

# **Marine Pen Fish Farm Permit**

# **Culnacnoc Salmon Farm**

# CAR/L/1189257

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# Introduction

# This introduction does not form part of the permit.



## Authorisations

**Who we are:** The Scottish Environment Protection Agency (SEPA) is a nondepartmental public body of the Scottish Government, established under the Environment Act 1995. Our purpose is to deliver environmental protection and improvement in ways that, as far as possible, also create health and wellbeing benefits and sustainable economic growth.

Why we issue authorisations: SEPA is responsible for preventing or controlling pollution and improving the quality of the environment. This responsibility includes regulating industrial and other processes that may be capable of causing pollution of the environment. One of the tools available to SEPA is the authorisation of certain activities that may present a risk to the environment.

Anyone who wishes to carry out one of these activities has to first apply to SEPA for an authorisation, be granted the authorisation, and thereafter carry out activities in line with conditions contained within the authorisation. It is an offence under the relevant legislation to breach a condition of an authorisation.

When we issue authorisations: SEPA will issue an authorisation when satisfied that an applicant has put in place measures to protect the environment and is capable of carrying out activities in line with the conditions of an authorisation. Authorisations allow activities to occur and set performance outcomes based on a site's environmental risk. SEPA can amend, suspend or revoke an authorisation in response to changes in legislation, site activities or authorisation holder performance. Sites that hold an authorisation may be monitored and inspected by SEPA Officers who assess compliance with the conditions of the authorisation. All authorisations and inspection reports are publicly available.

**Enforcement:** If an authorisation holder (or site operator) fails to comply with the conditions of the authorisation it may result in enforcement action being taken against it by SEPA in accordance with SEPA's enforcement policy and guidance.

Site Name and Location:	Culnacnoc Salmon Farm Sound of Raasay
Description of Authorised Activities:	The discharge to the water environment of fish excreta, uneaten food and other substances as listed in this permit resulting from the operation of a marine pen fish farm.
Environmental risks SEPA has regulatory powers to control:	The impact on the water environment due to the discharge of organic material and medicine residues from a pen fish farm.

#### General site information:



This authorisation has been granted by the Scottish Environment Protection Agency (SEPA) in exercise of its powers under The Water Environment (Controlled Activities) (Scotland) Regulations 2011.

Authorisation Number:	CAR/L/1189257	
Authorised Person:	Organic Sea Harvest Ltd	
Date of Authorisation:	8 September 2020	
Authorised Activities:	The discharge to the water environment of fish excreta, uneaten food and other substances as listed in this permit resulting from the operation of a marine pen fish farm.	
Authorised Place:	Culnacnoc Salmon Farm By Staffin Sound of Raasay NG 5316 6166	
<b>Conditions applicable to this</b> <b>authorisation:</b> The conditions in Schedules 1 to 7 of this authorisation. Terms used in this authorisation unless otherwise specified, defined in Sched		

[Redacted]

Signature: Authorised to sign on behalf of the Scottish Environment Protection Agency

Date: 08/09/2020



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# **Schedule 1: The Authorised Person and Activities**

**Purpose:** This schedule sets out what the authorised activities are and places responsibility on the authorised person for ensuring compliance with the permit conditions.

#### **1.1** Authorised Activities

1.1.1 The authorised activities are the discharge to the water environment of fish excreta, uneaten food and other substances as listed in this permit resulting from the operation of a marine pen fish farm.

## **1.2** Duty of Authorised Person

1.2.1 The authorised person must ensure compliance with the conditions of the permit.



# Schedule 2: Marine Pen Fish Farm Description

**Purpose:** This schedule limits the scale of the impact from the activities by controlling the maximum weight of fish, fallow periods and the specific location and layout of the fish farm.

#### 2.1 Fish Species

2.1.1 Atlantic Salmon (Salmo salar) must only be farmed at the site.

## 2.2 Maximum Weight of Fish

2.2.1 The maximum weight of Atlantic Salmon held on site at any one time must not exceed 2500 tonnes.

#### 2.3 Fallow Period

- 2.3.1 There must be a minimum period of 42 consecutive days between every production cycle during which Atlantic Salmon must not be kept on site.
- 2.3.2 SEPA must be notified in writing within 14 days of the site being stocked.
- 2.3.3 SEPA must be notified in writing within 14 days of the site being fallowed.
- 2.3.4 The information required by 2.3.2 and 2.3.3 must be sent to aquaculture.notifications@sepa.org.uk.



## 2.4 Pen Configuration

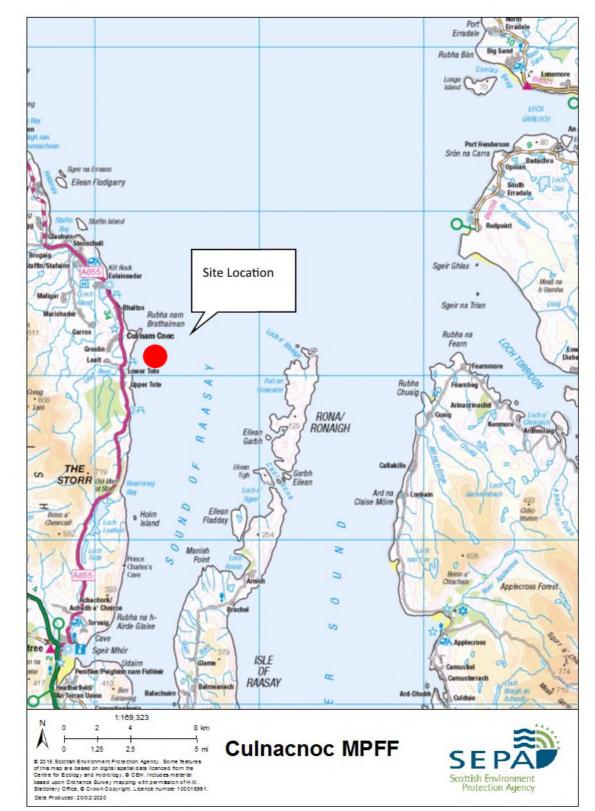
2.4.1 The fish pens must be configured as set out in Table 1.

#### Table 1Pen Configuration

Number of pens	12
Circumference of pens	120 m
Depth of nets	20 m
Number of different pen groups	1
Number of pens in each group	12
Number of pens in row 1	6
Number of pens in row 2	6

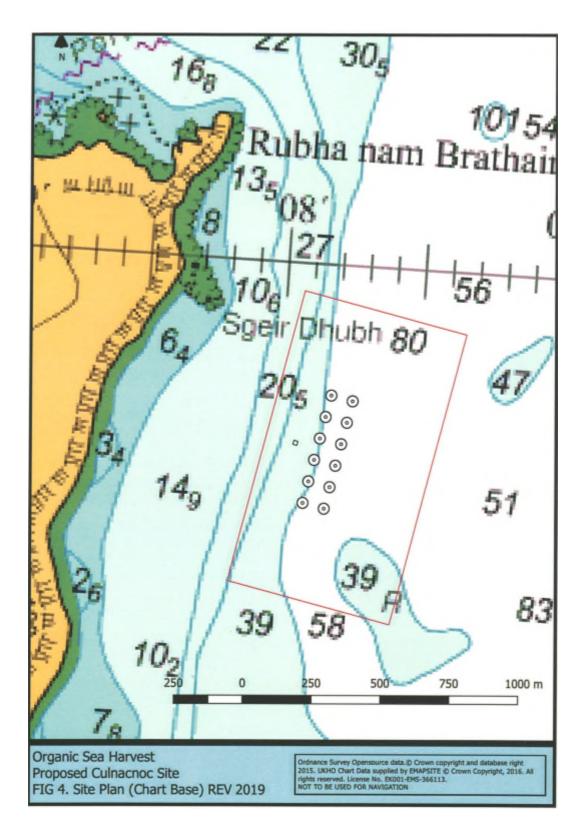
- 2.4.2 The authorised location of the fish pen group is within an area delineated by the red line in Figure 1 and bounded by the pen corner buoys located at the following National Grid References (NGRs):
  - 1. NG 53167 61883 (NW)
  - 2. NG 53275 61852 (NE)
  - 3. NG 53057 61469 (SW)
  - 4. NG 53160 61440 (SE)
- 2.4.3 The pen corner buoys must not be located at a distance greater than 50 metres in any direction from the NGRs listed in 2.4.2.





#### Figure 1 Fish Pen Location







# Schedule 3: Medicine Use

**Purpose:** This schedule sets out SEPAs expectation that the authorised person will manage their site in such a way that it minimises the discharge of medicines into the water environment. Where it is necessary to use medicines the conditions control their use to meet environmental standards.

#### 3.1 Medicine Minimisation

3.1.1 All reasonable steps must be taken to minimise the discharge of medicines and medicine residues.

#### 3.2 Medicines and Chemical Use

3.2.1 Only those medicines and chemicals specifically authorised in this Permit or in the Permitted Substance Working Plan (PSWP) Culnacnoc Salmon Farm, PSWP/CAR/L/1189257, version 1, dated 16/04/2020 may be discharged to the water environment.

## 3.3 Permitted Substance Working Plan

3.3.1 All medicines and chemicals named in the Permitted Substances working Plan (PSWP) Culnacnoc Salmon Farm, PSWP/CAR/L/1189257, version 1, dated 16/04/2020 must be used in accordance with the limits specified in the PSWP.

## 3.4 Bath Medicinal Treatments

3.4.1 The medicines in Table 2 must only be discharged following treatment of fish within an enclosure fully separated from the water environment.

Medicine name	Active ingredient
Salmosan, Salmosan Vet or Azasure	Azamethiphos
AMX or ALPHAMAX	Deltamethrin
Excis	Cypermethrin

#### Table 2 Permitted Medicines - Bath



- 3.4.2 The quantity of medicines in Table 2 used must not exceed:
  - (a) 320.9 grams of azamethiphos in any 24 hour period.
  - (b) 22.2 grams of deltamethrin in any 3 hour period.
  - (c) 0.22 grams of cypermethrin in any 3 hour period.
- 3.4.3 During any treatment in a single pen the medicines in Table 2 must not be combined with:
  - (a) Each other; or
  - (b) Any other substance or compound unless the substance or compound is specifically authorised in the Permitted Substances Working Plan and is used in accordance with the limits specified in the PSWP.
- 3.4.4 The enclosure in which fish are treated with azamethiphos must be reduced by a minimum of 70% of the full pen volume.
- 3.4.5 The enclosure in which fish are treated with deltamethrin must be reduced by a minimum of 70% of the full pen volume.
- 3.4.6 The enclosure in which fish are treated with cypermethrin must be reduced by a minimum of 70% of the full pen volume.
- 3.4.7 The medicines in Table 2 must not be discharged within 24 hours of the discharge of any bath treatment medicine from a vessel at the site.



## 3.5 In-feed Medicinal Treatments

#### Table 3 Permitted Medicines – in-feed

Medicine name	Active ingredient
Slice or Quinafish	Emamectin benzoate

- 3.5.1 Any treatment with the medicine in Table 3 must be carried out over a 7-day period.
- 3.5.2 Subject to 3.5.3 and 3.5.4, the total quantity of the medicine in Table 3 used in any treatment must not exceed 50 micrograms per kilogram of Atlantic Salmon treated per day.
- 3.5.3 Subject to 3.5.4, the total quantity of the medicine in Table 3 which may be used in any treatment may be increased to a maximum of 60 micrograms per kilogram of Atlantic Salmon treated per day, where it has been authorised in writing by a registered veterinarian.
- 3.5.4 Any treatment of the medicine in Table 3 must not exceed the maximum environmental quantity of 2.38 grams.



## 3.6 Notification of Medicine Use

3.6.1 SEPA must be given the information required in Table 4 no fewer than 2 working days before using any medicine in Table 2.

#### Table 4 Bath Medicine Notifications

Medicine type	Information required
Bath medicines	Quantity of medicine to be used (g or I)
	Quantity of active ingredient to be used (g or ml)
	Number of pens to be treated
	Proposed start and end date of treatment

3.6.2 SEPA must be given the information required in Table 5 no fewer than 5 working days before using any medicine in Table 3.

#### Table 5 In-Feed Medicine Notifications

Medicine type	Information required
In-feed medicines	Biomass at start of treatment (t)
	Biomass at end of treatment (t)
	Quantity of medicine to be used (kg)
	Quantity of active ingredient to be used (g)
	Proposed start and end date of treatment
	Veterinary authorisation, if applicable

3.6.3 The information required by 3.6.1 and 3.6.2 must be sent to aquaculture.notifications@sepa.org.uk.



# Schedule 4: Seabed Standards

**Purpose:** This schedule details the minimum environmental standards that must be met.

## 4.1 Biological Seabed Standards

- 4.1.1 The level of enrichment of the seabed immediately adjacent to the outer edge of any pen must not result in either:
  - (a) fewer than 2 species of re-worker polychaete worms per square metre; or
  - (b) fewer than 1,000 individual re-worker polychaete worms per square metre.
- 4.1.2 In assessing compliance with 4.1.1, the results for a particular location may be disregarded if:
  - (a) the seabed has been sampled at 4 or more locations immediately adjacent to the outer edge of any pens during the same monitoring period; and
  - (b) only one of the sampled locations does not meet the standard in 4.1.1.
- 4.1.3 The seabed around the fish farm at the boundary of an area of 188708m2 (the "mixing zone") must meet as a minimum an Ecological Quality Ratio (EQR) of 0.64 IQI at any time.

## 4.2 Chemical Seabed Standards

4.2.1 Emamectin benzoate concentrations must not exceed 23.5ng/kg (dry weight) in the seabed at the boundary of the mixing zone.



# Schedule 5: Environmental Monitoring

**Purpose:** This schedule requires fish farm operators to carry out environmental monitoring in line with SEPA guidance.

## 5.1 Environmental Monitoring Plan

- 5.1.1 An Environmental Monitoring Plan (EMP), written in accordance with Interim Performance Standard MACS-FFA-01 Version 1.0 Dated June 2019 must be submitted to SEPA no later than 31 December 2020.
- 5.1.2 During each production cycle, sampling must be carried out within a 70 day period beginning 35 days before the weight of fish is reduced to 75% of final peak biomass.
- 5.1.3 SEPA must be notified no fewer than 14 days before sampling is undertaken.
- 5.1.4 SEPA must be notified within 24 hours if monitoring is not carried out in accordance with:
  - (a) the Environmental Monitoring Plan referenced in 5.1.1; or
  - (b) the sampling period described in 5.1.2.
- 5.1.5 The information required by 5.1.3 and 5.1.4 must be sent to aquaculture.notifications@sepa.org.uk



# Schedule 6: Environmental Events

**Purpose:** This schedule requires the cessation, prevention and reporting of any potentially polluting event and/or breach of permit condition that may arise from the authorised activities.

## 6.1 Notification of SEPA

- 6.1.1 SEPA must be notified via its pollution hotline contact telephone number as soon as reasonably practicable, and in any case within 24 hours of identification of the event, of the following:
  - (a) Any event which has caused or could cause adverse impact to the environment or harm to human health;
  - (b) Any event that results, or could result, in an emission to the environment that is not authorised by this permit; and
  - (c) A breach of any condition of this permit.

#### 6.2 Management of the Event

6.2.1 All measures that are reasonably practicable must be taken to stop an event, as described in 6.1.1, and to minimise and/or mitigate its effect on the environment.

## 6.3 Reporting of the Event

- 6.3.1 Within 14 days of an event as described in 6.1.1, a report must be submitted to SEPA detailing:
  - (a) The reason(s) for the event;
  - (b) The action(s) taken to stop the event and minimise and/or mitigate the impacts; and
  - (c) The action(s) taken to prevent the event from recurring.



# Schedule 7: Record Keeping and Data Submission

**Purpose:** This schedule requires the authorised person to keep records of specific activities carried out on site and to provide SEPA with specified information at regular intervals, or upon request.

## 7.1 Data Recording

- 7.1.1 All information recorded, kept, or submitted to SEPA in accordance with a condition of this Permit must be:
  - (a) true and accurate;
  - (b) held for a minimum period of 6 years, and;
  - (c) provided to SEPA upon request.
- 7.1.2 Records must be kept of the following:
  - (a) all medicine use notifications;
  - (b) quantities of medicine used during each medicinal treatment (g or I);
  - (c) weight of Atlantic Salmon at end of each medicinal treatment (t);
  - (d) veterinary prescription for each bath or in-feed medicinal treatment (where applicable);
  - (e) veterinary authorisations in accordance with 3.5.3;
  - (f) total weight of Atlantic Salmon harvested per month (t).



# 7.2 Data Reporting

7.2.1 The information specified in Table 6 must be submitted on a quarterly basis no later than the relevant submission deadline in Table 7 for every calendar year during which the site is operational.

Requirement number	Information to be Submitted
1	Maximum weight of Atlantic Salmon held on site during each month (t)
2	Total amount of feed used per month (kg)
3	Total Salmosan and/or Salmosan Vet and/or Azasure used in each treatment (g)
4	Total AMX and/or ALPHAMAX used in each treatment (I)
5	Total Slice and/or Quinafish used in each treatment (g)
6	Total azamethiphos used in each treatment (g)
7	Total deltamethrin used in each treatment (g)
8	Total emamectin benzoate used in each treatment (g)
9	Total Excis used in each treatment (I)
10	Total cypermethrin used in each treatment (g)
11	Daily start and end times of each medicinal treatment
12	Start and finish dates of each medicinal treatment
13	Total use of each anti-parasitic listed in the PSWP each month (g)
14	Total use of each anti-microbial listed in the PSWP each month (g)
15	Total weight of mortalities of Atlantic Salmon each month (kg)

#### Table 6 Data Reporting Requirements



Quarter	Reporting Period	Submission Deadline
1	1 January – 31 March	28 April
2	1 April – 30 June	28 July
3	1 July – 30 September	28 October
4	1 October – 31 December	28 January

- 7.2.2 Results from the analysis of all samples collected in accordance with the Environmental Monitoring Plan as described in 5.1.1 must be submitted to SEPA no later than 16 weeks from the final date of each sampling period, as described in 5.1.2.
- 7.2.3 Within 4 weeks of the end of each production cycle a description of each of the steps taken in accordance with 3.1.1 and the dates and/or time period(s) over which they were implemented must be submitted to SEPA.
- 7.2.4 The information required by 7.2.1, 7.2.2 and 7.2.3 must be submitted via email, in the SEPA Marine Fish Farm Data Return Excel spreadsheet supplied by SEPA, to ffbiomass@sepa.org.uk.



# Schedule 8: Interpretation of Terms

For the purposes of this permit, and unless the context requires otherwise, the following definitions apply.

Term	Definition
authorised activities	The activities which are authorised under this permit and subject to the conditions of this permit.
authorised person	The person who is responsible for securing compliance with the terms of this permit and has been identified as such by SEPA in accordance with regulation 8(6) of the Water Environment (Controlled Activities) (Scotland) Regulations 2011
authorised place	The geographic location or locations at which the authorised activities are undertaken.
biomass	Means the total weight of fish, in tonnes, held on site at any one time.
controlled activity	Means an activity to which the regulations apply, in accordance with regulation 3(1) of the Regulations
environmental harm	Means:
	(a) Harm to the health of human beings or other living organisms,
	(b) Harm to the quality of the water environment, including:
	<ul><li>(i) harm to the quality of the water environment taken as a whole,</li></ul>
	<ul> <li>(ii) other impairment of, or interference with, the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems,</li> </ul>
	(c) offence to the sense of human beings,
	(d) damage to property, or
	(e) impairment of, or any interference with, amenities or other legitimate uses of the water environment.
final peak biomass	Means the period during which the total weight of fish held on site is at peak biomass for the last time before harvesting in each production cycle



Term	Definition
maximum environmental quantity	Means the maximum residual quantity of Emamectin Benzoate in the environment at any one time taking into account excretion and decay of all previous treatments which if complied with will meet the environmental quantity standard at the edge of the mixing zone.
mixing zone	Means the area of seabed immediately under and extending outwards from a fish farm in which the discharge from the fish farm is likely to have an adverse impact on the environment.
peak biomass	Means the maximum weight of fish, in tonnes, held on site during a single production cycle.
pen	Means an enclosed cage, net or other structure in which fish are kept.
Permit	Means an authorisation under regulation 8 of the Water Environment (Controlled Activities) (Scotland) Regulations 2011.
production cycle	Means any period of time during which fish are on- grown in pens at sea until they are removed for transfer and/or slaughter.
SEPA Officer	Means any person who is authorised by SEPA under regulation 31(4) of the Regulations to exercise the powers specified in Part 1 of Schedule 6 of the Regulations for the purposes specified in Regulation 31(5) of the Regulations.
SEPA	Scottish Environment Protection Agency.
the water environment	Means all surface water, groundwater and wetlands
weight of fish	Means the weight of fish including stomach contents and body fluids. This shall not be after any period of starvation.

Except where specified otherwise, any reference to an enactment or statutory instrument includes a reference to it as amended (whether before or after the date of the permit) and to any other enactment, which may after the date of the permit replace or amend it.