

Modification history

Release	Comments
Release 1	This version released with SFI Seafood Industry Training Package Version 2.0.

SFIEMS5X3	Conduct an aquaculture environmental audit
Application	<p>This unit of competency describes the skills and knowledge required to contribute to the development and implementation of aquaculture plans and strategies by conducting an aquaculture environmental audit that incorporates ecological issues, waste management and the management of marine stock.</p> <p>This unit applies to individuals who have specialised aquaculture environmental knowledge and follow assigned instructions, liaise with clients and effectively identify and assess aquacultural practices and how they impact on the aquaculture environment.</p> <p>No licensing, legislative or certification requirements apply to this unit at the time of publication.</p>
Use Prerequisite Unit	Nil
Unit Sector	Environmental Management Systems

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Prepare for aquaculture environmental audit	1.1 Review environmental audit criteria to determine job requirements, including standards relating to the health of marine species, organic waste release, energy usage, groundwater, interactions with wildlife and other species and the health of coastal ecosystems 1.2 Access technology, and equipment, including personal protective equipment (PPE) required to conduct audit 1.3 Determine site access requirements to conduct audit and make appropriate arrangements 1.4 Assess prospective audit site for hazards and make safety arrangements in accordance with work health and safety standards and workplace procedures 1.5 Advise specified personnel of audit requirements and processes
2. Carry out aquaculture environmental audit	2.1 Commence aquaculture environmental audit at the specified site, as planned and in accordance with work health and safety standards and environmental codes 2.2 Consult with relevant personnel and check physical and workplace records for all aspects specified in the audit criteria
3. Record aquaculture environmental audit findings	3.1 Compile audit data and provide relevant personnel with the details, highlighting any detrimental findings and improvement requirements 3.2 Record audit activity details in accordance with audit plan and workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	<ul style="list-style-type: none"> Identifies and interprets aquaculture environmental principles
Writing	<ul style="list-style-type: none"> Records test results with appropriate technical detail
Navigate the world of work	<ul style="list-style-type: none"> Interprets and follows complex environmental requirements
Get the work done	<ul style="list-style-type: none"> Incorporates workplace processes and with aquaculture environmental

Foundation Skills

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Skill	Description
	principles <ul style="list-style-type: none"> • Uses appropriate technology to conduct audit criteria requirements

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
SFIAQU5X3 Conduct an aquaculture environmental audit	N/A		New unit

Links	
	Companion Volumes, including Implementation Guides, are available at VETNet: https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=e31d8c6b-1608-4d77-9f71-9ee749456273

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TITLE	Assessment requirements for SFIEMS5X3 Conduct an aquaculture environmental audit
Performance Evidence	
<p>An individual demonstrating competency must satisfy all of the elements, performance criteria and foundation skills in this unit.</p> <p>There must be evidence that the individual has interpreted, investigated and recorded information related to an aquaculture environmental audit on at least one occasion.</p> <p>In doing the above, evidence must also include:</p> <ul style="list-style-type: none"> • identifying and measuring the effectiveness of environmentally sustainable practices strategies for: <ul style="list-style-type: none"> • conserving energy resources • managing water use • minimising waste • groundwater monitoring • minimising adverse interactions with wildlife • using technology effectively • paying attention to detail • recording audit results accurately • consulting effectively with relevant personnel • displaying aquaculture environmental impact awareness • identifying hazards and risks • sourcing, organising and applying information • using PPE • complying with work health and safety standards • developing surveys and necessary documentation • using aquaculture technology • using recording and photographic equipment. 	
Knowledge Evidence	

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements, performance criteria and foundation skills of this unit. This includes knowledge of:

- operational aquaculture processes:
 - fish farms
 - hatchery
 - transport of stock and equipment
 - service of equipment
 - feed technology
 - environmental compliance
 - high-energy sites
 - real time platforms
 - probe maintenance
- land aquaculture operational processes:
 - extensive/semi-intensive (usually pond culture)
 - intensive culture systems (flow through systems and RAS)
- relevant aspects of an aquaculture environmental audit:
 - waste evaluation, waste system maintenance, including composting, shredding, re-using and recycling
 - energy usage, including fuel efficiency, passive energy use
 - water resource management, including the minimisation of water contamination with chemicals
 - minimising interactions with wildlife and other resource users
 - effective use of technology and atomisation
 - the general features and capabilities of aquaculture technology
 - water management systems
- groundwater monitoring techniques
- environmental control standards relevant to aquaculture practices
- legislative requirements relevant to environmentally sustainable aquaculture practices
- environmental risk identification and reduction
- principles of composting and waste management
- principles of integrated and sustainable agriculture and aquaculture systems
- features of antibiotic, pesticide and herbicide resistance
- effect of effluent on plants, animals and environment
- principles of energy flows and food webs
- key features of land and drainage catchment and coastal processes
- impact of noise, dust, odour and light control on aquaculture operations
- principles of nutrient cycling
- options for mechanisation or automation of process or activity
- soil testing processes and procedures and results interpretation
- options for use of specialised contract services
- relevant manufacturer specifications
- fishery or aquaculture work and healthy standards
- information gathering techniques.

Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
 - skills must be demonstrated in a fisheries or aquaculture setting or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - access to aquaculture technology or systems to monitor operational capacity and usage
- specifications:
 - access to aquaculture operational records
 - access to audit tools
- relationships:
 - evidence of interactions with relevant personnel.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

Links

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