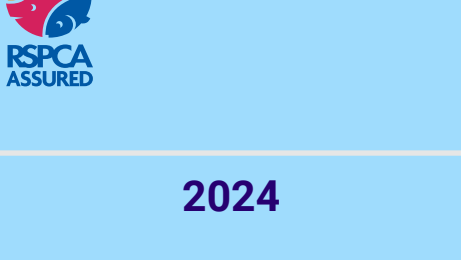

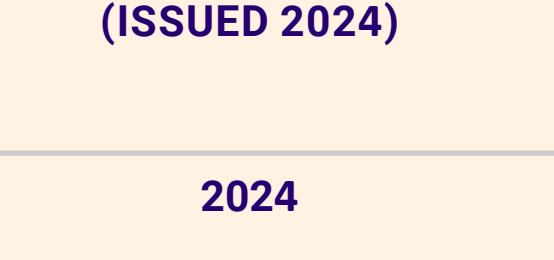
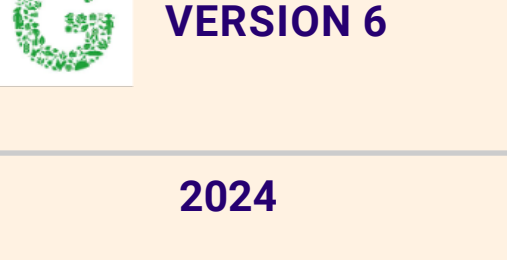
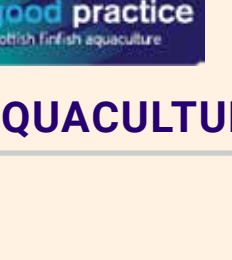
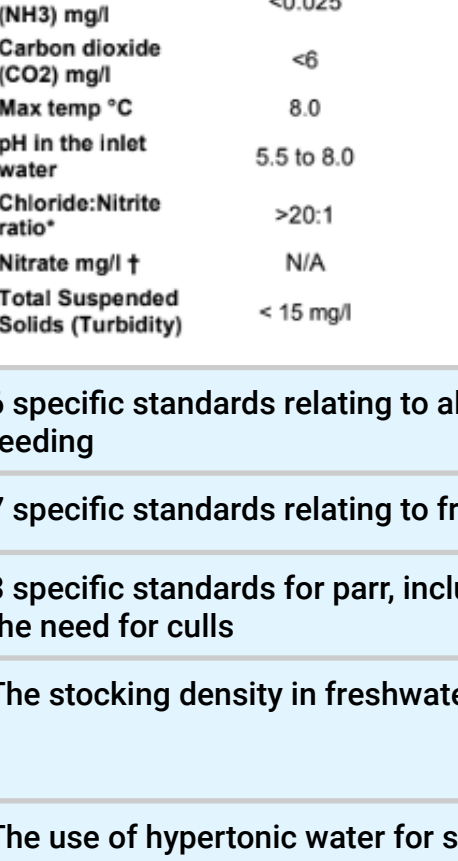


STANDARDS	 RSPCA ASSURED	 SOIL ASSOCIATION	 ASC SALMON STANDARD (ISSUED 2024)	 GLOBAL GAP - VERSION 6	 SALMON SCOTLAND CODE OF GOOD PRACTICE FOR SCOTTISH FINFISH AQUACULTURE (2015 VERSION)																																																							
YEAR OF PUBLICATION	2024	2024	2024	2024	2015																																																							
<b>MANAGEMENT</b>																																																												
<b>INSPECTIONS</b>	Fish must be inspected at regular intervals, at least twice daily, weather permitting.	Not mentioned	Not mentioned	Not mentioned	Weather permitting, and having regard to health and safety conditions, daily visual inspection of the holding units should be carried out to ensure containment of the stock.																																																							
<b>MORTALITY REMOVAL</b>	Removal of dead fish must occur as frequently as is necessary and without undue delay and, in any case: a) at least twice a week, but preferably daily b) at least daily for land-based systems.	Sustainable management plan to include how mortalities are managed, but no mention of frequency	All dead fish removed and disposed of in a responsible manner	Mortality inspection and removal from the production units are carried out according to the aquaculture health plan (AHP)	Dead fish should be removed from the fish holding enclosure as soon as possible.																																																							
<b>MORTALITY CLASSIFICATION</b>	The cause of death of all fish must be classified using the categories developed in the VHWPP	Not mentioned	All fish mortalities recorded, classified and report a post-mortem analysis	Mortalities, cause of death, and mortality unit level	All stages, the number of dead fish should be recorded, along with, where possible, a record of the cause of death.																																																							
<b>MORTALITY THRESHOLDS</b>	Where the level of fish mortality exceeds the thresholds shown below, this must be recorded and reported to RSPCA Assured within 72 hours:  Freshwater: • 1kg to 10kg: 0% weekly • 10kg to 50kg: 3% weekly • 50kg to 100kg: 1.5% weekly  Seawater: <table border="1" data-bbox="148 484 276 557"> <thead> <tr> <th>Site average weight (kg)</th> <th>Max. Weekly mortality (%)</th> <th>Max. 5-week rolling mortality (%)</th> </tr> </thead> <tbody> <tr> <td>Under 750</td> <td>1.5</td> <td>6</td> </tr> <tr> <td>750+</td> <td>1.0</td> <td>4</td> </tr> </tbody> </table>	Site average weight (kg)	Max. Weekly mortality (%)	Max. 5-week rolling mortality (%)	Under 750	1.5	6	750+	1.0	4	Not mentioned	Max viral disease related mortality < 10% Max unexplained mortality from each of the previous two production cycles, for farms with total mortality >5% - <40%	Not mentioned	FW - Same as RSPCA SW - Same as RSPCA																																														
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Under 750	1.5	6																																																										
750+	1.0	4																																																										
<b>HEALTH</b>																																																												
<b>HEALTH PLANNING</b>	A site specific Veterinary Health and Welfare Plan (VHWPP) must be drawn up, reviewed and updated: a) at the start of every production cycle or on an annual basis b) by those with responsibility for health and welfare of the fish, which may include the vet, health manager, stockpersons, nutritionist and other relevant personnel c) and details of the review must be made available on request	You must keep an animal health management plan. It must detail the biosecurity and disease prevention practices you have put in place and include a written agreement for health counselling, proportionate to the production unit, with qualified animal health services. They must visit the farm not less than once per year	Evidence of a fish health management plan for the identification and monitoring of fish diseases, parasites and environmental conditions relevant for good fish health, including implementing corrective action when required	An aquaculture health plan (AHP) is available, updated during the last 12 months, for the last production cycle, or whenever new medicines or treatments not previously used have been added	• Companies should have a Veterinary Health Plan (VHP) and Biosecurity Plan (BP) covering relevant aspects set out in Annex 2 • VHPs and BPs should be reviewed at the end of each production cycle.																																																							
<b>ENVIRONMENT/ EQUIPMENT/ SURROUNDINGS</b>	There must be no recurring physical damage occurring on fish attributable to features of their environment, husbandry procedures or unrecognised disease challenge	The design and construction of the installations for containing farmed species must provide flow rates and physicochemical parameters that protect the animals health and welfare and provide for their behavioural needs	Not mentioned	Equipment shall be designed and fit for purpose of avoiding physical damage and ensuring minimal stress to the farmed aquatic species	Equipment should be designed in such a way as to avoid creating welfare problems for the fish and be capable of being cleaned and disinfected.																																																							
<b>ENRICHMENT</b>	Some forms of environmental enrichment have been shown to improve the health and welfare of captive fish. As this area of knowledge is still relatively new and developing, particularly in commercial farming systems, the RSPCA strongly encourages further trial work to determine appropriate forms of enrichment in all salmon farming enclosures. We will be looking to update the standards in future publications, as knowledge develops in this important area	Not mentioned	Not mentioned	The producer considers enhancing the rearing conditions to improve performance and animal welfare of the farmed aquatic species	Not mentioned																																																							
<b>ANTIBIOTIC/ VETERINARY MEDICINAL PRODUCTS USE</b>	• Prophylactic use of veterinary medicinal products (where no known disease problems exist, is prohibited (except vaccines as agreed with the veterinary surgeon). • The use of antibiotics on-farm must be reviewed annually or at the end of a production cycle.		• Allowance for prophylactic use of antimicrobial treatments – None • On-farm documentation that includes, at a minimum, detailed information on all chemicals and therapeutics used during the most recent production cycle, the amounts used (including grams per ton of fish produced), the dates used, which group of fish were treated and against which diseases, proof of proper dosing, and all disease and pathogens detected on the site • If more than one antibiotic treatment is used in the most recent production cycle, demonstration that the antibiotic load is at least 15% less than that of the average of the two previous production cycles	Antibiotic agents are only applied following the diagnosis of an infectious bacterial agent	Veterinary medicines should be used prudently under the conditions set out in the data sheet and/or as advised by the veterinary surgeon																																																							
<b>CULLING OF SICK/INJURED FISH</b>	• Tanks/enclosures must be inspected daily for the presence of moribund (dying) fish. • If found at the time of inspection, moribund (dying) fish must be: a) removed promptly b) humanely culled according to: i. standard H 2.2 in freshwater or ii. standard H 2.3 in seawater. • Any seriously sick or injured fish, or fish found not to be recovering, must be humanely killed without delay. Records of this must be made available on request. • During the freshwater stage, only the following methods are permitted for the emergency killing of fish: a) being put into an anaesthetic overdose under veterinary prescription b) electrical stun-to-kill c) for fish over 5g, a priest of appropriate size. • During the seawater stage, in addition to anaesthetic overdose, the following are permitted for the emergency killing of fish: a) a priest of appropriate size for the fish b) a mechanical percussive device.	Not mentioned	Not mentioned	Culling of farmed aquatic species is done according to prescribed methods respecting animal welfare and the aquaculture health plan (AHP)	Farmers should remove and cull any moribund or damaged fish.																																																							
<b>WELFARE ASSESSMENTS</b>	Full set of standards relating to collection of WOA Data (5 standards)	Not mentioned	Not mentioned	The hatchery/farm has in place a system to monitor and register farmed aquatic species health and welfare indicators and all disease occurrences	Not mentioned																																																							
<b>BIOSECURITY</b>	High standards of biosecurity must be maintained to avoid the spread of diseases between different populations of fish, as specified in a written policy, contained within the Veterinary Health and Welfare Plan (VHWPP) (see standard H 1.1)	The Animal health management plan must detail biosecurity and disease prevention plans (same standard as health planning above)	Evidence of compliance with the OIE Aquatic Animal Health Code	• Sites have a documented biosecurity plan • The producer demonstrates both understanding of hygiene practices regarding farmed aquatic species health and welfare, and implemented hygiene procedures which are suitable to the farm	Companies should have a Veterinary Health Plan (VHP) and Biosecurity Plan (BP) covering relevant aspects set out in Annex 2.																																																							
<b>SEA LICE</b>																																																												
<b>IN-SITU DAMAGE RECORDING</b>	Sea lice damage to fish must be recorded during lice counts. This must include: a) condition of fish b) site of lesions c) skin condition d) fish behaviour	Not mentioned	Not mentioned	Feedback relating to animal welfare from the preceding production stage is in place and recorded	Not mentioned																																																							
<b>THRESHOLDS</b>	Farms must take all reasonable steps to minimise the gravid lice population, as per the requirements of the Aquaculture and Fisheries (Scotland) Act 2007, as amended 2013 and the Fish Farming Business (Record Keeping) (Scotland) Order 2008.	Not mentioned	Scotland - In areas of wild salmonids, max on-farm lice levels during sensitive periods for wild fish - 0.5 mature female lice per farmed fish	Not mentioned	In general, treatments should be guided by the build-up of pre-adults as indicated by weekly counts, the objective being to prevent the development of gravid females. Suggested criteria for the treatment of sea lice on individual farm sites are: • An average of 0.5 adult female L. salmonis per fish during the period 1st February to 30th June inclusive. • An average of 1.0 adult female L. salmonis per fish during the period 1st July to 31st January inclusive																																																							
<b>CLEANERFISH</b>																																																												
	Whole set of standards	You must give preference to the use of cleaner fish for biological control of ectoparasites or freshwater, marine water and sodium chloride solutions. No standards for their care.	There's a note in 3.2 - The use of alternatives to chemical treatments for cleaner fish for sea lice control, is permitted and encouraged under ASC Salmon standard, but must be a native species	A management plan for cohabitant species not intended for human consumption is in place, and this plan applies the same welfare, feed management, biosecurity, and the environmental enrichment principles as for the commercially grown species	Set of 12 standards outlining use and care																																																							
<b>HUSBANDRY</b>																																																												
<b>CROWDING TIMES</b>	Fish must not be crowded for more than 2 hours	Not mentioned	Not mentioned	Periods of crowding time out of the water, grading, transport and fasting are recorded and justified by the certified veterinarian/aquatic health professional	The frequency and duration of crowding will be kept to the minimum.																																																							
<b>LIGHTING</b>	Lighting must be maintained at a level suitable for each stage of development	You may only prolong natural day-length to levels that respect the ethological needs, geographical location and general health of the aquaculture species. You may only prolong natural day-length to beyond 16 hours per day for reproductive purposes. You must avoid abrupt changes in light intensity at changeover time by using dimmable lights or background lighting.	Not mentioned	A risk assessment for animal welfare is conducted (notes have a reference to light-intensity and changes in artificial/sun light; diurnal rhythm)	Levels of light to which fish are exposed should be appropriate to the species and stage of development.																																																							
<b>HANDLING</b>	Removal from water and handling must only be carried out when absolutely necessary. If fish must be handled and be given to the body a) adequate support must be given to the body b) live fish must never be held by the tail only or thrown on solid objects. Time out of water must: a) be kept to the minimum possible b) never exceed 15 seconds for a live fish (unless anaesthetised).	Handling of aquaculture livestock must be kept to a minimum. When handling is into account harvest sizes, species and protocols must be used to avoid stress and physical damage. You must handle broodstock in ways that minimise physical damage and you must use anaesthesia where appropriate	Not mentioned	Farmed aquatic species are treated and handled at all times in such a way as to protect them from pain, stress, injury, and disease	• Live fish should only be removed from water and handled when absolutely necessary • If fish are handled, adequate support should be given to the body - live fish should never be held by the gills or tail only. • Different species have different tolerance to being out of water, but the time out of water should never be so long as to produce signs of distress.																																																							
<b>FEEDING</b>																																																												
<b>FEED QUALITY</b>	Feeding must be such that the quality, quantity and frequency are optimal for the fish's stage of development.		Has feed standard which addresses contents	Farmed aquatic species receive a compound feed diet which is suitable for the species farmed	Farmers should ensure, through labelling information or documentary assurance, that they use feeds that have been formulated for the species and life stage of fish being grown																																																							
<b>FEED WITHDRAWAL</b>	For harvest fish, fasting time must: a) not exceed 72 hours (unless directed by the designated veterinary surgeon for fish welfare reasons) b) be recorded in the VHWPP  Prior to grading, any period of feed withdrawal must be as short as possible so as not to compromise fish welfare and, in any case, not exceed 48 hours.  Prior to treatment, the fasting period must be as short as possible and, in any case, not exceed the following: a) 48 hours for physical delousing b) 72 hours for freshwater bathing  Pre-transport fasting must: a) never exceed 48 hours, unless specified by a veterinary surgeon/ senior production manager b) be recorded in the Veterinary Health and Welfare Plan (VHWPP) where it exceeds 48 hours	Not mentioned	Not mentioned	Periods of crowding, time out of the water, grading, transport and fasting are recorded and justified by the certified veterinarian/aquatic health professional	• Before transport or harvest, feed should be withheld to reduce metabolic rate and the excretion of waste products, and to eliminate the presence of food and/or faecal material in the gut at harvest, thereby minimising the risk of microbiological contamination during processing. • The period during which fish are deprived of food to achieve gut clearance prior to certain procedures or harvesting should be appropriate to the species and temperature.  Fish should be fasted for the minimum period necessary to clear the gut of feed and faeces																																																							
<b>FEEDING METHOD</b>	Food must be dispensed and distributed in such a way that fish can eat without undue competition.	You must design your feeding regimes to prioritise: a) animal health b) the production of high quality aquaculture products including nutritional composition c) low environmental impact.	Not mentioned	The farm has in place a system to ensure appropriate feeding levels and feed usage records	Farmers should have a written feed management plan, which includes the following points: • Feeding the correct feed size • If fish are handled, adequate support should be given to the body - live fish should never be held by the gills or tail only. • Regular monitoring of feed conversion efficiency (following sample weighing), and assessment of whether feeding protocols and guidelines to assist farm personnel are effective																																																							
<b>ESCAPEES</b>																																																												
	Fish farms must have a site specific containment plan in place with the aim of preventing fish escaping and which includes plans for fish recapture	Installations for containing farmed species must be designed, located and operated to minimise the risk of escapes. If fish or crustaceans escape, you must take appropriate action to reduce the impact on the local ecosystem, including recapture where appropriate	Evidence of escape prevention planning and related employee training, including: net strength testing; appropriate net mesh size; net traceability; system robustness; predator management; record keeping and reporting of risk events (e.g. holes, infrastructure issues, handling errors, reporting and follow up of escape events); and worker training on escape prevention and counting technologies max number of escapes in the most recent production cycle - 300	The EMP includes a contingency plan and an SOP to avoid escape of farmed aquatic species into the sea or local freshwater course.	4.34 Farms should have site-specific contingency plans that describe actions to be taken in the event of any escapes. 4.35 All farm staff should be aware of factors affecting the potential breaches of containment and trained in actions to take in the event of an escape. 4.36 Weather permitting, and having regard to health and safety conditions, daily visual inspection of the holding units should be carried out to ensure containment of the stock. 4.37 Any escape, or suspected escape, of live fish should be reported immediately to all relevant stakeholders, including the trade body, local District Salmon Fisheries Board and Fisheries Trust (or at the latest, within 48 hours of discovery). 4.38 A decision to attempt to recapture fish and the method to be employed should be agreed with the local District Salmon Fisheries Board and Fisheries Trust and permission sought from Marine Scotland.																																																							
<b>FOLLOWING</b>																																																												
	Enclosures must be followed as detailed in the Environmental Impact Plan to allow recovery of the benthos and help to reduce sea lice populations	Your control body will determine whether following is necessary and the appropriate duration. In open water containment systems at sea, following must take place after each production cycle. Following is also recommended for production systems using tanks, fishponds and cages	Coordination of following between each production cycle to help break disease cycles, with a clear period of time when there are no farmed salmon in the area in the water (included within Area-Based Management (ABM) scheme)	PONDS ONLY - Follow periods are defined, and where there is no aquaculture, this has been defined in the aquaculture health plan (AHP)	The minimum fallow period should be 4 weeks																																																							
<b>FRESHWATER</b>																																																												
<b>STOCKING DENSITIES</b>	The following maximum stocking densities must not be exceeded: Hatchery – 15,000 per California basket/tray Multi-level – 20,000 eggs per tray First feeding tank – 10,000/m <sup>3</sup> Freshwater production tank: Liveweight (mean) Stocking density (kg/m <sup>3</sup> ) Up to 1gm 10 >1–5gm 20 5–30 30 >30 50	Maximum stocking density in FW is 20kg/m <sup>3</sup>	Not mentioned	The farm/hatchery/transport operates according to set densities	Stocking density should be monitored in relation to fish health, fish behaviour and water quality to ensure that fish welfare is not compromised.																																																							
<b>WATER QUALITY PARAMETERS</b>	 The following water quality parameters must be complied with: <table border="1" data-bbox="148 2857 276 3100"> <thead> <tr> <th>Parameter</th> <th>Open</th> <th>Alewife</th> <th>Fry</th> <th>Farm/boat</th> </tr> </thead> <tbody> <tr> <td>Dissolved Oxygen (DO)</td> <td>7.0</td> <td>7.0</td> <td>7.0</td> <td>7.0</td> </tr> <tr> <td>pH</td> <td>8.0</td> <td>8.0</td> <td>8.0</td> <td>N/A</td> </tr> <tr> <td>Oxygen (O2) saturation %</td> <td>&gt;90.0</td> <td>&gt;70.0</td> <td>&gt;70.0</td> <td>&gt;70.0</td> </tr> <tr> <td>Free ammonia (NH3) (NH3-N)</td> <td>&lt;0.025</td> <td>&lt;0.025</td> <td>&lt;0.025</td> <td>&lt;0.025</td> </tr> <tr> <td>Carbon dioxide (CO2) (mg/l)</td> <td>&lt;6</td> <td>&lt;6</td> <td>&lt;15</td> <td>&lt;15</td> </tr> <tr> <td>Max temperature (°C)</td> <td>18.0</td> <td>18.0</td> <td>14.0</td> <td>N/A</td> </tr> <tr> <td>pH to the inlet</td> <td>5.5 to 8.0</td> <td>5.5 to 8.0</td> <td>5.5 to 8.0</td> <td>5.5 to 8.0</td> </tr> <tr> <td>Chloride/Nitrite ratio</td> <td>&gt;20:1</td> <td>&gt;20:1</td> <td>&gt;20:1</td> <td>&gt;20:1</td> </tr> <tr> <td>Nitrate (mg/l) t</td> <td>N/A</td> <td>&lt;50.0</td> <td>&lt;150.0</td> <td>&lt;150.0</td> </tr> <tr> <td>Total Suspended Solids (TSS) (mg/l)</td> <td>&lt; 15 mg/l</td> <td>&lt; 15 mg/l</td> <td>&lt; 15 mg/l</td> <td>&lt; 15 mg/l</td> </tr> </tbody> </table>	Parameter	Open	Alewife	Fry	Farm/boat	Dissolved Oxygen (DO)	7.0	7.0	7.0	7.0	pH	8.0	8.0	8.0	N/A	Oxygen (O2) saturation %	>90.0	>70.0	>70.0	>70.0	Free ammonia (NH3) (NH3-N)	<0.025	<0.025	<0.025	<0.025	Carbon dioxide (CO2) (mg/l)	<6	<6	<15	<15	Max temperature (°C)	18.0	18.0	14.0	N/A	pH to the inlet	5.5 to 8.0	5.5 to 8.0	5.5 to 8.0	5.5 to 8.0	Chloride/Nitrite ratio	>20:1	>20:1	>20:1	>20:1	Nitrate (mg/l) t	N/A	<50.0	<150.0	<150.0	Total Suspended Solids (TSS) (mg/l)	< 15 mg/l	< 15 mg/l	< 15 mg/l	< 15 mg/l	The developmental, physiological and behavioural needs of your aquaculture animals must be met through: a) water quality	Water quality monitoring matrix completed and submitted to ASC (see Appendix VIII-2)	A risk assessment is conducted to demonstrate that water quality does not compromise food safety or farmed aquatic species health and welfare	• The siting of farms should be such that there is an adequate supply of water of suitable quality at all times. • Monitoring should be carried out to ensure that water quality parameters are maintained within the known acceptable limits for the species. The parameters to be monitored should be agreed with the local District Salmon Fisheries Board and Fisheries Trust and permission sought from Marine Scotland.
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<b>ALEVINS</b>	6 specific standards relating to alevin hatching, handling and first feeding	Not mentioned	Not mentioned	Not mentioned	Not mentioned																																																							
<b>FRY</b>	7 specific standards relating to fry development and handling	Not mentioned	Not mentioned	Not mentioned	Not mentioned																																																							
<b>PARR</b>	3 specific standards for parr, including production plans for reducing the need for culls	Not mentioned	Not mentioned	Not mentioned	Not mentioned																																																							
<b>FW LOCHS</b>	The stocking density in freshwater enclosures must not exceed 8kg/m <sup>3</sup>	Not mentioned	Must be certified to ASC Freshwater Trout standard	Not mentioned	Stocking density should be monitored in relation to fish health, fish behaviour and water quality to ensure that fish welfare is not compromised																																																							
<b>SMOLTIFICATION</b>	The use of hypertonic water for smolt survival testing is prohibited  Producers must be able to demonstrate that they have done everything possible to ensure maximum survival when smolts are transferred to sea.  Feeds withdrawal prior to transfer to sea must be no greater than 48 hours	Not mentioned	Not mentioned	Not mentioned	Fish should not be exposed to salt concentrations above 35ppt but salt water tolerance test is allowed  Prior to the transfer of juvenile Atlantic salmon to sea, the degree of smoltification in the population should be monitored for several weeks before the expected transfer date, so that the optimal time for transfer can be identified.  No time outlined																																																							
<b>VACCINATION PROCESS</b>	Full set of standards (48 total) for vaccination process	Not mentioned	Not mentioned	Protocols are mentioned (in no detail) in notes for what to include in AHP	Set of 24 standards within FW																																																							
<b>VACCINE USE</b>	The VHWPP (see standard H 1.1) must incorporate a vaccination programme to protect fish from diseases for which an effective vaccine is available and which may represent a risk to the fish.	The use of immunological veterinary medicines is allowed.	All fish should be vaccinated for selected diseases that are known to present a significant risk in the region and for which an effective vaccine exists	If effective vaccines are available for a recurring disease, vaccination is preferred over therapeutic treatments	Where appropriate, VHPs and BPs should include a vaccination regime to protect fish from diseases which may present a risk to their health																																																							
<b>SEAWATER</b>																																																												
<b>STOCKING DENSITY</b>	Seawater enclosure max stocking density – 17kg/ m <sup>3</sup> . Site max – 15kg/m <sup>3</sup>	Max stocking density per pen is 10kg/m <sup>3</sup>	Not mentioned	The farm/hatchery/transport operates according to set densities	Stocking density should be monitored in relation to fish health, fish behaviour and water quality to ensure that fish welfare is not compromised																																																							
<b>WATER QUALITY (RELATING TO FISH WELFARE)</b>	If water quality departs from its acceptable range, steps must be taken immediately to identify the source of the problems and rectify the situation as quickly as possible.	Details of environmental monitoring to be included in sustainable management plan.	Evidence of a fish health management plan for the identification and monitoring of fish diseases, parasites and environmental conditions relevant for good fish health, including implementing corrective action when required	The farm/hatchery/transport and holding facilities have a routine water quality monitoring and control program based on a risk assessment and taking into account potential contamination, farmed aquatic species health and welfare, and the production system	Farmers should have written contingency plans covering actions to be taken in the event of a serious incident, such as storm damage or water quality problems. These plans should consider both the welfare of the fish and environmental protection.																																																							
<b>WATER-BORNE INSULT MONITORING</b>	Water quality composition must be monitored sufficiently frequently, if necessary daily, depending on the system, time of year and lifecycle stage of stock (as specified in the VHWPP – see standard H 1.1).	Not mentioned	Not mentioned	Not mentioned	Not mentioned																																																							
<b>TRANSPORT</b>																																																												
<b>STOCKING DENSITIES</b>	Max stocking density in a helicopter bucket for FW is 400kg/m <sup>3</sup>  Max stocking density in wellboats must: a) be within 4-50kg/m <sup>3</sup> (depending on water quality and size of smolts) b) be set so that water quality can be maintained over the length of the journey	Not mentioned	Not mentioned	The farm/hatchery/transport operates according to set densities	Not mentioned																																																							
	The maximum stocking density in the well must be based on the liveweight of the fish, as shown below: Liveweight (kg) Maximum stocking density (kg/m <sup>3</sup> ) 5.0 125 4.0 100 3.5 90 2.0 75 1.0 60 0.1 45	Not mentioned	Not mentioned	The farm/hatchery/transport operates according to set densities	Not mentioned																																																							
<b>STOCKING DENSITY ON WELLBOATS</b>	The maximum stocking density in the well must be based on the liveweight of the fish as follows: Liveweight of fish (kg) Max stocking density (kg/m <sup>3</sup> ) 125 5.0 100 4.0 90 3.5 75 2.0 60 1.0 45 0.1	Only mention – During transport, the density must not reach a level which is detrimental to the species	Not mentioned	The farm/hatchery/transport operates according to set densities	Not mentioned																																																							
<b>MAINTAINING WELFARE</b>	Full standards for each type of transport (lorry, wellboat, helicopter)	If you transport live fish you must ensure that welfare of the fish maintained. This includes: a) Transporting the fish in suitable tanks with clean water which meets their physiological needs in terms of temperature and dissolved oxygen. b) Thoroughly clean, disinfect and rinse tanks before transport of organic fish and fish products c) Taking precautions to reduce stress. During transport, the density must not reach a level which is detrimental to the species	Not mentioned	Elements of the risk assessment on animal welfare are applied for transport of live farmed aquatic species, eggs, and juveniles	• Fish should be transported in such a way that possible adverse effects on their welfare are minimised. • Biosecurity and fish welfare should be considered before transporting fish populations.																																																							
<b>SLAUGHTER</b>																																																												
<b>TECHNIQUES</b>	• The method of killing used must, rapidly and without pain and distress, render the fish insensible, until death supervenes • The following slaughter methods are considered to be humane and must not be used: a) bleeding (exsanguination) or decapitation without prior stunning b) asphyxia c) evisceration d) live chilling e) live slurry or bath f) carbon dioxide narcosis	You must only use slaughter techniques that render fish immediately unconscious and insensible to pain. You must take into account harvest sizes, species and production sites when considering optimal slaughter methods. Guidance includes prohibited list of methods: – The following methods of harvest and slaughter do not meet this standard: • ice, except for warm water shrimp • carbon dioxide • suffocation, leaving stock to die in the open air • exsanguination without stunning • selecting a rolling harvest where you stave all fish in the holding facility and operationally grade a number for slaughter on a repeated basis • staving stock to modify carcass weight or quality (bushy)	Not mentioned	Farmed aquatic species are effectively stunned, with consideration of farmed aquatic species welfare	Not mentioned																																																							
	Bleeding must follow within 10 seconds			When farmed aquatic species are bled, this is done immediately after stunning	Ensuring efficiency should be considered by fish to ensure fish do not regain consciousness prior to death.																																																							
<b>RECORDING OF MISSTUNS</b>	The number of fish that have not been effectively stunned must be recorded	Not mentioned	Not mentioned	Not mentioned	Not mentioned																																																							
<b>RECORDING OF DEAD ON ARRIVALS</b>	Not mentioned	Not mentioned	Not mentioned	Mortalities are recorded and removed from the holding areas and reasons for death are recorded, where known (applies to wellboats and holding areas)	Not mentioned																																																							
<b>CCTV</b>	A functional CCTV system must be installed and operational to clearly monitor fish undergoing the following processes: a) initial tank/dewaterer entry and exit b) stunning, including entry and exit c) killing d) passing through post-stun assessment area.  The recorded CCTV footage must be: a) retained for a period of at least three months b) available for viewing upon request	Not mentioned	Not mentioned	Not mentioned	Not mentioned																																																							
<b>TRAINING</b>																																																												
<b>FISH WELFARE FOR SITE STAFF (INC THOSE STANDARDS WHICH ARE OVERARCHING)</b>	All stock-keepers must have attended a recognised fish welfare course	Staff keeping aquatic animals must have the necessary knowledge and skills to manage their health and welfare needs	Company regularly performs training of staff in fish husbandry, general farm and fish escape management and health and safety procedures	Workers directly responsible for handling farmed aquatic species receive species-specific training in health, welfare, and handling techniques	Personnel carrying out lice counts should have appropriate training in lice recognition and recording, and demonstrate post-training competence • Personnel involved in crowding should be trained on the appropriate techniques • Farmers should be trained in the procedures for assessing smoltification and in minimising any negative effects on the welfare of the fish																																																							
<b>FISH WELFARE FOR AUXILIARY STAFF</b>	All wellboat crew (inc skippers) must have received welfare training Vaccination staff must be trained and competent in aspects of the vaccination process				All those involved in vaccination should be appropriately trained and competent																																																							
<b>FISH WELFARE FOR HARVEST STAFF</b>	All staff involved with the handling/killing process must have received full training and be fully competent in all methods of harvest – dead haul, shore based or cage side. • There must be a named person responsible for fish welfare throughout the killing process who has attended a recognised training course in humane killing of fish.	Included in guidance – Staff who handle fish, including those involved with killing, must be appropriately trained, competent and aware of their duty of care		Workers responsible for harvest operations have appropriate training in farmed aquatic species welfare and handling techniques Harvesting workers receive farmed aquatic species welfare training in relation to the slaughter process	Not mentioned																																																							
<b>GENETICS</b>																																																												
	• Genetic modification techniques are prohibited. • Fish must not have been produced by breeding techniques that result in health or welfare problems for any of the animals involved.	Products labelled as consisting of or made from GMOs must never be described as organic.  When breeding organic aquaculture animals you must not use artificial hybridisation, artificial induction of polyploidy, cloning and production of monosex strains, except by hand sorting	No use of transgenic salmon by the farm	Genetically modified (GM/transgenic) farmed aquatic species is prohibited	Not mentioned																																																							