LETTER OF REQUEST - ASSESSMENT OF AMOEbic GILL DESEASE (AGD)

1. Background

Infection with amoebic gill disease (AGD) is considered a new disease in Norway. According to the National Veterinary Institute, AGD was first observed in Norway in connection with some health problems in four salmon farms in the autumn 2006.

AGD has been the cause of major losses in farmed salmonids in Tasmania and Australia since 1984. The disease has relatively recently been established in European waters, and it has apparently spread gradually northwards. AGD was previously reported sporadically in farmed salmon in Ireland and Scotland, but in the last two years the severity of the disease has increased dramatically and recently it has also been reported in farmed salmon in the Orkney Islands and Shetland. The disease affects salmon throughout the seawater-phase, but particularly affects post-smolts the first fall in sea. Outbreaks are often long-lasting. The most important factor for disease outbreaks is high salinity (>32 ‰). In Tasmania (Australia), AGD is usually associated with water temperatures above 17 °C, but in the North-East Atlantic outbreaks have been observed at temperatures down to 7 °C. There is limited knowledge about the survival of the amoeba at low temperatures. The most effective treatment against AGD is fresh water. Hydrogen peroxide is also reported to be an effective treatment.

The Norwegian Food Safety Authority (NFSA) understands the need to survey the situation in Norway in order to assess whether the disease should be listed or not. The disease has been previously observed in Atlantic salmon, but has recently also been observed in farmed cleaner fish. In 2013 the NFSA notified a cleaning fish farm about possible restriction of movements in and out of the farm due to suspicion of AGD in the farm.

The NFSA will use the risk assessment to evaluate whether AGD should be listed on list 3 of Annex I of the Regulation 17 June 2008 on the placing on the market of aquaculture animals and products thereof, and on the prevention and control of certain diseases in aquatic animals. If AGD is listed, the following provisions shall take effect upon suspicion or detection of AGD:

§ 27. Notification
When increased mortality occurs, a health control must be carried out by a veterinarian or a fish health biologist without any delay to determine the cause. The NFSA must be notified immediately in case of unclarified increased mortality. Upon suspicion of a listed disease, the NFSA must be notified.

§ 28. Restrictions on the movement of fish into and from the farm
This provision is aimed to prevent spreading the disease. Aquatic animals must not be moved in or out of the aquaculture facility if there is reason to suspect a listed disease or AGD is diagnosed. The NFSA may give permission to move the aquatic animals if it is done to reduce the risk of spreading the disease or to remove the fish for destruction of slaughter.

§ 29. Restrictions on breeding and reproduction
Aquaculture animals in facilities where listed disease is suspected or diagnosed must not be used for breeding and reproduction. The NFSA may give permission to do so if the infection cannot be transmitted vertically and if the business operator has biosecurity measures in place that prevent that cross-contamination does not take place.

§ 41. Removal, slaughter, killing and destruction
The provision only applies to diseases on List 3. Dead fish from a fish farm with a confirmed diagnosis of disease on list 3 must be removed from the site and be destructed. The NFSA decides how fish from an infected farm must be handled, including whether they can be slaughtered for human consumption or killed and destructed.

§ 42. Fallowing
Upon confirmation of a listed disease in a fish farm, the farm must be fallowed for a period of time according to a plan approved by the NFSA.

2. Available data
The NFSA has no overview of all relevant studies.

3. Terms of reference
Amoebic gill disease is an unspecific term referring to any gill infection with pathogenic amoebae. In the present report we define AGD as gill disease due to *Paramoeba perurans*.

The NFSA requests the Norwegian Scientific Committee for Food Safety (VKM) to undertake a risk assessment of the following:

a) Does AGD in Atlantic salmon and Rainbow trout represent a significant risk for the fish health in Norwegian fish farms?
   - What is known about the distribution of *Paramoeba perurans* in farmed and wild fish in Norway?
   - What is known about the distribution of AGD in farmed and wild fish in Norway?
   - What factors influence the development of AGD?
   - What is known about the spreading dynamics?

b) Is it possible to control the infection at site level?
   - If yes, what methods/measures will be most relevant for the control of the disease?

c) Is it possible to achieve and maintain areas free from the pathogenic agent? Is it possible to achieve and maintain areas free from the disease?
   - If yes, what measures will be most relevant to achieve and maintain areas free from pathogenic agents and/or free from the disease?

d) Can the disease constitute a threat to wild stocks of fish if not treated and/or kept at a controlled low level?
e) Can infection with AGD in fish have significant consequences for the Norwegian aquaculture industry?

The risk assessment may be written in English with an extended Norwegian summary.

4. Timeframe

This assessment shall be considered as a normal case. We request that the risk assessment be completed and submitted to the NFSA by 1st of November 2014.

5. Contact persons

The contact persons at the NFSA are:
- Jonathan Vaz Serrano, Adviser, jodvs@mattilsynet.no
- Torunn Knævelsrud, Head of Section, tokne@mattilsynet.no

Yours sincerely

Torunn Knævelsrud,
Head of Section for Animal Welfare and Fish Health