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15 November 2018

Ref.: Feedback to consultation "Proposal for measures to combat the negative environmental impact of the treatment against salmon lice within the scope of the Norwegian aquaculture Act"

To Nærings- og fiskeridepartementet

Benchmark thanks for the opportunity to provide input to the "Proposal for measures to combat the negative environmental impact of the treatment against salmon lice within the scope of the Norwegian aquaculture Act".

Benchmark was founded in 2000 with the aim to build a global food chain that is more efficient, economical, ethical, environmentally friendly and fit for the future. The company has over 850 people working towards the same vision and our platform encompasses genetics, nutrition, health and knowledge services (sustainability science and technical publishing).

Benchmark operates internationally with R&D facilities, commercial farms, diagnostic laboratories, manufacturing sites, production facilities and commercial offices spread across 27 countries in five continents.

General comments:

Considering the scope of this document, we would like to use the opportunity to explain how our new water purification system (CleanTreat®) which is impacting the environmental profile of bath treatments towards sea lice.

This purification system is currently being deployed in Norway. The system is being used alongside our next generation sea lice treatment, which is currently in clinical field trials.

The medicine is administered in a well boat which is a closed, contained system. This water remains contained in the well boat after treatment and the fish are returned to sea after having been rinsed in clean water. Once the fish are returned to their pens, purification of the treatment water begins with the removal of all organic waste including all sea lice and egg strings. The filtered water then enters the purification system where medicine is removed by a series of closely monitored steps.

On board chemists use one of the chemical industry's most sensitive tests to detect medicine levels and only allow discharge when no medicine is detectable. Benchmark have also undertaken extensive modelling simulations to ensure that the water discharged from the purification system is safe for even the most sensitive of aquatic flora and fauna.

Therefore, we consider inadequate the requirement that bath treatments must be carried out in well boats in fish farming facilities located in shrimp fields and/or spawning grounds or no more

than 500 meters away and that the treatment water must be transported away from the site. This requirement does not take into consideration innovative solutions like CleanTreat which has proven to work under Norwegian conditions and made it safe to discharge treatment water in the sea.

Comments on specifics sections:

2.3.3. Azamethiphos

The text describing characteristics of azamethiphos does not include all the environmental information provided to the Norwegian Medicines Agency during and after the registration process. One example is the approved half-life mentioned which is incorrect for our product Salmosan Vet® which is currently <5.6 days and not 8-9 days.

2.3.4 Pyrethroids:

At the last paragraph the sentence "realistic worst-case scenarios" is mentioned but without specifying what this means. We would like to kindly request a description of this scenario.

2.3.5. Bath agents overview

We consider the last paragraph inappropriate as is speculation.

3.1. Current legal standard

Paragraph No 3:

With regard to official guidance on what constitutes environmentally responsible operation in respect of emissions of medicinal products when treating salmon lice, a "Guide for discharging bath treatment water from wellboats containing salmon lice medicines" is available. Another guide aimed at fish farmers linked to the provisions laid down in § 15 of the Aquaculture Regulation is under development. There is no correct practice defining what is considered the environmentally responsible use of salmon lice medicines.

We kindly request to be included in the discussions related with the new guideline aimed at fish farms linked to the provisions laid down in §15 of the Aquaculture Regulation that is under development.

4. The Ministry's comments on the proposal for regulatory amendment

<u>Paragraph No 2:</u> The proposal conveys a requirement that bath treatment with salmon lice medicines must be carried out in wellboats/barges in fish farming facilities located in shrimp fields and/or spawning grounds or no more than 500 meters away. The water used for the lice treatment must be transported away from the facility.

Considering the scope of this document and potential impact on projects under development, we propose to consider that an efficient cleaning treatment of used bath water should be accepted as an alternative to transport from site (please refer to our project described above).

Finally, we would like to kindly propose a meeting to present our purification system project in more detail when the Minister and his collaborators consider appropriate.

With kind regards

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