



Australian Government

Department of Education, Employment and Workplace Relations

AHCLPW305A Perform diving for scientific purposes

Release: 1

AHCLPW305A Perform diving for scientific purposes

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of scientific diving required to support scientific research, monitoring and inspection roles associated with places or areas of significance and defines the standard required to: plan to carry out a dive; prepare to dive; carry out pre-dive checks; monitor dive conditions; respond to incidents and amend dive procedures if necessary; debrief dive team; store diving equipment.
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Application of the Unit

Application of the unit	This unit requires knowledge of the physics of diving, node compression tables, dive equipment and planning, emergency procedures, agency standing orders for notification, and radio operation procedures. This standard requires compliance with the current Australian Standard for Occupational Diving Operations: Scientific Diving.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Plan diving operations	1.1.Objectives of dive are determined to enterprise guidelines, to diving standards and occupational health and safety guidelines. 1.2.Number and type of dives to complete objectives are assessed to develop a dive program. 1.3.Equipment and personnel required for dive operations are determined. 1.4.Appropriate people are consulted about the dive objectives and proposed program.
2. Prepare for diving operations	2.1.Equipment and personnel required for dive operations are obtained. 2.2.Appropriate notification and consents for dive plans are given and obtained. 2.3.Equipment condition is checked to legislative, manufacturers', enterprise and code of practice requirements. 2.4.Faulty equipment is sent for repair or discarded. 2.5.Consumables requirements are assessed and sourced. 2.6.Personnel are checked for competence and possession of a current medical clearance. 2.7.Safety and emergency procedures for the dive program are developed to enterprise requirements and codes of practice.
3. Conduct dive	3.1.Personnel and equipment are transported safely to dive site. 3.2.Communications procedures are established for dives in remote areas. 3.3.Pre-dive checks are performed to enterprise requirements and codes of practice. 3.4.Final assessment on environmental factors is completed before entering the water. 3.5.Dives are completed to procedures, safe working practices, defined objectives, enterprise requirements, codes of practice, legislation. 3.6.Dives are conducted within the parameters of the special dive plan, including entry, descent, working on dive objective and exit. 3.7.Dive procedures are amended within enterprise requirements, codes of practice and personal authority in light of dive conditions, and any changes to dive objectives.

ELEMENT	PERFORMANCE CRITERIA
	3.8.Dives are suspended or cancelled where safety or equipment operation considerations warrant. 3.9.Dives are completed to objectives or suspended where personnel have completed allowed number of dives. 3.10. Equipment is removed from site at completion of dives. 3.11. Dives are logged to enterprise and legislative requirements and codes of practice.
4. Debrief diving team	4.1.Procedures applied during dive and outcomes of dive are reviewed by dive team promptly after dive. 4.2.Procedures and dive plans are amended to enterprise requirements or codes of practice to reduce dive risks including safety and diver health, and improve dive efficiency and effectiveness. 4.3.Dive debriefing is recorded to enterprise and legislative requirements and codes of practice.
5. Check and store equipment	5.1.Dive equipment is checked for condition and operation to manufacturer's instructions, enterprise requirements and codes of practice. 5.2.Faulty equipment is sent for repair or discarded to enterprise requirements. 5.3.Equipment is stored to manufacturers' and enterprise requirements. 5.4.Equipment use is recorded to enterprise, manufacturers' and legislative requirements. 5.5.All equipment is tested according to statutory requirements.
6. Review diving program	6.1.Dive plan is reviewed in light of debriefing, outcomes achieved, risk assessments and safety analysis, and future requirements. 6.2.Review conclusions are recorded and reported to enterprise requirements.
7. Respond to diving incidents	7.1.Dive operations are continually monitored to identify potential or actual maladies. 7.2.Dive operations are suspended or cancelled where potential or actual maladies have been identified. 7.3.A rescue approach is developed where required to enterprise requirements, or codes of practice. 7.4.Diver first aid is applied to injured or distressed personnel.

ELEMENT	PERFORMANCE CRITERIA
	7.5. Emergency authorities are notified where assistance is required. 7.6. Procedures and dive plan are reviewed in light of risks identified and potential or actual malady. 7.7. All incidents are recorded on the enterprise/agency register.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- identify hazards and implement safe operating procedures
- plan diving operations
- prepare for diving operations conduct dive
- debrief diving team
- check and store equipment
- review diving program
- respond to diving maladies
- use literacy skills to read, interpret and follow organisational policies and procedures, follow sequenced written instructions, record accurately and legible information collected and select and apply procedures for a range of tasks
- use oral communication skills/language competence to fulfil the job role as specified by the organisation, including questioning techniques, active listening, clarifying information and consulting with supervisors as required
- use numeracy skills to estimate, calculate and record routine workplace measures
- use interpersonal skills to work with and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

Required knowledge

- physics of diving
- no-decompression tables
- dive equipment
- dive planning
- AS2299 Scientific Diving
- rescue procedures
- oxygen administration procedures

REQUIRED SKILLS AND KNOWLEDGE

- agency standing orders for notification
- emergency service procedures
- radio operation procedures.

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following: • plan to carry out a dive • prepare to dive • carry out pre-dive checks • monitor dive conditions, respond to incidents and amend dive procedures if necessary • debrief dive team • store diving equipment.
Context of and specific resources for assessment	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole.	
Diving operations may include:	• operations that are scientific investigation • monitoring of marine/coastal/freshwater environment, including ecosystems, communities, populations • sea bed forms • marine wrecks • search and rescue • ground truthing.

Unit Sector(s)

Unit sector	Lands, parks and wildlife
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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