
# SEPA Position Statement to support the implementation of the Water Environment (Controlled Activities) (Scotland) Regulations 2011

## Interim position statement for protecting the marine environment until such time as a Ministerial direction is issued on environmental standards for emamectin benzoate

## 1. Purpose

This statement sets out our interim position on the environmental standards that we will apply when assessing applications to discharge the in-feed sea lice medicine, emamectin benzoate, into the marine environment pending the establishment of new environmental standards for the medicine.

The statement replaces our previous interim position statement on emamectin benzoate published in October 2017.

## 2. Background

We use environmental standards to protect the marine environment from discharges of medicines from fish farms. By controlling the quantities of medicines that can be administered, we limit medicine discharges to levels calculated not to breach the environmental standards.

It is important that the environmental standards we use are based on the best scientific evidence available. As evidence changes, the standards may need to be updated accordingly.

In 2016, we commissioned independent scientific work to review the existing environmental standard for emamectin benzoate, the active ingredient in the sea lice medicines marketed as Slice and Quinafish. The review was prompted by indications from a study by the Scottish Association for Marine Science that the use of the medicine may be affecting crustaceans, a large and diverse group of animals that include shrimps, lobsters and crabs. It was undertaken by the consultancy, WRc and completed in 2017. It recommended new, tighter environmental standards for emamectin benzoate.

Following the conclusion of the WRc work, in our interim position statement issued in October 2017, we set out our regulatory approach pending the establishment of new environmental standards for the medicine. Under that interim position, we have been applying the standards recommended by WRc to assess and control the risk posed to marine protected areas and priority marine features from proposed new or increased discharges of emamectin benzoate.

In parallel, we progressed work to establish new environmental standards: We invited the sector and the medicine manufacturer to provide any additional scientific information that they may have on the toxicity of emamectin benzoate. We then requested the UK Technical Advisory Group (UKTAG) to consider all the available scientific evidence and make recommendations to Scottish Government on new standards. UKTAG is a partnership of the UK's environment and conservation agencies. It was set up jointly by the different government administrations from across the UK to provide scientific advice on environmental standards and other matters relating to the protection of the water environment.

UKTAG is in the process of developing its recommendations. This includes obtaining and considering independent scientific peer reviews of the evidence. After UKTAG makes its recommendations to the Scottish Government, Scottish Government will consult on draft directions on establishment of the standards.

In 2017, we conducted a survey of waters around fish farms to trial improved environmental monitoring strategies. Our subsequent analysis during 2018 of the environmental samples collected identified evidence of impacts on crustaceans. The impacts were proportional to the concentrations of emamectin benzoate in the seabed and were present at concentrations of the medicine below the current environmental standard. We have provided these findings to UKTAG.

The results of the analysis have increased the now substantial weight of scientific evidence that the existing standards do not adequately protect marine life. In light of this, and pending the establishment of the new standards, we are replacing the October 2017 interim position with this new, revised interim position. The revised position extends our use of the standards proposed by WRc to include assessing and controlling the risk posed by proposed new or increased discharges of emamectin benzoate to any areas of coastal waters.

## 3. Interim regulatory position

### A. Interim position for the determination of applications for new licences or variations to existing licences where new or increased discharges of emamectin benzoate are proposed.

When determining the above applications, the applicable environmental standards will be as follows:

| Interim environmental standards | |
|---|---|
| Cage edge (ie sea bed directly beneath the cage edge) | 120 ng per kg of marine sediment (dry weight) |
| Mixing zone edge (ie sea bed at 100 metres from the cage) | 12 ng per kg of marine sediment (dry weight) |

We will limit the total quantity of emamectin benzoate that can be administered in order to ensure compliance with the above interim environmental standards

### B. Interim position for existing, authorised discharges of emamectin benzoate

We will continue to ensure previously authorised discharges comply with their conditions of authorisation.

We will work with operators to seek their agreement to a voluntary reduction in the maximum quantity of in-feed treatment permitted for use by 60%.

## 4. Regulatory guidance

We will assess whether any proposal of the types listed below would result in concentrations of emamectin benzoate in the marine environment greater than the interim environmental standards. To do this, we will use the modelled data provided by the applicant.

If the modelled data are consistent with the achievement of the interim standards, we will authorise a total allowable quantity (TAQ) in accordance with the output of the model. Where the results are inconsistent with the achievement of the interim standards, we will refuse to authorise use of the quantity of emamectin benzoate being proposed.

### Types of proposal to which we will apply the interim environmental standards

1. Proposals to use emamectin benzoate at:
   (a) new farm sites;
   (b) farms re-locating outwith their current environmental footprint;
   (c) existing farms with no previous authorisation to use emamectin benzoate; and

2. Proposals to increase the use of emamectin benzoate at:
   (d) existing farms already authorised to use emamectin benzoate.

### Taking account of new environmental monitoring or modelling information

Existing farms that we have already authorised to discharge emamectin benzoate under the existing environmental standards rather than the interim environmental standards sometimes apply to vary other parts of their authorisations (eg limits on biomass; bath medicine residue discharges; etc). To support such applications, the farms will often submit new environmental monitoring or modelling information.

Where such new information is submitted, we will use it to check that the quantity of emamectin benzoate the farm is permitted to administer under its authorisation is low enough to ensure compliance with the existing environmental standards. Where it is not, we will vary the authorisation accordingly.