Marine Pen Fish Farm Permit

<Site Name>

<Authorisation Number>

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Every day SEPA works to protect and enhance Scotland's environment, helping communities and businesses thrive within the resources of our planet.

We call this One Planet Prosperity

Introduction

This introduction is not part of the authorisation.

Authorisations

Who we are: The Scottish Environment Protection Agency (SEPA) is a non-departmental public body of the Scottish Government. 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 environment. One of the tools available to SEPA is the authorisation of activities that present environmental risk. Authorisations give permission for these activities to occur and set conditions that the activities must comply with.

When we issue authorisations: SEPA will issue an authorisation following our determination of an application, when satisfied that the authorised person has put in place measures to protect the environment and is capable of carrying out activities in line with the conditions of an authorisation.

Changes to authorisations: SEPA can amend, suspend or revoke an authorisation in response to changes in legislation, the activities undertaken or authorisation holder performance.

Compliance and enforcement: SEPA Officers may undertake monitoring and inspections to assess compliance with authorisation conditions. All authorisations and inspection reports are publicly available. If an authorised person fails to comply with an authorisation, SEPA may take enforcement action in line with our enforcement policy and guidance.

General information:

Address:	<Site Address - Line 1> <Site Address - Line 2> <Site Address - Line 3> <Site Postcode>
Description of authorised activities:	The operation of a marine pen fish farm including the abstraction of water and the discharge to the water environment of fish excreta, uneaten food and other substances as listed in this permit.
Environmental risks SEPA has regulatory powers to control:	The adverse impact on the water environment due to the abstraction of water and the discharge of organic material, medicines and permitted substances from a pen fish farm.

Authorisation Number: XXX/Y/123456

Notice: Grant of Authorisation

This authorisation has been granted by the Scottish Environment Protection Agency (SEPA) in exercise of its powers under:

Regulation 8 of the Water Environment (Controlled Activities) (Scotland) Regulations 2011 ("the Regulations")

Authorisation Number:	<<Enter Authorisation Number>>
Authorised Person:	<<Authorised Person>> <<Company Number - if applicable>> <<Registered Address>>
Date of Authorisation:	<<DD/MM/YYYY>>
Authorised Activities:	The operation of a marine pen fish farm including the abstraction of water and the discharge to the water environment of fish excreta, uneaten food and other substances as listed in this permit.
Authorised Place:	<<Enter Site Name>>
Conditions applicable to this authorisation:	The conditions contained in the schedules of this authorisation. Terms used in this authorisation are, unless otherwise specified, defined in the Interpretation of Terms schedule.

Authorisation Number: XXX/Y/123456

SEPA Scottish Environment Protection Agency Buidheann Dìon Àrainneachd na h-Alba

Contents

Schedule 1: The Authorised Person and Activities

Purpose: This schedule places responsibility on the authorised person to ensure compliance with the conditions of this authorisation, and details the activities that can be carried out.

1.1 Duty of Authorised Person

1.1.1 The authorised person must ensure compliance with the conditions of this authorisation.

1.2 Authorised Activities

1.2.1 The authorised activities are:

(a) the discharge to the water environment of fish excreta, uneaten food and other substances as listed in this permit; and

(b) the abstraction of more than 10m^3/day of seawater.

Authorisation Number: XXX/Y/123456

Schedule 2: Marine Pen Fish Farm Description

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

2.1 Fish Species

2.1.1 Atlantic Salmon *(Salmo salar)*ORRainbow Trout *(Oncorhynchus mykiss)* OR<<Insert names of other species, if applicable. Please include English and scientific names>> must only be farmed at the authorised place.

2.2 Maximum Weight of Fish

2.2.1 The maximum weight of Atlantic SalmonORRainbow TroutOR<<Insert names of other species, if applicable>> held at the authorised place at any one time must not exceed <<Enter Value>>tonnes.

2.3 Fallow Period and Restocking

2.3.1 There must be a minimum fallow period of 28 consecutive days between each production cycle during which Atlantic SalmonORRainbow TroutOR<<Insert names of other species, if applicable>> must not be kept at the authorised place.

2.3.2 SEPA must be notified in writing within 14 days of the authorised place being stocked.

2.3.3 SEPA must be notified in writing within 14 days if the authorised place is stocked with fish that have been treated with the active ingredient in Table 3.

2.3.4 SEPA must be notified in writing within 14 days of the authorised place being fallowed.

2.3.5 The information required by 2.3.2, 2.3.3 and 2.3.4 must be sent to aquaculture.notifications@sepa.org.uk.

2.3.6 OPTIONAL Delete if not required The site must be operated in accordance with the Management Agreement concluded between <<Enter Party A>>, <<Enter Party B>> and <<Enter Party C (if applicable, else delete)>>, reference <<Enter Reference>> dated <<Enter Date>>.

2.4 Pen Configuration

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

Table 1 Pen Configuration

Number of pens	<<Enter Value>>
Circumference of pens	<<Enter Value, in metres>>m
OPTIONAL for square pens, delete if not requiredLength of pen sides	<<Enter Values, e.g. 24x24, in metres>>m
Depth of nets	<<Enter Value, in metres>>m
Number of different pen groups	<<Enter Value>>
Number of pens in each group	<<Enter Value>>
Number of pens in row 1	<<Enter Value>>
Number of pens in row 2	<<Enter Value>>

2.4.2 The authorised location of the fish pen group is within an area delineated in Figure 1 and bounded by the pen corner buoys located at the following National Grid References (NGRs):

1. <<Enter NGR 1>> (<<Enter appropriate cardinal point, e.g. NW>>)
2. <<Enter NGR 2>> (<<Enter appropriate cardinal point, e.g. NE>>)
3. <<Enter NGR 3>> (<<Enter appropriate cardinal point, e.g. SW>>)
4. <<Enter NGR 4>> (<<Enter appropriate cardinal point, e.g. 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.

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Figure 1 Fish Pen Location

Schedule 3: Permitted Medicines and Substances

Purpose: This schedule limits the risk to the water environment from the discharge of fish medicines and requires the authorised person to use the water environment efficiently by taking reasonable steps to minimise those discharges.

3.1 Medicine Discharge Minimisation

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

3.2 Medicines and Permitted Substances

3.2.1 Only those medicines and other substances specifically authorised in this Permit may be discharged to the water environment.

3.3 Bath Medicinal Treatments

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

Table 2 Permitted Medicines - Bath

Medicine name	Active ingredient
Salmosan, Salmosan Vet or Azasure	Azamethiphos
AMX or ALPHAMAX	Deltamethrin
OPTIONAL - delete row if not required Excis	OPTIONAL - delete row if not required Cypermethrin

3.3.2 The quantity of medicines in Table 2 used, whether in a pen or a vessel or a combination of both must not exceed:

(a) <<Enter Value>> grams of azamethiphos in any 24 hour period.

(b) OPTIONAL Delete if not required<<Enter Value>> grams of azamethiphos in any 3 hour period.

(c) <<Enter Value>> grams of deltamethrin in any 3 hour period.

(d) OPTIONAL Delete if not required<<Enter Value>> grams of cypermethrin in any 3 hour period.

3.3.3 During any treatment:

(a) the medicines in Table 2 must not be combined in either a pen or vessel;

(b) in-feed medicines and the medicines in Table 2 must not be used simultaneously in the same pen; and

(c) the medicines in Table 2 must not be combined with any other substance or compound unless the substance or compound is included as a category in Table 4.

3.3.4 OPTIONAL There may be a requirement for different pen volume reductions for each medicine.When carrying out treatments in a pen, the enclosure in which fish are treated with <<Enter Medicine Name OR enter the medicines in Table 2 (if reduction for all medicines is the same)>> must be reduced by a minimum of <<<<Reduction should normally be between 50 & 70%. Can be outwith this on a site-specific basis>>>> of the full pen volume.

3.3.5 OPTIONAL There may be a requirement for different pen volume reductions for each medicine.When carrying out treatments in a pen, the enclosure in which fish are treated with <<Enter Medicine Name(s)>> must be reduced to a minimum of <<Reduction should normally be between 50 & 70%. Can be outwith this on a site specific basis>> of the full pen volume.

3.3.6 Discharges of medicines from a vessel must only be made whilst the vessel is moored to the fish pens or maintaining position immediately adjacent to the fish pens.

3.4 In-feed Medicinal Treatments

Table 3 Permitted Medicines – in-feed

Medicine name	Active ingredient
Slice or Quinafish	Emamectin benzoate

3.4.1 Any treatment with the active ingredient in Table 3 must be carried out over a minimum 7-day period.

3.4.2 Subject to 3.4.3, the total amount of the active ingredient in Table 3 used in any treatment must not exceed an amount equivalent to treating the Atlantic SalmonORRainbow TroutOR<<Insert names of other species, if applicable>> at a rate of 60 micrograms per kilogram of fish per day over a 7 day period.

3.4.3 Any discharge of the active ingredient in Table 3 must not exceed the maximum environmental quantity of <<Enter Value>> grams.

3.5 Permitted Substances

3.5.1 Substances listed as categories in Table 4 must only be discharged subject to the corresponding limits in Table 4.

Table 4 Permitted Substances

Category	Limits
Anaesthetics	Prior to discharge, anaesthetics must be diluted to an appropriate working strength. Where the quantity of dilute anaesthetics is greater than 150 litres, it must be discharged over a minimum period of 15 minutes.
Antifoulants	Anti-foulants must only be used for the purposes of protecting fish farm infrastructure and equipment from excessive growth of marine flora and fauna. Discharge of anti-foulants to the water environment must only be as a result of leaching or erosion from previously treated surfaces. Removal of antifoulants must not be carried out at the authorised place. Application of antifoulants must not be carried out at the authorised place.
Anti-microbials	Anti-microbials must only be discharged to the water environment following treatment of fish with an in-feed formulation of the medicine.
Anti-parasitics	Must only contain hydrogen peroxide as the active ingredient. Must only be discharged following treatment of fish within an enclosure fully separated from the water environment or following treatment of fish within a vessel. When carrying out treatments in a pen, the enclosure in which fish are treated must be reduced by a minimum of 70% of the full pen volume.
Detergents	Discharge of detergents to the water environment must only be as a result of wash-off from treated surfaces.
Disinfectants	Discharge of disinfectants to the water environment must only be as a result of wash-off from treated surfaces.
Lubricants of fish contact surfaces	Must only contain tetrasodium EDTA as the active ingredient. Prior to discharge, products containing tetrasodium EDTA must be diluted to 0.2mg/l.

3.6 Notification of Medicine Use

3.6.1 When, in the opinion of a veterinary surgeon, fish require to be treated with any medicine in Table 2 in less than 48 hours, SEPA must be given the information in Table 5 no less than 24 hours before any such treatment is carried out. In all other circumstances, SEPA must be given the information required in Table 5 no less than 48 hours before the use of any medicine in Table 3.

Table 5 Bath Medicine Notifications

Medicine type	Information required
Bath medicines	Name of medicine to be used
	Proposed start date of treatment

3.6.2 SEPA must be given the information required in Table 6 no less than 7 days before using any medicine in Table 3.

Table 6 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

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 in order to protect the flora and fauna within the seabed.

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 <<Enter Value>>m2 (the “mixing zone”) must meet as a minimum an Ecological Quality Ratio (EQR) of 0.64 IQI (Infaunal Quality Index) at any time.

4.2 Chemical Seabed Standards

4.2.1 Emamectin benzoate concentrations must not exceed 272ng/kg (dry weight) in the seabed at the boundary of the mixing zone.

Schedule 5: Environmental Monitoring

Purpose: This schedule requires the authorised person to carry out environmental monitoring in accordance with SEPA guidance.

5.1 Environmental Monitoring Plan

5.1.1 Monitoring to assess the standards in 4.1.1, 4.1.3 and 4.2.1 must be carried out in accordance with:

(a) OPTIONAL - Delete if not requiredThe Environmental Monitoring Plan (EMP) <<Enter the Document name, Reference number, Version number, Date of document>>.

(b) Measurement assurance and certification Scotland, Performance standard MACS-FFA-PS-01, Finfish Aquaculture Sector, Sampling of soft-substrate, version 1 dated March 2022.

(c) Measurement Assurance and Certification Scotland, Performance standard MACS-FFA-PS-02 Finfish Aquaculture Sector, Physical and chemical testing, version 1, dated March 2022.

(d) Measurement Assurance and Certification Scotland, Performance standard MACS-FFA-PS-03 Finfish Aquaculture Sector, Biological testing, version 1, dated March 2022.

5.1.1 OPTIONAL condition - Delete if not requiredAn Environmental Monitoring Plan (EMP), written in accordance with the SEPA document “Marine Finfish Farms Seabed environmental standards Demonstrating compliance guidance for operators”, version 1, dated March 2022 must be submitted to SEPA no later than <<Enter Date>>.

5.2 Sampling Period

5.2.1 Subject to 5.2.2, during each production cycle, sampling to assess the standards in 4.1.1, 4.1.3 and 4.2.1 must:

(a) Begin no earlier than 10 days before the weight of fish is reduced to 75% of final peak biomass and;

(b) Be completed no later than 70 days after the weight of fish is reduced to 75% of final peak biomass.

5.2.2 Where more than one production cycle is carried out in each 24 month period, sampling in accordance with condition 5.2.1 is only required once in that period.

5.3 Notification of Monitoring

5.3.1 SEPA must be notified by email at aquaculture.notifications@sepa.org.uk no less than 14 days before sampling in accordance with 5.2.1 is undertaken.

Schedule 6: Environmental Events

Purpose: This schedule requires the cessation, prevention and reporting of any potentially polluting event 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 an event, of any of the following:

(a) an event that has caused or could cause adverse impact to the environment or harm to human health;

(b) an event that results, or could result, in an emission to the environment that is not authorised by this permit; and

(c) an event that has caused a breach of a condition of this authorisation.

In this condition, the meaning of 'event' is as defined in the Interpretation of Terms in schedule 8 of this authorisation.

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 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 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 l);

(c) weight of Atlantic SalmonORRainbow TroutOR<<Insert names of other species, if applicable>> at the end of each medicinal treatment (t);

(d) names and total amounts of each anaesthetic used each month(l);

(e) names and total amounts of each detergent used each month (l);

(f) names and total amounts of each disinfectant used each month (l), and;

(g) total weight of Atlantic SalmonORRainbow TroutOR<<Insert names of other species, if applicable>> harvested per month (t).

7.2 Data Reporting

7.2.1 The information specified in Table 7 must be submitted on a quarterly basis in the 'SEPA Marine Fish Farm Data Return' Excel spreadsheet, supplied by SEPA, to ffbiomass@sepa.org.uk no later than the relevant submission deadline in Table 8 for every calendar year during which the site is operational.

Table 7 Data Reporting Requirements

Requirement number	Information to be Submitted
1	Maximum weight of Atlantic SalmonORRainbow TroutOR<<Insert names of other species, if applicable>> 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 (l)
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	OPTIONAL - delete row if cypermethrin not used Total Excis used in each treatment (l)
10	OPTIONAL - delete row if cypermethrin not used Total cypermethrin used in each treatment (g)
11	Daily start and end times of each bath medicinal treatment
12	Start and finish dates of each medicinal treatment
13	Dates in each medicinal treatment on which medicines were used
14	Name of vessel used, where applicable
15	The names and total amounts of each anti-parasitic used each month (kg)
16	The names and total amounts of each anti-microbial used each month (g)

17	The name of any substance listed in Table 4 used in combination with any bath medicinal treatment
18	The number of pens treated in each bath medicinal treatment
19	Total weight of mortalities of Atlantic SalmonORRainbow TroutOR<<Insert names of other species, if applicable>> each month (kg)

Table 8 Data Reporting Submission Deadline

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 5.1.1 must be submitted to aquaculture.monitoring@sepa.org.uk in the Environmental Monitoring Survey Results Template Excel spreadsheet no later than <<16 weeks if site is high risk, 26 weeks if site is low risk>> weeks from the final date of each sampling period, as described in 5.2.1.

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 sent to aquaculture.notifications@sepa.org.uk .

Schedule 8: Interpretation of Terms

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

Term	Definition
authorisation	the water use licence granted by SEPA under <<Regulation 8 for new permits or Regulation 15 for variations>>of The Water Environment (Controlled Activities) (Scotland) Regulations 2011 with licence number <<Enter authorisation number, e.g. CAR/L/1234567>>
authorised activities	the activities which may be carried on under this authorisation, as detailed in Schedule 1 For variations ONLY, please retain the following text, otherwise delete Any reference to "the controlled activity or activities" in the authorisation is a reference to the authorised activity or activities
authorised person	the holder of this authorisation, and person responsible for securing compliance with the conditions of it For variations ONLY, please retain the following text, otherwise delete Any reference to "the responsible person" in the authorisation is a reference to the authorised person
authorised place	the geographic location or locations at which the authorised activities may be carried on.
biomass	the total weight of fish, in tonnes, held on site at any one time.
controlled activity	an activity to which the regulations apply, in accordance with regulation 3(1) of the Regulations

Term	Definition
environmental harm	(a) Harm to the health of human beings or other living organisms, (b) Harm to the quality of the water environment, including: (i) harm to the quality of the water environment taken as a whole (ii) other impairment of, or interference with, the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems, (c) offence to the senses of human beings, (d) damage to property, or (e) impairment of, or any interference with, amenities or other legitimate uses of the water environment.
event	(a) any accident which has caused or could cause environmental harm; or (b) any malfunction, breakdown or failure of plant, infrastructure or techniques which has caused or could cause environmental harm; or (c) force majeure or action taken to save human life or limb
final peak biomass	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
IQI (Infaunal Quality Index)	a multi-metric index used to describe changes in benthic invertebrate community in response to anthropogenic pressures.
maximum environmental quantity	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	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	the maximum weight of fish, in tonnes, held on site during a single production cycle.
pen	an enclosed cage, net or other structure in which fish are kept.

Term	Definition
permit	an authorisation under regulation 8 of the Water Environment (Controlled Activities) (Scotland) Regulations 2011.
production cycle	any period of time, during which fish are on-grown in pens at sea: (a) beginning when pens are stocked with fish for the first time or following any fallow period; and (b) ending when those fish are removed for transfer and/or slaughter.
SEPA Officer	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	all surface water, groundwater and wetlands
vessel	any ship, boat, craft or other vehicle which is used to carry out sea lice medicine treatments
weight of fish	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 authorisation) and to any other enactment, which may after the date of the authorisation replace or amend it.