



IN DEPTH

4.3 Fish Health and Welfare – Slaughter

4.4 Shrimp Health and Welfare - Slaughter

Stakeholder Consultation April 2024



**Setting The
Standard for
Seafood**



The issue and ASC's approach

The issue

- Welfare is the physical and mental state of an animal in relation to the conditions in which it lives or dies and its capacity to cope with the environment
- During slaughter, failure to meet specific farming principles may result in unnecessary harm to animal welfare prior to the point of death
- Harm can result from the absence or the improper use of stunning, inadequate killing methods and from the inadequacy of backup systems to ensure effective stunning and killing

Our approach

- The ASC Farm Standard requires practices such as health and disease monitoring plans, biosecurity, disease prevention and responsible veterinary therapeutic use to ensure good animal health and welfare prior to harvest and slaughter
- The ASC Farm Standard outlines specific requirements and handling practices immediately prior to and at the point of slaughter to ensure farms adhere to a slaughter processes which ensure welfare is preserved and animals do not suffer unnecessarily
- The ASC Farm Standard eliminates ineffective killing methods, makes stunning compulsory for relevant species and lays out requirements to ensure stunning and slaughter are effective

The requirements

Steps to ensure welfare is preserved

1) Eliminate inadequate slaughter methods

The following methods are not permitted:

- Asphyxia in air
- CO₂
- Salt/ammonia baths
- Evisceration/dismemberment
- Boiling or steaming alive

Anaesthetic overdose is permitted as a slaughter method only when the product is not destined for human consumption.

2) Implement compulsory stunning

- Electrical or mechanical stunning methods are preferred with specific guidance provided per species
- For stunning to be effective, consciousness must be lost immediately and persist until the onset of death
- The mandatory use of electrical and percussive stunning is immediate for salmon and cleaner fish species
- For other finfish species mandatory use of electrical and percussive stunning to be implemented over a 1–3-year transition period from October 2025

3) Guarantee that stunning and slaughter are effective

- Back up slaughter systems must be in place
- All staff on site must have general health and welfare training
- Employees and subcontractors involved in fish husbandry, handling, or slaughter operations must have specific training on slaughter processes and welfare
- A staff member must be appointed who is specifically responsible for welfare during slaughter activities

The requirements

Species-specific requirements

Fish



- Stunning method is considered suitable if 95% fish lose consciousness immediately based on a sample of 100 individual fish
- A 100% effectiveness is required for killing method, based on a sample of 100 fish
- Slaughter and stunning effectiveness must be monitored for absence of opercular (gill) movements, eye movements and reaction to painful stimulus

Shrimp



- Permitted methods are immersion in an ice slurry bath or use of an electrical device prior to an ice slurry bath
- Use of ice slurry serves as both the stunning and killing method- the only species group for which this is permitted
- Ice slurry temperature must be controlled and monitored at $\leq 4^{\circ}\text{C}$
- Immersion must be a sufficient time to achieve an effective kill
- Slaughter effectiveness monitoring by absence of coordinated leg and body movement

Cleaner fish



- Requirements for fish slaughter are applied to cleaner fish

Improvements on current species standards

The ASC Farm Standard addresses slaughter requirements more rigorously

Existing species standards

Previous species standards do not include requirements for slaughter

New ASC Farm Standard

- Elimination of inadequate slaughter methods across species
- Compulsory stunning for fish
- Measures to ensure stunning and slaughter are effective



The benefits

Benefits go beyond animal welfare

Quality, value and industry leading standards

Clear and strengthened requirements that support effective farming practices



Welfare focused handling and slaughter processes mitigate stress and contribute to a more consistent and higher quality finished product



Requirements allow producers to demonstrate responsible welfare and slaughter practices



The ASC Farm Standard sets out the highest welfare standards in major aquaculture certification schemes



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The questions: General

Consultation questions

1

ALL

To what extent are the requirements in this criteria clear?

Reasons for finding clarity/lack of clarity

2

ALL

To what extent will there be challenges in implementing these requirements?

What challenges do you foresee?

3

PRODUCERS

What cost will be involved in meeting these requirements?

Scale (reduced costs → similar costs → moderate additional costs
→ significant additional costs)

What are the main sources of additional cost?

4

CABs

To what extent are these requirements auditable?

Please detail any challenges you foresee with auditing this criterion

5

ALL

What suggestions do you have for improving these requirements?

Specific Questions

Consultation questions

The Farm Standard requires stunning, defines effective stunning and sets out mandatory stunning methods (with immediate or delayed effect depending on species).

To what extent do you agree with the approach taken here by ASC?	All
<i>Reasons for agreement/disagreement</i>	

In defining effective stunning and killing, the Standard requires monitoring for absence of gill, eye and body movements and of reaction to painful stimuli.

To what extent do you agree with the approach taken here by ASC?	All
<i>Reasons for agreement/disagreement</i>	

How to get involved?

Email: consultation@asc-aqua.org



Materials are available in English, Spanish, Vietnamese, French, German, Turkish, Japanese, Korean



In depth topic slides on:

[2.4 Alien Species](#)

[2.6 Water Quality](#)

[2.10 Energy Use & GHG Emissions](#)

[2.14 Pre-grow Out](#)

[3.9 Working Hours](#)

[4.3-4.4 Fish and Shrimp Health and Welfare - Slaughter](#)



ASC Farm Standard Slides ([link](#))



Full ASC Draft Farm Standard ([link](#))



Survey ([link](#))



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Criterion: 4.3 – Fish Health and Welfare – Slaughter

4.3.1 Scope: Finfish

Indicators:	Requirements
Indicator 4.3.1.1	The UoC shall ensure all fish are stunned ¹³⁹ prior to killing ¹⁴⁰ , using permitted methods only, and within the timelines indicated in Appendix 10 , Table 1 of Criterion 4.3.
Indicator 4.3.1.2	The UoC shall ensure fish stunned lose consciousness immediately ¹⁴¹ , and that unconsciousness persists until death sets in.
Indicator 4.3.1.3	The UoC shall ensure that fish are stunned effectively ¹⁴² , monitoring stunned fish for the absence of all of the following: opercular (gill) movements ¹⁴³ , eye movements, body movements, reaction to a painful stimulus (e.g., tail-prick or eye corner tap).
Indicator 4.3.1.4	The UoC shall not use the following methods to kill fish: <ul style="list-style-type: none">• asphyxia in air;• CO₂;• salt baths;• ammonia baths; or• evisceration.

Criterion: 4.3 – Fish Health and Welfare – Slaughter

4.3.1 Scope: Finfish

Indicators:	Requirements
Indicator 4.3.1.5	The UoC shall ensure fish are killed effectively ¹⁴⁴ by monitoring fish for the absence of all of the following: opercular (gill) movements, eye movements ¹⁴⁵ , body movements, reaction to a painful stimulus (i.e., tail-prick, eye corner tap).
Indicator 4.3.1.6	The UoC shall have immediate mitigation measures in place to respond to ineffective stunning or killing, including the presence of a back-up system such as manual percussive stunning.
Indicator 4.3.1.7	The UoC may, for fish not destined for human consumption, use an overdose of anaesthetic to stun and kill fish.
Indicator 4.3.1.8	The UoC shall appoint a staff member who is responsible to look after fish welfare during slaughter activities.
Indicator 4.3.1.9	The UoC shall have a slaughter log, which captures all the harvest monitoring parameters above for each harvest event.

4.3.2 Scope: Cleaner Fish

Indicators:	Requirements
Indicator 4.3.2.1	The UoC shall ensure that the Indicators 4.3.1.1. to 4.3.1.9 are applied to Cleaner Fish.
Indicator 4.3.2.2	The UoC shall reuse cleaner fish only once, either within the same farm or by moving them to another site ¹⁴⁶ .
Indicator 4.3.2.3	The UoC shall re-use cleaner fish where possible, or slaughtered, at the end of the production cycle. Release into the wild is not allowed.
Indicator 4.3.2.4	The UoC shall only reuse cleaner fish upon completion of a successful risk assessment that takes into account at least: <ul style="list-style-type: none">• health status of the salmon and cleaner fish at the origin and destination sites;• health assessment of the cleaner fish by a veterinarian or an aquatic animal health professional carried out no longer than two weeks before reuse. This shall include screening for diseases that are relevant to cleaner fish and salmonids in the corresponding farming region;• presence of cleaner fish at sites located in a radius of 5km.
Indicator 4.3.2.5	The UoC shall segregate cleaner fish destined for reuse at the UoC.

Criterion: 4.4 – Shrimp Health and Welfare - Slaughter

Indicators:	Requirements
Indicator 4.4.1	The UoC shall ensure shrimp are killed ¹⁴⁷ immediately after harvest, by immersion in an ice slurry bath, or through an electrical device followed by immersion in an ice slurry bath.
Indicator 4.4.2	The UoC shall monitor and control the ice slurry bath (Indicator 4.4.1) at ≤ 4 °C, and ensure shrimp are immersed for a suitable length of time for an effective killing.
Indicator 4.4.3	The UoC shall ensure electrical devices are used according to the manufacturer's recommendations.
Indicator 4.4.4	The UoC shall ensure shrimp death has set in before applying sodium metabisulfite.
Indicator 4.4.5	The UoC shall ensure that shrimp are killed effectively ¹⁴⁸ by assessing the absence of coordinated legs and body movements.

Criterion: 4.4 – Shrimp Health and Welfare - Slaughter

Indicators:	Requirements
Indicator 4.4.6	The UoC shall not use the following methods to kill shrimp: <ul style="list-style-type: none">• asphyxia;• CO₂;• salt baths;• ammonia baths;• boiling or steaming alive; or• dismemberment.
Indicator 4.4.7	The UoC shall have immediate mitigation measures in place to respond to ineffective killing, including the presence of a back-up system such as extra ice or another electrical device.
Indicator 4.4.8	The UoC may, for shrimp not destined for human consumption, use an overdose of anaesthetic to kill.
Indicator 4.4.9	The UoC shall appoint a staff member who is responsible to look after shrimp welfare during slaughter activities.
Indicator 4.4.10	The UoC shall have a harvest log, which captures all the harvest monitoring parameters above for each harvest event.

Thank you



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