

Regulation concerning Transportation of Aquaculture Animals

Issued by The Ministry of Fisheries and Coastal Affairs 17. June 2008 pursuant to the Act of 19 December 2003 no. 124 on Food Production and Food Safety etc (The Food Act) §§ 5, 6, 7, 14, 15 and 19, cf. delegation of authority decision of 19 December 2003 no. 1790, and the Act of 20 December 1974 no. 73 on Animal Welfare § 30, cf. delegation of authority decision of 6 February 2004 no. 307.

EEA reference: The EEA agreement appendix 1 chap. I (directive 2006/88/EU).

Chapter 1 Purpose, scope and definitions

§ 1 Purpose

The purpose of this regulation is to promote good aquatic animal health and ensure good fish welfare during transportation.

§ 2 Scope

This regulation applies to Norwegian territory and territorial waters, to the continental shelf and to the Norwegian economic zone.

This regulation pertains to transportation of live aquaculture animals. The welfare requirements in chapters 2, 3 and 4 pertain only to fish. § 10 pertains to transporting aquarium animals to pet shops, garden centres, garden ponds, commercial aquariums and wholesalers apart from letter c) in the second paragraph and chapter 5. § 9 pertains to transportation of molluscs and crustaceans apart from letters d) - g) in the first paragraph, § 10 applies apart from letter c) in the second paragraph, §19, §20 first paragraph letters b) and e) and second paragraph, § 21, § 22 third paragraph, § 23 and § 24.

This regulation regulates those legal and natural persons who are responsible for, or are involved in the transportation of live aquaculture animals.

This regulation applies in addition to the transportation requirements of vertebrates which are laid down in Council Regulation (EC) no. 1/2005 on the protection of animals during transport and related operations which has been laid down as a Norwegian regulation in the form of the regulation of 5 January 2007 no. 11.

§ 3 Definitions

In this regulation the following definitions apply:

- a) *Aquaculture establishment* means: Any locality, physically limited area or installation run by an aquaculture venture at which aquaculture animals are farmed, excluding localities, areas or installations at which wild aquatic animals are harvested or caught destined for consumption, are kept temporarily awaiting slaughter without being fed. Aquaculture venture here means any private or public venture, whether idealistic or not, which carries out any kind of activity linked to the farming, keeping or cultivating of aquaculture animals.
- b) *Aquaculture animal(s)* means: All life stages, including sexual products and resting stages of all aquatic animals farmed at an aquaculture establishment or an aquaculture area for molluscs, including all aquatic animals which have lived in the wild and which are intended for an aquaculture establishment or an aquaculture area for molluscs.
- c) *Aquarium animals* means: All aquatic animals which are kept, farmed or sold only for decoration.
- d) *Aquatic animals* means:
 1. fish belonging to the superclass *Agnatha*, and fish belonging to the classes *Chondrichthyes* and *Osteichthyes*
 2. molluscs belonging to the phylum *Mollusca*

3. crustaceans belonging to the subphylum *Crustacea*

- e) *Long journey* means: A journey which lasts for more than eight hours and which commences when the first aquaculture animal of the load is moved.
- f) *Transport*: the movement of animals effected by one or more means of transport, and the related operations, including loading, unloading, transfer and resting, until the unloading of the animals at the place of destination is completed.
- g) *Transportation unit*: transportation equipment and means of transport.
- h) *The Transport Regulation*: Council Regulation (EC) no 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and amending Directive 64/432/EEC and 93/119/EC and Regulation (EC) no 1255/97.
- i) *Means of transport*: boat, car/train, plane and helicopter and similar which are used to transport live aquaculture animals.
- j) *Transportation equipment*: the space in which live aquaculture animals and transport water are kept during transport such as containers, tanks, wells etc., as well as buckets/cylinders for transportation of live roe from aquaculture animals and containers for transportation of live decapods or shellfish. Transportation equipment also includes all technical equipment associated with the space of transportation, such as the circulation system for water pumps, the oxygen system, water filtration system, vacuum pump system for loading and unloading live fish, valves, valve caps, hoses, pipes etc.
- k) *Transporter*: any natural or legal person transporting animals on his own account, or for the account of a third party.
- l) *Water quality*: the suitability of the aquatic environment according to the needs of the fish, including the water's chemical, physical and hygienic qualities.

Chapter 2 Approval of the fish transportation unit

§ 4 Requirements for approval of transportation unit

A transportation unit used to transport live aquaculture animals, apart from aquarium fish, crustaceans, molluscs and roe and milt from aquaculture animals, shall be approved by the Norwegian Food Safety Authority. This requirement for approval does not apply to plastic bags used for the transportation of small amounts of fish. Approvals shall be valid for a period of not more than five years from the date of issue and shall become invalid as soon as the means of transport are modified or refitted with new equipment in a way that affects the welfare of the aquaculture animals.

§ 5 Requirements for an application for approval for transportation units

The application for approval shall contain the data necessary to assess whether the approval can be granted and which conditions may need to be set. The application shall be sent in a timely manner to the district office where the transportation unit has its home. The application for approval of the transportation unit shall contain the following at the least:

1. Personal data such as name of the transportation unit, the person responsible for the transportation unit, form of ownership, address, telephone number and mobile number.
2. Data about the type of transportation assignments which the transportation unit is applying to have approved and whether the transportation unit previously has been approved.
3. Drawings which show the transportation unit's construction, water exchange, well and/or pipe systems.
4. Internal control system demonstrating that the requirement for sound operation in terms of preventing infection and promoting welfare, including competence, routines for cleaning

and disinfecting, handling dead fish, water exchanging, monitoring water quality, sampling water quality and log keeping, can be fulfilled.

5. Documentation of the fittings and the equipment's suitability in relation to fish welfare.

§ 6 *Elements which are assessed when granting approval*

For approval to be granted, the transportation unit must meet the requirements for construction, pursuant to § 8, requirements for the means of transport, pursuant to § 15, and the requirements laid down in the Transport Regulation's Annex I, chapter II on construction and maintenance. There shall be an internal control system demonstrating that the requirements for sound operation in terms of preventing infection and promoting welfare, including competence, routines for cleaning and disinfecting, handling dead fish, monitoring water quality, sampling water quality and log keeping, can be fulfilled.

§ 7 *Withdrawal of approval*

The Norwegian Food Safety Authority can withdraw approval mentioned in § 4 if:

1. Significant infringements of the conditions of approval or of decisions taken have occurred as per or pursuant to the Food Act or the Animal Welfare Act.
2. It emerges that knowledge about conditions pertaining to disease or fish welfare has changed significantly since approval was granted.

Chapter 3 General sanitary and hygienic and fish-welfare requirements for transportation

§ 8 *Requirements for construction*

The surfaces of the transportation unit shall be smooth, easy to clean and disinfect. The transportation equipment shall have no holes, cracks, sharp angles etc. which may to a great extent make difficult effective cleaning and disinfection. The volume of the tank, vessel and well (recirculation system) shall be known.

Dry installed pumps, muffers and connections shall be constructed so they are sealed and do not suck in air which can generate a total gas problem in the transportation water when running a closed system (recirculation).

The transportation equipment shall not emit substances which are detrimental to fish health or which in any other way inflict the fish injury or unnecessary suffering.

It shall be possible to inspect satisfactorily all areas of the transportation unit. It shall be easy to remove grills, caps, hinges and similar so that inspection can be performed.

§ 9 *Log-keeping*

For each transport assignment, the following data shall be entered into the log:

1. the amount of aquaculture animals transported (number, , species, size or weight)
2. disease, injuries to the aquaculture animals and mortality. If there is a known or likely cause, this must be stated
3. route of journey, including aquaculture farms and abattoirs which are visited.
4. time and place for release or intake of water /closing and opening of valves, if any
5. consumption of oxygen, if any
6. water temperature and other water quality parameters which are monitored pursuant to §§ 16 and 17 and
7. the point of time, the amount of cleaning preparations and disinfectants, and method used to clean and disinfect the transportation unit.

The log shall be available to the supplier of the load and to the recipient and to the appropriate authority. The log for previous trips made shall be kept available to the appropriate authority for five years after it has been filled in.

On well-boats the deck log book can be used as a log provided it contains the same records which are required to be entered into a log.

§ 10 *Duty to notify*

In the event of increased mortality, apart from when such mortality is obviously not caused by disease, a health check shall be carried out without unnecessary delay to determine the cause. The health check shall be performed by a veterinarian or fish-health biologist.

The Norwegian Food Safety Authority shall be notified immediately if there is

- a) undetermined increased mortality
- b) reason to suspect a disease on lists 1,2 or 3, or
- c) other factors which have led to significant repercussions on fish welfare, including disease, injury or failure, technical or otherwise.

§ 11 *Sound operation, contingency plan and assessing risk factors*

Operation shall be sound in terms of fish welfare and infection. There shall be a contingency plan ensuring fish welfare and preventing infection in emergency situations. It shall provide an overview of the sanitary and hygienic and fish-welfare measures pertinent to implement to prevent and, if necessary, tackle acute events and mass death, including the handling of dead aquaculture animals, the destruction of aquaculture animals and the reporting of events to the recipient and the Norwegian Food Safety Authority.

Before transportation, risk factors which can affect fish welfare and the health of aquaculture animals, and the health of aquatic animals along the route of transportation and at the place of destination, shall be assessed.

Chapter 4. Special welfare requirements for transportation etc. of fish

§ 12 *Competency*

The transporter, driver/skipper and others responsible for the animals shall have the necessary knowledge about the mode of transport and about the aquaculture animals' behavioural and physiological needs.

It shall be ensured that there be sufficient personnel with the necessary competency to ensure fish welfare at any time.

The necessary competency pursuant to the first and second subsections shall be documented by virtue of practical and theoretical training under the aegis of the industry. This training shall include the following elements and shall be repeated each fifth year:

- a) relevant requirements laid down by the Transport Regulation and by this regulation
- b) the species' physiology, natural needs and behaviour and an understanding of stress and disease and how the animals react to the effects of stress or in connection with disease
- c) conditions which are significant when handling fish and which affect their welfare
- d) water quality, including water quality parameters, monitoring of these and measures to maintain good water quality (both in open and closed systems)
- e) the significance of the manner of driving/sailing (on both land and at sea) for fish welfare.

§ 13 *Responsibility and duty to supply information*

The dispatcher is obliged to ensure that the fish to be transported are fit enough to undergo the whole journey. The dispatcher is obliged to ensure that the recipient is informed in good time which means of transport are used, the time of departure of the transportation and estimated time of arrival.

Transporter or skipper/transport driver shall require that the dispatcher state all information about the fish which may be of significance for the performance of the transportation and for fish welfare.

If the time or means of transportation is delayed or changed, the skipper/transport driver is obliged to inform the establishment of destination of this so he/she can ensure that the fish are received appropriately.

The establishment of destination is obliged to keep itself informed of the time of arrival, prepare itself to receive the fish appropriately.

§ 14 *General requirements for transportation*

Transportation shall be conducted in a careful way which is adapted to the fish's species, age, stage of development, condition, feed withdrawal time and water temperature

Transportation shall be carried out with undue delay. The duration of the transportation and density shall be adapted to factors which may be of significance for fish welfare. On long journeys, special emphasis shall be placed on water quality, water temperature and density. During transportation using a closed system, sound levels of CO₂ and O₂ must be particularly attended to.

Fish which at the outset are not fit for transportation may be transported if on the whole this is regarded as most sound in terms of fish health and fish welfare.

§ 15 *The means of transport*

Water treatment systems and transportation methods, such as transportation in plastic bags etc, shall be suitable in terms of fish welfare.

New transport methods, fittings and equipment shall be tried and tested and have been documented to be suitable in terms of welfare before they are offered for sale or used.

Necessary information shall be available about how the equipment is to be used to ensure welfare. For pumps and related equipment, instructions shall be available stating which size of fish they are suited for and stating the number of fish which can be transported through the system per unit of time.

Should there be a power failure, technical failure or other error, the user, without unnecessary delay, shall ensure fish welfare by using alternative solutions until the fault has been rectified.

Wild fish shall in the best way possible be prevented from entering the means of transport underway

§ 16 *Water quality and water volume*

Fish shall be ensured good water quality and enough water suited to their age, species, stage of development, condition etc.

Water quality shall be monitored. Contents of carbon dioxide and total ammonium nitrogen in the transport water shall be kept low. When carrying out transportation which lasts more than two hours, systematic measuring of O₂, pH, salinity and temperature shall be performed and procedures developed for measures against the risk of detrimental levels or poor water quality. Measuring pH may be replaced by measuring CO₂. Transporting small amounts of fish in plastic bags is exempt from this requirement for systematic measuring.

In some specific cases, water samples shall be taken for analysis of CO₂ and total ammonium nitrogen. Suitable sampling bottles shall be available on the means of transport.

The means of transport shall have suitable equipment with which to add oxygen when necessary. Well-boats shall have adjustable valves to ensure enough water flows through.

Total gas oversaturation generated by air in pipes and pumps and from filling the well shall be removed by means of active airing before the fish are transferred to the means of transport.

§ 17 *Pertaining especially to water quality and water volume in a closed system*

Transport by well-boat with closed valves, by car or vessel, including transportations which only periodically take place closed, must be planned so good water quality is maintained. This also implies that consideration must be paid to the frequency with which water is exchanged and possible places at which to exchange it.

The transportation unit shall have suitable equipment and customizations of the transportation system to maintain sound water quality when the water is recirculated.

When loading the fish onto a closed system, it shall be possible to separate used farm water and the fish.

When transporting fish using a closed system, manoeuvres which lead to a sudden rise in the pH of the transportation water with high accumulated levels of total ammonium nitrogen shall be avoided.

§ 18 *Handling, inspection and care*

The welfare conditions of the fish shall be regularly checked and appropriately maintained. When transportation by well-boat occurs, inspection of the fish shall also be performed using a camera.

Handling, including crowding, pumping or pressure setting, shall occur carefully and at an appropriate tempo. Loading and unloading shall occur as far as possible without delay. The pump distance shall be as short as possible. When pumping fish, it shall be ensured that the height of the pump, pressure and falling height are of a nature which avoids injury

Fish shall not be handled unnecessarily, and crowding shall be performed without the fish being inflicted injury or unnecessary suffering and be limited in extent and time. The fish while being handled shall have appropriate water quality based on the needs of the species concerned. During crowding, the oxygen level shall be monitored using suitable measuring equipment.

If the fish exhibit changes in behaviour beyond what is normal during handling, the necessary measures shall immediately be taken to ensure fish welfare.

Chapter 5. Special sanitary and hygienic requirements for transportation etc., of aquaculture animals

§ 19. *General sanitary requirements preventing infection during transportation*

Aquaculture animals shall be transported as quickly as possible to the place of destination. Transportation shall occur in a way which ensures the health of:

- a) the aquaculture animals which are transported,
- b) the aquaculture animals at the place of destination, and
- c) aquatic animals passed during transportation.

Fish, apart from aquarium fish, from different aquaculture establishments shall not be transported simultaneously on the same transport unit.

§ 20. *Cleaning and disinfection of transportation unit to be re-used*

Unless disposable packaging is used, the transportation unit shall be cleaned and disinfected in the following cases:

- a) Before each individual transportation of aquaculture animals to an aquaculture establishment, sea ranching or other place to be set out.
Disinfection may be omitted if:
 1. Repeated transportations of smolts or hatchery-reared fish from one hatchery fish establishment to the same recipient establishment is regarded as one operation (short-haul),
 2. The distance between the hatchery fish establishment and on-growing fish establishment is short, and
 3. Necessary steps are taken to hinder the spread of infection during loading from boats, equipment, etc., to the hatchery fish establishment.
- b) After transportations have been completed from one aquaculture establishment or aquaculture area for molluscs to a abattoir or processing plant, and before one commences equivalent transportations from one aquaculture establishment or aquaculture area for molluscs.
- c) After fish for slaughter have been unloaded at the abattoir at which fish are kept in short-term storage pens from other aquaculture establishments.
- d) After fish for slaughter have been unloaded at a abattoir at which simultaneously fish from other aquaculture establishments are unloaded,
- e) After the completed transportation of aquaculture animals from an aquaculture establishment or aquaculture area for molluscs which is under restrictions due to listed infectious diseases.

The transportation equipment shall be empty of aquaculture animals before cleaning and disinfection take place. Cleaning shall ensure that any surface matter and organic matter is removed before disinfection takes place.

§ 21. *Land transportation*

When transporting aquaculture animals by land, the means of transport shall be constructed so no water leakages occur during transportation. Any water exchange during transportation by land shall occur at a water-exchange station approved by the Norwegian Food Safety Authority. To be approved, the following conditions must be met:

- a) The water used for the exchange must not affect the health status of the aquaculture animals transported.
- b) The water-exchange station must be equipped so that the environment is not polluted, either in that the water is disinfected, or by avoiding water being let directly out into the sea or open watercourse.

§ 22. *Sea transportation*

Transportation of fry to hatchery fish establishments shall occur with no water exchange.

Transportation of hatchery-reared fish to on-growing fish and brood fish establishments and transportation of fish to slaughter may occur with continual water exchange. Transportation shall nevertheless occur with no water exchange if the transportation passes so close to an aquaculture establishment, or outlets from a abattoir or processing plant that there is a risk of infection spreading to the aquaculture animals transported or to the aquaculture animals passed during transportation. Water exchange shall cease at the furthest possible distance away from aquaculture establishments, abattoirs or processing plants which are passed.

Transportation of aquaculture animals from a segment having a lower health-status category in terms of non-exotic diseases shall occur with no water exchange when it passes through a segment having a higher health-status category and goes closer than four nautical miles from the baseline. Transportation of aquaculture animals to a segment having a higher health category in terms of non-exotic diseases shall occur with no water exchange when it passes through a segment having a lower health category and goes closer than four nautical miles from the baseline.

§ 23. *Transportation to quarantine*

Transportation of aquatic animals to quarantine shall take place closed and all transportation water shall be disinfected before release. When transportation by sea takes place, water exchange can occur when the means of transport is four nautical miles from the baseline.

§ 24. *Handling dead aquaculture animals*

Dead aquaculture animals shall not be stored on the transport unit between different transportation tasks.

Aquaculture animals which have died during transportation to the aquaculture establishment, apart from mass death during transportation, shall be delivered to the recipient establishment. Should mass death have occurred, dead aquaculture animals shall be delivered directly to an establishment approved for the receipt and processing of animal by-products.

Chapter 6 Final decisions

§ 25 *Inspection and decisions*

The Norwegian Food Safety Authority conducts inspection and makes decisions to effect the provisions given in or pursuant to this regulation pursuant to the Food Act § 23 and the Animal Welfare Act § 23.

§ 26 *Dispensations*

The Norwegian Food Safety Authority can in special cases grant dispensations from the provisions in this regulation, provided this does not conflict with Norway's international obligations, including the EEA-agreement.

§ 27 *Penalties*

Wilful or inadvertent contravention of this regulation or decisions made pursuant to it is punishable pursuant to the Food Act § 28 and the Animal Welfare Act § 31.

§ 28 *Entry into force*

This regulation, with the exception of § 12 third paragraph, enters in force 1 August 2008. Simultaneously the regulation of 20 February 1997 no. 193 pertaining to transportation of aquatic animals is repealed

§ 12 third paragraph pertaining to documentation of competency enters into force 1 January 2010.