



6th August 2021

## APPLICATION FOR VARIATION SITE: Seaforth AUTHORISATION REFERENCE: Seaforth CAR/L/1009963

Please find enclosed an application for a technical variation of the CAR licence for Seaforth Salmon Farm, leased and operated by Mowi in Loch Seaforth, Isle of Lewis.

The aquaculture industry currently has access to a very limited number of medicinal treatments to treat their salmon for two sea louse species. For any integrated pest management programme to maintain efficacy of treatment products and to prevent resistance, it is essential that their use is rotated and that repeat treatments with the same active ingredient are minimised. It is also vital that the industry farms sustainably and with efficacious amounts of medicine.

The application requests changes to the quantity of medicines containing the active ingredient azamethiphos used at the site.

The enclosed report presents results from coupled hydrodynamic and particle tracking modelling to describe the dispersion of bath treatments to determine EQS-compliant quantities for the current site biomass and equipment. The modelling procedure follows as far as possible guidance presented by SEPA in June 2019 (SEPA, 2019). The baseline simulation presented in the supporting modelling report was designed to be conservative and therefore provide confidence that the EQS will not be breached.

Seaforth and Noster Salmon Farms are managed together. Cumulative modelling of simultaneous treatments at the two sites (4 treatment releases per day) demonstrated that environmental quality standards were still comfortably met.

A third site with consent to discharge azamethiphos is located at Trilleachan Mor. Cumulative modelling of coincident treatments at all three sites (up to 5 releases per day) revealed the potential for an EQS breach at spring tides. Reducing the treatment schedule at Seaforth and Noster, such that only 2 pens per day were treated (at either Seaforth or Noster, or one pen at each) together with the daily treatments at Trilleachan Mor, successfully met the MAC and EQS conditions.

It should be noted that this treatment regime, 18 pens treated in 8 consecutive days, is extremely intensive and is unlikely to occur in reality. We can be confident that more realistic treatment regimes, provided that no more than 3 pens are treated in the whole loch system per day, will not breach environmental quality standards.



Please note that due to IT restrictions Mowi is unable to use the SEPA Portal at this time. Due to limits on the size of files that can be received by SEPA Registry via email the modelling files are not included with this submission but may be requested by the SEPA modelling team

when required.

A copy of the requisite application form G is attached together with a proof of payment for the application fee which has been made

The list of documents comprising the application are as follows:

- Application form G;
- Location and Site Plan;
- Proof of Payment;
- CAR Licence;
- Azamethiphos Dispersion Modelling Report
- Hydrographic Report (Annex 1. HG\_Sheets); and
- Raw Data Summary Data Sheet

Modelling files and further Raw Current Data are available on request as detailed above.

A copy of the site's historical CAR Licence documents were sent to SEPA recently as part of an application for CAR/L/1009963/VN2021-01. If required, a second copy is available on request.

Please do not hesitate to contact me if further clarification or information is required.

Yours sincerely

