agencies may consult with a sample of respondent (fewer than 10), utilize the 60-day pre-OMB submission public comment process and use existing economic or regulatory impact analysis associated with the rulemaking containing the information collection, as appropriate.
- Generally, estimates should not include purchases of equipment or services, or portions thereof, made: (1) prior to October 1, 1995, (2) to achieve regulatory compliance with requirements not associated with the information collection, (3) for reasons other than to provide information or keep records for the government, or (4) as part of customary and usual business or private practices.

Cost of Transferring Records to NIOSH

As described in footnote 15 of Table 1 above, the Agency estimates that 600 employers (3,000 employers/5 years = 600) will ship records with expired retention periods to NIOSH. In addition, OSHA assumes that one employer who ceases to do business will ship the required records to NIOSH each year. The Agency estimates that each employer will mail records weighing approximately 2 pounds at a cost of \$4.60 (based on United States Postal Service postage rate calculator) to NIOSH every five years.

Cost: 600 employers x \$4.60 each	= \$2,760
1 employer ceasing to do business x \$4.60	= \$ 5
	\$ 2,765

14. Provide estimates of the annualized cost to the Federal Government. Also, provide a description of the method used to estimate cost, which should include quantification of hours, operational expenses (such as equipment, overhead, printing, and support staff), any other expense that would not have been incurred without this collection of information. Agencies also may aggregate cost estimates from Items 12, 13, and 14 into a single table.

1. Transfer of Records to NIOSH

As described in footnote 15 of Table 1 above, the Agency estimates that each year 600 employers covered by the Subpart ship sets of records with expired retention periods to NIOSH. In addition, OSHA assumes that one employer who ceases to do business will ship the required

records to NIOSH each year. The Agency believes that a NIOSH secretary (at a wage rate of \$19.22 per hour (GS-6/5)) will spend 30 minutes (.50 hour) processing a set of records. Therefore, the estimated annual cost of this requirement to the Federal government is:

Cost: 601 sets of records x .50 hour x \$19.22 = \$5,776

2. OSHA Enforcement

The Agency estimates that a compliance officer (GS-12, step 5), at an hourly wage rate of \$37.89, spends about one minute (.02 hour) on each of the 64 records during an inspection (see footnote 13 to Table 1 above). OSHA determines that its compliance officers will conduct 42 such inspections during each year covered by this ICR (see footnote 13 above). In making this cost determination, the Agency does not account for other occupational costs (e.g., equipment, overhead, and support staff expenses) because it considers these costs to be normal expenses that would occur without the collection of information requirements specified by the Standard. Therefore, the total yearly cost of these paperwork requirements to the Federal government is:

Cost: 42 inspections x 64 records x .02 hour x \$37.89 = \$2,037

15. Explain the reasons for any program changes or adjustments reported in Items 13 or 14 of the OMB Form 83-1.

There are no program changes or adjustments associated with this ICR; however, the Agency is now providing a cost for the employer to mail records with expired retention periods to NIOSH in the amount of \$2,765. Table 1 above describes the requested burden hours.

16. For collections of information whose results will be published, outline plans for tabulations, and publication. Address any complex analytical techniques that will be used. Provide the time schedule for the entire project, including beginning and ending dates of the collection of information, completion of report, publication dates, and other actions.

OSHA will not publish the information collected under the Subpart.

17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons that display would be inappropriate.

No forms are available for the Agency to display the expiration date.

18. Explain each exception to the certification statement identified in Item 19 per "Certification for Paperwork Reduction Act Submission," of OMB Form 83-1.

OSHA is not seeking such an exception.