# PERFORMANCE WORK STATEMENT
# COMMERCIAL DIVE TRAINING

## 1 GENERAL

### 1.01 BACKGROUND

A. The Department of Interior, Bureau of Reclamation (Reclamation), has a need for commercial dive training services for Reclamation divers who will conduct underwater inspection services. The services are in support of Reclamation's mission to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public. Reclamation underwater inspections were traditionally performed by Reclamation Engineer Divers with extensive knowledge of these facilities.

There are 243 high hazard dam facilities in Reclamation's inventory that require underwater inaccessible feature examinations, equating to approximately 30 underwater examinations annually.

There are 53 type 1 bridges that require underwater bridge inspections, equating to approximately 13 inspections annually.

The are many other underwater exams that fall within the review of operation and maintenance (RO&M) program including pumping plants and siphons. 95% of conveyance assets are operated by a transferred works operating entity. As a result, Reclamation area and field offices typically coordinate underwater exams based on their judgment and as a part of their regularly occurring RO&M exams.

These inspections are performed at various locations throughout the Western United States with reservoir elevations up to 10,000 feet above sea level. The inspections are located across the 17 western states and often in remote locations. The data collection will occur in a variety of underwater conditions, including but not limited to, flow, turbidity and temperature.

Additionally, Reclamation divers may be called on for light Operations and Maintenance (O&M) activities. Installation of bulkheads, drilling anchors into concrete, replacing flapper valves on flange connections and other such activities.

Reclamation intends to train Reclamation divers to meet Occupational Safety and Health Administration (OSHA) standards for commercial divers in an agency specific dive training program.

### 1.02 LOCATION

1. Tentative training location at Reclamation Lower Colorado Basin Campus in Boulder City NV, and/or the Columbia-Pacific Northwest Campus in Boise ID. The campuses have classroom space that can be used. Access to pools (depth 12 feet) for confined water training. Local lakes can be used for open water and deeper water diving.
2. Contractor may propose a training location.
3. Government's intent is for divers to be trained in the local area where they work.

## 1.03 SCOPE

A. The contractor shall develop a training program to meet the requirements of OSHA CFR 1910 Subpart T, Commercial Diving Operations. The Government's intent is to develop a training program that is focused on the diving tasks applicable to Reclamation's underwater inspections. The training shall consist of a combination of classroom instruction and field/in-water exercises designed to train to competency standards rather than a prescribed number of hours. General Reclamation underwater task list in Section 3 of this Performance Work Statement (PWS). At the end of the training, it is the Government's intent for the divers to be given a certificate as Reclamation Divers. Underwater inspection techniques and procedures will be trained through other means. CPR, First Aid, AED, and Emergency oxygen provided to be trained through other means. Reclamation does not intend for the Engineer Divers to obtain an Association of Diving Contractors International (ADCI) Commercial Diver Card at the end of this training.

1. Contractor developed training shall cover all explicit and implied tasks required to meet the training requirements in CFR 1910 Subpart T.
2. Training audience will generally be Reclamation Engineers and engineering technicians with a good understanding of math and physics. Reclamation Diver is a collateral duty, and Reclamation is looking for as much flexibility as possible in the training schedule.
3. To the greatest extent possible, classroom portions of the training should be delivered in a distance learning format and provide the ability for students to test out of classroom training through College-Level Examination Program (CLEP) or equivalent assessment methods, while still receiving credit.
4. All hands-on training to be attended by the students. Reclamation intends for the hands-on training portion of the class to be given in one continuous training evolution.

B. Through subsequent task orders under this requirement, the Contractor shall audit the Reclamation dive program during the biannual 40–50 hour dive training events. Reclamation maintains three dive teams located in Boulder City, Nevada; Denver, Colorado; and Boise, Idaho.

The biannual dive training alternates by year between Boulder City, Nevada and Boise, Idaho. The Contractor shall audit the dive program and oversee dive training for SCUBA and surface-supplied diving operations, including emergency procedures exercises.

## 1.04 REFERENCE STANDARDS

A. Use the most recent edition of the standards listed in this section.

B. Bureau of Reclamation (USBR)

| | | |
|---|---|---|
| 1. | HECP | Hazardous Energy Control Program (lock-out/tag-out) including revisions posted at https://www.usbr.gov/power/data/fist/fist1_1/FIST_1-1.pdf |

| | | |
|---|---|---|
| 2. | RSHS | Reclamation Safety and Health Standards including revisions posted at https://www.usbr.gov/safety/rshs/index.html |

C. Occupational Safety & Health (OSHA)

| | | |
|---|---|---|
| 1. | 29 CFR 1910 | Regulations (Standards – 29 CFR) https://www.osha.gov/laws-regs/regulations/standardnumber/1910 |

## 1.05 DEFINITIONS

| | | |
|---|---|---|
| A. | CO | Contracting Officer |
| B. | COR | Contracting Officer's Representative |
| C. | TPOC | Technical Point of Contact (may or may not be the COR) |
| D. | Days | Calendar days, unless otherwise specified. |

## 1.06 SCHEDULE

A. TBD once baseline training is developed.

## 1.07 TRAINING CONDITIONS

A. Government intends to use Government facilities to the greatest extent possible. The following facilities/equipment is available at the Government locations.

1. Classroom space for 20 students.
2. Access to a 12-foot dive tank for confined water skills
3. Government boats are available for shore and boat dives.
4. Surface Supplied Air station with umbilicals and Kirby Morgan SuperLight and BandMask helmets.
    a. Enough equipment to operate three dive stations simultaneously.
5. Onsite high pressure breathing air compressor in Boulder City location for cylinder fills. Tanks to be filled at local dive shop in Boise location.

B. Alternate training location may be proposed as long as it meets the requirements of the training.

## 1.08 PERSONNEL

A. Instructors shall meet the requirements of Association of Commercial Diving Educators (ACDE) 01-2015 and shall have a minimum of two years' full-time working experience in the field of commercial surface-supplied diving, or area of instruction taught, and meet the ADCI requirements as a dive supervisor. All instructors shall have current first aid and CPR certificates and be trained in emergency policies and procedures.

B. Student to instructor ratio.

1. Sufficient for effective instruction.

a. Classroom training: 1:20 ratio

b. Hands-on training: 1:5 ratio

## 2 SUBMITTALS

A. General:

1. Prepare in English. Use US customary units.
2. Identify each submittal with contract number, Register of Submittals Number (RSN), and title.

B. Government Review:

1. Submit to the COR for review and acceptance.
2. The Government will require 21 calendar days, from date of receipt, for review of each submittal or resubmitted, unless otherwise provided elsewhere in the PWS for this requirement. This required time begins when the Government receives complete sets of materials required for a particular RSN and extends through return mailing postmark date.
3. Make any revisions requested by the COR and resubmit. Show changes and revisions with a revision date. Describe reasons for significant changes in a transmittal letter.

   Final payment will not be processed until all submittals or resubmittals have been reviewed and accepted by the COR.
4. Required Submittals Table.

* Submittal Types: A – Approval, I – Information
** CO indicates Contracting Officer, COR indicates Contracting Officer Representative

| RSN | Clause or Section Title | Submittals required | Due date or delivery time | Type * | Responsible code | No. of sets to be sent to. ** | |
|---|---|---|---|---|---|---|---|
| | | | | | | CO | COR |
| 1 | Safety and Health (CFR 1910.420) | Dive Safe Practices Manual | Submitted and accepted before starting onsite work | A | COR | 0 | 1 |
| 2 | Safety and Health (WBR 1452.223-81) | Dive Hazard Analysis (DHA) | May be incorporated into training plan. | A | COR | 0 | 1 |
| 3 | Safety and Health (WBR 1452.223-81) | Job Hazard Analysis (JHA) | May be incorporated into training plan. | A | COR | 0 | 1 |
| 4 | Safety and Health (WBR 1452.223-81) | Accident Mishap Report | Verbal within 1 hour of incident written within 24 hours. | I | COR | 1 | 1 |
| 5 | Schedule | Baseline schedule: | Within 14 days after receipt of task order award. | A | COR | 1 | 1 |
| 6 | Contractor Personnel | List of key personnel | Within 14 days after award of contract and within 14 days after award of any task order | I | COR | 0 | 1 |
| 7 | Task Order Process | Dive training program | As directed by task order | A | COR | 1 | 1 |
| 8 | Task Order Process | Course materials | As directed by task order | A | COR | 1 | 1 |

| RSN | Clause or Section Title | Submittals required | Due date or delivery time | Type * | Responsible code | No. of sets to be sent to. ** | |
|---|---|---|---|---|---|---|---|
| | | | | | | CO | COR |
| 9 | Task Order Process | Course schedule | As directed by task order | A | COR | 1 | 1 |
| 10 | Task Order Process | Commercial Dive Certifications | As directed by task order | A | COR | 0 | 1 |
| 11 | Task Order Process | Other Certifications | As directed by task order | A | COR | 0 | 1 |
| 12 | Task Order Process | Medical Clearance letters | As directed by task order | A | COR | 1 | 1 |
| 13 | Safety | Confined space entry program | As directed by task order | A | COR | 1 | 1 |
| 14 | Safety | Site-specific fall protection rescue plan | As directed by task order | A | COR | 1 | 1 |

C. Quality Control Plan (QCP)
The Contractor shall develop and maintain an effective quality control program to ensure services are performed IAW the PWS. The Contractor shall develop and implement procedures to identify, prevent, and ensure non-recurrence of defective services such as a service output that does not meet the standards of the performances associated with the submittal requirements listed in the table above.

## 3 EXECUTION

### 3.01 RECLAMATION DIVE TASKS

A. Reclamation inspections are accomplished in fresh water within the no decompression limits and no deeper than 100 foot depth after altitude correction. No mixed gases will be used, no closed-circuit systems, no low-pressure breathing gas compressors are used, no confined space entries will be performed, no penetration diving will be performed, and no contamination diving will be performed. Diving IAW US Navy tables and altitude correction tables. Dive modes utilized are Commercial SCUBA and Surface Supplied Air Equipment.

B. Below is a list of tasks the Reclamation Divers may be required to accomplish. Specified and derivative tasks to the requirements shall be included in the training provided.

1. Altitude diving – Inspection at reservoirs up to 10,000 feet above sea level.
2. Cold water diving – freshwater diving in the winter prior to the reservoir freezing. No penetration diving under ice.
    a. Drysuit diving
3. Dive planning – intended for designated person in charge
4. Differential Pressure exposure – diving around hydropower facilities
5. Lift bags/operations
    a. Underwater rigging as required.
6. Low/zero visibility diving.
7. Photography/Video equipment usage for underwater inspection.
8. Shore/boat entry.

9. Self-Contained Underwater Breathing Apparatus (SCUBA)
    a. Full face mask
    b. Through water communications
    c. Bailout/secondary air supply
10. Surface Supplied Air Equipment
    a. Diver/Standby Diver
    b. Tender
    c. Console Operator
11. Tool use
    a. Battery, pneumatic, hydraulic tools for drilling/cleaning concrete.
    b. Hand, battery tools for flange bulkhead install/maintenance.
    c. Hand tools for cleaning and scraping concrete.

C. Tasks Reclamation intends to teach outside this course.

1. NHI Underwater Bridge Inspection course
2. CPR, First Aide, AED, Emergency Oxygen provider
3. Underwater inspection techniques

## 4 MEETINGS AND CONFERENCES:

4.01 Prior to developing the training, a coordination meeting shall be conducted between the contractor, COR, and Reclamation dive team leaders. Meeting shall be onsite at proposed training location.

A. Agenda for coordination meeting.

1. Safety/security
2. Schedule
3. Site access/meet up location.
4. Coordination (owner, stakeholders, etc.)
5. RFIs
6. General discussions

**4.02** Minutes, records, and confirmation notices: the contractor shall promptly (within 5 business days) provide a record of all meetings, discussions, verbal directions, telephone conversations, etc., participated in by the contractor or his representative(s) on matters relative to the project and the work. These records, entitled "minutes", shall be numbered sequentially and shall fully identify participating personnel, subject discussed, and any conclusions reached. The contractor shall forward to the CO and COR, as soon as possible after preparation, a reproducible copy of each minute. Distribution of the minutes will be made by the Government.

## 5 TASK ORDER PROCESS:

5.01 Upon issuance of a task order under this IDIQ contract, the Contractor shall submit all deliverables and submittals specified in the applicable task order. Required submittals may include, but are not limited to, the following:

A. Training program with course materials

1. A complete training program meeting the requirements of CFR 1910 Subpart T requirements.
2. Course materials as required. Electronic/PDF format is preferred for classroom materials.
3. Course schedule with training objectives and required support facilities/materials
   a. i.e. dive tank, boat support

B. Commercial Dive Certifications for all instructors.

1. Include experience information to meet the requirements of Section 1.08 Personnel of this PWS.

C. Other Certifications

1. Cardiopulmonary Resuscitation
2. First Aid
3. Emergency Oxygen Provider

D. Medical Clearance Letters

1. Only required if instructors are required to perform underwater activities.

5.02 For biannual dive training task orders, Reclamation will be developing the training program for the inhouse training. The other submittals in 5.01 will still be applicable.

## 6 WORK ACCESS

The Contractor shall permit the Government access to any facilities where work is being performed under this requirement, or where materials to be used under this requirement are stored, at any time during performance.

## 7 SECURITY

Contractors shall be escorted by a Reclamation employee at all times while within Government facilities. The Contractor shall be responsible for ensuring that its employees comply with all established security rules and regulations. Contract personnel shall not be permitted to enter established or designated restricted areas unless so authorized by the Government. Entry shall be IAW and subject to the security regulations established in the area. It shall be the Contractor's responsibility to ensure that its personnel do not enter these areas unless authorized.

## 8 SAFETY

A. Perform all work IAW the applicable standards from OSHA, RSHS, and HECP.

B. Contractor shall provide the following submittals for this section.

1. Dive Safe Practices Manual
    a. The safe practices manual shall be made available at the dive location to each dive team member.
    b. The safe practices manual shall contain a copy of 29 CFR 1910 Subpart T and the employer's policies for implementing the requirements of this standard.
    c. For each diving mode engaged in, the safe practices manual shall include:
        (i) Safety procedures and checklists for diving operations.
        (ii) Assignments and responsibilities of the dive team members.
        (iii) Equipment procedures and checklists
        (iv) Emergency procedures for fire, equipment failure, adverse environmental conditions, and medical illness and injury
2. Dive Hazard Analysis: IAW RSHS.
3. Job Hazard Analysis: IAW RSHS.
4. Contractors Onsite Safety Personnel Qualifications.
5. Accident Mishap Report
    a. Accidents and mishaps that involve government property, or contractor personnel will be verbally reported to the COR within one hour and a written report will be provided to the CO and the COR within 24-hours.

C. Prior to commencement of work requiring Lockout/Tagout:
1. The Contractor’s project manager or inspection team lead shall take an in-person facility HECP class and pass the test (estimated 2 hours).
2. The Contractor’s representative shall lock onto the clearance lockbox with a uniquely keyed lock and walk the clearance limits. The lock shall be labeled with the name and primary phone number of the representative.

D. Prior to commencement of work requiring Confined Space Entry:
1. Develop and submit a confined space entry program to the TPOC.
2. Inspect air monitoring equipment for proper function.

E. Prior to commencement of work requiring Fall Protection:
1. Develop and submit a site-specific rescue plan to the TPOC.
2. Inspect fall protection equipment for proper function.

## 9 GOVERNMENT-FURNISHED RESOURCES

A. Upon request by the Contractor and subsequent approval by the COR, the following Reclamation resources may be made available at no charge for use in the performance of work under this requirement. Not all facilities will be able to provide government furnished resources. Resources available will need to be discussed during task order preparation/RFI period.

B. Utilities and facilities are provided on an as-is, where-is basis. This may include:

1. Electricity at 120/240V, single-phase, 60 Hz.
2. Water at approximately 80 psi.
3. Compressed air at approximately 90 psi.
    a. The Contractor is responsible for local filtering and desiccation as needed for their own purposes.
    b. This compressed air is not suitable for breathing gases.
4. High pressure breathing gas compressor for filling breathing gas cylinders.
5. Existing restrooms.

C. Contractor use of Reclamation permanently installed cranes is subject to the following:

1. All crane operators, riggers, and signalpersons shall possess a current certification issued by nationally recognized accrediting organization.
2. All operations shall be performed IAW RSHS Section 19.
3. The Contractor shall notify the COR prior to each operation.

D. Boat support for existing Reclamation boats.

1. Reclamation to provide boat operators.

E. The Contractor shall:

1. Evaluate the adequacy of the available resources for their purposes.
2. Specify in their proposal all resources the Contractor intends to request.
3. Furnish all materials, equipment, and labor necessary to convey utilities to the worksite and distribute utilities around the worksite.
4. Capture the costs of furnishing all materials, equipment and labor in their price schedule.
5. Not adversely impact the performance or operation of the Government’s utility systems.

F. Unless otherwise specified, the Government will provide no other resources.

Attachment 1

Performance Requirements Summary

| Required Services | Performance Standard: | Acceptable Quality Level (AQL) of Performance | Surveillance Method and Positive/Negative Incentives |
|---|---|---|---|
| **Task 1 – Training Development:** The Contractor shall develop dive training meeting the requirements of CFR 1910 Subpart T and encompassing the tasks in section 3 of the SOW. | Training is developed in accordance with Section 1, encompassing the tasks in section 3 of the SOW. | Training is developed within required timelines. | Positive / Negative Past Performance<br><br>Review of submitted training documentation. |
| **Task 2 – Training:** Contractor to present Reclamation dive training to Reclamation divers. | Training provided in accordance with training schedule in task order. | Training starts on time 80% of the time. All training tasks covered by the end of the training cycle 100% of the time. | Positive / Negative Past Performance<br><br>Student feedback. |
| **Task 3 – Program Audit:** Contractor to support Reclamation in house training and provide an audit of host dive team program. | Feedback on audit provided to dive team lead prior to completion of the audit. Written report provided within task order timeline. | Contractor attends 100% of in-house training. Audit report is provided within task order timeline. | Positive / Negative Past Performance<br><br>Review of submitted audit. |

**END OF REQUIREMENT**