

March
2022



East Moclett, The North Sound Benthic Environmental Monitoring Plan (EMP)

Environmental Monitoring Plan, BENTHIC – SITE SPECIFIC

EMP/CAR/L/ 1191746

FOR

LICENCE REFERENCE NUMBER: CAR/L/ 1191746

ADDRESS OF PREMISES: East Moclett, North Sound, Orkney.

The responsible person (Cooke Aquaculture Scotland Limited), as named in the licence, will carry out monitoring at the premises as specified in the protocol below.

The benthic Environmental Monitoring Plan (EMP) will be modified, in agreement with SEPA should it be deemed necessary. The modified EMP will be dated and shall clearly state that it replaces and supersedes the previous version.

Version: 3

Dated: 30th March 2022.

Sampling Plans and Protocol

Sampling methods for benthic and in-feed chemical treatments will comply with Measurement Assurance and Certification Scotland (SEPA, 2019a) as well as Baseline survey & seabed and water quality monitoring plan design (SEPA, 2019b).

Monitoring Plan

The site consists of 160m circumference pens, in 1 group of 2 x 3 arrangement with a 110m grid separation. Pen centre locations are provided in table 1. The pen groups are aligned on a N axis. All pens at the site have a net depth of 21m.

Table 1. Pen centre locations.

Pen No.	Easting	Northing	Latitude	Longitude
1	352702	1048405	59°19.162'N	2°49.964'W
2	352702	1048515	59°19.222'N	2°49.965'W
3	352702	1048625	59°19.281'N	2°49.966'W
4	352812	1048405	59°19.163'N	2°49.848'W
5	352812	1048515	59°19.222'N	2°49.849'W
6	352812	1048625	59°19.282'N	2°49.850'W

The monitoring transects are illustrated in figure 1. The primary transect (T1) is aligned with the modelled benthic footprint. Transects T2-4 are arranged orthogonal to the farm. Transect details are provided in table 2. Each transect will comprise a maximum of 7 sample stations with the first sample station taken at the cage edge.

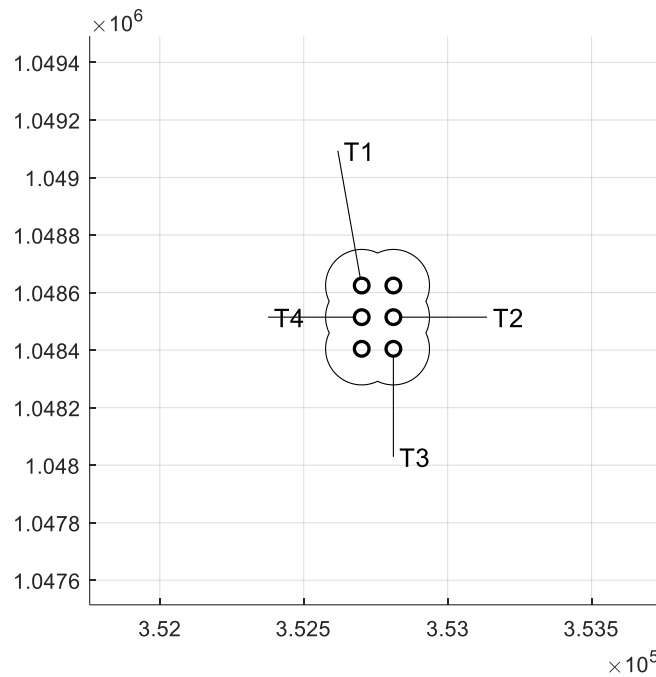


Figure 1. Pen layout with 100m mixing zone and benthic sampling transects.

Table 2. Benthic sampling transects information

Transect Name	Number	Bearing
NN	T1	350
EE	T2	90
SS	T3	180
WW	T4	270

In-feed Chemical Treatments

The in-feed chemical treatment of Emamectin Benzoate is sampled at all benthic sampling stations, providing chemical residue data along all transects. The results will be used to determine compliance under the current SEPA guidance (SEPA, 2022).

Reference

Scottish Environmental Protection Agency (2019a) "Measurement Assurance and Certification Scotland - Performance Standard MACS-WAT-01"

Scottish Environmental Protection Agency (2019b) "Baseline survey & seabed and water quality monitoring plan design".

Scottish Environmental Protection Agency (2022) "Seabed environmental standards - Demonstrating compliance: Guidance for operators".