

LANAqu29 SQA Unit Code HC16 04

Manage the aquatic production environment for farmed fish/shellfish



Overview

This standard is about managing the aquatic production environment for any farmed fish or shellfish. It relates to the development of programmes to monitor and maintain the production environment in holding units.

It requires that work is completed in accordance with site standard operating procedures and in line with industry codes of practice.

This standard is for those who manage the aquatic production environment.

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Performance criteria

You must be able to:

- P1 implement procedures to ensure a healthy, safe and secure working environment
- P2 plan the resources required to monitor and maintain the production environment
- P3 determine the environmental parameters of the aquaculture site
- P4 develop procedures to monitor and record the condition of holding units and the environmental conditions within them
- P5 analyse data to maintain an accurate assessment of the aquatic production environment
- P6 develop a **stocking plan**
- P7 manage **environmental maintenance** programmes to maintain the health, welfare and security of farmed stock
- P8 ensure appropriate alarm systems are established to support the production environment
- P9 develop **emergency procedures**
- P10 develop procedures to manage hygiene and bio-security
- P11 manage aquatic production environment records in accordance with legal requirements and site procedures
- P12 evaluate the success of activities to manage the production environment

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Knowledge and understanding

You need to know and understand:

- K1 relevant legal and organisational requirements for health, safety and security associated with the production environment
- K2 aquaculture site and holding unit characteristics and stocking capacity
- K3 environmental requirements of the fish/shellfish species being farmed
- K4 how environmental legislation controls how aquaculture utilises the aquatic environment
- K5 the processes used to monitor the condition of holding units
- K6 the data required to monitor the aquatic environment
- K7 how adjustments can be made to holding units to minimise the impact of adverse environmental conditions
- K8 holding units and optimum stocking densities, depending on the fish being farmed
- K9 health and welfare requirements for fish/shellfish and how these are maintained within the available holding units
- K10 how environmental factors can affect fish/shellfish welfare
- K11 how relevant industry codes of practice and legislation influence environmental maintenance programmes
- K12 how farm procedures are developed to take account of holding unit strengths and weaknesses
- K13 how to minimise the impact of emergencies on the fish/shellfish
- K14 legislation affecting the disposal of waste, including effluent from farms
- K15 the importance of hygiene and bio-security to the production environment
- K16 the factors that can impact on containment, including how the actions of pests and predators can be controlled
- K17 causes of containment failure and fish escape, including farm design
- K18 how legislation controls farming practices and the containment of stock
- K19 the current legislative framework and implications following a breach of containment
- K20 methods used to evaluate the management of the production environment
- K21 legal requirements and site procedures for the management of production environment records

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Scope/range

- develop a **stocking plan** to:
- 1 make best use of available holding units
 - 2 achieve required production
 - 3 maintain the health and welfare needs of farmed fish or shellfish
- manage **environmental maintenance** programmes covering:
- 4 care of holding units, containment and farm security
 - 5 control of stocking densities
 - 6 control of pests and predators
 - 7 disposal of waste
 - 8 control of farm effluent
- develop **emergency procedures** to be followed in the event of:
- 9 pollution incidents
 - 10 equipment failure
 - 11 variations in water quality
 - 12 fish escapes

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