

## Overview

This standard is about controlling the aquatic production environment for any farmed fish or shellfish. It relates to the implementation of programmes to monitor and maintain the production environment within 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 control the aquatic production environment.

## Performance criteria

You must be able to:

1. ensure all work is carried out safely in accordance with relevant legal requirements and site procedures
2. control the aquatic production environment to maintain the development of farmed stock
3. organise the resources required to monitor and maintain the aquatic production environment
4. facilitate the regular collection of information about the aquatic production environment
5. implement procedures to monitor the condition of holding units
6. implement and control **environmental maintenance programmes** to meet organisational requirements, in accordance with current legislation
7. modify maintenance programmes to take account of prevailing environmental conditions
8. implement procedures to monitor and maintain environmental conditions within **holding units**
9. maintain required stocking densities within holding units
10. implement procedures to monitor the presence of pests, predators and **commercially damaging species**
11. ensure equipment, alarms and security systems are maintained in a serviceable condition
12. control the disposal of waste to maintain the aquatic environment, in accordance with relevant legal requirements
13. establish and maintain site hygiene and bio-security in accordance with legal requirements and site biological risk assessments
14. maintain records of the aquatic production environment to meet legal and quality audit requirements in accordance with site procedures

## Knowledge and understanding

You need to know and understand:

1. relevant legal requirements and site procedures for health and safety associated with activities to control the aquatic production environment
2. aquaculture site and holding unit characteristics
3. environmental conditions required by the fish/shellfish species that are farmed
4. how to establish optimum stocking densities for the holding units, depending on the fish/shellfish being farmed
5. how environmental factors can affect the health and welfare and the stock development of fish/shellfish
6. how appropriate environmental maintenance programmes help to maintain water quality
7. how to implement and control the environmental maintenance programmes
8. the relevant legal requirements for the disposal of waste including discharge consents and how these are controlled by the regulatory bodies
9. how to recognise pests and predators and the relevant legal methods of exclusion and control
10. the importance of monitoring the presence of commercially damaging species and the action to take if their presence is reported
11. causes of fish escape on a fin fish farm
12. the procedures to deal with identified **emergencies** affecting the aquatic environment
13. bio-security and its importance in maintaining fish/shellfish health and minimising environmental impact
14. organisational procedures and how these relate to the relevant codes of practice and the law
15. site equipment design and setup and its associated strengths and weaknesses as a fish containment system
16. the processes used to monitor the condition of site equipment
17. the current legislative framework and implications following a breach of containment
18. the auditing procedures related to containment that have been implemented
19. the legal requirements and site procedures for maintaining records of the aquatic production environment

**Scope/range related to knowledge and understanding** This standard requires that you know how to control the following environmental maintenance programmes:

- care of holding units, containment and farm security
- control of stocking densities
- control of pests and predators
- disposal of waste
- control of farm effluent

---

## Glossary

**commercially damaging species** – a species of fish or shellfish, any other species of animal or a species of plant that, if not controlled, would be likely to have a significantly adverse impact on the economic or commercial interests of a fish or shellfish farmer, and where the species itself is of little or no commercial value. This would include non-native invasive species.

**emergencies** – e.g. pollution incidents, equipment failure, variations in water quality, fish escapes

**holding units** – facilities used to hold fish or shellfish in a controlled production environment e.g. cages, pens, ponds, raceways, lantern nets, socks/tubing, bags, etc.

Control the aquatic production environment for farmed fish/shellfish

---

<b>Developed by</b>	Lantra
<b>Version Number</b>	2
<b>Date Approved</b>	August 2015
<b>Indicative Review Date</b>	August 2020
<b>Validity</b>	Current
<b>Status</b>	Original
<b>Originating Organisation</b>	Lantra
<b>Original URN</b>	LANAqu22
<b>Relevant Occupations</b>	Fish Farming
<b>Suite</b>	Aquaculture
<b>Keywords</b>	fish; production; environment

---