



Norwegian Food Safety Authority

Regulation of transport of fish in Norway

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Overview

1. Scope
2. Approval of transport units
3. General requirements
4. Specific requirements – animal welfare
5. Specific requirements – biosecurity
6. Some conclusions



Scope and purpose

Purpose:

- To promote good health in aquatic animals
- To secure good animal welfare during transport of aquatic animals

Scope:

- The regulation is directed towards legal persons responsible for or involved in transport of live aquatic animals.
- Includes transport of live aquaculture animals with some limitations.
- Valid for all transport of aquaculture fish including wild caught cleaner fish.
- Valid in the whole territory of Norway, including the continental shelf and the Norwegian economic zone.



Approval of transport vehicles

- **All transport vehicles meant for transport of live fish destined for aquaculture purposes has to be approved by the Norwegian Food Safety Authority (NFSA).**
- **The approval is only valid for five years from the date of issuing.**
- **Any change of the construction or of the equipement of the vehicle triggers the need of a new approval**

Approval

Requirements regarding the application

- **Personal information**
- **Information regarding type of transport missions**
- **Documentation showing the construction of the vehicle including the well, tubes, valves and cleaning and disinfection systems.**
- **Documentation of the internal quality insurance systems to secure satisfactory biosecurity and fish welfare.**
- **For well boats also information about automatic reporting of position and registration of opening and closing of the bottom valves.**

General requirements

- **Smooth surface – easy to clean and disinfect**
- **Pumps, joints and sockets shall be constructed in a way to avoid suction of air which can result in total gas problems for the fish during transport.**
- **Requirements for registration and journaling.**
- **Requirements regarding equipment for automatic reporting of position (AIS).**
- **Requirement regarding automatic registration of bottom valves.**



Animal welfare

1. Competence

- **Transporter, skipper etc. must have necessary knowledge about the physiological and behavioural needs of the fish of the aquaculture animals of concern.**

2. Responsibility

- **The transporter etc. must secure that necessary information about the status of the aquaculture animals are available before initiation of the transport.**

3. Water quality and volume

- **Good water quality shall be secured during the entire transport**
- **Mandatory monitoring of the water quality – in particular CO₂**

4. Specific requirements regarding water quality in closed systems

- **Suitable equipment and more specific monitoring**



Biosecurity

General requirements

- 1. Transport directly and as soon as possible**
- 2. Cleaning and disinfection of the vehicle**
 - Before each and every transport
 - After unloading fish at a slaughter where fish from other establishments are temporarily kept in open cages
 - After simultaneously unloading fish from different establishments
 - After transport of fish being subject to movement restrictions
 - After the transport unit has been used for other purposes that transportation of live aquaculture animals



Biosecurity

Additional requirements

1. Well boats used for other purposes than transport of smolt, shall in addition to cleaning and disinfection be subject to a period of quarantine before used for transportation of smolt of salmon, trout or char.

The period of quarantine shall not be less than 48 hours.

2. This requirement is also valid for well boats leaving the defined Norwegian PD-zone after a transport of fish or other missions into or within the zone.

2. Some exemptions:

- Transports directly to a newly fallowed site (less than 10 days) – the well boat leaves the zone immediately after unloading.
- When the estimated risk of attracting a listed disease is considered to be low, the NFSA may allow exemptions in other cases.



Biosecurity

Treatment and exchange of transport water I

1. Transport water to be used for transport of live fish to an aquaculture establishment shall be treated before loaded into the well.
 - Exemptions:
 - Water loaded from the delivering site
 - Water used for transportation to «waiting cages» at a slaughterhouse
2. Transport water used for transport to a slaughterhouse including, «waiting cages» at the slaughterhouse, must be treated with an approved disinfectant before discharged into the sea.



Biosecurity

Treatment of water – transitional rules

- **Transport of fry to smolt producing establishments shall be closed without exchange of water.**
- **Transport of fish to units producing food for human consumption or broodfish may be carried out by continuous exchange of water. However:**
 - **No exchange of water when the well boat moves close to another aquaculture establishment or to the water outlet from a slaughterhouse or a food production establishment.**
 - **No exchange of water when transporting smolt of salmon, trout, char or cleaner fish within the defined PD-zone.**
 - **No exchange of water when transporting salmon, trout or char which are known or suspected to be infected by SAV.**



Biosecurity

Treatment and exchange of water II

- Transport of fish from zones or compartments with lower health status regarding diseases on List 2: **No exchange of water when passing through zones or compartments with higher health status**
- Transport to compartments or zones having higher health status with regard to diseases on List 2: **No exchange of water when passing through zones or compartments having lower health status, and the well boat is sailing closer than 4 nautical miles from the so called nautical baseline.**
- In any case it is forbidden to:
 - Transport live salmon, trout or char out of the defined PD-zone.
 - Transport of fish infected with SAV or suspected infected for the purpose of being unloaded in «waiting cages».
 - Transport live salmon, trout or char for slaughtering across Hustadvika.
 - Transport live cleaner fish from establishments using non disinfected seawater out of the PD-zone.



Summary

- **Transport of live fish has always been associated with high risk of spreading contagious diseases**
- **Norwegian competent authorities has a long tradition with regard to regulate such transports**
- **In spite of the development in technology and improved regulations, the risk of spreading diseases is still high.**
- **There is still a huge room for improvement!**
- **Next steps:**
 - **Completely closed transports?**
 - **Dedicated vehicles for transport of smolt?**



Thank you for your attention!

