

Media Backgrounder (October 2018):

All is Not Well With Sick Scottish Salmon

- **Unreported Use of Toxic Chemicals Via Wellboats Slips Net**
 - **Lethal Plumes of Poison Flooding Scottish Lochs**
 - **New Scientific Paper Raises Serious Concerns**
- **Norway proposes a ban on toxic chemical use on salmon farms**
- **SEPA now reviewing toxicity of Azamethiphos & Hydrogen Peroxide (???)**



Summary:

The use of toxic chemicals via wellboats to treat lice-infested Scottish salmon is slipping through the net. According to SEPA, [Scotland's Aquaculture database](#) does NOT record the use of Azamethiphos and Deltamethrin via wellboats and does NOT record use of Hydrogen Peroxide at all.

Data on the use of Azamethiphos and Deltamethrin is recorded via [SEPA's Scottish Pollutant Release Inventory](#) but is not available for 2017 and 2018 (Hydrogen Peroxide use is not recorded at all).

FOI documents obtained from the Scottish Government and SEPA reveal that reporting on the use of toxic chemicals via wellboats is haphazard, at extremely short notice and in some cases (e.g. Scottish Sea Farms in Loch Nevis in December 2016) reporting takes place after the use of toxic chemicals (i.e. breach of the licence).

Data suggests an explosion in the use of Azamethiphos, Deltamethrin and Hydrogen Peroxide via wellboats (although the data sets available make it impossible to calculate annual use figures).

Data [disclosed by the Scottish Government in June 2018](#) reveals that dozens of wellboats - mostly registered in Norway but some in Chile and Canada - are now licensed by Marine Scotland until as far away as 2021 to discharge toxic chemicals from over 100 salmon farms around Scotland.

A wellboat treatment by [Kames](#) in September 2017 in Loch Shuna took five days and used 30 bottles of Alphamax (7.5 litres). [Alphamax contains the toxic chemical Deltamethrin](#) which the Veterinary Medicines Directorate warned in August 2017:

The substance is toxic to crustaceans and should not be used in sea farms where crabs or lobsters are kept in the close vicinity of the treated sea-cages (<200 m), or when local water-currents increase the likelihood of exposure.

To prevent toxic effects on local aquatic organisms and to prevent toxic waste of deltamethrin to be washed into the littoral zone, bath treatment should be performed at outgoing tide or during periods with a local outgoing current.

Deltamethrin is toxic to aquatic and sediment living species and may cause adverse effects in the vicinity of treated sea cages. Also at distances of up to 4 kilometers downstream short term effects after treatment can be seen in sensitive organisms. Deltamethrin demonstrates high affinity to organic matter and particles in the water column and in sediments. Deltamethrin is very stable and slowly degradable when bound to sediments, both at aerobic and anaerobic conditions.

VMD document online via

[Revised: August 2017 AN: 01665/2016 SUMMARY OF PRODUCT ...](#)

A new scientific paper [published in the February 2019 issue of *Science of the Total Environment*](#) concludes that the use of Azamethiphos, Cypermethrin, Deltamethrin and Hydrogen Peroxide "have detrimental effects on non-target species".

In September 2018, the Norwegian Government's Ministry of Food & Fisheries [proposed a ban](#) on the use of toxic chemicals via tarpaulins. "The move follows surprising and controversial early findings in one scientific study that hydrogen peroxide, regarded as the least environmentally harmful of the chemicals used to kill sea lice, can damage shrimp stocks," [reported](#) Fish Farming Expert (25 September 2018).

Norwegian research presented in March 2018 on "[Environmental effects of chemicals used against sea lice](#)" reported [significantly increased mortality of shrimp](#) by both Deltamethrin and Hydrogen Peroxide.

In August 2016, a [report published by the Scottish Aquaculture Research Forum](#) revealed that the use of Emamectin benzoate (SLICE) was [lethal to lobsters](#). However, SEPA [dropped a proposal](#) to ban the use of Emamectin [following lobbying by the Scottish salmon farming industry](#), the [chemical company Merck](#) and the [Scottish Government](#) (read more [online here](#) and via "[Slicegate: Anatomy & Chronology of an Environmental Lobotomy](#)").

SEPA is now understood to be reviewing the use of both Azamethiphos and Hydrogen Peroxide (John Aitchison, pers. comm).

In January 2017, The Sunday Times [revealed a 1000% increase](#) in the use of toxic chemicals on Scottish salmon farms over the last decade (but this [data set](#) did not include use via wellboats or the [sky-rocketting use of hydrogen peroxide](#)).

According to data obtained from [Scotland's Aquaculture](#) there has only been six reported uses of Deltamethrin in 2018 (data since July will be published in December):

Monthly Biomass & Treatment Reports > Report Month > From date: 01/01/1900 To date: 13/10/2018

Water Type --All-- Local Authority --All-- Sealice Treatment Used Deltamethrin

Apply Current Filters Show All Results Clear All Filters CSV Export

Show/Hide Advanced Filters

| Month | Year | Licence Site ID | Licence Site Name | Licence Number | Licence Holder | Actual Biomass on Site (Tonnes) | Actions |
|----------|------|-----------------|--------------------------------------|----------------------|---------------------------------|---------------------------------|----------------------|
| May | 2018 | COL3 | Swining Voe Site 3 (Collafirth Ness) | CAR/L/1003929/V6 | Grieg Seafood Shetland Ltd | 978 | More |
| February | 2018 | KYL1 | Kyles Vuia East | CAR/L/1001791/V4 | The Scottish Salmon Company Ltd | 1279 | More |
| February | 2018 | FFMC04N | Port na Moine Site 2 (North) | CAR/L/1020918/V6 | Marine Harvest (Scotland) Ltd | 160 | More |
| February | 2018 | VACR1 | Vacasay, Roag | CAR/L/1005041/V9 | The Scottish Salmon Company Ltd | 917 | More |
| January | 2018 | SCOT1 | Scotasay | CAR/L/1004080 /C1/V6 | Marine Harvest (Scotland) Ltd | 914 | More |
| January | 2018 | COL3 | Swining Voe Site 3 (Collafirth Ness) | CAR/L/1003929/V6 | Grieg Seafood Shetland Ltd | 1550 | More |

There were [82 reported uses of Deltamethrin in 2017](#) although many more uses are believed to have been carried out via wellboats:

Monthly Biomass & Treatment Reports > Report Month > From date: 01/01/1900 To date: 31/12/2017

Water Type --All-- Local Authority --All-- Sealice Treatment Used Deltamethrin

Apply Current Filters Show All Results Clear All Filters CSV Export

Show/Hide Advanced Filters

| Month | Year | Licence Site ID | Licence Site Name | Licence Number | Licence Holder | Actual Biomass on Site (Tonnes) | Actions |
|-----------|------|-----------------|--------------------------------------|----------------------|---------------------------------|---------------------------------|----------------------|
| December | 2017 | DUI1 | Duich | CAR/L/1010433/V7 | Marine Harvest (Scotland) Ltd | 1868 | More |
| December | 2017 | COL3 | Swining Voe Site 3 (Collafirth Ness) | CAR/L/1003929/V6 | Grieg Seafood Shetland Ltd | 1389 | More |
| November | 2017 | NEPL1 | East of Papa Little | CAR/L/1108670/V2 | Grieg Seafood Shetland Ltd | 1245 | More |
| November | 2017 | FFMC04N | Port na Moine Site 2 (North) | CAR/L/1020918/V6 | Marine Harvest (Scotland) Ltd | 87 | More |
| November | 2017 | FFMC33 | Shuna Castle Bay | CAR/L/1000801 /C1/V3 | Kames Fish Farming Ltd | 584 | More |
| November | 2017 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 322 | More |
| November | 2017 | COL3 | Swining Voe Site 3 (Collafirth Ness) | CAR/L/1003929/V6 | Grieg Seafood Shetland Ltd | 1268 | More |
| October | 2017 | APT1 | Aird Point (Etive 4) | CAR/L/1018068/V5 | Dawnfresh Farming Ltd | 876 | More |
| October | 2017 | ARDN1 | Ardnish | CAR/L/1002887/V9 | Marine Harvest (Scotland) Ltd | 300 | More |
| October | 2017 | IOEWE2 | Isle of Ewe | CAR/L/1002963/V8-R | Marine Harvest (Scotland) Ltd | 99 | More |
| October | 2017 | FFMC37 | Kames Bay | CAR/L/1000237/V3 | Kames Fish Farming Ltd | 243 | More |
| October | 2017 | FFMC33 | Shuna Castle Bay | CAR/L/1000801 /C1/V3 | Kames Fish Farming Ltd | 585 | More |
| September | 2017 | APT1 | Aird Point (Etive 4) | CAR/L/1018068/V5 | Dawnfresh Farming Ltd | 788 | More |
| September | 2017 | GRN1 | Greanamul | CAR/L/1112630/V4 | The Scottish Salmon Company Ltd | 1416 | More |
| September | 2017 | FFMC37 | Kames Bay | CAR/L/1000237/V3 | Kames Fish Farming Ltd | 248 | More |

Data obtained from [Scotland's Aquaculture](#) reveals multiple use of Azamethiphos at salmon farms across Scotland. For example, [Marine Harvest's](#) salmon farm in [Loch Greshornish](#) has used Azamethiphos at least four times during 2018 (data since July will be published in December) and five times in 2016:

Monthly Biomass & Treatment Reports > Report Month > From date: 01/01/1900 To date: 13/10/2018

Water Type --All-- Local Authority --All-- Sealice Treatment Used Azamethiphos

Apply Current Filters Show All Results Clear All Filters CSV Export

Show/Hide Advanced Filters

| Month | Year | Licence Site ID | Licence Site Name | Licence Number | Licence Holder | Actual Biomass on Site (Tonnes) | Actions |
|-----------|------|-----------------|-------------------|------------------|-------------------------------|---------------------------------|----------------------|
| | | | greshornish | | marine harve: | | |
| May | 2018 | GRE1 | Greshornish | CAR/L/1002890/V7 | Marine Harvest (Scotland) Ltd | 1670 | More |
| April | 2018 | GRE1 | Greshornish | CAR/L/1002890/V7 | Marine Harvest (Scotland) Ltd | 1487 | More |
| March | 2018 | GRE1 | Greshornish | CAR/L/1002890/V7 | Marine Harvest (Scotland) Ltd | 1363 | More |
| February | 2018 | GRE1 | Greshornish | CAR/L/1002890/V7 | Marine Harvest (Scotland) Ltd | 1505 | More |
| September | 2016 | GRE1 | Greshornish | CAR/L/1002890/V7 | Marine Harvest (Scotland) Ltd | 588 | More |
| August | 2016 | GRE1 | Greshornish | CAR/L/1002890/V7 | Marine Harvest (Scotland) Ltd | 1387 | More |
| July | 2016 | GRE1 | Greshornish | CAR/L/1002890/V7 | Marine Harvest (Scotland) Ltd | 2129 | More |
| June | 2016 | GRE1 | Greshornish | CAR/L/1002890/V7 | Marine Harvest (Scotland) Ltd | 2179 | More |
| February | 2016 | GRE1 | Greshornish | CAR/L/1002890/V7 | Marine Harvest (Scotland) Ltd | 1656 | More |

[Marine Harvest's](#) salmon farm at [Eilean Raineach](#) used Azamethiphos at least three times in 2018 (data since July will be published in December), five times in 2016 and six times in 2014:

Monthly Biomass & Treatment Reports > Report Month > From date: 01/01/1900 To date: 13/10/2018

Water Type --All-- Local Authority --All-- Sealice Treatment Used Azamethiphos

Apply Current Filters Show All Results Clear All Filters CSV Export

Show/Hide Advanced Filters

| Month | Year | Licence Site ID | Licence Site Name | Licence Number | Licence Holder | Actual Biomass on Site (Tonnes) | Actions |
|-----------|------|-----------------|-------------------|------------------|-------------------------------|---------------------------------|----------------------|
| | | | Eilean Rainea | | marine harve: | | |
| June | 2018 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 1112 | More |
| May | 2018 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 1009 | More |
| March | 2018 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 513 | More |
| October | 2016 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 1037 | More |
| September | 2016 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 1439 | More |
| August | 2016 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 1412 | More |
| July | 2016 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 1401 | More |
| April | 2016 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 1343 | More |
| November | 2014 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 1189 | More |
| October | 2014 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 1824 | More |
| September | 2014 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 1776 | More |
| August | 2014 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 1503 | More |
| July | 2014 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 1217 | More |
| June | 2014 | ELR1 | Eilean Raineach | CAR/L/1099410/V5 | Marine Harvest (Scotland) Ltd | 874 | More |

[Marine Harvest's](#) salmon farm at [Colonsay](#) used Azamethiphos at least three times in 2018 (data since July will be published in December), twice in 2017 and five times in 2016:

Monthly Biomass & Treatment Reports > Report Month > From date: 01/01/1900 To date: 13/10/2018

Water Type --All-- Local Authority --All-- Sealice Treatment Used Azamethiphos

Apply Current Filters Show All Results Clear All Filters CSV Export

Show/Hide Advanced Filters

| Month | Year | Licence Site ID | Licence Site Name | Licence Number | Licence Holder | Actual Biomass on Site (Tonnes) | Actions |
|----------|------|-----------------|-------------------|------------------|-------------------------------|---------------------------------|----------------------|
| | | | colonsay | | marine harve: | | |
| June | 2018 | COLS1 | Colonsay | CAR/L/1110925/V5 | Marine Harvest (Scotland) Ltd | 1683 | More |
| February | 2018 | COLS1 | Colonsay | CAR/L/1110925/V5 | Marine Harvest (Scotland) Ltd | 856 | More |
| January | 2018 | COLS1 | Colonsay | CAR/L/1110925/V5 | Marine Harvest (Scotland) Ltd | 695 | More |
| December | 2017 | COLS1 | Colonsay | CAR/L/1110925/V5 | Marine Harvest (Scotland) Ltd | 533 | More |
| November | 2017 | COLS1 | Colonsay | CAR/L/1110925/V5 | Marine Harvest (Scotland) Ltd | 387 | More |
| August | 2016 | COLS1 | Colonsay | CAR/L/1110925/V5 | Marine Harvest (Scotland) Ltd | 1948 | More |
| July | 2016 | COLS1 | Colonsay | CAR/L/1110925/V5 | Marine Harvest (Scotland) Ltd | 1695 | More |
| June | 2016 | COLS1 | Colonsay | CAR/L/1110925/V5 | Marine Harvest (Scotland) Ltd | 1313 | More |
| May | 2016 | COLS1 | Colonsay | CAR/L/1110925/V5 | Marine Harvest (Scotland) Ltd | 1055 | More |
| April | 2016 | COLS1 | Colonsay | CAR/L/1110925/V5 | Marine Harvest (Scotland) Ltd | 933 | More |

[Marine Harvest's](#) salmon farm in Soay Sound used Azamethiphos eight times in 2016, four times in 2015 and five times in 2014:

Monthly Biomass & Treatment Reports > Report Month > From date: 01/01/1900 To date: 31/12/2016

Water Type --All-- Local Authority --All-- Sealice Treatment Used Azamethiphos

Apply Current Filters Show All Results Clear All Filters CSV Export

Show/Hide Advanced Filters

| Month | Year | Licence Site ID | Licence Site Name | Licence Number | Licence Holder | Actual Biomass on Site (Tonnes) | Actions |
|-----------|------|-----------------|-------------------|-------------------|-------------------------------|---------------------------------|----------------------|
| | | | soay | | marine harve: | | |
| December | 2016 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 1649 | More |
| November | 2016 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 1633 | More |
| October | 2016 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 1419 | More |
| September | 2016 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 1289 | More |
| August | 2016 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 1253 | More |
| June | 2016 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 732 | More |
| March | 2016 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 400 | More |
| February | 2016 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 330 | More |
| April | 2015 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 1038 | More |
| March | 2015 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 2035 | More |
| February | 2015 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 1931 | More |
| January | 2015 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 1950 | More |
| November | 2014 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 2067 | More |
| October | 2014 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 1750 | More |
| September | 2014 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 1836 | More |
| July | 2014 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 1317 | More |
| June | 2014 | SOAY1 | Soay Sound | CAR/L/1004053/V12 | Marine Harvest (Scotland) Ltd | 907 | More |

Press statement from Scottish Salmon Watch:

"All is not well with sick Scottish salmon," said Don Staniford, Director of Scottish Salmon Watch. "Toxic chemical use via so-called wellboats - an oxymoron if there ever was one - has exploded around Scotland. Plumes of poisonous chemicals such as Azamethiphos, Deltamethrin and Hydrogen Peroxide are flooding in Scotland's pristine lochs. Scientific

research has shown that these toxic chemicals - marked 'Marine Pollutants' by the chemical manufacturers - are lethal to lobsters and other shellfish. You don't need to be a rocket scientist to work out that discharging untreated poisons into Scottish lochs is leaving a lethal legacy. It is time for SEPA to close the net completely and ban the use of Azamethiphos, Deltamethrin, Hydrogen Peroxide as well as the lobster-killing chemical Emamectin benzoate."



Read more on the use of toxic chemicals by Scottish salmon farms [online here](#)

Is data on chemical use via wellboat reported publicly?

SEPA told Scottish Salmon Watch in May 2018 that data on the use of toxic chemicals is NOT included via the [Scotland's Aquaculture database](#):

"I have asked colleagues who confirm that it is not included on Scotland's Aquaculture page," said SEPA in an email dated on 1 May 2018. "However It is included in the SPRI figures that are published on SEPA's website."

A letter from SEPA dated 29 May 2018 included:

Response

[1] Wellboat chemical use is not reported on Scotland's Aquaculture Website.

Under the terms of Regulation 9 of the EIRs, SEPA has a duty to provide advice and assist. We advise that SEPA does not directly regulate wellboats. It is the requirement of the operator's marine licenses to supply all well boats treatment notifications to Marine Scotland. SEPA is provided information relating to some well boat treatments when copies of the notifications are provided to SEPA by Marine

Scotland. In accordance with Regulation 14(1)(b) of the EIRs we advise that you may wish to contact Marine Scotland to enquire further on the reporting of well-boat chemical use data. The general enquiries email address for the Scottish Government is ceu@gov.scot

And:

[3] Please note that the azamethiphos release to water was reported on the SEPA SPRI website in 2016. You can search and download and view the data on our public website here <http://apps.sepa.org.uk/spria/Search/ByPollutant/Results.aspx?Media=water-d&Pollutant=169&Year=2016&IncludeBr=Y>

[4] We confirm that Wellboat azamethiphos use will be added to SPRI. Please note that but SEPA has yet to receive the 2017 wellboat use figures from Marine Scotland. SEPA does not hold this information therefore it is excepted under Regulation 10(4)(a) of the Environmental Information Regulations 2004. The text of which is reproduced below;

(4) *A Scottish public authority may refuse to make environmental information available to the extent that:-*

(a) *it does not hold that information when an applicant's request is received.*

The exception in regulation 10(4)(a) is subject to the public interest test in regulation 10(1)(b) of the EIRs. As SEPA does not hold the information in question there is no conceivable public interest in requiring that the information be made available. The public interest in making the requested information available is outweighed by that in maintaining the exception in regulation 10(4)(a) of the EIRs.

We advise the information will be available on SEPA's website in the Autumn 2018 (normally published in October).

However, a letter from Marine Scotland dated 28 June 2018 (via FoI/18/01265) claimed that wellboat usage of chemicals has been included in the Scotland's Aquaculture database since 2014:

Your request

You asked for, "...information on well boat licences issued by MS-LOT to fish farm operators to permit the discharge of chemotherapeutants. Please provide copies of all well boat licences and copies of well boat licence returns detailing chemical use. Finally, please clarify whether the use of chemical via well boats is included in the data published via the Scotland's Aquaculture database:

http://aquaculture.scotland.gov.uk/data/fish_farms_monthly_biomass_and_treatment_reports.aspx i.e. Is well boat chemical use included or not via Scotland's Aquaculture database? If so, when was well boat chemical use data included?"

Response to your request

I enclose a link to most of the information you requested.

The answers to your questions in relation to Scotland's Aquaculture website are yes and 2014.

Previously, SEPA explained in June 2017 (via F:0187827):

Response

Please refer to the enclosed documents for details of amount of product used on 40 well boats sites since 1 January 2016.

Under SEPA's duty to advise and assist under the terms of regulation 9 of the EIRs, we advise data is not included in the treatment reports via Scotland's Aquaculture database because this was not included on the original specification when the website was being developed. We currently do not have resource to place this data on the website. Please note the well boat data is currently available on SEPA's SPRI database and can be accessed in the link below.

<http://apps.sepa.org.uk/spripa/Search/Options.aspx>

And SEPA explained in October 2018 (via F:0189594):

Please note that these figures do not include treatments carried out in wellboats, which are reported to Marine Scotland. In accordance with Regulation 14(1)(b) of the EIRs, the contact details can be found via the following link; <https://www.gov.scot/Topics/marine>

On 13 October 2018, Scottish Salmon Watch wrote to the Director of SEPA and Director of Marine Scotland asking for clarification on whether chemical use via wellboats was reported via the Scotland's Aquaculture database.

Legislative & Licence Background:

A [letter dated 17 April 2018](#) from the Director of Marine Scotland to the Scottish Parliament's Environment, Climate Change & Land Reform Committee included:

'Wellboat licences'

Wellboat licences are issued by MS-LOT to fish farm operators to permit the discharge of chemotherapeutants following treatment for sealice in a vessel (a wellboat). Such licences are only issued where a valid Controlled Activity Regulations (CAR) licence has been issued to the relevant fish farm site for discharge of chemotherapeutants following in-cage treatments by SEPA following its consideration of the environmental effects. The volumes permitted for discharge are the same as the CAR volumes and Marine and CAR licences are conditioned to prohibit the release of chemotherapeutant under one regime at the same time as the other, thereby avoiding cumulative effects.

Wellboat licences are issued for three (3) years.

MCA and NLB have confirmed they will not provide routine comment on the applications for 'wellboat licences' as there is not a navigational element.

SEPA has provided standing advice that it has no objection to 'wellboat applications' provided the type and amount of chemical used and discharged will not exceed that specified in the respective CAR licence. An agreed condition is added to licences which prevents the simultaneous discharge from bath treatments.

SNH is consulted where such activity takes place in a European site, and advise of the likely significant effects. SNH directs MS-LOT to advice given by SNH during the CAR licensing process. MS-LOT would look to adopt the 'appropriate assessment' carried out by the SEPA as the competent authority under The Conservation (Natural Habitats, &c.) Regulations 1994. Again, a similar process occurs where SNH advise that an activity may affect the feature of a Marine Protected Area (MPA).

In May 2018 the [Scottish Aquaculture Industry Leadership Group reported](#):

Scottish Aquaculture Industry Leadership Group

Meeting 22nd May 2018 Agenda and Actions Note

CW summarised findings of research commissioned by HIE on behalf of the AILG on future skills requirements for the industry including supply chain. Next steps will include drafting of a skills action plan. AILG members repeated previous requests for Marine Scotland to provide site specific advice on sea lice. MP reported on progress across the 8 'quick wins' arising from the consenting review (<http://www.gov.scot/Resource/0052/00525256.pdf>). Aside from the transfer of wellboat discharge licensing from Marine Scotland to SEPA, these had all been completed or were well on track for completion (a workshop would be held in June to finalise the work on the EIA template and the Working Arrangements Document, with a view to sign off by July 2018.) On the transfer of wellboat licensing from Marine Scotland to SEPA, there continued to be legal questions requiring clarification but it was hoped a positive resolution of the legal issues could be reached within a few weeks.

The Scottish Aquaculture Industry Leadership Group [noted in February 2018](#):

MP updated on progress with the ICR recommendations. Detailed at <http://www.gov.scot/Resource/0052/00525256.pdf>
All projects were progressing well or had been completed. It was noted that on the integration of wellboat marine licences into the CAR regime the process was necessarily complex and would take time to work through. . would shortly be updated on the current state of play.

In January 2018, [the Farmed Fish Health Framework Working Group](#) noted:

**Farmed Fish Health Framework Working Group (FFHFWG)
Meeting 2
30 January 2018
Note and Actions**

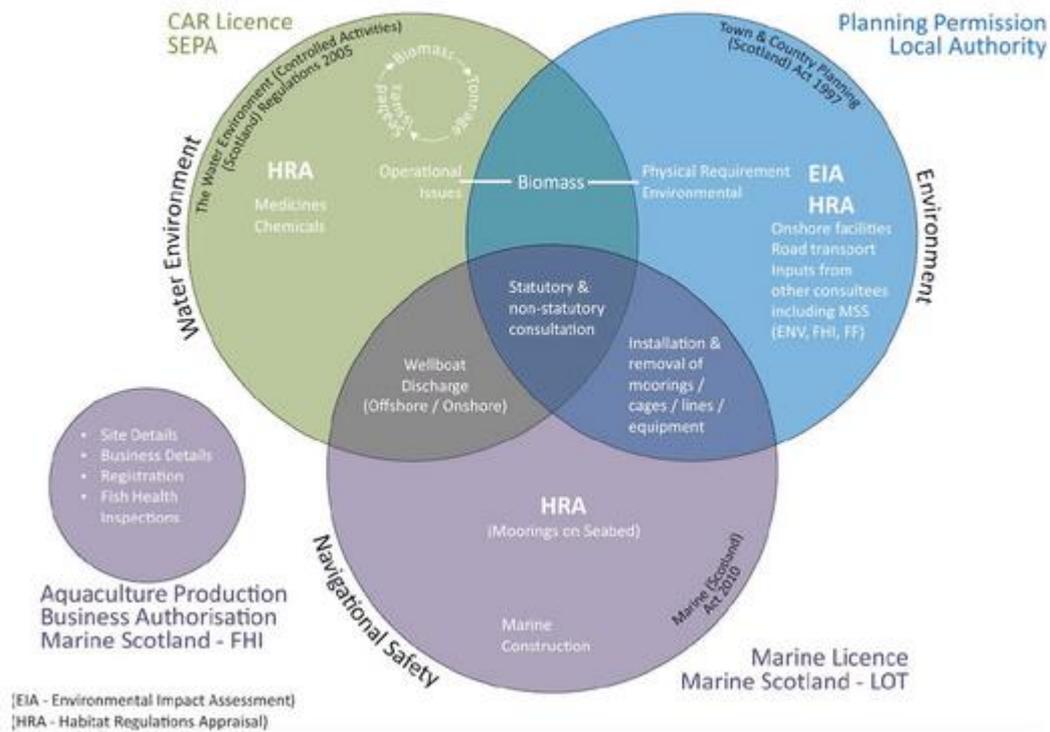
- It was noted the independent consenting review (ICR) recommendation on wellboat discharge licenses was outstanding.
- SG confirmed that an update would be provided at the next aquaculture industry leadership group and would be relayed to the farmed fish health working group at the next meeting.

Action: SG to keep FFHFWG updated with ICR wellboat discharge licence recommendation.

Marine Scotland
Secretariat
February 2018

An 'Independent Review of Scottish Aquaculture Consenting' [published by the Scottish Government in July 2016](#) identified "wellboat discharge" as overlapping in the consenting area for SEPA and Marine Scotland:

Figure 4.11: Venn diagram illustrating overlap in consenting areas for key regulators



The [report included](#) (p13):

A Ministerial Group on Aquaculture (MGA) was established in 2009 to oversee implementation of A Fresh Start, through six working groups. The MGA has since been replaced by the Ministerial Group for Sustainable Aquaculture (MGSA), which was established in 2013 to continue the work of the MGA and to support Scotland's aquaculture industry to achieve the 2020 growth targets. This includes the following working groups:

- **Wellboats Working Group:** considers standards for wellboats - tracking position, valve status & sea lice filtration.

And (p30):

4.2.4 Marine Licence

With respect to finfish and shellfish aquaculture, three types of activities require a marine licence(s):

- Equipment – including mussel lines, fish farm cages, walkways/pontoon;
- Moorings (i.e. deposits on the seabed); and
- Discharge of sea lice treatments from wellboats.

In relation to equipment and moorings, the marine licence focuses only on potential hazards to navigation and conditions may require appropriate markers and lighting. A separate marine licence for 'discharge of treatment agents' is also required for discharging from a wellboat. This is not focused on navigational safety and is not specifically needed to gain consent for a fish farm, but will be applied for during the operational phase, if required.

And (p53):

Table 6.1: Recommended quick wins

| No. | Action | Responsibility |
|------------|---|---------------------------|
| QW4 | <p>Integrate wellboat Marine Licence into the CAR Licence</p> <ul style="list-style-type: none"> • It is understood that this would require one additional sentence to be added to the CAR Licence. • It is assumed that this would cover all wellboat discharges. • It is noted that SEPA and the finfish industry support this consolidation of licences. | <p>SEPA</p> <p>MS-LOT</p> |

And (p74):

Table 7.1: Summary of recommendations

| No. | Actions |
|-------------------|---|
| Quick Wins | |
| QW | <ol style="list-style-type: none"> 1. Strengthen the pre-application process 2. Introduce consistent format for co-ordinates, site name and summary information 3. Update of Working Arrangements document 4. Integrate wellboat Marine Licence into the CAR Licence 5. Update Scottish Aquaculture portal |

Here's a copy of a [wellboat discharge licence](#):

Marine Licence Application for Discharge of Treatment Agents from a Wellboat

Version 1.0

Marine (Scotland) Act 2010

The licence includes:

6. Wellboat Discharge Details

- (a) Give a brief description of the discharge including rationale for discharge.
- (b) Provide the proposed start date of the project. The start date will not be backdated, since to commence a project for which a licence has not been obtained will constitute an offence, which may result in appropriate legal action. A licence is normally valid for the duration of the project but not exceeding 3 years. If a project will not be completed before a marine licence lapses, it will be necessary for licence holders to re-apply for a further licence to continue any ongoing work at least 14 weeks prior to the expiry date of the licence. **Target duration for determination of a marine licence application is 14 weeks.**

- (c) Provide the proposed completion date of the project.
- (d) Describe the location of the proposed works. Include a list of the latitude and longitude co-ordinates (WGS84) of the site where discharge will take place. WGS84 is the World Geodetic System 1984 and the reference co-ordinate system used for marine licence applications. Co-ordinates taken from GPS equipment should be set to WGS84. Coordinates taken from recent admiralty charts will be on a WGS84 compatible datum. Ordnance survey maps do not use WGS84.

Example: For positions read from charts the format should be as in the example: 55°55.555'N 002°22.222'W (WGS84). The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the format should be as in the example: 55°55'44"N 2°22'11"W (WGS84).

It is important that the correct positions, in the correct format, are included with this application, as any errors will result in the application being refused or delayed.

To supplement your application, please provide a suitably scaled extract of an Ordnance Survey Map (1:2,500 scale but not more than 1:10,000) or Admiralty Chart which must be marked to indicate:

- o the discharge site and associated marine farm;
- o latitude and longitude co-ordinates defining the location of the works;
- o the level of MHWS;
- o any adjacent SAC, SPA, SSSI, MPA, Ramsar or similar conservation area boundary.

Drawings and plans will be consulted upon. If they are subject to copyright, **it is the responsibility of the applicant to obtain necessary approvals to reproduce the documents and to submit suitably annotated copies with the application.**

- (e) Provide details of the water depth at the discharge site in metres and the distance of the discharge site from land in metres or kilometres.
- (f) Indicate if the discharge site is located within the jurisdiction of a statutory harbour authority and provide details of the statutory harbour authority where relevant.
- (g) Provide assessment of the potential impacts the works may have, including interference with other uses of the sea. Please include details of areas of concern e.g designated conservation areas, such as a SAC, SPA, SSSI, MPA or Ramsar site and shellfish harvesting areas. Further guidance on designated conservation areas can be obtained from SNH at this website: <http://gateway.snh.gov.uk/sitelink/index.jsp> and guidance on shellfish harvesting areas can be obtained from <http://www.foodstandards.gov.scot/> with regards to the Shellfish Waters Directive (2006/113/EC) which has parameters set to protect the water quality in which edible shellfish are grown.

Where there are potential impacts from the works, please provide details of proposed mitigation in response to potential impacts.

7. Details of Treatment Agent(s) to be Discharged

Provide the proprietary name(s) of all treatment agents (e.g. Excis), the chemical name(s) or other relevant description(s) of all chemicals (e.g. Cypermethrin) and provide all appropriate Material Safety Data Sheets.

Under section 27(2) of the Marine (Scotland) Act 2010, the licensing authority has an obligation to consider the availability of practical alternatives when considering applications involving disposal of substance(s) or object(s) at sea. All applications for sea disposal must be supported by a detailed assessment of the alternative options - BPEO assessment. This must include a statement setting out the reasons why deposit of the substance(s) or object(s) at sea is the preferred option and applications will not be considered unless they are accompanied by such an assessment. All options in the BPEO must be explored fully (as per the guidance documents) otherwise your form and BPEO are liable to be returned to you, thereby delaying processing of the application.

8. Details of Discharge

For each treatment agent deposit listed in section 7 provide the date of discharge (wherever possible approximate date of discharge must be provided); duration of discharge in minutes (the estimated duration that the treatment agents being discharged are likely to be detectable/active in the water column); weight/volume of the treatment agent in grams/cubic metres (the discharge dose of each agent, including post treatment if required); and the total volume of the treatment agent (the total volume to be discharged from each vessel and also the number of wells in each vessel to be used during the procedure).

9. Details of Discharge Procedure

For each treatment agent deposit listed in section 7 provide the method of deposit (e.g gravity, discharge pump); the mode of deposit (e.g through a pipeline, valve, diffuser, bucket); the depth of deposit (e.g sea surface, subsurface with depth in metres); and the rate of deposit (e.g discharge rate – litres or m³ per second, minute or hour. This must be given for each well).

10. Details of Vessel(s) Undertaking Discharge

Provide the name and call sign, if appropriate, of each of the vessels involved in the procedure. It is understood that vessel availability issues often lead to changes over small time scales to vessel choice. Please be as exhaustive as possible in the list of vessels that may be used to reduce the need for further administrative changes and continue on a separate sheet if necessary.

11. Scotland's National Marine Plan

Scotland's National Marine Plan has been prepared in accordance with the EU Directive 2014/89/EU, which came into force in July 2014. The Directive introduces a framework for maritime spatial planning and aims to promote the sustainable development of marine areas and the sustainable use of marine resources. It also sets out a number of minimum requirements all of which have been addressed in this plan. In doing so, and in accordance with article 5(3) of the Directive, Marine Scotland have considered a wide range of sectoral uses and activities and have determined how these different objectives are reflected and weighted in the marine plan. Land-sea interactions have also been taken into account as part of the marine planning process. Any applicant for a marine licence should consider their proposals with reference to Scotland's National Marine Plan. A copy of Scotland's National Marine Plan can be found at: <http://www.gov.scot/Publications/2015/03/6517/0>

Indicate whether you have considered the wellboat discharge with reference to Scotland's National Marine Plan and provide details of considerations made including reference to the policies that have been considered. If you have not considered the project with reference to Scotland's National Marine Plan please provide an explanation.

A Scottish Government report - Environmental Assessment (Scotland) Act 2005 Aquaculture and Fisheries Bill Consultation Document Environmental Report - [published in February 2012](#) included:

8.0 WELLBOAT CONTROLS

Current Situation

- 8.1 Wellboats are used in the Scottish aquaculture industry primarily for the transport of live fish and in the application of therapeutic treatment for sea-lice. Anecdotal evidence indicates that between 20-30 wellboats are currently used in the aquaculture industry in Scotland and these vessels are often shared between the Scottish and Norwegian aquaculture industries. The use of a wellboat in aquaculture is licensed through Marine Scotland, where a licence must be held for each farming site where a wellboat is used.
- 8.2 In addition to transferring live fish between farm cages and, sometimes, between farm management areas, wellboats are commonly used for transporting smolts to on-growing sites and harvest fish to slaughter, with approximately 70% of Scottish salmon production being collected by direct harvest wellboats as of 2006³⁷. So called "dead-boats" are regularly used for the on-site slaughter and transport of harvested salmon to processing plants. All wastes from dead-boats, including wastewater, are required to be disposed of on land under the Pollution Prevention and Control (PPC) permit. No discharges to sea should be made from these vessels.
- 8.3 The CoGP details a cleaning and decontamination regime for wellboats, particularly when transporting fish or moving between FMAs³⁸. While regulatory controls and codes of practice³⁹ are in place for the management

³⁷ Humane Slaughter Association (2006) Fish Welfare During Transport Forum, 25 October 2006 Thistle Hotel, Inverness [online] Available at: www.hsa.org.uk/Resources/Fish%20Transport%20proceedings.pdf

³⁸ Fraser DI, Munro PD and Smail DA (2006) Fisheries Research Services Internal Report No 13/06: Disinfection Guide Version IV - Practical Steps To Prevent The Introduction And Minimise Transmission Of Diseases Of Fish, Produced By Fisheries Research Services, Marine Laboratory, Aberdeen, January 2006 [online] Available at: <http://www.scotland.gov.uk/Topics/Marine/Fish-Shellfish/Fhi/Healthpractice>

³⁹ Joint Government/Industry Working Group On ISA (2000) A Code Of Practice To Avoid And Minimise The Impact Of Infectious Salmon Anaemia (Isa), [Online] Available At: <http://www.Scotland.Gov.Uk/Topics/Marine/Fish-Shellfish/Fhi/Healthpractice>

and monitoring of sea-lice and diseases in farmed stock in Scotland, the cage to cage, farm to farm and farm to processing plant transfers of fish remain a potential vector for the transmission of sea-lice and pathogens⁴⁰, particularly where vessels collect and deliver fish from multiple sites in separate FMAs. Risks are lower for fish movements within defined FMAs established for the management of sea-lice, disease control and biosecurity, compared with fish movements between separate management areas.

- 8.4 While wellboats can be equipped with oxygenation systems and sensors enabling continuous monitoring of dissolved oxygen, temperature and carbon dioxide in holding bay waters³⁷, it is understood that it may be common practice for wellboat operators to open the valves or “flush” the water in the holding bays to allow fresh oxygenated water in during the transport of live fish. Although the CoGP states that transport water should not be discharged en route directly into natural watercourses and that wellboats must travel with valves closed and not undertake water exchange when within 5km of any finfish farm site, no monitoring controls are in place and this remains a potential source of sea-lice and/or pathogen transmission.
- 8.5 Our understanding is that in-bath treatments are the most common means of sea-lice and pathogen treatment on Scottish salmon farms, but that wellboats are also used for sea-lice treatment. This method can increase the efficacy of therapeutant and reduce the quantity required, as the salmon are exposed to a bath treatment in as little as one-third of the water that would be used in cage treatments using a tarp⁴¹. In this process, the boat is positioned adjacent to the sea cage and the salmon are loaded from the cages into its holding bay for therapeutant application. After the treatment is finished, the treated fish are unloaded and returned to the sea cage, and the residual treatment water is discharged from the wellboat at this location.
- 8.6 As well as the permitted discharge of therapeutant, the discharged treatment water may also typically include dead and surviving sea-lice. Given that this discharge is local, the likelihood of transmission of lice or pathogens between farms and the wider marine environment is considered to be the same as for in-bath treatments done within the cages.

Proposals

- 8.7 The proposed provisions include powers to Scottish Ministers to provide for controls on discharges from wellboats.

Potential Effects

- 8.8 The proposed introduction of additional controls for wellboat discharges and species movements are intended to control and manage sea-lice and pathogens associated with finfish aquaculture. Wellboats have been identified as a potential pathway for the transmission of sea-lice and pathogens.

⁴⁰ Murray AG, Smith RJ, and Stagg RM. (2002) Shipping and the Spread of Infectious Salmon Anemia in Scottish Aquaculture. *Emerg Infect Dis.* [serial on the Internet]. 2002 Jan [online]. Available at: <http://wwwnc.cdc.gov/eid/article/8/1/01-0144.htm>

⁴¹ Atlantic Canada Fish Farmers Association (2011) Evaluation of Well Boat Technology for the Treatment of Sea Lice, [online] Available at: 0101.nccdn.net/.../Final_Report_Mar_19_11_-_Evaluation_of_Well_Boat_Technology_for_the_Treatmen.pdf

8.9 Improved control of sea-lice and pathogens has the potential for significant environmental benefit, since these can adversely affect wild salmonid populations.

Mitigation

8.10 As no significant negative effects from these provisions have been identified, no mitigation measures are required. Given the high-level nature of the provisions, enhancement measures have not been proposed at this stage of the Bill's development.

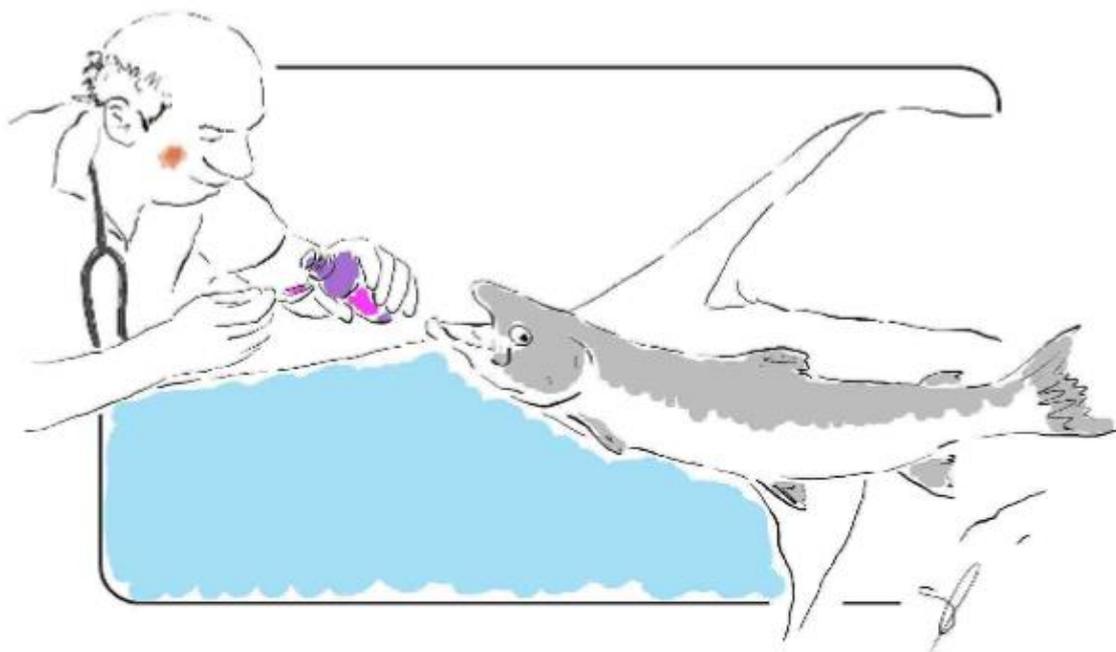
Effects of Continuing the Status Quo

8.11 Continuing the current situation would result in the continuing risk that sea-lice may be discharged from wellboats, which would have adverse implications for wild salmonid populations.

SEPA's Public Register includes a [2016 report from Cooke Aquaculture on wellboat treatments](#):

PUBLIC REGISTER COPY

| | |
|---|--|
| <p><u>Feed, Tarp and Wellboat Treatments</u></p> <p>Standard Operating Procedure (SOP) Number 20</p> <p>Revised <u>September 2016</u></p> |  <p>Cooke AQUACULTURE SCOTLAND</p> <p><i>Refusing to go with the flow</i></p> |
|---|--|



This procedure addresses the necessary requirements to ensure that all treatment activities are conducted in compliance with relevant regulations. All employees and contractors are expected to adhere to these protocols and to be familiar with Emergency Response requirements and equipment, and to ensure that appropriate documentation is completed where required.

This document is a training instruction and outlines the risks of doing the job. It also describes how to do the job to reduce the risks to an acceptable level. This document is to be used along with good judgment and common sense at all times. It is only a guide and cannot replace vigilance and good practices being adopted by everyone involved.

| | |
|---|---|
| <u>Financial</u> | <u>Health and Safety</u> |
| <p>Failure to Treat correctly, could result in one or more of the following:</p> <p>Complete/Partial stock loss – Sea lice and amoeba. Bad Treatments. Stress – Disease, incorrect treatment. Fish damage – as above.. Fish Growth – Compromised fish. Net/Cage damage – Excessive weight, bad treatment.</p> | <p>Physical Injury – Chemical Handling, Lifting.</p> |
| | <u>Environmental</u> |
| | <p>Large Mortality Chemical</p> |

Purchase Authorisation

Only Products fully licensed as Salmon Treatments in Scotland will be used.

Only Products named on the Site CAR / Wellboat Discharge License will be used.

No product will be used unless supplied with a Veterinary Prescription from the Veterinary Surgeon in clinical charge of the designated fish stock.

The Fish Health Department will authorise all Purchases of Fish Medicines.

The Fish Health Department will maintain detailed written and Computer records of all Medicinal Purchases. These will be available to all authorised staff responsible for Fish Health and Welfare and all External Auditing Organisations and Agencies.

ANY ILLEGAL OR UNAUTHORISED PRODUCT/COMPOUND USED OR FOUND ON THE SITE WILL RESULT IN AN EXTENSIVE INTERNAL INVESTIGATION AND INSTANT DISMISSAL OF ALL STAFF DIRECTLY INVOLVED

Product Use

Regular Sea lice Counts, gill scoring and gill histology must be maintained to ensure that treatments are applied at the correct time.

Products will only be used following the provision of a veterinary written direction.

The directions will involve applying the product at an approved dose rate for an approved time period *(In certain cases the Veterinary Surgeon may deem it necessary to vary the dose rate or treatment period. A default withdrawal period of at least 500° days will be applied, irrespective of the circumstances or the presence/absence of residues).*

Any increase in the dose rate used will need to take account of the CAR / Wellboat Discharge License conditions in place.

SEPA/Marine Scotland must be advised if it is considered necessary to exceed the existing CAR/ Wellboat Discharge conditions and their approval must be obtained.

Treatment In Well Boat

See **SW3 Crowding, Grading, Transfer and Handling Procedure** for movement of fish onto the Well Boat.

Fish are left for 30 minutes before they can be treated as above. Check with Skipper before starting the treatment.

Start treatment.

Ensure oxygen, degassing and water supply is adequate for maintaining fish welfare and flushing.

Ensure all Environmental Parameters are monitored and alarmed whilst fish are on the well Boat.

The well is flushed through with fresh Seawater, for 30 minutes before the fish are discharged into the cage.

In 2011, [COAST raised concerns about the use of chemicals via wellboats in Loch Fyne](#):

COAST response to:

THE SCOTTISH SALMON COMPANY'S (LOCH FYNE FISH FARMS) SEA LICE CONTAINMENT AND WELL BOAT BATH TREATMENT PROPOSAL

The proposal

The company has submitted an application to Marine Scotland under the Food and Environmental Protection Act 1985 Part 2 Deposits in the Sea (FEPA) for approval to discharge pollutants into the sea from wellboats. There is nothing really new here in that the pollutants are all well-known chemicals or medicines in widespread use for the treatment and containment of parasitic lice infestations of farmed salmon. A description of these chemicals and the way they are used can be found in a recent scientific paper published on the COAST website. These chemicals are either administered through the food over a longer time span or applied in quantity in a method known as a bath treatment where tarpaulins are used over a period of hours to line the cage reducing the tidal flow and flushing of water and thus increasing the contact between fish and chemical before the chemical is lost through dilution and migration into the surrounding environment. Bath treatments require considerable manpower and understandably must be relatively inefficient in gaining contact between fish and chemical. TSSC's proposal is to conduct exactly the same process but transferring the caged salmon to the containment tanks or wells of a wellboat and conducting bath treatments in these tanks before placing the treated fish back in the cage. Having conducted this exercise it is then necessary to get rid of the spent seawater with residual chemicals. This requires a licence to discharge under FEPA in the same way, as any other offshore activity would be regulated in terms of discharges.

The Fisheries Research Services Marine Laboratory in Aberdeen administers the UK act on behalf of Scottish ministers, so Marine Scotland, not SEPA and this in itself raises questions of who does what in terms of policing the act. Licences are apparently issued for a twelve-month period so in the Loch Fyne case there is the possibility of revisiting the impact of the newly licensed process before too much damage is done.

The comments provided here are solely based on the content of the four documents provided and a more general understanding of what goes on at a fish farm in terms of sea lice containment. The four are :-

- A formal application for discharge under FEPA
- A statement of the best practicable environmental option BPEO (an evaluation that covers all options for disposal on the both technical and economic grounds, the key here being acceptance of realistic cost built into the legislation) (Annexes are missing)
- Two maps identifying the location of TSSC fish farms in Loch Fyne

Why the change in practice?! Essentially TSSC claim that the old method of fitting tarpaulins each time a bath treatment is required is logistically difficult now that cage sizes and biomass stocked has increased. TSSC claim that the job can be done more efficiently using wellboats and that this efficiency of treatment means less chemicals are used.

What can be extracted from the documents that provide any comfort that this is a better approach BUT more importantly what can be gleaned that raises concerns about TSSC practices and additional environmental impact?

And:

What is not clear at all is how the licensing procedure and outcomes of each specific fish farm licence will be applied to this new proposal to use well boats and different regimes for bath treatment, the subject of the FEPA application. TSSC propose that the spent seawater containing the residual bath medicines be discharged at the fish farm site. This makes sense at one level BUT there is no indication anywhere in the paperwork of any cooperation between the regulatory agencies or any joint consultation. Surely it is necessary somewhere to say that regardless of the technique applied and subsequent approval to use wellboats that the overall outcome will be no different from what SEPA have already consented and that SEPA will go on policing the site as before with the same tools and standards they have already established ? The implications are that the loch wide approach, the increased frequency of treatment, the synchronised timing, longer in feed treatments all add up to more medicines in quantity and range being used with greater impact at both individual sites and across the loch as a whole. Yet there is no evidence of SEPA being involved with these new proposals.

TSSC claims in the application that environmental assessments have been conducted for each site. There must be doubts however that these statements take into account the new regime of treatment. Apparently the documents in question are lodged with Argyll and Bute Council in Oban.

In summary the key here is to find out whether TSSC are bypassing the existing regulatory constraints applied by SEPA in applying for a consent under FEPA. If SEPA have been involved are they supportive of the proposals in that the new approach will still manage to maintain the present standards set for each site? Finally has any overall environmental assessment been conducted of the whole of Loch Fyne to determine the effects of essentially waging war on sea lice in a coordinated way throughout the loch with implications for other crustaceans and the marine ecology generally?

Freedom of Information on Chemical Use via Wellboats:

Background:

In March 2018, Scottish Salmon filed FOI requests on the use of chemicals via wellboats with the Scottish Environment Protection Agency, Marine Scotland and Scottish Natural Heritage. These FOI requests were followed up during the course of 2018 with various FOI replies generating vast quantities of information on discharges of chemicals via wellboats (for more details please read Appendix).

Data disclosed by SEPA on 3 October 2018 (via F:0189594):

Thank you for your recent request, received by SEPA on 25 September 2018 in which you asked for the following information:

Please provide an annual breakdown on the use of chemicals on salmon farms via a) tarpaulins; b) well boats since 1 January 2013.

Please include the use of hydrogen peroxide, azamethiphos, cypermethrin, deltamethrin and any other chemical treatments via tarpaulins and well boats.

Please give data for 2013, 2014, 2015, 2016, 2017 and thus far during 2018.

Please also provide any information detailing any breakdown of chemical usage via tarpaulin or well boat in any documents, materials, data, presentations or correspondence.

Response

Please note that data on the use of azamethiphos, cypermethrin, deltamethrin is publicly available and easily accessible. In accordance with the terms of Regulation 6(1)(b) of the EIRs we advise that the data is available via Scotland's Aquaculture Website. <http://aquaculture.scotland.gov.uk/>

Please find below the figures for hydrogen peroxide treatments via tarpaulins for the years 2013-2017.

| | Hydrogen Peroxide (litres) |
|------|----------------------------|
| 2013 | 6788634.5 |
| 2014 | 9082650.5 |
| 2015 | 19564988 |
| 2016 | 11873924.5 |
| 2017 | 9504378.5 |

Figures for 2018 are not due to be reported until late Jan 2019. SEPA does not hold this information at this time therefore it is excepted under Regulation 10(4)(a) of the Environmental Information Regulations 2004. The text of which is reproduced below;

(4) A Scottish public authority may refuse to make environmental information available to the extent that:-

(a) it does not hold that information when an applicant's request is received.

The exception in regulation 10(4)(a) is subject to the public interest test in regulation 10(1)(b) of the EIRs. As SEPA does not hold the information in question there is no conceivable public interest in requiring that the information be made available.

Please note that these figures do not include treatments carried out in wellboats, which are reported to Marine Scotland. In accordance with Regulation 14(1)(b) of the EIRs, the contact details can be found via the following link; <https://www.gov.scot/Topics/marine>

Data disclosed by the Scottish Government on 28th June 2018 (via FoI/18/01265) - data disclosed via [Dropbox online here](#):

| 2017 | | Kames | | | | | |
|------------------|----|----------|-------|-------|------------|----------|--------|
| Site | A3 | MCMS No. | Date | Time | Duration | Product | Amount |
| Shuna | | 05769 | 42745 | 14:50 | 60 Minutes | Salmosan | 200 g |
| Shuna | | 05769 | 42746 | 16:05 | 60 Minutes | Salmosan | 200 g |
| Shuna | | 05769 | 42747 | 13:50 | 60 Minutes | Salmosan | 200 g |
| Shuna | | 05769 | 42748 | 15:00 | 60 Minutes | Salmosan | 200 g |
| Shuna | | 05769 | 42749 | 13:10 | 60 Minutes | Salmosan | 200 g |
| Shuna | | 05769 | 42750 | 14:50 | 60 Minutes | Salmosan | 200 g |
| Shuna | | 05769 | 42751 | 13:15 | 60 Minutes | Salmosan | 200 g |
| Shuna | | 05769 | 42752 | 14:35 | 60 Minutes | Salmosan | 200 g |
| Shuna South West | | 05338 | 42745 | 14:50 | 60 minutes | Salmosan | 200 g |
| Shuna South West | | 05338 | 42746 | 16:05 | 60 minutes | Salmosan | 200 g |
| Shuna South West | | 05338 | 42747 | 13:50 | 60 minutes | Salmosan | 200 g |
| Shuna South West | | 05338 | 42748 | 15:00 | 60 minutes | Salmosan | 200 g |
| Shuna South West | | 05338 | 42749 | 13:10 | 60 minutes | Salmosan | 200 g |
| Shuna South West | | 05338 | 42750 | 14:50 | 60 minutes | Salmosan | 200 g |
| Shuna South West | | 05338 | 42751 | 13:15 | 60 minutes | Salmosan | 200 g |
| Shuna South West | | 05338 | 42752 | 14:35 | 60 minutes | Salmosan | 200 g |

| 2017 | | Grieg Seafood Ltd | | | | |
|-----------------|----------|-------------------|-------|----------|--------------------------------|-----------------|
| Site | MCMS No. | Date | Time | Duration | Product | Amount |
| West of Burwick | 06123 | 3/1/2017 | 06:10 | 20 mins | Alphamax and Hydrogen Peroxide | 360ml and 5700L |
| West of Burwick | 06123 | 3/1/2017 | 09:50 | 20 mins | Alphamax and Hydrogen Peroxide | 180ml and 2850L |
| West of Burwick | 06123 | 3/1/2017 | 13:50 | 20 mins | Alphamax and Hydrogen Peroxide | 360ml and 5700L |
| West of Burwick | 06123 | 3/1/2017 | 17:30 | 20 mins | Alphamax and Hydrogen Peroxide | 360ml and 5700L |
| West of Burwick | 06123 | 3/1/2017 | 20:00 | 20 mins | Alphamax and Hydrogen Peroxide | 360ml and 5700L |
| West of Burwick | 06123 | 3/2/2017 | 06:00 | 20 mins | Alphamax and Hydrogen Peroxide | 360ml and 5700L |
| West of Burwick | 06123 | 3/2/2017 | 09:00 | 20 mins | Alphamax and Hydrogen Peroxide | 360ml and 5700L |
| West of Burwick | 06123 | 3/2/2017 | 12:00 | 20 mins | Alphamax and Hydrogen Peroxide | 360ml and 5700L |
| West of Burwick | 06123 | 3/2/2017 | 15:00 | 20 mins | Alphamax and Hydrogen Peroxide | 360ml and 5700L |
| West of Burwick | 06123 | 4/11/2017 | 06:30 | 20 mins | Salmosan and Paramove | 180g and 2400L |
| West of Burwick | 06123 | 4/11/2017 | 09:55 | 20 mins | Salmosan and Paramove | 360g and 4800L |
| West of Burwick | 06123 | 5/17/2017 | 11:20 | 20 mins | Salmosan and Paramove | 360g and 5400L |
| West of Burwick | 06123 | 5/17/2017 | 15:50 | 30 mins | Salmosan | 180g |
| West of Burwick | 06123 | 5/17/2017 | 16:50 | 30 mins | Salmosan | 180g |
| West of Burwick | 06123 | 5/17/2017 | 20:35 | 30 mins | Salmosan | 360g |

| 2017 | | Marine Harvest | | | | |
|------------------|----------|--------------------------|------|----------|-----------------------------|------------|
| Site | MCMS No. | Date | Time | Duration | Product | Amount |
| Camus Glas | 05997 | 07/01/2017 to 10/01/2017 | | | Salmosan (Azamethiphos) | 1840 grams |
| BDNC | 05887 | 09/01/2017 to 20/01/2017 | | | Salmosan (Azamethiphos) | 2660 grams |
| PNG | 05881 | 09/01/2017 to 20/01/2017 | | | Salmosan (Azamethiphos) | 4160 grams |
| Shuna South West | 05769 | 09/01/2017 to 20/01/2017 | | | Salmosan (Azamethiphos) | 2240 grams |
| Gorsten | 06004 | 23/01/2017 to 24/01/2017 | | | Salmosan Vet (Azamethiphos) | |
| Cairidh | 05996 | 04/02/2017 to 07/02/2017 | | | Salmosan (Azamethiphos) | 220g |

Full file [online here](#)

| 2016 | | Scottish Sea Farms | | | | |
|----------|---------|--------------------|-------|----------|-------------------|---------|
| Site | Ref No. | Date | Time | Duration | Chemical/Agent | Amount |
| Spelve B | 05425 | 5/24/2016 | 09:37 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/24/2016 | 13:10 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/24/2016 | 16:45 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/24/2016 | 20:10 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/25/2016 | 09:20 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/25/2016 | 13:20 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/25/2016 | 16:47 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/25/2016 | 20:06 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/26/2016 | 09:50 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/26/2016 | 13:15 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/26/2016 | 16:50 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/26/2016 | 20:15 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/27/2016 | 09:20 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/27/2016 | 12:30 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/27/2016 | 15:55 | 20 mins | Hydrogen Peroxide | 924 lts |
| Spelve B | 05425 | 5/27/2016 | 19:10 | 20 mins | Hydrogen Peroxide | 924 lts |

Full file [online here](#)

| 2015 | | | | | | |
|---------------------------|---------|-----------|-------------|----------|-------------------|------------|
| Scottish Sea Farms | | | | | | |
| Site | FKB No. | Date | Time | Duration | Product | Amount |
| Fishnish B | | 8/22/2015 | 9:00:00 AM | 60 mins | Hydrogen Peroxide | 924 litres |
| | | 8/22/2015 | 12:00:00 PM | 50 mins | Hydrogen Peroxide | 924 litres |
| | | 8/22/2015 | 3:00:00 PM | 50 mins | Hydrogen Peroxide | 924 litres |
| | | 8/22/2015 | 6:00:00 PM | 50 mins | Hydrogen Peroxide | 924 litres |
| | | 8/22/2015 | 8:00:00 PM | 50 mins | Hydrogen Peroxide | 924 litres |
| | | 8/23/2015 | 7:00:00 AM | 50 mins | Hydrogen Peroxide | 924 litres |
| | | 8/23/2015 | 11:00:00 AM | 50 mins | Hydrogen Peroxide | 924 litres |
| | | 8/23/2015 | 3:00:00 PM | 50 mins | Hydrogen Peroxide | 924 litres |
| | | 8/23/2015 | 7:00:00 PM | 50 mins | Hydrogen Peroxide | 924 litres |
| | | 8/24/2015 | 9:00:00 AM | 50 mins | Hydrogen Peroxide | 924 litres |

Full file [online here](#)

| 2014 | | | | | | |
|---------------------------|----------|-----------|-------------|----------|-------------------|-----------------|
| Hjaltland Seafarms | | | | | | |
| Site | FKB No. | Date | Time | Duration | Product | Amount (Litres) |
| Gob na Hoe | FKB/W216 | 6/30/2014 | 9:46:00 AM | 20 mins | Hydrogen Peroxide | 3000.000 |
| | | 6/30/2014 | 1:36:00 PM | 20 mins | Hydrogen Peroxide | 2675.000 |
| | | 6/30/2014 | 5:20:00 PM | 20 mins | Hydrogen Peroxide | 2669.000 |
| | | 7/1/2014 | 10:06:00 AM | 20 mins | Hydrogen Peroxide | 2644.000 |
| | | 7/1/2014 | 1:26:00 PM | 20 mins | Hydrogen Peroxide | 2643.000 |
| | | 7/1/2014 | 4:56:00 PM | 20 mins | Hydrogen Peroxide | 2635.000 |
| | | 7/7/2014 | 9:56:00 AM | 20 mins | Hydrogen Peroxide | 2626.000 |
| | | 7/7/2014 | 1:16:00 PM | 20 mins | Hydrogen Peroxide | 2631.000 |
| | | 7/7/2014 | 5:21:00 PM | 20 mins | Hydrogen Peroxide | 2626.000 |
| | | 7/8/2014 | 10:26:00 AM | 20 mins | Hydrogen Peroxide | 2624.000 |
| | | 7/8/2014 | 2:26:00 PM | 20 mins | Hydrogen Peroxide | 2612.000 |
| | | 7/8/2014 | 5:51:00 PM | 20 mins | Hydrogen Peroxide | 2601.000 |
| | | 7/9/2014 | 9:36:00 AM | 20 mins | Hydrogen Peroxide | 2591.000 |
| | | 7/9/2014 | 1:31:00 PM | 20 mins | Hydrogen Peroxide | 2579.000 |

Full file [online here](#)

| 2013 | | | | | | |
|---------------------------|---------|------------|-------------|----------|-------------------|------------|
| Scottish Sea Farms | | | | | | |
| Site | FKB No. | Date | Time | Duration | Product | Amount (L) |
| Bloody Bay | W130 | 6/15/2013 | 10.10 | 20 mins | Hydrogen Peroxide | 1386 |
| | | 6/15/2013 | 13.28 | 17 mins | Hydrogen Peroxide | 2772 |
| | | 6/15/2013 | 16.20 | 20 mins | Hydrogen Peroxide | 2772 |
| | | 6/15/2013 | 20.05 | 20 mins | Hydrogen Peroxide | 2772 |
| | | 6/16/2013 | 11.40 | 20 mins | Hydrogen Peroxide | 2772 |
| Toyness | W119 | 15/02/2013 | 1:00:00 PM | 20 mins | Hydrogen Peroxide | 1145 |
| | | 15/02/2013 | 3:25:00 PM | 20 mins | Hydrogen Peroxide | 1145 |
| | | 15/02/2013 | 6:00:00 PM | 20 mins | Hydrogen Peroxide | 1145 |
| | | 16/02/2013 | 9:40:00 AM | 20 mins | Hydrogen Peroxide | 1145 |
| | | 16/02/2013 | 11:40:00 AM | 20 mins | Hydrogen Peroxide | 1145 |
| | | 16/02/2013 | 1:50:00 PM | 20 mins | Hydrogen Peroxide | 1145 |

Full file [online here](#)

| 2012 | | A1 | | |
|------------------------------------|-------------|-------------|-------------------|------------------------|
| The Scottish Salmon Company | | | | |
| <u>Site</u> | <u>Area</u> | <u>Date</u> | <u>Product</u> | <u>Amount (Litres)</u> |
| Eughlam | 6A | 07/06/2012 | Hydrogen Peroxide | 2000 |
| | | 07/06/2012 | Hydrogen Peroxide | 2000 |
| | | 07/06/2012 | Hydrogen Peroxide | 2000 |
| | | 07/06/2012 | Hydrogen Peroxide | 2000 |
| | | 08/06/2012 | Hydrogen Peroxide | 2000 |
| | | 08/06/2012 | Hydrogen Peroxide | 2000 |
| | | 08/06/2012 | Hydrogen Peroxide | 2000 |
| | | 08/06/2012 | Hydrogen Peroxide | 2000 |
| | | 09/06/2012 | Hydrogen Peroxide | 2000 |
| | | 09/06/2012 | Hydrogen Peroxide | 2000 |
| | | 09/06/2012 | Hydrogen Peroxide | 2000 |
| | | 09/06/2012 | Hydrogen Peroxide | 2000 |
| | | 09/06/2012 | Hydrogen Peroxide | 2000 |
| | | 10/06/2012 | Hydrogen Peroxide | 2000 |
| | | 10/06/2012 | Hydrogen Peroxide | 2000 |

Full file [online here](#)

| 2011 | | Lakeland Marine | | |
|---------------------|-------------|------------------------|-------------------|--------------------|
| <u>Site</u> | <u>Area</u> | <u>Date</u> | <u>Product</u> | <u>Amount (kg)</u> |
| Fishnish A | 15B | 11/16/2011 | Hydrogen Peroxide | 951.5 |
| | | 11/16/2011 | Hydrogen Peroxide | 1124.5 |
| | | 11/16/2011 | Hydrogen Peroxide | 1384 |
| | | 11/23/2011 | Hydrogen Peroxide | 2076 |
| | | 11/23/2011 | Hydrogen Peroxide | 1903 |
| | | 11/23/2011 | Hydrogen Peroxide | 1913 |
| | | 11/24/2011 | Hydrogen Peroxide | 1903 |
| | | 11/24/2011 | Hydrogen Peroxide | 1903 |
| | | 11/24/2011 | Hydrogen Peroxide | 1903 |
| Vidlin North | 2A | 27/10 - 09/11 | Hydrogen Peroxide | 81100 |
| Vidlin Outer | 2A | 04/12 - 15/12 | Hydrogen Peroxide | 46000 |
| | | 27/10 - 09/11 | Hydrogen Peroxide | 55700 |
| | | 04/12 - 15/12 | Hydrogen Peroxide | 54000 |

| 2011 | Marine Harvest | | | |
|-------------|-----------------------|-------------|-------------------|------------------------|
| <u>Site</u> | <u>Area</u> | <u>Date</u> | <u>Product</u> | <u>Amount (litres)</u> |
| Cairidh | 11B | 12/19/2011 | Hydrogen Peroxide | 2580 |
| | | 12/19/2011 | Hydrogen Peroxide | 2750 |
| | | 12/20/2011 | Hydrogen Peroxide | 2838 |
| | | 12/20/2011 | Hydrogen Peroxide | 3010 |
| | | 12/20/2011 | Hydrogen Peroxide | 1505 |
| | | 12/20/2011 | Hydrogen Peroxide | 3010 |
| | | 12/20/2011 | Hydrogen Peroxide | 3010 |
| | | 12/20/2011 | Hydrogen Peroxide | 3010 |
| | | 12/21/2011 | Hydrogen Peroxide | 3010 |
| | | 12/21/2011 | Hydrogen Peroxide | 3010 |
| | | 12/21/2011 | Hydrogen Peroxide | 3010 |
| | | 12/21/2011 | Hydrogen Peroxide | 3010 |
| | | 12/23/2011 | Hydrogen Peroxide | 3010 |
| | | 12/23/2011 | Hydrogen Peroxide | 3010 |
| | | 12/23/2011 | Hydrogen Peroxide | 3010 |
| | | 12/23/2011 | Hydrogen Peroxide | 3010 |

Full file [online here](#)

| 2010 | Marine Harvest | | | | | | | |
|-------------|-----------------------|----------------|-------------|-------------|-----------------|-----------------|-------------------------|---------------|
| <u>Site</u> | <u>Area</u> | <u>FKB No.</u> | <u>Date</u> | <u>Time</u> | <u>Time End</u> | <u>Duration</u> | <u>Product</u> | <u>Amount</u> |
| Meavaig | 5B | FKB/W16 | 6/14/2010 | 8.35 | 9.05 | 12 mins | Hydrogen Peroxide (50%) | 1325 ltrs |
| | | | 6/14/2010 | 8.45 | 9.15 | 12 mins | Hydrogen Peroxide (50%) | 1325 ltrs |
| | | | 6/14/2010 | 12.30 | 13.00 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/14/2010 | 12.40 | 13.10 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/14/2010 | 15.45 | 16.15 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/14/2010 | 15.55 | 16.25 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/14/2010 | 19.15 | 19.45 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/14/2010 | 19.25 | 19.55 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/14/2010 | 23.55 | 0.25 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/15/2010 | 0.02 | 0.32 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/15/2010 | 3.45 | 4.15 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/15/2010 | 3.53 | 4.23 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/15/2010 | 7.02 | 7.32 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/15/2010 | 7.10 | 7.40 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/15/2010 | 13.50 | 14.20 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/15/2010 | 14.00 | 14.30 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |

| | | | | | | | | |
|--------|------------|---------|-----------|-------|-------|---------|-------------------------|-----------|
| Noster | 5B | FKB/W17 | 6/19/2010 | 0.30 | 1.03 | 12 mins | Hydrogen Peroxide (50%) | 1425 ltrs |
| | A22 | | 6/19/2010 | 0.36 | 0.45 | 12 mins | Hydrogen Peroxide (50%) | 1425 ltrs |
| | | | 6/19/2010 | 1.05 | 1.38 | 12 mins | Hydrogen Peroxide (50%) | 1425 ltrs |
| | | | 6/19/2010 | 4.43 | 5.16 | 12 mins | Hydrogen Peroxide (50%) | 1425 ltrs |
| | | | 6/19/2010 | 4.49 | 5.22 | 12 mins | Hydrogen Peroxide (50%) | 1425 ltrs |
| | | | 6/19/2010 | 11.45 | 12.18 | 12 mins | Hydrogen Peroxide (50%) | 1425 ltrs |
| | | | 6/19/2010 | 11.52 | 12.25 | 12 mins | Hydrogen Peroxide (50%) | 1425 ltrs |
| | | | 6/19/2010 | 15.26 | 15.59 | 12 mins | Hydrogen Peroxide (50%) | 1425 ltrs |
| | | | 6/19/2010 | 15.33 | 16.06 | 12 mins | Hydrogen Peroxide (50%) | 1425 ltrs |
| | | | 6/19/2010 | 18.54 | 19.26 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/19/2010 | 19.00 | 19.30 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/19/2010 | 22.35 | 23.05 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/19/2010 | 22.41 | 23.11 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/20/2010 | 1.47 | 2.18 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/20/2010 | 1.54 | 2.46 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/20/2010 | 5.00 | 5.30 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/20/2010 | 5.05 | 8.35 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/20/2010 | 8.22 | 8.55 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |
| | | | 6/20/2010 | 8.27 | 9.00 | 12 mins | Hydrogen Peroxide (50%) | 1400 ltrs |

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The FOI reply also [disclosed dozens of licences issued by Marine Scotland for discharge of used chemicals from wellboats:](#)

marinescotland

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E: MS.MarineLicensing@scotland.gsi.gov.uk



MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

LICENCE FOR DISCHARGE OF USED CHEMICALS FROM WELLBOATS

The [licence conditions included:](#)

Part 2 - Conditions

1. The licensee shall notify the licensing authority, at least two working days in advance of starting the operation, with the date and time of commencement of all operations undertaken under the authority of this licence and the product name and quantity of chemical(s) or agent(s) intended for discharge. Details of chemical(s) or agent(s) discharged must also be recorded and reported in accordance with Condition 10 of the licence.
2. The treatment of fish should be carried out in such a way as to minimise the discharge of chemical(s) or agent(s).
3. "*Force majeure*" may apply when, due to stress of weather or any other cause, it is necessary to discharge the chemicals or agents at a location other than that specified in Part 1 of the Schedule because the safety of human life, or a vessel or vehicle, is threatened. If chemicals or agents are discharged in an unauthorised area, full details of the circumstances must be immediately notified to the licensing authority. (See also notes appended to the Schedule).
4. Under the authority of this licence, the discharge of chemical(s) or agent(s) is only permitted if the location described in Part 1, section 4 of the Schedule is an operational and stocked fish farm. Furthermore, the said discharge is only permitted in respect of the treatment of fish being reared at the fish farm site at the location described in Part 1, section 4 of the Schedule, at the time of discharge.
5. No dead fish must be discharged to the water environment at any time. Any dead fish should be disposed of above the Mean High Water Springs in an appropriate manner.
6. Works must only be carried out in accordance with the Treatment Procedure (dated 18 December 2012) as provided with the application and Marine Scotland Licensing Operations Team (MS-LOT) must be informed if alterations are made to the treatment procedure. Copies of the treatment procedure must be kept with copies of the licence.
7. Only those chemicals or agents described in Part 1, section 5 of the Schedule (the authorised deposits) must be discharged under authority of the licence and all associated tank/hopper washings must be discharged at the location(s) specified in Part 1, section 4 of the Schedule.
8. The method of discharge must be:

Pumped discharge via pipe/hatches from Wellboat at a depth of surface to 2 metres below sea surface.

Moreover:

12. The applicant must ensure that:
 - a) subject to condition 12 b), the total quantity of cypermethrin as contained in the trade product Excis, discharged in any consecutive 3 hour period beginning at the time of the first release of Excis as part of any specific treatment, must not exceed 21.93 grams (this is equivalent to 2193 millilitres of Excis).
 - b) Cypermethrin, as contained in the trade product Excis, must not be discharged if deltamethrin, formulated as AMX™ 10mg/ml concentrate solution for fish treatment or

as ALPHA MAX™ marketed by Pharmaq AS, has been discharged at the premises in the previous 3 hours.

13. The total quantity of azamethiphos, as contained in the trade product Salmosan, discharged in any consecutive 24 hour period beginning at the time of the first release of Salmosan as part of any specific treatment, must not exceed 342.6 grams (this is equivalent to 685.2 grams of Salmosan).

14. The applicant must ensure that:

- a) subject to condition 14 b), the total quantity of deltamethrin, formulated as AMX™ 10mg/ml concentrate solution for fish treatment or as ALPHA MAX™ marketed by Pharmaq AS, discharged in any consecutive 3 hour period beginning at the time of the first release of deltamethrin, formulated as AMX™ 10 mg/ml concentrate solution for fish treatment or as ALPHA MAX™ marketed by Pharmaq AS, as part of any specific treatment must not exceed 8.22 grams (this is equivalent to 822.38 millilitres of AMX™ or ALPHA MAX™).
- b) Deltamethrin, formulated as AMX™ 10mg/ml concentrate solution for fish treatment or as ALPHA MAX™ marketed by Pharmaq AS, must not be discharged if cypermethrin, as contained in the trade product Excis, has been discharged at the premises in the previous 3 hours.

15. Hydrogen peroxide may be discharged at any time provided its actual use is recorded and reported in accordance with Part 2, section 10 of this licence.

Dozens of wellboats [authorized for discharge of toxic chemicals to Scottish waters](#) include:

ANNEX ONE

Vessels authorised to be used for chemical discharge at licensed Grieg Seafood Shetland Ltd sites.

| | | |
|---|------------|------------------|
| ° | 06132/16/0 | 11 December 2019 |
| ° | 06131/17/0 | 11 December 2019 |
| ° | 06130/16/0 | 17 November 2019 |
| ° | 06129/16/0 | 11 December 2019 |
| ° | 06128/16/0 | 11 December 2019 |
| ° | 06126/17/1 | 18 November 2019 |
| ° | 06125/16/0 | 20 November 2019 |
| - | 06124/16/0 | 20 November 2019 |
| * | 06123/16/0 | 17 November 2019 |
| * | 06122/17/0 | 17 November 2019 |
| ° | 06121/16/0 | 11 December 2019 |
| ° | 06107/16/0 | 18 December 2019 |
| ° | 06032/16/0 | 01 March 2020 |
| ° | 06031/16/0 | 20 November 2019 |
| * | 06029/16/0 | 11 December 2019 |
| * | 05224/17/1 | 03 August 2017 |
| * | 06575/18/0 | 22 February 2021 |
| ° | 06714/18/0 | 31 May 2021 |

| Vessel Name | IMO | Flag |
|-------------------------|---------|--------|
| <i>Ronja Harvester</i> | 9392547 | Norway |
| <i>Ronja Polaris</i> | 9657765 | Norway |
| <i>Ronja Settler</i> | 9258703 | UK |
| <i>Ronja Nordic</i> | 9443695 | Norway |
| <i>Ronja Superior</i> | 9421881 | Norway |
| <i>Ronja Carrier</i> | 9282845 | Canada |
| <i>Ronja Austral</i> | 9229465 | Chile |
| <i>Ronja Commander</i> | 9276183 | Norway |
| <i>Ronja Viking</i> | 9364100 | Norway |
| <i>Ronja Pioneer</i> | 9345520 | Norway |
| <i>Ronja Skye</i> | 9245926 | Norway |
| <i>Ronja Diamond</i> | 9814947 | Norway |
| <i>Froyhav</i> | | |
| <i>Froyfisk</i> | | |
| <i>Inter Caledonia</i> | 9745756 | Norway |
| <i>Viking Atlantic</i> | 9167954 | Norway |
| <i>Viking Caledonia</i> | 9125188 | UK |
| <i>Viking Viknes</i> | 9139658 | UK |
| <i>Roy Kristian</i> | 8237691 | Canada |
| <i>Ronja Atlantic</i> | 9451583 | Chile |
| <i>Ronja Pacific</i> | | |

ANNEX ONE

Vessels authorised to be used for chemical discharge at licensed Scottish Sea Farms sites.

- 06384/17/1 29 August 2020
- 06383/17/0 29 August 2020
- 06381/17/0 29 August 2020
- 06380/17/0 29 August 2020
- 06378/17/0 29 August 2020
- 06377/17/0 09 August 2020
- 06379/17/0 09 August 2020
- 06382/17/0 09 August 2020
- 06385/17/0 09 August 2020
- 06386/17/0 09 August 2020
- 06332/17/0 18 May 2020
- 06287/17/0 04 April 2020
- 06203/17/0 25 May 2020
- 06095/16/0 19 Dec 2019
- 05857/16/0 20 April 2019
- 05856/16/0 20 April 2019
- 05855/16/0 20 April 2019
- 05654/16/1 19 Jan 2019
- 05612/15/0 21 Jan 2019
- 05361/15/0 22 June 2018
- 05617/18/0 04 June 2021
- 05620/18/0 04 June 2021
- 05622/18/0 04 June 2021
- 05624/18/0 04 June 2021

| Vessel Name | IMO | Flag |
|------------------------|---------|--------|
| <i>Froyfisk</i> | | |
| <i>Froyhav</i> | | |
| <i>Griptisk</i> | 9158642 | Norway |
| <i>Migdale</i> | 9220689 | Norway |
| <i>Norholm</i> | 9139567 | UK |
| <i>Oylaks</i> | | |
| <i>Ronja Atlantic</i> | 9451563 | Chile |
| <i>Ronja Commander</i> | 9276183 | Norway |
| <i>Ronja Harvester</i> | 9392547 | Norway |
| <i>Ronja Nordic</i> | 9443685 | Norway |
| <i>Ronja Pacific</i> | | |
| <i>Ronja Settler</i> | 9258703 | UK |
| <i>Ronja Superior</i> | 9421881 | Norway |
| <i>Ronja Carrier</i> | 9282945 | Canada |
| <i>Ronja Viking</i> | 9364160 | Norway |
| <i>Ronja Pioneer</i> | 9345520 | Norway |
| <i>Ronja Skye</i> | 9245926 | Norway |
| <i>Ronja</i> | 9165475 | Canada |
| <i>Roy Kristian</i> | 9237591 | Canada |
| <i>Viktorfa Lady</i> | 9369849 | Norway |
| <i>Viktorfa Viking</i> | 9521801 | Norway |

ANNEX ONE

Vessels authorised to be used for the discharge of used sea lice treatment chemicals at licensed **The Scottish Salmon Company** sites under the following licences:

| | | |
|-----|------------|-------------------|
| 1. | 05443/17/0 | 27 May 2018 |
| 2. | 05950/17/0 | 18 December 2019 |
| 3. | 06198/17/0 | 25 May 2020 |
| 4. | 06199/17/0 | 08 June 2020 |
| 5. | 06200/17/0 | 25 May 2020 |
| 6. | 06201/17/0 | 25 May 2020 |
| 7. | 06202/17/0 | 25 May 2020 |
| 8. | 06214/17/1 | 29 March 2020 |
| 9. | 06216/17/1 | 29 March 2020 |
| 10. | 06218/17/1 | 29 March 2020 |
| 11. | 06219/17/1 | 29 March 2020 |
| 12. | 06307/17/0 | 20 July 2020 |
| 13. | 06340/17/0 | 13 August 2020 |
| 14. | 06399/17/0 | 23 August 2020 |
| 15. | 06368/17/1 | 28 August 2020 |
| 16. | 06394/17/1 | 28 August 2020 |
| 17. | 06402/17/0 | 28 August 2020 |
| 18. | 06440/17/0 | 28 August 2020 |
| 19. | 06363/17/0 | 29 August 2020 |
| 20. | 06364/17/0 | 29 August 2020 |
| 21. | 06365/17/0 | 29 August 2020 |
| 22. | 06367/17/0 | 07 September 2020 |
| 23. | 06372/17/0 | 07 September 2020 |
| 24. | 06395/17/0 | 07 September 2020 |
| 25. | 06401/17/0 | 07 September 2020 |
| 26. | 06460/17/0 | 12 September 2020 |
| 27. | 06369/17/0 | 17 September 2020 |
| 28. | 06376/17/0 | 25 September 2020 |
| 29. | 06443/17/0 | 25 September 2020 |
| 30. | 06370/17/0 | 01 October 2020 |
| 31. | 06373/17/0 | 01 October 2020 |
| 32. | 06397/17/0 | 09 October 2020 |
| 33. | 06463/17/0 | 22 October 2020 |
| 34. | 06464/17/0 | 22 October 2020 |
| 35. | 06459/17/0 | 23 October 2020 |
| 36. | 06508/17/0 | 29 October 2020 |
| 37. | 06462/17/0 | 29 October 2020 |
| 38. | 06396/17/0 | 29 October 2020 |
| 39. | 06512/17/0 | 09 November 2020 |
| 40. | 06366/17/0 | 13 November 2020 |
| 41. | 06371/18/0 | 18 January 2021 |
| 42. | 06590/18/0 | 18 April 2021 |

| Vessel Name | IMO | Flag |
|--------------------|------------|-------------|
| Viktoria Viking | 9521801 | Norway |
| Viktoria Lady | 9369849 | Norway |
| Nurholm | 9139587 | UK |
| Ronja Viking | 9364100 | Norway |
| Ronja Nordic | 9443695 | Norway |
| Ronja Pioneer | 9345520 | Norway |
| Viking Atlantic | 9167954 | Norway |
| Ronja Supporter | 9775359 | Norway |
| Robris | 9204544 | Norway |
| Ronja Settler | 9258703 | UK |
| Viking Gripfisk | 9158642 | Norway |
| Rostein | 9220665 | Norway |
| Rohav | 9220677 | Norway |
| Sordyroy | 6700652 | Norway |

ANNEX ONE

Vessels authorised to be used for chemical discharge at licensed **Loch Duart Ltd** sites.

- | | |
|----------------------------|---------------------------|
| <i>a) Ronja Commander</i> | <i>b) Ronja Pioneer</i> |
| <i>c) Ronja Challenger</i> | <i>d) Inter Caledonia</i> |
| <i>e) Migdale</i> | <i>f) Viking Atlantic</i> |
| <i>g) Solundoy</i> | |

ANNEX ONE

Vessels authorised to be used for chemical discharge at licensed **Marine Harvest (Scotland) Ltd** sites.

- | | | | |
|---------------------------|--------------------------|----------------------------|---------------------------|
| <i>a) Inter Caledonia</i> | <i>b) Ronja Atlantic</i> | <i>c) Ronja Challenger</i> | <i>d) Ronja Commander</i> |
| <i>e) Ronja Nordic</i> | <i>f) Ronja Pioneer</i> | <i>g) Ronja Settler</i> | <i>h) Ronja Superior</i> |
| <i>i) Ronja Skye</i> | <i>j) Ronja Viking</i> | <i>k) Victoria Viking</i> | |

ANNEX ONE

Vessels authorised to be used for chemical discharge at licensed **Cooke Aquaculture Scotland Ltd** sites.

- | | | |
|---------------------------|-------------------------|------------------|
| <i>a) Viktoria Viking</i> | <i>b) Victoria Lady</i> | <i>c) Rofisk</i> |
|---------------------------|-------------------------|------------------|

Data disclosed by SEPA on 19 July 2017 (via F:0187827):



Wellboats -
Treatments 2016.xls

| 2016 | | The Scottish Salmon Company | | | Confirmed on 03/03/2017 | | |
|-------------|---------|-----------------------------|-------|----------|-------------------------|--------|--|
| Site | Ref No. | Date | Time | Duration | Chemical/Agent | Amount | |
| Outer Eport | 04567 | 23/11/2016 | 11:00 | 60 mins | Salmosan (Azamethiphos) | 296g | |
| Outer Eport | 04567 | 25/11/2016 | 11:45 | 60 mins | Salmosan (Azamethiphos) | 296g | |
| Scadabay | 05383 | 14/05/2016 | 21:30 | 60 mins | Salmosan (Azamethiphos) | 200g | |
| Scadabay | 05383 | 18/05/2016 | 21:30 | 60 mins | Salmosan (Azamethiphos) | 200g | |
| Scadabay | 05383 | 28/05/2016 | 18:00 | 60 mins | Salmosan (Azamethiphos) | 200g | |
| Scadabay | 05383 | 05/11/2016 | 15:00 | 60 mins | Salmosan (Azamethiphos) | 200g | |
| Greanamul | 05180 | 01/10/2016 | 11:06 | 16 mins | Salmosan (Azamethiphos) | 100g | |

| 2016 | | Scottish Sea Farms | | | Confirmed on 07/02/2017 | | |
|----------|---------|--------------------|-------|----------|-------------------------|---------|--|
| Site | Ref No. | Date | Time | Duration | Chemical/Agent | Amount | |
| Spelve B | 05425 | 24/05/2016 | 09:37 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 24/05/2016 | 09:37 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 24/05/2016 | 09:37 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 24/05/2016 | 13:10 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 24/05/2016 | 13:10 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 24/05/2016 | 13:10 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 24/05/2016 | 16:45 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 24/05/2016 | 16:45 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 24/05/2016 | 16:45 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 24/05/2016 | 20:10 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 24/05/2016 | 20:10 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 24/05/2016 | 20:10 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 25/05/2016 | 09:20 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 25/05/2016 | 09:20 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 25/05/2016 | 09:20 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 25/05/2016 | 13:20 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 25/05/2016 | 13:20 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 25/05/2016 | 13:20 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 25/05/2016 | 16:47 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 25/05/2016 | 16:47 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 25/05/2016 | 16:47 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 25/05/2016 | 20:06 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 25/05/2016 | 20:06 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 25/05/2016 | 20:06 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 26/05/2016 | 09:50 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 26/05/2016 | 09:50 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 26/05/2016 | 09:50 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 26/05/2016 | 13:15 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 26/05/2016 | 13:15 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 26/05/2016 | 13:15 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 26/05/2016 | 16:50 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 26/05/2016 | 16:50 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 26/05/2016 | 16:50 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 26/05/2016 | 20:15 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 26/05/2016 | 20:15 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 26/05/2016 | 20:15 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 27/05/2016 | 09:20 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 27/05/2016 | 09:20 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 27/05/2016 | 09:20 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 27/05/2016 | 12:30 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 27/05/2016 | 12:30 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 27/05/2016 | 12:30 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 27/05/2016 | 15:55 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 27/05/2016 | 15:55 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 27/05/2016 | 15:55 | 20 mins | Hydrogen Peroxide | 924 Its | |
| Spelve B | 05425 | 27/05/2016 | 19:10 | 20 mins | Salmosan (Azamethiphos) | 20 g | |
| Spelve B | 05425 | 27/05/2016 | 19:10 | 20 mins | Azasure (Azamethiphos) | 100 g | |
| Spelve B | 05425 | 27/05/2016 | 19:10 | 20 mins | Hydrogen Peroxide | 924 Its | |

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|------------|-------|------------|-------|---------|-------------------|--------|
| Grunna Voe | 05245 | 15/11/2016 | 08:15 | 30 mins | Hydrogen Peroxide | 1018 L |
| Grunna Voe | 05245 | 15/11/2016 | 12:30 | 30 mins | Hydrogen Peroxide | 1018 L |
| Grunna Voe | 05245 | 16/11/2016 | 09:00 | 30 mins | Hydrogen Peroxide | 1018 L |
| Grunna Voe | 05245 | 16/11/2016 | 13:25 | 30 mins | Hydrogen Peroxide | 1018 L |
| Grunna Voe | 05245 | 19/11/2016 | 08:15 | 30 mins | Hydrogen Peroxide | 1018 L |
| Grunna Voe | 05245 | 19/11/2016 | 12:15 | 30 mins | Hydrogen Peroxide | 1018 L |
| Grunna Voe | 05245 | 20/11/2016 | 08:00 | 30 mins | Hydrogen Peroxide | 1018 L |
| Grunna Voe | 05245 | 20/11/2016 | 12:20 | 30 mins | Hydrogen Peroxide | 1018 L |
| Grunna Voe | 05245 | 21/11/2016 | 07:50 | 30 mins | Hydrogen Peroxide | 1018 L |

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|-----------|------|---------------|-------|---------|-------------------|--------|
| Loura Voe | 0542 | 16/11/2016 | 17:30 | 30 mins | Hydrogen Peroxide | 1018 L |
| Loura Voe | 0542 | 16-17/11/2016 | 23:15 | 30 mins | Hydrogen Peroxide | 1018 L |
| Loura Voe | 0542 | 18/11/2016 | 08:00 | 30 mins | Hydrogen Peroxide | 1018 L |
| Loura Voe | 0542 | 19/2016 | 17:50 | 30 mins | Hydrogen Peroxide | 1018 L |
| Loura Voe | 0542 | 19-20/11/2016 | 22:30 | 30 mins | Hydrogen Peroxide | 1018 L |
| Loura Voe | 0542 | 21/22/2016 | 22:00 | 30 mins | Hydrogen Peroxide | 1018 L |
| Loura Voe | 0542 | 22/11/2016 | 08:00 | 30 mins | Hydrogen Peroxide | 1018 L |
| Loura Voe | 0542 | 22/11/2016 | 13:15 | 30 mins | Hydrogen Peroxide | 1018 L |

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|---------------|-------|------------|-------|---------|-------------------------|---------|
| Lismore North | 05360 | 29/06/2016 | 16:45 | 20 mins | Salmosan (Azamethiphos) | 60 g |
| Lismore North | 05360 | 29/06/2016 | 16:45 | 20 mins | Hydrogen Peroxide | 462 lts |
| Lismore North | 05360 | 30/06/2016 | 08:38 | 20 mins | Salmosan (Azamethiphos) | 120 g |
| Lismore North | 05360 | 30/06/2016 | 08:38 | 20 mins | Hydrogen Peroxide | 924 lts |
| Lismore North | 05360 | 30/06/2016 | 11:28 | 20 mins | Salmosan (Azamethiphos) | 120 g |
| Lismore North | 05360 | 30/06/2016 | 11:28 | 20 mins | Hydrogen Peroxide | 924 lts |
| Lismore North | 05360 | 30/06/2016 | 14:27 | 20 mins | Salmosan (Azamethiphos) | 120 g |
| Lismore North | 05360 | 30/06/2016 | 14:27 | 20 mins | Hydrogen Peroxide | 924 lts |
| Lismore North | 05360 | 30/06/2016 | 17:05 | 20 mins | Salmosan (Azamethiphos) | 60 g |
| Lismore North | 05360 | 30/06/2016 | 17:05 | 20 mins | Hydrogen Peroxide | 462 lts |
| Lismore North | 05360 | 30/06/2016 | 19:20 | 20 mins | Salmosan (Azamethiphos) | 120 g |
| Lismore North | 05360 | 30/06/2016 | 19:20 | 20 mins | Hydrogen Peroxide | 924 lts |
| Lismore North | 05360 | 30/06/2016 | 21:45 | 20 mins | Salmosan (Azamethiphos) | 60 g |
| Lismore North | 05360 | 30/06/2016 | 21:45 | 20 mins | Hydrogen Peroxide | 462 lts |
| Lismore North | 05360 | 01/07/2016 | 09:45 | 20 mins | Salmosan (Azamethiphos) | 60 g |
| Lismore North | 05360 | 01/07/2016 | 09:45 | 20 mins | Hydrogen Peroxide | 462 lts |
| Lismore North | 05360 | 01/07/2016 | 09:45 | 20 mins | Salmosan (Azamethiphos) | 60 g |
| Lismore North | 05360 | 01/07/2016 | 09:45 | 20 mins | Hydrogen Peroxide | 462 lts |

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|---------|-------|------------|-------|---------|-------------------|---------|
| Nevis C | 05422 | 13/12/2016 | 09:00 | 20 mins | Hydrogen Peroxide | 640 lts |
| Nevis C | 05422 | 13/12/2016 | 12:00 | 20 mins | Hydrogen Peroxide | 320 lts |
| Nevis C | 05422 | 13/12/2016 | 15:00 | 20 mins | Hydrogen Peroxide | 320 lts |
| Nevis C | 05422 | 14/12/2016 | 07:00 | 20 mins | Hydrogen Peroxide | 320 lts |
| Nevis C | 05422 | 14/12/2016 | 10:00 | 20 mins | Hydrogen Peroxide | 320 lts |
| Nevis C | 05422 | 14/12/2016 | 13:00 | 20 mins | Hydrogen Peroxide | 640 lts |
| Nevis C | 05422 | 14/12/2016 | 15:00 | 20 mins | Hydrogen Peroxide | 320 lts |
| Nevis C | 05422 | 15/12/2016 | 07:00 | 20 mins | Hydrogen Peroxide | 640 lts |
| Nevis C | 05422 | 15/12/2016 | 10:00 | 20 mins | Hydrogen Peroxide | 320 lts |
| Nevis C | 05422 | 15/12/2016 | 13:00 | 20 mins | Hydrogen Peroxide | 320 lts |
| Nevis C | 05422 | 15/12/2016 | 16:00 | 20 mins | Hydrogen Peroxide | 320 lts |

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|-----------|-------|------------|-------|----------|------------------------|--------|
| Bellister | 05243 | 25/11/2016 | 08:00 | 120 mins | Azasure (Azamethiphos) | 200 g |
| Bellister | 05243 | 25/11/2016 | 11:00 | 120 mins | Azasure (Azamethiphos) | 200 g |
| Bellister | 05243 | 25/11/2016 | 14:00 | 120 mins | Azasure (Azamethiphos) | 200 g |
| Bellister | 05243 | 26/11/2016 | 08:00 | 120 mins | Azasure (Azamethiphos) | 200 g |
| Bellister | 05243 | 26/11/2016 | 11:00 | 120 mins | Azasure (Azamethiphos) | 200 g |
| Bellister | 05243 | 26/11/2016 | 14:00 | 120 mins | Azasure (Azamethiphos) | 200 g |
| Bellister | 05243 | 26/11/2016 | 08:00 | 120 mins | Hydrogen Peroxide | 2036 L |
| Bellister | 05243 | 26/11/2016 | 11:00 | 120 mins | Hydrogen Peroxide | 2036 L |
| Bellister | 05243 | 26/11/2016 | 14:00 | 120 mins | Hydrogen Peroxide | 2036 L |
| Bellister | 05243 | 25/11/2016 | 08:00 | 120 mins | Hydrogen Peroxide | 2036 L |
| Bellister | 05243 | 25/11/2016 | 11:00 | 120 mins | Hydrogen Peroxide | 2036 L |
| Bellister | 05243 | 25/11/2016 | 14:00 | 120 mins | Hydrogen Peroxide | 2036 L |

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|------------------|-------|------------|-------|---------|-------------------------|---------|
| Lismore North DS | 05353 | 28/06/2016 | 11:48 | 20 mins | Salmosan (Azamethiphos) | 60 g |
| Lismore North DS | 05353 | 28/06/2016 | 11:48 | 20 mins | Hydrogen Peroxide | 462 lts |
| Lismore North DS | 05353 | 28/06/2016 | 14:45 | 20 mins | Salmosan (Azamethiphos) | 60 g |
| Lismore North DS | 05353 | 28/06/2016 | 14:45 | 20 mins | Hydrogen Peroxide | 462 lts |
| Lismore North DS | 05353 | 28/06/2016 | 17:46 | 20 mins | Salmosan (Azamethiphos) | 60 g |
| Lismore North DS | 05353 | 28/06/2016 | 17:46 | 20 mins | Hydrogen Peroxide | 462 lts |
| Lismore North DS | 05353 | 29/06/2016 | 09:09 | 20 mins | Salmosan (Azamethiphos) | 60 g |
| Lismore North DS | 05353 | 29/06/2016 | 09:09 | 20 mins | Hydrogen Peroxide | 462 lts |
| Lismore North DS | 05353 | 29/06/2016 | 11:37 | 20 mins | Salmosan (Azamethiphos) | 60 g |
| Lismore North DS | 05353 | 29/06/2016 | 11:37 | 20 mins | Hydrogen Peroxide | 462 lts |
| Lismore North DS | 05353 | 29/06/2016 | 12:24 | 20 mins | Salmosan (Azamethiphos) | 60 g |
| Lismore North DS | 05353 | 29/06/2016 | 12:24 | 20 mins | Hydrogen Peroxide | 462 lts |

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|---------|-------|------------|-------|---------|-------------------|----------|
| Toyness | 04680 | 15/11/2016 | 12:32 | 20 mins | Hydrogen Peroxide | 1300 ltr |
| Toyness | 04680 | 15/11/2016 | 17:09 | 20 mins | Hydrogen Peroxide | 1100 ltr |

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|------------|-------|------------|----------|---------|-------------------------|------|
| Gob Na Hoe | 04905 | 03/09/2016 | 21:19:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Gob Na Hoe | 04905 | 04/09/2016 | 12:28:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Gob Na Hoe | 04905 | 04/09/2016 | 16:35:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Gob Na Hoe | 04905 | 04/09/2016 | 20:40:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Gob Na Hoe | 04905 | 05/09/2016 | 19:00:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Gob Na Hoe | 04905 | 10/09/2016 | 12:48:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Gob Na Hoe | 04905 | 10/09/2016 | 17:03:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Gob Na Hoe | 04905 | 11/09/2016 | 12:43:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Gob Na Hoe | 04905 | 12/09/2016 | 17:03:00 | 20 mins | Salmosan (Azamethiphos) | 300g |

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|---------|-------|------------|----------|---------|-------------------------|------|
| Leinish | 04906 | 25/08/2016 | 11:40:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Leinish | 04906 | 25/08/2016 | 16:40:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Leinish | 04906 | 25/08/2016 | 21:00:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Leinish | 04906 | 26/08/2016 | 12:16:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Leinish | 04906 | 26/08/2016 | 15:47:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Leinish | 04906 | 26/08/2016 | 20:16:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Leinish | 04906 | 27/08/2016 | 11:56:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Leinish | 04906 | 27/08/2016 | 15:47:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Leinish | 04906 | 27/08/2016 | 11:35:00 | 20 mins | Salmosan (Azamethiphos) | 300g |
| Leinish | 04906 | 27/08/2016 | 14:57:00 | 20 mins | Salmosan (Azamethiphos) | 300g |

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|----------------|-------|------------|--|---------|-------------------|--------|
| South of Linga | 05223 | 04/09/2016 | | 30 mins | Hydrogen Peroxide | 4500 L |
| South of Linga | 05223 | 04/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| South of Linga | 05223 | 05/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| South of Linga | 05223 | 05/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| South of Linga | 05223 | 05/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| South of Linga | 05223 | 05/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| South of Linga | 05223 | 06/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| South of Linga | 05223 | 07/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| South of Linga | 05223 | 07/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| South of Linga | 05223 | 07/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |

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|------------------|-------|------------|--|---------|-------------------|--------|
| Settermess South | 04908 | 07/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| Settermess South | 04908 | 07/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| Settermess South | 04908 | 08/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| Settermess South | 04908 | 08/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| Settermess South | 04908 | 08/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| Settermess South | 04908 | 08/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| Settermess South | 04908 | 08/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| Settermess South | 04908 | 09/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| Settermess South | 04908 | 09/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| Settermess South | 04908 | 09/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |
| Settermess South | 04908 | 09/09/2016 | | 30 mins | Hydrogen Peroxide | 4650 L |

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|--------------------|-------|------------|--|---------|-------------------|----------|
| Bright of Foraness | 04909 | 07/09/2016 | | 30 mins | Hydrogen Peroxide | 5600.000 |
|--------------------|-------|------------|--|---------|-------------------|----------|

| 2016 | | Marine Harvest | | Confirmed on 25/04/2017 | | | |
|-------------|----------|-----------------------|------|--------------------------------|--------------------------------|--------|--|
| Site | MCMS No. | Date | Time | Duration | Product | Amount | |
| Tabhaigh | 05656 | 20/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 400g | |
| Tabhaigh | 05656 | 20/01/2016 | | 60 mins | Hydrogen Peroxide | 6500L | |
| Tabhaigh | 05656 | 21/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g | |
| Tabhaigh | 05656 | 21/01/2016 | | 60 mins | Hydrogen Peroxide | 7500L | |
| Tabhaigh | 05656 | 21/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g | |
| Tabhaigh | 05656 | 21/01/2016 | | 60 mins | Hydrogen Peroxide | 6619L | |
| Tabhaigh | 05656 | 22/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g | |
| Tabhaigh | 05656 | 22/01/2016 | | 60 mins | Hydrogen Peroxide | 6553L | |
| Tabhaigh | 05656 | 23/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g | |
| Tabhaigh | 05656 | 23/01/2016 | | 60 mins | Hydrogen Peroxide | 7601L | |
| Tabhaigh | 05656 | 25/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g | |
| Tabhaigh | 05656 | 25/01/2016 | | 60 mins | Hydrogen Peroxide | 7863L | |
| Tabhaigh | 05656 | 26/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g | |
| Tabhaigh | 05656 | 26/01/2016 | | 60 mins | Hydrogen Peroxide | 7805L | |
| Tabhaigh | 05656 | 28/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g | |
| Tabhaigh | 05656 | 28/01/2016 | | 60 mins | Hydrogen Peroxide | 7797L | |
| Tabhaigh | 05656 | 29/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g | |
| Tabhaigh | 05656 | 29/01/2016 | | 60 mins | Hydrogen Peroxide | 7688L | |
| Tabhaigh | 05656 | 30/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g | |
| Tabhaigh | 05656 | 30/01/2016 | | 60 mins | Hydrogen Peroxide | 7500L | |

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|------------------|-------|------------|--|---------|--------------------------------|-------|
| North Shore West | 05662 | 20/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore West | 05662 | 20/01/2016 | | 60 mins | Hydrogen Peroxide | 7250L |
| North Shore West | 05662 | 21/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore West | 05662 | 21/01/2016 | | 60 mins | Hydrogen Peroxide | 6706L |
| North Shore West | 05662 | 23/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore West | 05662 | 23/01/2016 | | 60 mins | Hydrogen Peroxide | 7524L |
| North Shore West | 05662 | 24/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore West | 05662 | 24/01/2016 | | 60 mins | Hydrogen Peroxide | 7898L |
| North Shore West | 05662 | 25/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore West | 05662 | 25/01/2016 | | 60 mins | Hydrogen Peroxide | 7627L |
| North Shore West | 05662 | 27/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore West | 05662 | 27/01/2016 | | 60 mins | Hydrogen Peroxide | 8000L |
| North Shore West | 05662 | 28/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore West | 05662 | 28/01/2016 | | 60 mins | Hydrogen Peroxide | 7761L |
| North Shore West | 05662 | 29/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore West | 05662 | 29/01/2016 | | 60 mins | Hydrogen Peroxide | 7550L |

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|------------------|-------|------------|--|---------|--------------------------------|-------|
| North Shore East | 05660 | 22/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore East | 05660 | 22/01/2016 | | 60 mins | Hydrogen Peroxide | 7603L |
| North Shore East | 05660 | 23/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore East | 05660 | 23/01/2016 | | 60 mins | Hydrogen Peroxide | 7493L |
| North Shore East | 05660 | 24/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore East | 05660 | 24/01/2016 | | 60 mins | Hydrogen Peroxide | 7863L |
| North Shore East | 05660 | 26/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore East | 05660 | 26/01/2016 | | 60 mins | Hydrogen Peroxide | 7313L |
| North Shore East | 05660 | 27/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore East | 05660 | 27/01/2016 | | 60 mins | Hydrogen Peroxide | 8000L |
| North Shore East | 05660 | 28/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore East | 05660 | 28/01/2016 | | 60 mins | Hydrogen Peroxide | 7665L |
| North Shore East | 05660 | 30/01/2016 | | 60 mins | Salmosan/-Vet (Azameth active) | 440g |
| North Shore East | 05660 | 30/01/2016 | | 60 mins | Hydrogen Peroxide | 7515L |

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|-------------|-------|-------------------------|----------|---------|--------------------------------|-------|
| Geshornish | 06005 | 04/02/2016 | 11:30:00 | 40 mins | Salmosan/-Vet (Azameth active) | 400g |
| Geshornish | 06005 | 04/02/2016 | 11:30:00 | 40 mins | Hydrogen Peroxide | 3500L |
| Geshornish | 06005 | 05/02/2016 | 12:20:00 | 40 mins | Salmosan/-Vet (Azameth active) | 400g |
| Geshornish | 06005 | 05/02/2016 | 12:20:00 | 40 mins | Hydrogen Peroxide | 3500L |
| Greshornish | 06005 | 08/08/2016 - 11/08/2016 | | | Salmosan/-Vet (Azameth active) | 825g |
| Greshornish | 06005 | 18/08/2016 - 21/08/2016 | | | Salmosan/-Vet (Azameth active) | 825g |

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|-------------------|-------|-------------------------|--|--|--------------------------------|-------|
| West Loch Tarbert | 06015 | 23/02/2016 - 25/02/2016 | | | Salmosan/-Vet (Azameth active) | 980g |
| West Loch Tarbert | 06015 | 23/02/2016 - 25/02/2016 | | | Hydrogen Peroxide | 9300L |

| | | | | | | |
|----------|-------|-------------------------|--|--|--------------------------------|-------|
| Raineach | 05884 | 16/04/2016 - 29/04/2016 | | | Salmosan/-Vet (Azameth active) | 2160g |
|----------|-------|-------------------------|--|--|--------------------------------|-------|

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|----------|-------|------------|----------|---------|--------------------------------|------|
| Stulaigh | 05968 | 08/07/2016 | 14:05:00 | 30 mins | Salmosan/-Vet (Azameth active) | 400g |
| Stulaigh | 05968 | 09/07/2016 | 12:12:00 | 30 mins | Salmosan/-Vet (Azameth active) | 400g |
| Stulaigh | 05968 | 09/07/2016 | 17:23:00 | 30 mins | Salmosan/-Vet (Azameth active) | 400g |
| Stulaigh | 05968 | 09/07/2016 | 13:16:00 | 30 mins | Salmosan/-Vet (Azameth active) | 400g |
| Stulaigh | 05968 | 12/07/2016 | 12:40:00 | 30 mins | Salmosan/-Vet (Azameth active) | 500g |
| Stulaigh | 05968 | 12/07/2016 | 16:55:00 | 30 mins | Salmosan/-Vet (Azameth active) | 500g |
| Stulaigh | 05968 | 13/07/2016 | 12:44:00 | 30 mins | Salmosan/-Vet (Azameth active) | 500g |
| Stulaigh | 05968 | 13/07/2016 | 17:07:00 | 30 mins | Salmosan/-Vet (Azameth active) | 500g |
| Stulaigh | 05968 | 14/07/2016 | 12:48:00 | 30 mins | Salmosan/-Vet (Azameth active) | 500g |
| Stulaigh | 05968 | 14/07/2016 | 18:21:00 | 30 mins | Salmosan/-Vet (Azameth active) | 500g |
| Stulaigh | 05968 | 15/07/2016 | 13:21:00 | 30 mins | Salmosan/-Vet (Azameth active) | 500g |
| Stulaigh | 05968 | 15/07/2016 | 20:05:00 | 30 mins | Salmosan/-Vet (Azameth active) | 500g |

| | | | | | | |
|--------------------------|-------|-------------------------|--|--|--------------------------------|--------|
| West Loch Tarbert (Soay) | 06015 | 28/06/2016 - 02/07/2016 | | | Salmosan/-Vet (Azameth active) | 1750g |
| West Loch Tarbert (Soay) | 06015 | 08/09/2016 - 11/09/2016 | | | Paramove 50 (Perox active) | 10500L |
| West Loch Tarbert (Soay) | 06015 | 19/10/2016 - 02/11/2016 | | | Salmosan/-Vet (Azameth active) | 3320g |
| West Loch Tarbert (Soay) | 06015 | 19/10/2016 - 02/11/2016 | | | Paramove 50 (Perox active) | 12100L |

| | | | | | | |
|-----------------------------------|-------|-------------------------|--|--|--------------------------------|----------|
| Carradale South (Eilean Grianain) | 05747 | 21/07/2016 - 30/07/2016 | | | Salmosan/-Vet (Azameth active) | 700g |
| Carradale South (Eilean Grianain) | 05747 | 11/10/2016 - 14/10/2016 | | | Paramove 50 (Perox active) | 16850L |
| Carradale South (Eilean Grianain) | 05747 | 09/10/2016 | | | Salmosan/-Vet (Azameth active) | 100grams |

| | | | | | | |
|-----------------|-------|--------------------------|--|--|--------------------------------|--------|
| Carradale North | 05869 | 21/07/2016 - 30/07/2016 | | | Salmosan/-Vet (Azameth active) | 2700g |
| Carradale North | 05869 | 09/10/2016 - 11/10/2016 | | | Salmosan/-Vet (Azameth active) | 500g |
| Carradale North | 05869 | 10/10/2016 to 17/10/2016 | | | Paramove 50 (Perox active) | 18400L |

| | | | | | | |
|---------------------|-------|-------------------------|--|--|--------------------------------|-------|
| Groatay (Cheesebay) | 04794 | 04/07/2016 - 15/07/2016 | | | Salmosan/-Vet (Azameth active) | 2440g |
|---------------------|-------|-------------------------|--|--|--------------------------------|-------|

| | | | | | | |
|--------------------|-------|-------------------------|--|--|--------------------------------|--------|
| Grey Horse Channel | 04796 | 03/07/2016 - 09/07/2016 | | | Salmosan/-Vet (Azameth active) | 1540g |
| Grey Horse Channel | 04796 | 9/2/2016 to 11/2/2016 | | | Paramove 50 (Perox active) | 28729L |

| | | | | | | |
|--------------------|-------|--------------------------|----------|---------|--------------------------------|----------|
| (East) Scotasay | 04787 | 18/06/2016 - 19/06/2016 | | | Salmosan/-Vet (Azameth active) | 400g |
| (East) Scotasay | 06017 | 01/08/2016 - 16/08/2016 | | | Salmosan/-Vet (Azameth active) | 945g |
| (East) Scotasay | 06017 | 22/09/2016 - 28/09/2016 | | | Salmosan/-Vet (Azameth active) | 900g |
| | | | | | | |
| Raineach | 05884 | 18/06/2016 | | | Salmosan/-Vet (Azameth active) | 200g |
| Raineach | 05884 | 01/08/2016 - 16/08/2016 | | | Salmosan/-Vet (Azameth active) | 1620g |
| | | | | | | |
| Colonsay | 05998 | 30/07/2016 - 05/08/2016 | | | Salmosan/-Vet (Azameth active) | 1200g |
| Colonsay | 05998 | 30/07/2016 - 05/08/2016 | | | Paramove 50 (Perox active) | 20575L |
| Colonsay | 05998 | 22/08/2016 - 26/08/2016 | | | Salmosan/-Vet (Azameth active) | 2530g |
| | | | | | | |
| Marulaig Bay | 06022 | 01/07/2016 - 02/07/2016 | | | Salmosan/-Vet (Azameth active) | 400g |
| Marulaig Bay | 06022 | 30/08/2016 - 02/09/2016 | | | Salmosan/-Vet (Azameth active) | 1440g |
| Marulaig Bay | 06022 | 02/09/2016 - 04/09/2016 | | | Paramove 50 (Perox active) | 6600L |
| | | | | | | |
| Seaforth | 06016 | 14/09/2016 - 28/09/2016 | | | Salmosan/-Vet (Azameth active) | 950g |
| | | | | | | |
| Noster | 06020 | 14/09/2016 to 28/09/2016 | | | Salmosan/-Vet (Azameth active) | 850g |
| | | | | | | |
| Maclean's Nose | 05635 | 27/11/2016 - 01/12/2016 | | | Salmosan/-Vet (Azameth active) | 990g |
| | | | | | | |
| Kingairloch | 06010 | 29/11/2016 - 06/12/2016 | | | Salmosan/-Vet (Azameth active) | 3200g |
| | | | | | | |
| Linnhe | 06024 | 10/12/2016 - 16/12/2016 | | | Salmosan/-Vet (Azameth active) | 4200g |
| | | | | | | |
| Ardintoul | 04804 | 15/08/2016 - 17/08/2016 | | | Salmosan/-Vet (Azameth active) | 1200g |
| | | | | | | |
| Ardmaddy South | 03850 | 04/01/2016 - 08/01/2016 | | | AMX (Deltameth active) | 33.1g |
| Ardmaddy South | 03850 | 04/01/2016 - 08/01/2016 | | | Paramove 50 (Perox active) | 17260.5L |
| | | | | | | |
| Bagh Dail Nan Cean | 05887 | 14/12/2016 | 06:30:00 | 90 mins | Salmosan/-Vet (Azameth active) | 340g |
| Bagh Dail Nan Cean | 05887 | 15/12/2016 | 08:01:00 | 90 mins | Salmosan/-Vet (Azameth active) | 340g |
| Bagh Dail Nan Cean | 05887 | 16/12/2016 | 09:32:00 | 90 mins | Salmosan/-Vet (Azameth active) | 340g |
| Bagh Dail Nan Cean | 05887 | 17/12/2016 | 11:03:00 | 90 mins | Salmosan/-Vet (Azameth active) | 340g |
| Bagh Dail Nan Cean | 05887 | 18/12/2016 | 12:34:00 | 90 mins | Salmosan/-Vet (Azameth active) | 340g |
| Bagh Dail Nan Cean | 05887 | 19/12/2016 | 19:05:00 | 90 mins | Salmosan/-Vet (Azameth active) | 340g |
| Bagh Dail Nan Cean | 05887 | 20/12/2016 | 15:36:00 | 90 mins | Salmosan/-Vet (Azameth active) | 340g |
| | | | | | | |
| Gorsten | 06004 | 07/12/2016 - 19/12/2016 | | | Salmosan/-Vet (Azameth active) | 2100g |
| | | | | | | |
| Isle Ewe | 04803 | 07/09/2016 - 14/09/2016 | | | Paramove 50 (Perox active) | 9210L |
| | | | | | | |
| Port Na Cro | 05886 | 09/05/2016 | | | Salmosan/-Vet (Azameth active) | 300g |

Data disclosed by the Scottish Government on 20th February 2017 (via FOI/17/00034):



D4 - Wellboats -
Treatments 2015.xls



D3 - Wellboats -
Treatments 2014.xls



D2 - Wellboats
2013.xls



D6 - Wellboats -
Treatments 2017.xls



D5 - Wellboats -
Treatments 2016.xls



D1 - DATA from MSS
- Peroxide 2010-13.x

Includes:

| 2015 | Marine Harvest | | Confirmed as up to date as of 01 March 2016 | | | |
|----------------------------|-----------------------|-------------|---|-----------------|----------------|---------------|
| <u>Site</u> | <u>FKB No.</u> | <u>Date</u> | <u>Time</u> | <u>Duration</u> | <u>Product</u> | <u>Amount</u> |
| Bagh Dail Nan Ceann | | 24/11/2015 | 11:18:00 | 72 mins | Deltamethrin | 625ml |
| | | 24/11/2015 | 17:16:00 | 71 mins | Deltamethrin | 625ml |
| | | 25/11/2015 | 12:19:00 | 62 mins | Deltamethrin | 625ml |
| | | 25/11/2015 | 16:10:00 | 74 mins | Deltamethrin | 625ml |
| | | 05/12/2015 | 13:32:00 | 69 mins | Deltamethrin | 625ml |
| Poll Na Gille | | 26/11/2015 | 11:03:00 | 69 mins | Deltamethrin | 625ml |
| | | 26/11/2015 | 11:03:00 | 69 mins | Azamethiphos | 400g |
| Coalas East | | 15/06/2015 | 10:19:00 | 30 mins | deltamethrin | 500ml |
| | | 15/06/2015 | 12:50:00 | 30 mins | deltamethrin | 500ml |
| | | 15/06/2015 | 15:09:00 | 30 mins | deltamethrin | 250ml |
| | | 15/06/2015 | 17:51:00 | 30 mins | deltamethrin | 500ml |
| | | 15/06/2015 | 10:19:00 | 30 mins | Azamethiphos | 200g |
| | | 15/06/2015 | 12:50:00 | 30 mins | Azamethiphos | 200g |
| | | 15/06/2015 | 15:09:00 | 30 mins | Azamethiphos | 100g |
| | 15/06/2015 | 17:51:00 | 30 mins | Azamethiphos | 200g | |

And:

| 2015 | Scottish Sea Farms | | Confirmed up to date as of 29 January 2016 | | | |
|-----------------|---------------------------|-------------|--|-------------------|-------------------|---------------|
| <u>Site</u> | <u>FKB No.</u> | <u>Date</u> | <u>Time</u> | <u>Duration</u> | <u>Product</u> | <u>Amount</u> |
| | | 20/11/2015 | 10:52 | 78 mins | Hydrogen Peroxide | 550 litres |
| | | 20/11/2015 | 14:05 | 60 mins | Hydrogen Peroxide | 550 litres |
| Fada | | 16/12/2015 | 10:30:00 | 20 mins | Hydrogen Peroxide | 300 litres |
| | | 16/12/2015 | 11:45:00 | 20 mins | Hydrogen Peroxide | 300 litres |
| | | 16/12/2015 | 14:00:00 | 20 mins | Hydrogen Peroxide | 300 litres |
| Tanera 1 | | 13/12/2015 | 10:38:00 | 20 mins | Hydrogen Peroxide | 300 litres |
| | | 13/12/2015 | 11:45:00 | 20 mins | Hydrogen Peroxide | 300 litres |
| | | 13/12/2015 | 14:00:00 | 20 mins | Hydrogen Peroxide | 300 litres |
| | | 13/12/2015 | 16:00:00 | 20 mins | Hydrogen Peroxide | 300 litres |
| | | 14/12/2015 | 10:30 | 20 mins | Hydrogen Peroxide | 300 litres |
| | | 14/12/2015 | 11:45 | 20 mins | Hydrogen Peroxide | 300 litres |
| Tanera 2 | | 14/12/2015 | 14:00 | 20 mins | Hydrogen Peroxide | 300 litres |
| | | 14/12/2015 | 16:00 | 20 mins | Hydrogen Peroxide | 300 litres |
| | | 15/12/2015 | 10:30 | 20 mins | Hydrogen Peroxide | 300 litres |
| | | 15/12/2015 | 11:45 | 20 mins | Hydrogen Peroxide | 300 litres |
| | | 15/12/2015 | 14:00 | 20 mins | Hydrogen Peroxide | 300 litres |
| | 15/12/2015 | 16:00 | 20 mins | Hydrogen Peroxide | 300 litres | |

And:

| 2014 | | The Scottish Salmon Company | | | Confirmed as up to date as of 06/01/2015 | |
|-------------|----------------|------------------------------------|-------------|-----------------|--|-----------------|
| <u>Site</u> | <u>FKB No.</u> | <u>Date</u> | <u>Time</u> | <u>Duration</u> | <u>Product</u> | <u>Amount</u> |
| Eughlam | W90 | 06/06/2014 | 13:49:00 | 31 mins | (Deltamethrin) | 250 millilitres |
| | | 06/06/2014 | 15:13:00 | 30 mins | (Deltamethrin) | 250 millilitres |
| | | 08/06/2014 | 10:30:00 | 30 mins | (Deltamethrin) | 250 millilitres |
| | | 08/06/2014 | 11:24:00 | 30 mins | (Deltamethrin) | 250 millilitres |
| | | 08/06/2014 | 08:34:00 | 30 mins | (Deltamethrin) | 250 millilitres |
| | | 08/06/2014 | 13:26:00 | 30 mins | (Deltamethrin) | 250 millilitres |
| Strone | W80 | 26/06/2014 | 14:21:00 | 30 mins | (Deltamethrin) | 250 millilitres |
| Ardyne | W79 | 30/08/2014 | 05:20:00 | 30 mins | (Azamethiphos) | 120 grams |
| | | 30/08/2014 | 06:20:00 | 30 mins | (Azamethiphos) | 120 grams |
| | | 30/08/2014 | 10:50:00 | 30 mins | (Azamethiphos) | 120 grams |
| | | 30/08/2014 | 11:21:00 | 30 mins | (Azamethiphos) | 120 grams |
| | | 01/09/2014 | 11:53:00 | 30 mins | (Azamethiphos) | 120 grams |
| | | 01/09/2014 | 12:25:00 | 30 mins | (Azamethiphos) | 120 grams |
| | | 01/09/2014 | 15:55:00 | 30 mins | (Azamethiphos) | 120 grams |
| | | 01/09/2014 | 16:30:00 | 30 mins | (Azamethiphos) | 120 grams |
| | | 02/09/2014 | 17:10:00 | 30 mins | (Azamethiphos) | 120 grams |
| | | 02/09/2014 | 17:50:00 | 30 mins | (Azamethiphos) | 120 grams |
| | | 02/09/2014 | 21:25:00 | 30 mins | (Azamethiphos) | 120 grams |
| | | 02/09/2014 | 22:10:00 | 30 mins | (Azamethiphos) | 120 grams |

And:

| 2013 | | Marine Harvest | | | | |
|--------------------|----------------|-----------------------|-------------|-----------------|----------------|-------------------|
| <u>Site</u> | <u>FKB No.</u> | <u>Date</u> | <u>Time</u> | <u>Duration</u> | <u>Product</u> | <u>Amount</u> |
| Groatay | W28 | 12/01/2013 | 11:22:00 | 30 mins | (Deltamethrin) | 1000ml |
| | | 12/01/2013 | 14:55:00 | 30 mins | (Deltamethrin) | 1000ml |
| Grey Horse Channel | | 12/01/2013 | | | (Deltamethrin) | Notification Only |
| Kingairloch | | 15/01/2013 | 4.20 pm | 40 mins | (Deltamethrin) | 750ml |
| | | 16/01/2013 | 3.50pm | 40 mins | (Deltamethrin) | 375ml |

Data disclosed by SEPA on 4 April 2018 (via F:0188595):

Response

Please find attached a spreadsheet detailing site specific use of hydrogen peroxide and antibiotics at salmon farms reported to SEPA for 2017.

Under the terms of Regulation 9 of the EIRs, SEPA has a duty to provide advice and assist. We advise that treatments carried out on well boats are reported to Marine Scotland.



180312-AntibioticH2
O-2017.xlsx

i.e. data on Hydrogen Peroxide use via well boats is available from Marine Scotland and is not included in the SEPA data (or the Scotland's Aquaculture database?).

Data disclosed by the Scottish Government on 1st June 2018 (via a review of FoI/18/00985):

[Note that [AMX is the trade name for Deltamethrin](#)]

From: MS Marine Licensing
Sent: 26 June 2017 10:01
To: [Redacted]
Subject: RE: Marine Harvest Scotland notification

Dear [Redacted]

Thank you for notifying us with your intentions to conduct treatments in your site. However, I will require the name and the marine licence number as well as the quantities that you will use during your operation.

As per condition 1 of your marine licence, the licensee shall notify the licensing authority, of this licence and the product name and quantity of chemical(s) or agent(s) intended for discharge. Details of chemical(s) or agent(s) discharged shall also be recorded and reported in accordance with Condition 10 of the licence.

Kind Regards
[Redacted]

Marine Licensing Officer
Marine Scotland - Marine Planning & Policy

Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

Direct Line: [Redacted]
General Queries: +44 (0)1224 295 579
Fax: +44 (0)1224 295 524
Email: [Redacted]
Website: <http://www.gov.scot/Topics/marine/Licensing/marine>

From: [Redacted] @griegseafood.com>
Sent: 30 June 2017 14:26
To: MS Marine Licensing
Subject: North Voe Whalsay

Dear Sir / Madam,
Please accept this email as notification for wellboat treatment.
Vessel: Martin Saele.
Location: North Voe Whalsay.
To be discharged: Peroxide @ 6000 litres.
Start: 04.07.2017.
Finish: 05.07.2017.
I will forward eighter tomorrow or on Monday site license number because I am away from the office at the moment.
Regards, [Redacted]

From: [Redacted] @marineharvest.com
Sent: 26 June 2017 08:53
To: MS Marine Licensing
Cc: [Redacted]
Subject: Marine Harvest Scotland notification

To whom it may concern,

Marine Harvest Scotland will be conducting wellboat treatments using salmosan at Loch Shell from 27th June 2017, within our SEPA consented allowance. Apologies for the short notice, unforeseen circumstances and the weather over the weekend has moved our plan forward.

Thank you
[Redacted]

From: [Redacted] @griegseafood.com
Sent: 20 March 2017 08:36
To: MS Marine Licensing
Subject: Wellboat treatments, Gonfirth, Grieg SEafood Shetland

Dear Sir / Madam

Please accept this email as notification for upcoming wellboat treatments within Gonfirth Are / Shetland. Sites to be treated: East Of Papa Little and Coledeep. To be discharged: EOPL (05224/14/0): peroxide – 26000 litres, AMX: - 1620 ml. Coledeep (06107/16/0): peroxide – 33000 litres, AMX – 1980 ml. Wellboat: OYSUND. Original plan was to start on Friday but we have a chance to start this Wednesday instead.

Any further questions just let me know.

Best regards, [Redacted]

From: [Redacted] @griegseafood.com>
Sent: 22 May 2017 15:31
To: MS Marine Licensing
Cc: [Redacted]
Subject: wellboat notification EOPL, CD

Follow Up Flag: Follow up
Flag Status: Completed

Dear Sir / Madam,

Please accept this email as notification for wellboat treatmetns. Wellboat: Oysund. Locations: East Of Papa Little (05224/14/0), Coledeep (06107/16/0).

Start date: 25.05.2017.

Finish date: 28.05.2017

To be discharged: East Of Papa Little: H2O2: 16000 litres, AMX: 1260 ml.

Coledeep: H2O2: 23000 litres, AMX: 1800 ml.

Best Regards [Redacted]

From: [Redacted] @griegseafood.com>
Sent: 15 September 2017 18:09
To: MS Marine Licensing
Cc: [Redacted]
Subject: Treatment notification

Dear Sir/Madam,

We wish to notify you of a wellboat discharge commencing Monday 18th at our production sites Leinish and Corlarach in Skye. The discharge will result from AGD treatments using Hydrogen Peroxide.

Best regards

[Redacted]

Seawater Production Manager
Grieg Seafood Shetland Ltd
[Redacted]

From: [Redacted] @griegseafood.com]
Sent: 15 March 2017 17:44
To: MS Marine Licensing
Subject: wellboat treatments notification Greig Seafood, Dunvegan

Dear Sir / Madam

Please accept this email as notification regarding upcoming treatments within Dunvegan Area. Sites to be treated and quantities to be discharged: Gob Na hoe – 06032/16/0 – peroxide estimated discharge: 11200 litres, AMX: 720 ml. Corlarach – 05258/14/0 – peroxide: 28000 litres, AMX: 1800 ml. Wellboat: OYSUND. Planning to start late hours on the 17.03.2017, more likely 18.03.2017 – first site to be treated is really weather depending, at the moment probably start at Gob Na Hoe. If you have any other questions please let me know.
Best regards, [Redacted]

From: [Redacted] @griegseafood.com]
Sent: 30 December 2016 10:17
To: MS FishHealth; MS Marine Licensing
Cc: [Redacted]
Subject: Wellboat treatment notification

Dear Sir / Madam,

Please accept this as notification of our intention to treat fish with a wellboat at our Corlarach site, Dunvegan, Skye commencing 4th January 2017.

In this case discharge of peroxide is approved under Marine License 05258/14/0, expiry Aug 2017.

The vessel being contracted in is the 'Martin Saele'. This vessel appears on our approved wellboat list as 'Lilly Johanne' but she was renamed prior to her launch just this month. Discharge will be within the consented coordinates as per the Marine Licence. The vessel however benefits from having sea lice filtration technology so we are keen to engage her.

From: [Redacted] @griegseafood.com]
Sent: 08 May 2017 16:02
To: MS Marine Licensing
Cc: [Redacted]
Subject: wellboat notification

Dear Sir / Madam,
Please accept this email as notification for wellboat treatment at Corlarach / Dunvegan Area / Skye.
Licence number: 0528/14/0
Wellboat: Oysund.
Chemicals to be discharged: Peroxide: 5500 litres + AMX: 360ml.
Start date: 11.05.2017
Finish date: 11.05.2017.
Regards, [Redacted]

From: [Redacted] @scottishseafarms.com]
Sent: 22 June 2017 16:15

Subject: RE: Wellboat treatment notification

Hi [Redacted]

The proposed quantities to be used are as follows:

Fishnish A – 1100g Azasure so 550 g Azamethiphos over 4 days with 10,164 ltrs Paramove 50 over same period.

Fishnish B – 900g Azasure so 450g Azamethiphos over 3 days with 8316 ltrs Paramove 50 over the same period.

Best wishes,

[Redacted]

Environment Team Leader
Scottish Sea Farms
South Shian
Connel
Argyll
PA37 1SB

From: [Redacted] @scottishseafarms.com
Sent: 12 October 2017 12:56
To: MS Marine Licensing
Cc: [Redacted]
Subject: Puldrite - Wellboat treatment

Good Afternoon

This is a note to inform you of our intention to carry out a hydrogen peroxide treatment, using the wellboat 'Ronja Superior', at our Puldrite site (License: 05415/15/0) in Wide Firth, Orkney.

Treatment is due to start and finish on 13/10/17 and total volume of peroxide expected to be used is approx. 1,100L. Apologies for the late notice, we have been offered a last minute opportunity to use the wellboat.

Kind Regards
[Redacted]

Biomass Assessor | Scottish Sea Farms Ltd
[Redacted] @scottishseafarms.com
Orkney Regional Office, Scapa, Orkney, UK, KW15 1SD
T: [Redacted]
M: [Redacted]

From: [Redacted] @scottishseafarms.com
Sent: 20 January 2017 09:56
To: MS Marine Licensing
Cc: [Redacted]
Subject: Notification of wellboat treatment

Dear Marine Scotland,

In preparing the medicines data for our Q4 return it has come to my attention that a wellboat treatment was carried out at Nevis C in December, and unfortunately this was not notified to Marine Scotland. Details are as follows:

Site name: Nevis C
Licence Ref: 05422/16/1
Wellboat name: NORHOLM
Agent: Hydrogen peroxide
Treatment date: 13-15/12/2016

Please accept our apologies for this oversight. I will shortly circulate an email around all site managers to remind them of the notifications procedure, to try and ensure that this does not happen again.

Many thanks & best wishes,

[Redacted]

From: [Redacted] @scottishseafarms.com]
Sent: 17 March 2017 15:48
To: MS Marine Licensing
Cc: [Redacted]
Subject: Wellboat treatment Nevis C

Dear Marine Scotland,

We intend to treat our Nevis C site (05422) with Peroxide and Salmosan start Saturday 18th March.

Apologies for the delay in notification this was due to an oversight on my part.

[Redacted] **Environmental Analyst | Scottish Sea Farms Limited**
South Shian, Connel, Argyll PA37 1SB
Tel [Redacted]

From: [Redacted] @marineharvest.com>
Sent: 14 August 2017 12:11
To: MS Marine Licensing
Cc: [Redacted]
Subject: RE: Marine Scotland - Licensing Operations Team

Hi,

I would like to notify you of our plan to treat fish at our farm at marine harvest, loch Erisort Tabhaigh (FS1297). We are planning to do some well boat treatments at tabhaigh using Salmosan.

Treatments will start on Thursday 17th August finishing on Sunday 20th . And we intend to use 1.8kg salmosan or 900g of active substance.

From: [Redacted] @kames.co.uk>
Sent: 12 September 2017 10:00
To: MS Marine Licensing
Cc: [Redacted]
Subject: Shuna South West - Wellboat Discharge Notification 05769/16/0 commencing 11.9.17

Please find below confirmation of the following wellboat treatment at Shuna South West further to notification yesterday.

Starting on Monday 11th September for 5 days.
Alphamax is the Therapeutant at 15grams per day with 75g total being used.
The biomass on site is 1725T
The quantity of Alphamax is 7.5 litres which is 30 bottles total over the treatment.

I understand you have also updated SEPA with regard to this, but should we need to do anything further would appreciate your confirmation.

From: [Redacted] [@marineharvest.com](mailto:marineharvest.com)
Sent: 11 September 2017 16:26
To: MS Marine Licensing
Subject: RE: Notification of discharge of medicines at PNG CAR/L/1000800 (MHS)

Apologies for the very late request, but we are carrying out an Alphamax treatment starting today at South West Shuna for the next 5 days.

Kames will be sending the formal notification shortly but here is the information.

Starting on Monday 11th September for 5 days.
Alphamax is the Therapeutant at 15grams per day with 75g total being used.
The biomass on site is 1725T
The quantity of Alphamax is 7.5 litres which is 30 bottles total over the treatment.

Again apologies for the last minute notification.

Many thanks in advance.

Best regards

[Redacted]

Production Assistant
MARINE HARVEST SCOTLAND LTD

From: [Redacted]
Sent: 11 September 2017 16:10
To: 'MS.MarineLicensing@gov.scot'
Subject: RE: Notification of discharge of medicines at PNG CAR/L/1000800 (MHS)

Apologies for the confusion, this treatment has now been changed to Alphamax and will be within SEPA discharge consent quantities please accept this notification, treatment is urgent and cannot be delayed to prevent an increase in sea lice numbers.

Official notification will come through Kames as per usual, fish are on South West Shuna site and discharge will take place on South West Shuna site.

Best regards

[Redacted]

Production Assistant
MARINE HARVEST SCOTLAND LTD

From: MS.MarineLicensing@gov.scot [mailto:MS.MarineLicensing@gov.scot]
Sent: 11 September 2017 14:41
To: [Redacted]
Cc: [Redacted]
Subject: RE: Notification of discharge of medicines at PNG CAR/L/1000800 (MHS)

3

Hj [Redacted]

Thank you. Please note that the licence you sent through is for Shuna South West and is for Kames fish farming and not Marine Harvest. Additionally, I note that Sabina referred to a CAR licence at PNG. If a treatment is carried out the discharge of the chemicals must be at the site where the treatment was completed and not at another site.

Can you please confirm whether you are treating and discharging at PNG or Shuna South West?

Many thanks
[Redacted]

From: [Redacted] @marineharvest.com>
Sent: 19 January 2017 21:05
To: epiwesthighlands-argyll@sepa.org.uk; MS Marine Licensing
Cc: [Redacted]
Subject: FW: Treatment notification Gorsten - correction
Attachments: SEPA Salmosan Gorsten 19012017.docx

Good morning,

It's just been brought to my attention that the treatment vessel will be Ronija Commander not the Inter-Caledonia as previously stated in my email.

With best regards
[Redacted]

From: [Redacted]
Sent: 19 January 2017 20:45
To: 'epiwesthighlands-argyll@sepa.org.uk'; 'registrydingwall@sepa.org.uk'; MS.MarineLicensing@scotland.gsi.gov.uk
Cc: [Redacted]
Subject: Treatment notification Gorsten

Good morning,

Marine Harvest Scotland intend to treat stock at Gorsten. Please find attached notification. Treatment will be carried out aboard the well-boat Inter-Caledonia.

Have a good weekend
[Redacted]

Health Manager
MARINE HARVEST SCOTLAND LTD



To Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen AB11 9DB

From: [Redacted]
[Redacted]

Email ms.marinelicensing@gov.scot

Marine Harvest (Scotland) Ltd.
Farms Office, Blar Mhor Industrial Estate
Fort William, PH33 7TP
Telephone [Redacted]
Mobile [Redacted]
Fax 01397 701 174

Date: 25th January 2017

We intend to discharge the following used chemical from the wellboat Inter Caledonia in compliance with licence conditions. Actual times of discharge are subject to weather and workload.

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Date | |
|-----------------------|-------------------------------|-------------------|------------------------|-----------------------|------------|
| | | | | Start | End |
| Loch Hourn 06008/16/0 | Salmosan Vet (Fish Vet Group) | Azimethiphos | 1760.00 | 0900hrs 27/01/2017 | 31/01/2017 |

From: [Redacted] <[\[Redacted\]@griegseafood.com](mailto:[Redacted]@griegseafood.com)>
Sent: 08 April 2017 10:54
To: MS Marine Licensing
Cc: MS FishHealth; [Redacted]
Subject: North Voe treatment planned 10th April

Dear Sir, Madam,

We have a narrow window of opportunity to treat our North Voe, Whalsay site. We would like to commence afternoon Monday 10th April.

Our treatment plan is:

Monday: 2 cages
Tuesday: 3 cages
Wednesday: 3 cages

We intend to use peroxide and AMX (label dose). Treatments will be carried out with the wellboat Martin Saele (1000m3 capacity).

Please let me know if there are any issues with our plan.

Regards

[Redacted]

From: [Redacted] <[\[Redacted\]@griegseafood.com](mailto:[Redacted]@griegseafood.com)>
Sent: 31 August 2017 15:19
To: MS Marine Licensing
Cc: [Redacted]
Subject: treatment notification North Voe Whalsay

Dear Sir / Madam,

Please accept this email as notification for North Voe Whalsay (06029/16/0) wellboat treatment.

Vessel: Martin Saele.

Start: 05.09.2017

Finish: 13.09.2017

To be discharged: Salmosan Vet: 3000 grams, H2O2: 21000 litres

P.S. regarding our previous notifications for Coledeep and East of Papa Little please note that we will not discharge any chemicals from the wellboat – we will just move some fish around (01.09.2017 and 02.09.2017) to allow lower biomasses for tarpaulins.

Best regards, [Redacted]

From: [Redacted] @griegseafood.com>
Sent: 30 October 2017 14:23
To: MS Marine Licensing
Subject: Coledeep discharge of Salmosan Vet

Dear Sir / Madam,

Please accept this email as notification regarding wellboat treatment activity at Coledeep site. Weather permitting on Wednesday (01.11.2017) more likely on Thursday (02.11.2017) we will discharge: Salmosan Vet: 300 grams. Wellboat: Martin Saele. Finish date: 03.11.2017. Coledeep licence number: 06107/16/0.

Regards,[Redacted]

From:[Redacted] @griegseafood.com]
Sent: 10 October 2017 15:16
To: MS Marine Licensing
Subject: notification Setterness Noth

Dear Sir, Madam,

I would like to apologise for the confusion. My notification regarding treatment at Setterness North site will be changed – instead of AMX we will discharge Salmosan Vet in amount of: 3000 grams total. Rest the same.

Regards,[Redacted]

From:[Redacted] @griegseafood.com]
Sent: 10 May 2017 15:19
To: MS Marine Licensing
Cc:[Redacted]
Subject: wellboat notifications Grieg Seafood Shetland

Dear Sir / Madam,

Please accept this email as notification for our wellboat treatments plan. At this stage (apologise) but it's not possible to give you 100% answer where we will start. It depends as always on the weather and our other treatments in progress at the moment.

Wellboat: Oysund.

Locations: West Of Burwick (06123/16/0) – start: 14.05.2017, finish: 16.05.2017.

 Spoose Holm (06124/16/0) – start: 14.05.2017, finish: 15.05.2017.

 Score Holms (06125/16/0) – start: 15.05.2017, finish: 19.05.2017.

 Langa (06128/16/0) – start: 18.05.2017, finish: 21.05.2017.

To be discharged: West Of Burwick: Peroxide – 43000 litres, Salmosan Vet – 3060 grams.

 Spoose Holm: Peroxide – 18000 litres, Salmosan Vet – 1260 grams.

 Score Holms: Peroxide – 53000 litres, Salmosan Vet – 3580 grams.

 Langa: Peroxide – 55000 litres, Salmosan Vet – 3960 grams.

If you have any questions just let me know and I'll try to help!

-----Original Message-----

From: [Redacted]

[\[Redacted\]@griegseafood.com](mailto:[Redacted]@griegseafood.com)

Sent: 23 June 2017 12:36

To: MS Marine Licensing

Subject: WOB perox Wellboat MS

Dear Sir / Madam,

Please accept this email as notification for next week planned peroxide treatment onboard Martin Saele. Treatment start: 26.06.2017, Treatment finishing: 08.07.2017. Basically 2 wells treated per day. Estimated peroxide usage- 24000 litres. I'm not able to get site license number at the moment but it's West of Burwick in Scalloway Area.

Regards, [Redacted]

From: [Redacted]

[\[Redacted\]@griegseafood.com](mailto:[Redacted]@griegseafood.com)

Sent: 10 April 2017 10:12

To: MS FishHealth; MS Marine Licensing

Cc: [Redacted]

Subject: Treatment notification

Dear Sir, Madam,

In response to change of weather forecast we have a narrow window of opportunity to utilise the wellboat Oysund for treatments commencing tomorrow 11th April at our West Burwick site, Scalloway.

We intend to treat 2 cages and use peroxide + Salmosan, well within consented quantities.

I apologise for the late notification but it will make a big difference to us operationally if we can take advantage of this unexpected downtime with the boat.

Regards

[Redacted]

From:

[Redacted]

Sent:

12 January 2017 14:22

To:

[Redacted]

Subject:

RE: Wellboat treatment notification

Dear [Redacted]

Thank you for your email. However, would it be possible for you to be more specific? We need to know the amount of Salmosan that you will use per site and the number of days that you will be treating for, this is ok if it is the maximum number of days as an overestimate.

Kind regards,

[Redacted]

Marine Licensing Officer

Marine Scotland - Marine Planning & Policy

Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

Direct Line: [Redacted]

General Queries: +44 (0)1224 295 579

From: MS Marine Licensing
Sent: 05 January 2017 16:24
To: [Redacted]
Subject: RE: North Havra Wellboat treatment notification

Dear [Redacted]

Thank you for this information. Apologies for the confusion, I was asking about the treatment time frame. Please note that your SEPA CAR consent is for 1189g/24 hours of Salmosan/Salmosan Vet.

Kind regards,
[Redacted]

Marine Licensing Officer
Marine Scotland - Marine Planning & Policy

Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

Direct Line: [Redacted]
General Queries: +44 (0)1224 295 579
Fax: +44 (0)1224 295 524
Email: [Redacted]
Website: <http://www.gov.scot/Topics/marine/Licensing/marine>

From: [Redacted] @griegseafood.com]
Sent: 05 January 2017 10:35
To: MS Marine Licensing
Subject: RE: North Havra Wellboat treatment notification

Dear [Redacted]

We are planning to discharge 2400 g of Salmosan in total, within SEPA consent of 1040 g/24 hrs. Discharge time: to flush the wells is around 15 – 20 minutes if that's what you asking for, if you mean treatment time frame – we start on Saturday and we should finish on Wednesday 11.01.2017.

Regards, [Redacted]

From: MS.MarineLicensing@gov.scot [mailto:MS.MarineLicensing@gov.scot]
Sent: 05 January 2017 10:09
To: [Redacted] @griegseafood.com>
Subject: RE: North Havra Wellboat treatment notification

Dear [Redacted]

Thank you for your email. The Wellboat discharge licence is 06126/16/0. However, you have not told me the quantity of salmosan that you are planning to discharge and how long you will be discharging for. Please provide this information as soon as possible.

From: [Redacted] @griegseafood.com]
Sent: 05 January 2017 10:35
To: MS Marine Licensing
Subject: RE: North Havra Wellboat treatment notification

Dear [Redacted]

We are planning to discharge 2400 g of Salmosan in total, within SEPA consent of 1040 g/24 hrs. Discharge time: to flush the wells is around 15 – 20 minutes if that's what you asking for, if you mean treatment time frame – we start on Saturday and we should finish on Wednesday 11.01.2017.

Regards, [Redacted]

From: [Redacted] @griegseafood.com>
Sent: 15 May 2017 12:24
To: MS Marine Licensing
Subject: RE: North Havra wellboat notification

Hi [Redacted]

At the moment our plan is to do 5 cages on the first day and remaining 3 through the next day.
P.S. we had to stop right now our treatments at Score Holms because of the weather – hoping to get it started again tomorrow. In this case there might be actually 1 day delay to start at North Havra.
Regards, [Redacted]

From: MS.MarineLicensing@gov.scot [mailto:MS.MarineLicensing@gov.scot]
Sent: 15 May 2017 12:06
To: [Redacted] @griegseafood.com>
Subject: RE: North Havra wellboat notification

Hi [Redacted]

From your previous email it was not clear whether your treatment last one or two twenty four hour periods .
Can you please confirm how long your treatment will last?

Kind Regards
[Redacted]

From: [Redacted] <griegseafood.com>
Sent: 02 March 2017 16:42
To: MS Marine Licensing
Subject: further wellboat notifications - Grieg Seafood Shetland / Scalloway Area

Dear Sir / Madam,

Please accept this email as a notification for our further wellboat treatments plan around Scalloway Area / Shetland. From the previous notifications we still got to do Score Holms and Langa. We will be starting treating Score Holms today and weather permitting start Langa on Saturday late evening/ early hours on Sunday – this might actually change due to weather and possibly we might go with the treatments again to North Havra instead of Langa. In this case this notification for 2nd wellboat treatments at North Havra and other sites:

North Havra: 06126/16/0 - start on 05.03.2017, peroxide estimate: 22000 litres, AMX: 1440ml.

Spoose Holm: 06124/16/0 – start on 07.03.2017, peroxide: 25000 litres, AMX: 1620 ml.

West Of Burwick: 06123/16/0 – start on 09.03.2017, peroxide: 50000 litres, AMX: 3060 ml.

Langa: 06128/16/0 – start on 10.03.2017, peroxide: 50000 litres, AMX: 3240ml.

Score Holms – 06125/16/0, peroxide 50000 litres, AMX: 3240ml.

Please note as with previous notifications that we might have to change above treatments schedule due to weather conditions.

Best regards, [Redacted]

From: [Redacted] <griegseafood.com>
Sent: 23 January 2017 09:43
To: MS FishHealth; MS Marine Licensing
Subject: lice levels WK 3 Grieg Seafood Shetland

Dear Sir / Madam,

Good morning All, I'd like to report lice levels from last week (WK 3) on the sites which are over 3 AF av. All the sites are within Scalloway area/Shetland. Langa – 3.1 AF av, North Papa – 4.73 AF av, West of Burwick – 3.21 AF av. We are still treating using Martin Saele wellboat: so far we've finished treatments at Spoose Holm (20.01.2017) and North Havra (17.01.2017) – sites below 3 AF av after. Treatment started at Score Holms on 21.01.2017 – weather permitting site will be done by the end of this week! Further plan for other sites is: after Score Holms we will treat North Papa using wellboat –when this site is done wellboat will be back harvesting and we'll start tarpaulin treatments at West of Burwick and Langa which should go relatively faster – at the moment we will use peroxide for those 2 sites. If you have any further questions don't hesitate to ask!

Regards, [Redacted]

Data disclosed by SEPA in May 2018 (via F:0188830):

From: Kate McIntyre [mailto:kate.mcintyre@scottishseafarms.com]

Sent: 20 January 2017 09:56

To: MS Marine Licensing

Cc: Environment Scotland; Ewan Gibb; Chris Hempleman

Subject: Notification of wellboat treatment

Dear Marine Scotland,

In preparing the medicines data for our Q4 return it has come to my attention that a wellboat treatment

was carried out at Nevis C in December, and unfortunately this was not notified to Marine Scotland.

Details are as follows:

Site name: Nevis C

Licence Ref: 05422/16/1

Wellboat name: NORHOLM

Agent: Hydrogen peroxide

Treatment date: 13-15/12/2016

Please accept our apologies for this oversight. I will shortly circulate an email around all site managers to

remind them of the notifications procedure, to try and ensure that this does not happen again.

MARINE SCOTLAND, MARINE LABORATORY, ABERDEEN

DISCHARGE VESSEL LOG OF OPERATIONS*

Discharge Vessel: Royal Pioneer Log Sheet Page Number: 1 of 2
 Discharge Operation: _____ Marine Licence Number: 04904/13/0
 Discharge Site: Setterness North Farm of Operation: FKB/W209

| Date | Quantity of Chemical discharged (ml or grams) | Chemical(s) or agent(s) discharged | Discharge operation | | | | Comments |
|------------|---|------------------------------------|---------------------------|----------------------------------|-------------------------------|--------------------------|------------------------------|
| | | | Time and position: Start | Weather, sea state and tidal set | Time and position: Completion | Rate/duration* discharge | |
| 24/06/2016 | 150g | Azinthyls | 60°25.45'N 002°07.69'W | SW F4-5 | As for start. | 20 mins | STARTED DISCHARGING AT 17:10 |
| 25/06/2016 | 150g | - | - | SW F3 | - | - | - |
| 25/06/2016 | 150g | - | - | S F3-4 | - | - | AT 17:00 |
| 25/06/2016 | 150g | - | - | SE F3 | - | - | AT 21:40 |
| 26/06/2016 | 150g | - | - | NE F4 | - | - | AT: 10:30 |
| 26/06/2016 | 150g | - | - | NE F3-4 | - | - | AT: 15:50 |
| 26/06/2016 | 150g | - | - | NE F4 | - | - | AT: 20:25 |
| 27/06/2016 | 150g | - | - | NNE F2 | - | - | AT: 09:52 |
| 27/06/2016 | 150g | - | - | NNE F3 | - | - | AT: 14:50 |
| 27/06/2016 | 150g | - | - | NE F3 | - | - | AT: 19:20 |
| Total | 1500g | | | | | | |

*See Licence Conditions Relating to Discharge Operations

*Delete as appropriate Farm Manager: JULIAN WATSON Signat _____

MARINE SCOTLAND, MARINE LABORATORY, ABERDEEN

DISCHARGE VESSEL LOG OF OPERATIONS*

Discharge Vessel: Royal Pioneer Log Sheet Page Number: 2 of 2
 Discharge Operation: _____ Marine Licence Number: 04904/13/0
 Discharge Site: Setterness North Farm of Operation: FKB/W209

| Date | Quantity of Chemical discharged (ml or grams) | Chemical(s) or agent(s) discharged | Discharge operation | | | | Comments |
|------------|---|------------------------------------|---------------------------|----------------------------------|-------------------------------|--------------------------|-------------------------------|
| | | | Time and position: Start | Weather, sea state and tidal set | Time and position: Completion | Rate/duration* discharge | |
| 28/06/2016 | 150g | Azinthyls | 60°15.45'N 002°02.69'W | SW F5 | As for start | 20 mins | STARTED DISCHARGING AT: 11:10 |
| 28/06/2016 | 150g | - | - | SW F5-6 | - | - | AT: 17:05 |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| Total | 300g | | | | | | |

*See Licence Conditions Relating to Discharge Operations

*Delete as appropriate Farm Manager: JULIAN WATSON Signatur _____



To: Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen AB11 9DB

From: Alasdair MacLennan

alasdair.maclennan@marineharvest.com

Email: ms.marinelicensing@scotland.gsi.gov.uk

Marine Harvest (Scotland) Ltd.
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX
Telephone 01397 701550
Mobile
Fax 01397 701174

Date: 9th May 2016

We intend to discharge the following used product from the wellboat Ronja Challenger in compliance with licence conditions:
Actual times of discharge are subject to weather and workload.

| Site | Product | Active Ingredient | Quantity (litres or grams) | Date | |
|-----------------------------------|----------|-------------------|----------------------------|------------|------------|
| | | | | Start | End |
| Stulaigh - License No. 05968/16/0 | salmosan | azamethiphos | 1200g (600g active) | 09/05/2016 | 11/05/2016 |

Signed:

Alasdair MacLennan
Area Health Manager (Skye & Uists)



Marine Harvest Ltd
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX

Tel:
Email: dave.cockerill@marineharvest.com

To: Marine Scotland

From: Dave Cockerill

Email: MS.MarineLicensing@gov.scot

Date: 17th October 2016

We intend to discharge the following in compliance with consent conditions:

| Site | MS | Therapeutant | Active Ingredient | Quantity (up to) Grams | Biomass (kg) | Start | End |
|--------------------------|--------|--------------------|-------------------|------------------------|--------------|-------------------------------|-------------------------------|
| West Loch Tarbert (Soay) | FS0646 | Salmosan Vet (FVG) | Azamethiphos | 2,000g | 1,335,288 | 19 th October 2016 | 2 nd November 2016 |

Signed

Dave Cockerill
Veterinarian, Head of Fish Health



Fax message

This fax is confidential and may be privileged. If you are not the intended recipient, please notify Us immediately, you should not copy or use it for any purpose nor disclose its contents to any person.

To: MS.Marie
Licensing@
gov.scot

Fax Number

C.c.

From Alasdair Duce. Date 19/2/16

Page 1 of 1

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| site | Quantity (up to) grams | Dates | |
|---|------------------------|---------|---------|
| | FVG (Salmosan) | start | End |
| West Loch Tarbert Soay. CAR/L/1004053 | Active 1kg | 22/2/16 | 26/2/16 |

All stocked pens.

Alasdair Duce
Regional Health Manager



To Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen AB11 9DB

From: Ray Waddell
ray.waddell@marineharvest.com

Email env_prot@marlab.ac.uk

Marine Harvest (Scotland) Ltd.
Farms Office, Blar Mhor Industrial Estate
Fort William, PH33 7TP
Telephone 01397 701 550
Mobile
Fax 01397 701 174

Date: 30th November 2016

We intend to discharge the following used chemical from the wellboat Inter Caledonia in compliance with licence conditions.
Actual times of discharge are subject to weather and workload.

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Date | |
|-----------------------|-------------------------------|-------------------|------------------------|-----------------------|------------|
| | | | | Start | End |
| Loch Hourm 06008/16/0 | Salmosan Vet (Fish Vet Group) | Azimethiphos | 1100.00 | 1000hrs 01/12/2016 | 06/12/2016 |



Marine Harvest Ltd
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX

Tel:
Email: dave.cockerill@marineharvest.com

To: Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

From: Dave Cockerill

Email: EPiwesthighands-argyll@sepa.org.uk

Date: 17th August 2016

We intend to discharge the following used sea lice treatment product from the wellboat Caledonia in compliance with licence conditions:

Actual times of discharge are subject to weather and workload.

| Site | Therapeutant | Active Ingredient | Quantit Grams | Start | End |
|--|--------------|-------------------|---------------------------------------|------------------------------|------------------|
| Greshornish Licence no: 04807/13/0 Ref: FKB/W40 | Salmosan Vet | Azamethiphos | 2400g active (4800g product) | 18 th August 2016 | 21st August 2016 |

From: Justin Watson [mailto:justin.watson@griegseafood.com]

Sent: 22 August 2016 16:24

To: MS Marine Licensing

Cc: Jakub Pierzynowski; Bill Johnson

Subject: RE: notification of treatments at Gob na Hoe & Leneish

Hi Hannah,

We intend to use Salmosan – active ingredient is Azamethiphos. We are aiming to use ~200g per wellboat load taking approximately 3.5-4 hrs per load and aiming for 3-4 loads per day. That would equate to 600-800g of Salmosan per 24hrs, within our consented limits.

If I've understood you correctly the correspondence with my colleague Kaye does not effect our current

Marine Licence to deposit chemicals.

Regards

Justin

From: MS.MarineLicensing@gov.scot [mailto:MS.MarineLicensing@gov.scot]

Sent: 22 August 2016 16:09

To: Justin Watson <justin.watson@griegseafood.com>

Subject: RE: notification of treatments at Gob na Hoe & Leneish

Dear Justin,

Thank you for the notification. Please can you provide me with details of the product name and quantity of chemicals or agents intended for discharge. Please note that you do not have AMX on your current licence.

Please also note that Gob na Hoe does not currently have a valid marine farm licence as the application is currently on hold (see attached email), therefore we will not be able to grant a licence for your new application for wellboat discharge, until this has been licensed.

From: Kate McIntyre [mailto:kate.mcintyre@scottishseafarms.com]

Sent: 08 April 2016 09:05

To: MS Marine Licensing

Cc: Geoff Kidd; Environment Scotland

Subject: Notification of wellboat treatment

Dear Marine Scotland,

We are intending to carry out a wellboat treatment as follows:

Site name: Spelve B

Licence Ref: 05425/15/0

Wellboat name: NORHOLM

Agent: Azasure/hydrogen peroxide

Treatment date: Commencing 11/04/2016



Fax message

This fax is confidential and may be privileged. If you are not the intended recipient, please notify Us immediately; you should not copy or use it for any purpose nor disclose its contents to any person.

ToMS.MarineLicensing@gov.scot

Fax Number

C.c.

From Alasdair Duce. Date 12/4/16

Page 1 of 1

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| Site | Quantity (up to) grams | | Dates | |
|--|------------------------|--------------------|---------|---------|
| | AMX Active | FVG (Salmosan) | start | End |
| Loch Erisort, North Shore West CAR/L/1004085 | | Active. 1kg. | 15/4/16 | 18/4/16 |
| North Shore East CAR/L/1129789 | | 1kg. | | |
| Tabhaigh CAR/L/1129793 | | 1kg. | | |

All stocked pens.

Alasdair Duce
Regional Health Manager



Marine Harvest Ltd
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX

Tel:
Email: dave.cockerill@marineharvest.com

To: Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

From: Dave Cockerill

Email: ms.marinelicensing@gov.uk

Date: 17th August 2016

We intend to discharge the following used sea lice treatment product from the wellboat *Inter Caledonia* in compliance with licence conditions:

Actual times of discharge are subject to weather and workload.

| Site | Therapeutant | Active Ingredient | Quantity Grams | Start | End |
|---|--------------|-------------------|---------------------------------------|------------------------------|------------------------------|
| Colonsay Licence no: 05998/16/0 Ref: 05998 | Salmosan Vet | Azamethiphos | 2400g active (4800g product) | 22 nd August 2016 | 26 th August 2016 |

Signed

Dave Cockerill
Veterinarian, Head of Fish Health

From: Duce, Alasdair [mailto:Alasdair.Duce@marineharvest.com]

Sent: 26 June 2016 19:07

To: MS Marine Licensing

Cc: Manager, West Loch Tarbert; MacLeod, Don; Cockerill, David; MacGruer, Lynsey; Read, Chris

Subject: RE: Marine Scotland - Licensing Operations Team

Hi just an update to this Due to some unforeseen delays we will now be starting this treatment at West

loch Tarbert (soay) on Tuesday 28th June and finish on Sunday 2nd of July.

We now plan to use slightly more Salmosan 4.2kg or 2.1kg active ingredient.

Any problems please give me a call,

From: Kerry.Bell@gov.scot

Sent: 05 September 2016 16:51

To: FF Application

Subject:Notification of intended wellboat discharge

Dear Sir/Madam

I write to advise that Grieg Seafood Shetland Limited have notified us that they carried out wellboat discharge operations at their marine farm sites at South of Linga and Setterness South, Shetland 04 September 2016.

The chemical used was hydrogen peroxide.



To SEPA Lochgilphead

C.c. SEPA Registry
Dingwall

From Iain Webster Date 11.11.16

Page 1 of 1

We intend to discharge the following in compliance with consent conditions.

| Site | Quantity (up to) grams | | | | Dates | |
|-------------|--|--------------------------------------|---------------------------------------|------------------------------------|----------|----------|
| | Deltamethrin (AlphaMax or AMX, Phazmaq) | Azamethiphos (Salmosan, Novartis) | Emamectin (SLICE, Schering-Plough) | Teflubenzuron (Calicide, Trouw) | Start | End |
| Kingairloch | | 1000 | | | 11.11.16 | 17.11.16 |

CAR/L/1003
887

Signed:

Iain Webster



To SEPA Lochgilphead

C.c. SEPA Registry
Dingwall

From Iain Webster Date 06.10.16

Page 1 of 1

We intend to discharge the following in compliance with consent conditions.

| Site | Quantity (up to) grams | | | | Dates | |
|---|--|---|--|------------------------------------|----------|----------|
| | Deltamethrin (AlphaMax or AMX, Phamag) | Azamethiphos (Salmosan, Novartis) | Emamectin (SLICE, Schering- Plough) | Teflubenzuron (Calicide, Trouw) | Start | End |
| Carradale South (AKA Eilean Griannain) CAR/L/10 78064 | | 1200g | | | 09.10.16 | 23.10.16 |
| Carradale North CAR/L/1 131788131 788 | | 3400g | | | 09.09.16 | 23.09.16 |

Signed:

Iain Webster

Data disclosed by the Scottish Government in April 2018 (via FoI/18/00985):

| 2017 | The Scottish Salmon Company | | | | Returns as of 27/03/2018 detailed below - Awaiting final returns for 2017. | | |
|--------------|-----------------------------|------------|-------|----------|--|--------|--|
| Site | MCMS No. | Date | Time | Duration | Product | Amount | |
| Gob a Bharra | 05211 | 08/06/2017 | 09:00 | 60 mins | Hydrogen Peroxide | 8000L | |

| 2017 | | Scottish Sea Farms | | Returns as of 27/03/2018 detailed below - Awaiting final returns for 2017. | | | |
|-------------|-----------------|---------------------------|-------------|--|-------------------|---------------|--|
| <u>Site</u> | <u>MCMS No.</u> | <u>Date</u> | <u>Time</u> | <u>Duration</u> | <u>Product</u> | <u>Amount</u> | |
| Holms Geo | 05246 | 27/04/2017 | 22:00 | 60 mins | Hydrogen Peroxide | 3800L | |
| Holms Geo | 05246 | 28/04/2017 | 10:10 | 70 mins | Hydrogen Peroxide | 3800L | |
| Holms Geo | 05246 | 28/04/2017 | 14:23 | 45 mins | Hydrogen Peroxide | 3800L | |
| Holms Geo | 05246 | 28/04/2017 | 19:10 | 40 mins | Hydrogen Peroxide | 3800L | |
| Holms Geo | 05246 | 29/04/2017 | 10:08 | 34 mins | Hydrogen Peroxide | 3800L | |
| Holms Geo | 05246 | 29/04/2017 | 15:00 | 40 mins | Hydrogen Peroxide | 3800L | |
| Holms Geo | 05246 | 29/04/2017 | 18:55 | 40 mins | Hydrogen Peroxide | 3800L | |
| Holms Geo | 05246 | 29/04/2017 | 22:50 | 40 mins | Hydrogen Peroxide | 3800L | |
| Holms Geo | 05246 | 30/04/2017 | 02:20 | 40 mins | Hydrogen Peroxide | 3800L | |
| Teitsi Geo | 05240 | 30/04/2017 | 12:30 | 40 mins | Salmosan | 280g | |
| Teitsi Geo | 05240 | 30/04/2017 | 12:30 | 40 mins | Hydrogen Peroxide | 4300L | |
| Teitsi Geo | 05240 | 30/04/2017 | 16:25 | 45 mins | Hydrogen Peroxide | 4300L | |
| Teitsi Geo | 05240 | 30/04/2017 | 20:25 | 45 mins | Hydrogen Peroxide | 4300L | |
| Teitsi Geo | 05240 | 01/05/2017 | 01:10 | 62 mins | Hydrogen Peroxide | 4300L | |
| Teitsi Geo | 05240 | 01/05/2017 | 13:00 | 48 mins | Hydrogen Peroxide | 4300L | |
| Teitsi Geo | 05240 | 01/05/2017 | 17:25 | 45 mins | Hydrogen Peroxide | 4300L | |
| Teitsi Geo | 05240 | 01/05/2017 | 21:35 | 40 mins | Hydrogen Peroxide | 4300L | |
| Teitsi Geo | 05240 | 02/05/2017 | 01:20 | 40 mins | Hydrogen Peroxide | 4300L | |
| Teitsi Geo | 05240 | 02/05/2017 | 12:40 | 45 mins | Hydrogen Peroxide | 4300L | |
| Teitsi Geo | 05240 | 02/05/2017 | 16:40 | 55 mins | Hydrogen Peroxide | 4300L | |
| Teitsi Geo | 05240 | 02/05/2017 | 20:30 | 35 mins | Hydrogen Peroxide | 4300L | |
| Teitsi Geo | 05240 | 03/05/2017 | 01:00 | 50 mins | Hydrogen Peroxide | 4300L | |

| 2017 | | Kames | | Awaiting final returns for 2017 (as of 27/03/2018). | | | |
|-------------|-----------------|--------------|-------------|---|----------------|---------------|--|
| <u>Site</u> | <u>MCMS No.</u> | <u>Date</u> | <u>Time</u> | <u>Duration</u> | <u>Product</u> | <u>Amount</u> | |

| 2017 | | Grieg Seafood Ltd | | Awaiting final returns for 2017 (as of 27/03/2018). | | | |
|-------------|-----------------|--------------------------|-------------|---|----------------|---------------|--|
| <u>Site</u> | <u>MCMS No.</u> | <u>Date</u> | <u>Time</u> | <u>Duration</u> | <u>Product</u> | <u>Amount</u> | |

| 2017 | | Cooke Aquaculture | | Confirmed nil returns | | | |
|-------------|-----------------|--------------------------|-------------|-----------------------|----------------|---------------|--|
| <u>Site</u> | <u>MCMS No.</u> | <u>Date</u> | <u>Time</u> | <u>Duration</u> | <u>Product</u> | <u>Amount</u> | |

| 2017 | | Marine Harvest | | Awaiting final returns for 2017 (as of 27/03/2018). | | | |
|-------------|-----------------|-----------------------|-------------|---|----------------|---------------|--|
| <u>Site</u> | <u>MCMS No.</u> | <u>Date</u> | <u>Time</u> | <u>Duration</u> | <u>Product</u> | <u>Amount</u> | |

MARINE (SCOTLAND) ACT 2010

MARINE SCOTLAND, MARINE LABORATORY, ABERDEEN

DISCHARGE VESSEL LOG OF OPERATIONS*

Discharge Vessel: Oylaks Log Sheet Page Number: 1
 Discharge Operation: Lice treatment Marine Licence Number: 05246/17/0
 Discharge Site: Holms Geo Farm of Operation: Holms Geo

| Date | Quantity of Chemicals discharged (ml or grams) | Chemical(s) or agent(s) discharged | Discharge operation | | | | Comments |
|---------|--|------------------------------------|--------------------------|----------------------------------|-------------------------------|---------------------------|----------|
| | | | Time and position: Start | Weather, sea state and tidal set | Time and position: Completion | Rate/ duration* discharge | |
| 27/4/17 | 280/3800 | H2O2 | 22:00 Cage 12 | Calm | 2300 | 1hr | |
| 28/4/17 | 3800 | H2O2 | 1010 cage 1 | Calm | 1120 | 1hr 10min | |
| 28/4/17 | 3800 | H2O2 | 1423 Cage 2 | Calm | 1508 | 45min | |
| 28/4/17 | 3800 | H2O2 | 1910 Cage 3 | Calm | 2000 | 40min | |
| 29/4/17 | 3800 | H2O2 | 1008 cage 4 | South Easterly force 3-4 | 1042 | 34min | |
| 29/4/17 | 3800 | H2O2 | 1500 cage 5 | South East force 5 | 1540 | 40min | |
| 29/4/17 | 3800 | H2O2 | 1855 cage 6 | South East force 5 | 1935 | 40min | |
| 29/4/17 | 3800 | H2O2 | 2250 cage 7 | South East force 5 | 1130 | 40min | |
| 30/4/17 | 3800 | H2O2 | 0220 cage 9 | South East force 5 | 0300 | 40min | |
| Total | 280/34200 | | | | | | |

*Delete as appropriate
 Farm Manager: [Redacted] Signature: [Redacted]
 Form Fap6 March 1999

MARINE (SCOTLAND) ACT 2010

MARINE SCOTLAND, MARINE LABORATORY, ABERDEEN

DISCHARGE VESSEL LOG OF OPERATIONS*

Discharge Vessel: Oylaks Log Sheet Page Number: 1
 Discharge Operation: Lice treatment Marine Licence Number: 05240/17/0
 Discharge Site: Tesli Geo Farm of Operation: Tesli Geo

| Date | Quantity of Chemical discharged (ml or grams) | Chemical(s) or agent(s) discharged | Discharge operation | | | | Comments |
|---------|---|------------------------------------|--------------------------|----------------------------------|-------------------------------|---------------------------|----------|
| | | | Time and position: Start | Weather, sea state and tidal set | Time and position: Completion | Rate/ duration* discharge | |
| 30/4/17 | 280/4300 | Salmosan /Hydrogen Peroxide | 1230 C8 | SE Force 5 | 1310 | 40min | |
| 30/4/17 | 4300 | Hydrogen Peroxide | 1625 C13 | SE Force 5 | 1710 | 45min | |
| 30/4/17 | 4300 | Hydrogen Peroxide | 2025 C9 | SE Force 5 | 2110 | 45min | |
| 1/5/17 | 4300 | Hydrogen Peroxide | 0008 C11 | SE Force 4 | 0110 | 62min | |
| 1/5/17 | 4300 | Hydrogen Peroxide | 1212 C14 | SE Force 5 | 1300 | 48min | |
| 1/5/17 | 4300 | Hydrogen Peroxide | 1640 C1 | SE Force 5 | 1725 | 45min | |
| 1/5/17 | 4300 | Hydrogen Peroxide | 2050 C2 | SE Force 4 | 2135 | 40min | |
| 2/5/17 | 4300 | Hydrogen Peroxide | 0120 C3 | SE Force 4 | 0200 | 40min | |
| 2/5/17 | 4300 | Hydrogen Peroxide | 1240 C4 | Calm | 1325 | 45min | |
| 2/5/17 | 4300 | Hydrogen Peroxide | 1640 C5 | Calm | 1735 | 55min | |
| 2/5/17 | 4300 | Hydrogen Peroxide | 2030 C6 | Calm | 2105 | 35min | |
| 3/5/17 | 4300 | Hydrogen Peroxide | 0010 C7 | Calm | 0100 | 50min | |
| Total | 280/51600 | | | | | | |

*See Licence Conditions Relating to Discharge Operations
 Farm Manager: [Redacted] Signature: [Redacted]
 *Delete as appropriate



To Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen AB11 9DB

From: Ray Waddell
ray.waddell@marineharvest.com

Email ms.marinelicensing@gov.scot

Marine Harvest (Scotland) Ltd.
Farms Office, Blar Mhor Industrial Estate
Fort William, PH33 7TP
Telephone 01397 701 550
Mobile
Fax 01397 701 174

Date: 3rd February 2017

We intend to discharge the following used chemical from the wellboat Inter Caledonia in compliance with licence conditions.
Actual times of discharge are subject to weather and workload.

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Date | |
|---------------------|-------------------------------|-------------------|------------------------|-----------------------|------------|
| | | | | Start | End |
| Cairidh 05096/16/0 | Salmosan Vet (Fish Vet Group) | Azimethiphos | 220g | 0900hrs 04/02/2017 | 07/02/2017 |
| Maol Ban 06021/16/0 | Salmosan Vet (Fish Vet Group) | Azimethiphos | 2530g | 0900hrs 04/01/2017 | 26/02/2017 |
| Sconser 06018/16/0 | Salmosan Vet (Fish Vet Group) | Azimethiphos | 1210g | 1400hrs 04/02/2017 | 26/02/2017 |



To Marine Scotland

From: Charlotte Maddocks
charlotte.maddocks@marineharvest.com

Email msmarinelicensing@gov.scot

Marine Harvest (Scotland) Ltd.
Stob Ban House,
Glen Nevis Business Park
Fort William, PH33 6RX
Telephone 01397 701 550
Mobile
Fax 01397 701 174

Date: 19th June 2017

We intend to discharge the following in accordance with consent conditions

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Biomass | Date | |
|--|--------------|-------------------|-----------------------------------|---------|------------|-----|
| | | | | | Start | End |
| North Shore West CAR/L/1004085; North Shore East CAR/L/1129789; Tabhigh CAR/L/1129793/VN01 | Salmosan Vet | Azamethiphos | 220g;220g; 240g repectively | 2500T | 21/06/2017 | |



To Marine Scotland

From: Charlotte Maddocks
charlotte.maddocks@marineharvest.com

Email MS.MarineLicensing@gov.scot

Marine Harvest (Scotland) Ltd.
Stob Ban House,
Glen Nevis Business Park
Fort William, PH33 6RX
Telephone 01397 701 550
Mobile
Fax 01397 701 174

Date: 22nd August 2017

We intend to discharge the following in accordance with consent conditions

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Biomass | Date | |
|---|-------------|-------------------|--|---------|------------|-----------|
| | | | | | Start | End |
| Noster CAR/L/1009974/VN10 & MPSv5; Seaforth CAR/L/1009963/VN12 & MPSv4; Trillichean Mor CAR/L/1003016 | Salmosan | Aamethiphos | 170g; 190g and 190g respectively | 200T | 24/08/2017 | ~26/08/17 |

Treatment boat - Inter Caladonia well boat



To Marine Scotland

From: Charlotte Maddocks

charlotte.maddocks@marineharvest.com

Email msmarinelicensing@gov.scot

Marine Harvest (Scotland) Ltd.
Stob Ban House,
Glen Nevis Business Park
Fort William, PH33 6RX
Telephone 01397 701 550
Mobile
Fax 01397 701 174

Date: 26th August 2017

We intend to discharge the following in accordance with consent conditions

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Biomass | Date | |
|--|--------------|-------------------|------------------------|---------|----------|-----------|
| | | | | | Start | End |
| Caolas a Deas East, Loch Shell CAR/L/1120220; | Salmosan Vet | Azamethip os | 400g per 24 hours | ~700T | 26.08.17 | ~29.08.17 |



To Marine Scotland

From: Charlotte Maddocks

charlotte.maddocks@marineharvest.com

Email msmarinelicensing@gov.scot

Marine Harvest (Scotland) Ltd.
Stob Ban House,
Glen Nevis Business Park
Fort William, PH33 6RX
Telephone 01397 701 550
Mobile
Fax 01397 701 174

Date: 19th June 2017

We intend to discharge the following in accordance with consent conditions

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Biomass | Date | |
|---|--------------|-------------------|-----------------------------------|---------|------------|-----|
| | | | | | Start | End |
| North Shore West CAR/L/1004085; North Shore East CAR/L/1129789; Tabhig CAR/L/1129793/VN01 | Salmosan Vet | Azamethip os | 220g;220g; 240g repectively | 2500T | 21/06/2017 | |



Marine Harvest Ltd
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX

Tel:
Email: sabina.wilinska@marineharvest.com

To: Stephen MacIntyre
Marianne MacPherson
SEPA Fort William

From: Sabina Wilinska

Email: WestHighlandArgyll@sepa.org.uk
RegistryDingwall@sepa.org.uk

Date: 19th April 2017

We intend to discharge the following in compliance with consent conditions:

| Site Name | Site | Therapeutant | Active Ingredient | Quantity (up to) g of active ingredient | Biomass (T) | Start | End |
|----------------|----------------|---------------|-------------------|---|-------------|-----------------|-----------------|
| Maclean's Nose | CAR/L/100 2965 | Salmosan 880g | Azamethiphos | 440g | 30T | 21st April 2017 | 22nd April 2017 |

Signed

Sabina Wilinska
Health Manager



Marine Harvest Ltd
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX

Tel:
Email: sabina.wilinska@marineharvest.com

To: Stephen MacIntyre
Marianne MacPherson
SEPA Fort William

From: Sabina Wilinska

Email: EPIwesthighands-argyll@sepa.org.uk
RegistryDingwall@sepa.org.uk

Date: 06th January 2017

We intend to discharge the following in compliance with consent conditions:

| Site Name | Site | Therapeutant | Active Ingredient | Quantity (up to) Grams | Biomass (T) | Start | End |
|-----------|-------------------|--------------|-------------------|------------------------|-------------|-------------|--------------|
| Shuna | CAR/L/1109 280 | Salmosan | Azamethiphos | 2240g | 229T | 9th January | 20th January |

Signed

Sabina Wilinska
Health manager



Marine Harvest Ltd
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX

Tel:
Email: sabina.wilinska@marineharvest.com

To: Stephen MacIntyre
Marianne MacPherson
SEPA Fort William

From: Sabina Wilinska

Email: EPWesthighlands-argyll@sepa.org.uk
RegistryDingwall@sepa.org.uk

Date: 06th January 2017

We intend to discharge the following in compliance with consent conditions:

| Site Name | Site | Therapeutant | Active Ingredient | Quantity (up to) Grams | Biomass (T) | Start | End |
|-----------|-------------------|--------------|-------------------|------------------------|-------------|-------------|--------------|
| BDNC | CAR/L/1004 226 | Salmosan | Azamethiphos | 2660g | 547T | 9th January | 20th January |

Signed

Sabina Wilinska
Health manager



To Marine Scotland

From: Charlotte Maddocks

charlotte.maddocks@marineharvest.com

Email MS.MarineLicensing@gov.scot

Marine Harvest (Scotland) Ltd.
Stob Ban House,
Glen Nevis Business Park
Fort William, PH33 6RX
Telephone 01397 701 550
Mobile
Fax 01397 701 174

Date: 22nd August 2017

We intend to discharge the following in accordance with consent conditions

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Biomass | Date | |
|---|-------------|-------------------|--|---------|------------|-----------|
| | | | | | Start | End |
| Noster CAR/L/1009974/VN10 & MPSv5; Seaforth CAR/L/1009963/VN12 & MPSv4; Trillichean Mor CAR/L/1003016 | Salmosan | Aamethiphos | 170g; 190g and 190g respectively | 200T | 24/08/2017 | ~26/08/17 |

Treatment boat - Inter Caladonia well boat

Fax message



This fax is confidential and may be privileged. If you are not the intended recipient, please notify Us immediately; you should not copy or use it for any purpose nor disclose its contents to any person.

To Marine Scotland
Fax Number
C.c.
From Alasdair Duce Date 03/3/17 Page 1 of 1

| Site | Quantity (up to) grams | Dates | |
|--|----------------------------|--------|---------|
| | Azamethiphos (Salmosan) | Start | End |
| North shore West CAR/L/1004085 | 1,000kg Active. | 3/3/17 | 14/3/17 |
| North shore East CAR/L/1129789 All stocked pens. | 2,000kg Active. | | |

Alasdair Duce
Regional Health Manager

Dave Cockerill MRCVS (MHS Veterinarian)

From: Jakub Pierzynowski [mailto:jakub.pierzynowski@griegseafood.com]

Sent: 10 May 2017 15:19

To: MS Marine Licensing

Cc: Justin Watson

Subject: wellboat notifications Grieg Seafood Shetland

Dear Sir / Madam,

Please accept this email as notification for our wellboat treatments plan. At this stage (apologise) but it's

not possible to give you 100% answer where we will start. It depends as always on the weather and our

other treatments in progress at the moment.

Wellboat: Oysund.

Locations: West Of Burwick (06123/16/0) – start: 14.05.2017, finish: 16.05.2017.

Spoose Holm (06124/16/0) – start: 14.05.2017, finish: 15.05.2017.

Score Holms (06125/16/0) – start: 15.05.2017, finish: 19.05.2017.

Langa (06128/16/0) – start: 18.05.2017, finish: 21.05.2017.

To be discharged: West Of Burwick: Peroxide – 43000 litres, Salmosan Vet – 3060 grams.

Spoose Holm: Peroxide – 18000 litres, Salmosan Vet – 1260 grams.

Score Holms: Peroxide – 53000 litres, Salmosan Vet – 3580 grams.

Langa: Peroxide – 55000 litres, Salmosan Vet – 3960 grams.

If you have any questions just let me know and I'll try to help!

From: Jakub Pierzynowski [mailto:jakub.pierzynowski@griegseafood.com]

Sent: 22 February 2017 15:20

To: MS Marine Licensing

Subject: Wellboat treatment notifications Grieg Seafood Shetland

Dear Sir / Madam,

Please accept this email as notification for wellboat treatments in Shetland within Scalloway area.

Wellboat to be used is Oysund. Starting on Sunday 26.02.2017 at North Havra (licence 06126/16/0)–

estimated usage of peroxide: 26000 ltrs and AMX: 1440 ml. Next site to be treated straight after

(27.02.2017) is Spoose Holm (licence 06124/16/0) – estimated usage of peroxide: 29500 ltrs and AMX:

1620 ml. Next location will be West Of Burwick from 28.02.2017 (licence 06123/16/0) – estimated usage

of peroxide: 55000 ltrs and AMX: 3060 ml.

Please note that locations might be treated with other order due to weather conditions etc. Our

intention is to treat entire Scalloway area site after site. Other sites North Papa, Langa, Score Holms will

be treated as well – notifications for those would be send within next couple of days.

Regards, Jakub Pierzynowski, MRCVS.

From: Jakub Pierzynowski [mailto:jakub.pierzynowski@griegseafood.com]

Sent: 02 March 2017 16:42

To: MS Marine Licensing

Subject: further wellboat notifications - Grieg Seafood Shetland / Scalloway Area

Dear Sir / Madam,

Please accept this email as a notification for our further wellboat treatments plan around Scalloway Area

/ Shetland. From the previous notifications we still got to do Score Holms and Langa. We will be starting

treating Score Holms today and weather permitting start Langa on Saturday late evening/ early hours on

Sunday – this might actually change due to weather and possibly we might go with the treatments again

to North Havra instead of Langa. In this case this notification for 2nd wellboat treatments at North Havra

and other sites:

North Havra: 06126/16/0 - start on 05.03.2017, peroxide estimate: 22000 litres, AMX: 1440ml.

Spoose Holm: 06124/16/0 – start on 07.03.2017, peroxide: 25000 litres, AMX: 1620 ml.

West Of Burwick: 06123/16/0 – start on 09.03.2017, peroxide: 50000 litres, AMX: 3060 ml.

Langa: 06128/16/0 – start on 10.03.2017, peroxide: 50000 litres, AMX: 3240ml.

Score Holms – 06125/16/0, peroxide 50000 litres, AMX: 3240ml.

Please note as with previous notifications that we might have to change above treatments schedule due

to weather conditions.

Best regards, Jakub Pierzynowski, MRCVS.

From: Geoff Kidd [mailto:geoff.kidd@scottishseafarms.com]

Sent: 02 November 2017 09:33

To: MS Marine Licensing

Cc: Environment All; Chris Hempleman

Subject: Spelve B wellboat treatment notification

Dear Marine Scotland,

We hereby notify you of our intention to treat the following site:

Site name: Spelve B

Licence Ref: 05425

Wellboat name: Ronja Skye

Agent: Azasure

Quantity: Approx. 200g (100g active)

Treatment date: Commencing 04/11/2017

From: Jakub Pierzynowski [mailto:jakub.pierzynowski@griegseafood.com]

Sent: 29 May 2017 15:58

To: MS Marine Licensing

Subject: wellboat notification North Voe Whalsay

Dear Sir / Madam,

Please accept this email as notification for wellboat treatment at North Voe Whalsay – 06029/16/0.

Wellboat – Martin Saele. Start: 01.06.2017. Finish: 03.06.2017. To be discharged: Salmosan Vet: 1600 g.

Best Regards, Jakub Pierzynowski, MRCVS.

From: Duce, Alasdair [mailto:Alasdair.Duce@marineharvest.com]

Sent: 14 August 2017 12:11

To: MS Marine Licensing

Cc: MacGruer, Lynsey; Read, Chris; Manager, Erisort; MacLeod, Don

Subject: RE: Marine Scotland - Licensing Operations Team

Hi,

I would like to notify you of our plan to treat fish at our farm at marine harvest, loch Erisort Tabhaigh (

FS1297).

We are planning to do some well boat treatments at tabhaigh using Salmosan.

Treatments will start on Thursday 17th August finishing on Sunday 20th . And we intend to use 1.8kg salmosan or 900g of active substance.

From: MacGruer, Lynsey [mailto:lynsey.macgruer@marineharvest.com]

Sent: 11 September 2017 16:26

To: MS Marine Licensing

Subject: RE: Notification of discharge of medicines at PNG CAR/L/1000800 (MHS)

Apologies for the very late request, but we are carrying out an Alphamax treatment starting today at South West Shuna for the next 5 days.

Kames will be sending the formal notification shortly but here is the information.

Starting on Monday 11th September for 5 days.

Alphamax is the Therapeutant at 15grams per day with 75g total being used.

The biomass on site is 1725T

The quantity of Alphamax is 7.5 litres which is 30 bottles total over the treatment.

Again apologies for the last minute notification.

Many thanks in advance.

Best regards

Lynsey MacGruer

Production Assistant

MARINE HARVEST SCOTLAND LTD

MOBILE:

DIRECT: +44 139 771 5032

MAIL: lynsey.macgruer@marineharvest.com

From: MS.MarineLicensing@gov.scot [mailto:MS.MarineLicensing@gov.scot]

Sent: 11 September 2017 14:41

To: MacGruer, Lynsey

Cc: Wilinska, Sabina

Subject: RE: Notification of discharge of medicines at PNG CAR/L/1000800 (MHS)

Hi Lyndsey,

Thank you. Please note that the licence you sent through is for Shuna South West and is for Kames fish farming and not Marine Harvest. Additionally, I note that Sabina referred to a CAR licence at PNG. If a treatment is carried out the discharge of the chemicals must be at the site where the treatment was completed and not at another site.

Can you please confirm whether you are treating and discharging at PNG or Shuna South West?

From: Kate McIntyre [mailto:kate.mcintyre@scottishseafarms.com]

Sent: 22 June 2017 16:15

To: Cameron J (Jacqueline)

Cc: Environment All; Alastair Fraser; Chris Hempleman; MS Marine Licensing

Subject: RE: Wellboat treatment notification

Hi Jacqui,

The proposed quantities to be used are as follows:

Fishnish A – 1100g Azasure so 550 g Azamethiphos over 4 days with 10,164 ltrs Paramove 50 over same

period.

Fishnish B – 900g Azasure so 450g Azamethiphos over 3 days with 8316 ltrs Paramove 50 over the same

period.

From: Jakub Pierzynowski [mailto:jakub.pierzynowski@griegseafood.com]

Sent: 03 May 2017 18:53

To: MS Marine Licensing; Justin Watson

Cc: Base Dunvegan

Subject: wellboat notification

Dear Sir / Madam,

Please accept this email as notification for upcoming wellboat treatments in Duvegan Area / Grieg

Seafood Shetland Ltd. Wellboat – Oysund. Sites and chemicals to be discharged: Gob Na Hoe

(06032/16/0) – Peroxide: 35000 litres, Salmosan Vet: 2520 g. Leinish (06031/16/0) – Peroxide: 23000

litres, Salmosan Vet: 1620 g. Estimated start date: 06.05.2017. Estimated finish date: 15.05.2017.

Best regards, Jakub Pierzynowski, MRCVS.

Information disclosed by the Scottish Government in April 2018 (via FoI/18/00985):

From:[Redacted]
Sent: 13 December 2017 08:59
To:[Redacted] @bmkanimalhealth.com
Subject: Ectosan / CleanTreat

Hi [Redacted]

I work in the fish and shellfish health policy division of Scottish Government. I have inherited your business card from a colleague who left our unit at the start of this year[Redacted]

I noted the recent article on Ectosan in fish farming expert with interest. I am aware that trials are ongoing, however I was hoping you might be able to give me some further information?
Are you able to give an update on the status of trials in Norway? (for example, are you currently going through the authorisation process?)

I would also be interested to know if the CleanTreat system is already in use in Norwegian aquaculture.

Grateful for any info you can provide

Best regards

[Redacted]

Marine Scotland – Performance, Aquaculture and Recreational Fisheries
Tel:[Redacted]
E-mail[Redacted] @gov.scot
Web: <http://www.scotland.gov.uk/marinescotland>
Mail: Scottish Government, 1B North, Victoria Quay, Edinburgh EH6 6QQ

From:[Redacted] @gov.scot
Sent: 13 December 2017 11:13
To:[Redacted] [> @scottishaquaculture.com](mailto:@scottishaquaculture.com)
Cc:[Redacted] @gov.scot
Subject: Ectosan sea lice treatment

Morning [Redacted]

I am sure you are already aware of the article <https://www.fishfarmingexpert.com/news/new-lice-bath-100-effective-and-pollution-free/> but I wondered if you had any further readout around this particular innovation which on face value could be a significant game-changer. As I recall, Benchmark are an industry member of SAIC.

Regards

[Redacted]

[Redacted]

[Marine Scotland](#)

Scottish Government | Area 1-B North | Victoria Quay | EH6 6QQ

T:[Redacted]
[Redacted]

From: [Redacted] @scottishaquaculture.com]
Sent: 13 December 2017 14:01
To: [Redacted]
Cc: [Redacted]
Subject: RE: Ectosan sea lice treatment

Hi [Redacted]

Thanks for the Ectosan press release.

I note that Benchmark describe Ectosan as a follow on product to Salmosan. There's no publicly available on active ingredients, but I wonder if it's also azamethiphos-based, with the associated regulatory controls and need to avoid sea lice resistance, etc?

Regarding CleanTreat, this water purification system was presented at a SSPO meeting last week – again, no details provided on how the tech works, which made some of the audience a bit sceptical. Interestingly, it was mentioned that the shipping container-based modules would need to be multiplied up to enable treatment of commercial scale water volumes. As I understood things, this would in turn need a secondary vessel alongside the well boat. Finally, it was mentioned that initial discussion have been had with SEPA, but no indication as to how advanced these are.

I hope this is of some help!

Best regards,

[Redacted]

[Redacted]

[Redacted]

Scottish Aquaculture Innovation Centre
(t) [Redacted] (m) [Redacted] (w) scottishaquaculture.com [Connect+Collaborate](#)



Delivering industry success through research partnerships



From: [Redacted] (MARLAB)
Sent: 14 December 2017 10:17
To: [Redacted]
Subject: RE: Ectosan sea lice treatment

On the original topic – Benchmark presented on the Cleantreat system – in principle (if as effective as is presented) it is a good, if expensive, solution to discharge consent for bath treatments. If it is used as suggested it could remove the rate limiting factor of discharge consent for bath treatments – however, I'm not sure that there is sufficient wellboat capacity to use it as suggested.

Happy to discuss further.

[Redacted]

[Redacted]

Marine Scotland | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

Tel: [Redacted]

Mobile: [Redacted]

www.gov.scot/marinescotland

Information disclosed by Scottish Natural Heritage in April 2018 (via SIR149947/A2598894):

marinescotland

T: +44 (0)1224 295579 F: +44 (0)1224 295524
E: MS.MarineLicensing@scotland.gsi.gov.uk



Discharge of Treatment Agents in the Territorial Sea and UK Controlled Waters Adjacent to Scotland

Marine (Scotland Act) 2010

IMPORTANT: Before you start to complete this form, please read these notes carefully.

The following numbered paragraphs correspond to the questions on the application form and are intended to assist applicants in completing the form. These explanatory notes are specific to this application and so applicants are advised to read these in conjunction with the General Guidance document. If further clarification is needed please contact MS-LOT on 01224 295579 or email:

MS.MarineLicensing@scotland.gsi.gov.uk

Please refer to the General Guidance document for information regarding payment methods.

Explanatory Notes

2. Applicant

The person, company or organisation making the application that will be named as the licensee on any licence issued.

3. Proposed licensee details

Please provide the details of the person, company or organisation to appear as the licensee.

4. Agent

Any person, company or organisation involved in the works. For example, they may be engaged to act under contract or other agreement on behalf of any party listed in the answer to question 2 and having responsibility for the control, management or deposit anywhere below the tidal limit of the mean high water springs (MHWS).

5. Best Practicable Environmental Option (BPEO) Assessment

Under section 27(2) of the Marine (Scotland) Act 2010 (there is no equivalent provision under the Marine and Coastal Access Act 2009), the licensing authority has an obligation to consider the availability of practical alternatives when considering applications involving disposal of material at sea. All applications must be supported by a detailed assessment of the alternative options - a best practicable environmental option (BPEO) assessment. This should include a statement setting out the reasons why deposit of the materials at sea is the preferred option and applications will not be considered unless they are accompanied by such an assessment. All options in the BPEO should be explored fully (as per the guidance documents) otherwise your form and BPEO are liable to be returned to you, thereby delaying processing of the application.

6. Details of Current Licence (if any)

Enter the appropriate details for the current licence. If you have previously held a licence in respect of this operation, but no current licence exists, please provide the details for the most recently expired licence. If you have no knowledge of any previous licence, please enter "not applicable" (or "n/a").

7. Licence Start Date

Please provide details of when you wish the licence period to start. Licences will normally be issued for a 12 month period, with a possibility of extension.

8. Discharge Location(s)

You must provide information regarding the discharge site covered by the application. Please provide:

- an admiralty chart extract/map with the discharge site clearly marked;
- licensing zone - this refers to the delineation of areas for the purposes of charging, these can be found at <http://www.scotland.gov.uk/Topics/marine/Fish-Shellfish/FHI/managementagreement> and
- the co-ordinates for the site where discharge will take place - Include a list of the National Grid References (NGR) or latitude and longitude co-ordinates of the boundary points for the proposed dredge areas.

NGR - Should consist of two letters followed by 10 digits (e.g. TL6320031700) where the first 5 digits are the eastings (read from the south west corner of an Ordnance Survey map) and the last 5 digits are northings.

Latitude & longitude - For positions read from charts of 1:25,000 scale or smaller, the format should be, e.g.

55°55'.55N 2°22'.22W. The decimal point specifies that decimals of minutes are used and the datum is stated explicitly. If seconds are used then the datum should be explicitly marked, e.g. 55°55'44"N 2°22'11"W. For positions read from larger scale charts, e.g. 1:10,000, three decimal places of minutes should be used, e.g. 55°55'.444N 2°22'.222W.

- the distance from land in meters
- information relating the tidal streams and residual currents, if known (this data should be provided in a separate submission and/or report).

9. Rationale for Proposed Discharge

Please state why you wish to undertake the activity, for example, discharge of water and chemical product following treatment of farmed fish for sealice.

10. Details of Material to be Discharged

Provide the proprietary name(s) of all chemicals/agents (e.g. Excis), the chemical name(s) or other relevant description(s) of all chemicals (e.g. cypermethrin) and provide all appropriate Material Safety Data Sheets.

11. Post Treatment Chemical(s) or Agent(s) to be Discharged

Provide details of any treatment of the agents used prior to discharge.

12. Details of Scale of Discharge

This section requires the following data to be provided for the material(s) to be deposited/discharged:

- date: wherever possible approximate date of discharge should be provided.
- duration: the estimated duration that the chemicals being discharged are likely to be detectable/active in the water column
- weight/volume of agent: this refers to the discharge dose of each chemical, including post treatment if required.
- total volume: the total volume to be discharged from each vessel and also the number of wells in each vessel to be used during the procedure.

13. Details of Deposit/Discharge Procedure(s)

Provide details of:

- the origin of deposit (e.g. marine structure, vessel),
- the method of deposit (e.g. gravity, discharge pump),
- the mode of deposit (e.g. through a pipeline, valve, diffuser, bucket),
- the depth of deposit (e.g. sea surface, subsurface with depth),
- the rate of deposit (e.g. discharge rate – litres or m³ per second, minute or hour). For wellboat applications, this should be given for each well).

14. Details of Vessel Undertaking Discharge

Provide the name and call sign, if appropriate, of each of the structures and/or vessels involved in the procedure. It is understood that vessel availability issues often lead to changes over small time scales to vessel choice. Please be as exhaustive as possible in the list of vessels that may be used to reduce the need for further administrative changes.

15. Details of Vessel Operator Undertaking Discharge

The name, address and any other available contact details should be provided for the operators and/or owners of the structures and/or vessels involved in the procedure.

16. Monitoring of Discharge

Provide details of proposed or established monitoring and if you believe monitoring is required. A condition requiring monitoring of the effects of the activity may be included in the licence.

17. Consultation with Conservation Bodies

Consenting Authorities have a duty to ensure marine projects will not have a significant adverse environmental impact, particularly upon designated conservation areas (e.g. SSSI, SAC, SPA, Ramsar sites etc). All details of consultations with conservation bodies (e.g. SNH) should be given, particularly where the applicant has statutory powers for consenting aspects of the project. Indicate whether the proposed project is located within or close to the boundaries of a conservation area such as a SAC, SPA, SSSI or Ramsar site (further information can be found on the SNH SiteLink webpage <http://gateway.snh.gov.uk>).

Any application for beach replenishment works should be cross checked as to whether the proposed site is a designated bathing water site and if so, ideally all physical works should be done outwith the Bathing Water Season (1st June to 15th September). Further guidance on the Bathing Waters Directive (2006/7/EC) can be obtained from www.sepa.org.uk/data/bathingwaters.

In addition, guidance can be obtained from www.foodstandards.gov.uk/ with regards to the Shellfish Waters Directive (2006/113/EC) which has parameters set to protect the water quality in which edible shellfish are grown.

18. Other Considerations

Applicants should also be aware of the need to pay due regard to coastal and marine archaeological matters and attention is drawn to Historic Scotland's Operational Policy Paper HP6, "Conserving the Underwater Heritage".

Please ensure that you have:

- completed all applicable sections of the application form;
- signed and dated the declaration;
- provided the correct relevant documents, charts, and continuation sheets (where necessary); and
- enclosed the correct payment (together with the remittance slip) or paid by means of BACS (if appropriate).

Otherwise your application may be delayed or returned to you.

**Application for Discharge of Treatment Agents in the
Territorial Sea and UK Controlled Waters Adjacent to
Scotland**
(ML-004)

Marine (Scotland) Act 2010

**It is the responsibility of the applicant to obtain any other consents or authorisations that
may be required.**

Under Part 4, Section 54 of the Marine (Scotland) Act 2010 and Section 101 of the Marine and Coastal
Access Act 2009 all information contained within or provided in support of this application will be
placed on the Public Register. There is no national security grounds for application information not
going on the Register under the 2010 Act. Under the 2009 Act, application information goes on the
Register unless the Secretary of State determines that its disclosure in the Register would be
contrary to the interests of national security.

Public Register

Is there any information contained within or provided in support of this application that you consider
should not be included on the Public Register on the grounds that its disclosure

- (a) would be contrary to the interests of national security?; or YES NO
- (b) would adversely affect the confidentiality of commercial or industrial information where such
confidentiality is provided by law to protect a legitimate commercial interest? YES NO

5. Best Practicable Environmental Option (BPEO) Assessment

Has a BPEO been carried out?

YES NO

6. Details of Current Licence (if any)

- (a) Licence reference number
- (b) Expiry date
- (c) If no current licence exists, please give reference number(s) for any previous licence(s) held for this operation

7. Licence Start Date

- (a) When do you wish the licence to start?
(At least 8 weeks are normally required to process the application)
- (b) When are deposit operation(s) likely to be completed?
(Licences are generally issued for a period of 12 months)
- (c) Does the application cover an emergency operation? YES NO

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8. Discharge Location Details

| Site name | Zone | Coordinates | Water Depth (m) | Distance from Land (m) | Tidal Streams/ Residual Currents (if known) |
|------------|------|-----------------------------|-----------------|------------------------|---|
| Sgian Dubh | 19b | 55° 55.72'N 005° 04.59'W | 60m | 200m | |

9. Rationale for Proposed Discharge

In order to achieve more effective treatments to control sea lice (*Lepeophtheirus salmonis*) infection, with less potential for environmental impact due to the greater control and lower concentration of medicine required, Scottish Salmon Company (SSC) have made an application for the use of licensed sea lice medicine bath treatments using well boats.

It is necessary to have a range of medicines available to maintain an effective sea lice treatment strategy. Sea lice chemotherapeutants currently consented for use within Scotland are the in-feed treatments (Slice and Calicide) and the bath treatments (Excis, Salmoan/Vet, Alphamax and Hydrogen Peroxide).

In order to ensure a robust health management strategy and an effective sea lice treatment strategy, it is essential that all available products, and all possible treatment methods, are available for use by the Industry. For this reason, SSC are applying for the use of the following bath treatment medicines to be administered in well boats:

Excis™, (Cypermethrin) SalmoVet® (Azamethiphos) Alphamax™ (Deltamethrin) Hydrogen Peroxide.

The SSC strategy involves the use of in-feed medicines for a longer period during the production cycle, initiating treatments at lower trigger levels, strategic use of treatments to ensure optimum targeting of lice life stages, and focused use of bath treatments later on in the cycle. SSC disease management program has proven highly successful and the additional option of using well-boat treatments will ensure the efficient control of sea lice and high level of fish welfare continues.

10. Details of Material(s) to be Discharged (Please provide Material Safety Data Sheets for each chemical to be discharged).

| Proprietary Name of Chemicals or Agents | Chemical Name of Chemicals or Agents |
|---|--------------------------------------|
| 1. Exis | Cypermethrin |
| 2. SalmoVet | Azamethiphos |
| 3. AlphaMax | Deltamethrin |
| 4. Hydrogen Peroxide | Hydrogen Peroxide |
| | |

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11. Post treatment of Chemical(s) or Agent(s) to be Discharged

Will there be any treatment of the agents used prior to deposit/discharge?

YES NO

If YES, please give details below:

There will not be specific post treatment of chemicals as such, but significant dilution of the medicinal compounds will occur as water is re-circulated and discharged from the well boat in which the treatment takes place.

12. Details of Scale of Deposit(s)/Discharge(s)

| Deposit | Date of Deposit (Approx.) | Duration of Deposit | Weight/Volume of Agent Deposited | Total Volume (including solvent) |
|---------------|--|---|---------------------------------------|--|
| 1 Exis | Various times throughout the production cycle. | Ronja Viking: 20 minutes to discharge Rune Viking: 15 minutes to discharge Please use existing records for other vessels. | Treatment Dose: 0.5 ml/m ³ | Ronja Viking: =500 ml Exis in 2 wells of total volume 1000 m ³ Rune Viking: =325ml Exis in 2 wells of total volume 660 m ³ |
| 2 SalmoVet | Various times throughout the production cycle. | Ronja Viking: 20 minutes to discharge Rune Viking: 15 minutes to discharge Please use existing records for other vessels. | Treatment Dose: 0.2g/ m ³ | Ronja Viking: =200 g SalmoVet IN 2 WELLS OF TOTAL VOLUME 1000 m ³ Rune Viking: 130g SalmoVet in 2 wells of total volume 660 m ³ |

| | | | | |
|------------------------------------|--|---|--|--|
| 3 AlphaMax | Various times throughout the production cycle. | Ronja Viking: 20 minutes to discharge Rune Viking: 15 minutes to discharge Please use existing records for other vessels. | Treatment Dose: 0.2ml/m ³ | Ronja Viking =200 ml AlphaMax IN 2 WELLS OF TOTAL VOLUME 1000 m ³ Rune Viking:130 ml AlphaMax in 2 wells of total volume 660 m ³ |
| 4 H ₂ O ₂ | Various times throughout the production cycle. | Ronja Viking: 20 minutes to discharge Rune Viking: 15 minutes to discharge Please use existing records for other vessels. | Hydrogen peroxide is dosed at 1600PPM. | Ronja Viking = 1050 m ³ H ₂ O ₂ in 2 wells of total volume. Rune Viking = 660 m ³ H ₂ O ₂ in 2 wells of total volume. |
| 5 | | | | |

If necessary please continue on a separate sheet and tick this box

13. Details of Deposit/Discharge Procedure(s)

Please provide details for each of the deposits listed in Section 10 above:

| Deposit | Origin of Deposit | Method of Deposit | Mode of Deposit | Depth of Deposit | Rate of Deposit |
|---------|----------------------|---------------------------------|--|--|--|
| 1 | Ronja viking Vessel | Discharge pumps | Via pipeline and through valves into discharge pumps | ~3.5-4m depth at start, decreasing to 2.5m depth by finish | Total discharge rate of 2000m ³ / hour/ well Each well 500 m ³ Each well 2 pumps |
| 2 | Rune Viking Vessel | Discharge pumps on overpressure | Via pipeline | Discharge hose ~ 2m below surface | Total discharge rate of 3000m ³ /hour/well. Each well 325m ³ Each well 3 pumps |
| 3 | Norholm Vessel | See existing vessel records | See existing vessel records | See existing vessel records | See existing vessel records |
| 4 | Ronja nordic Vessel | See existing vessel records | See existing vessel records | See existing vessel records | See existing vessel records |
| 5 | Ronja settler Vessel | See existing vessel records | See existing vessel records | See existing vessel records | See existing vessel records |

If necessary please continue on a separate sheet and tick this box

14. Details of Vessel Undertaking Discharge

Please provide details for each of the deposits listed in Section 10 above:

| Deposit | Name | Registration Details/Call Sign (if appropriate) |
|---------|-----------------|---|
| 1 | MV Ronja Viking | M/V Ronja Viking Call Sign LAKA IMO #:9364100 |
| 2 | M/V Rune Viking | M/V Rune Viking Call sign:3YIW IMO#: 9167954 |

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| | | |
|---|-------------------|--|
| 3 | M/V Norholm | M/V Norholm Call sign:2BVA2 IMO#: 9139567 |
| 4 | M/V Ronja Nordic | M/V Ronja Nordic Call sign:LASK IMO#: 9443895 |
| 5 | M/V Ronja Settler | M/V Ronja Settler Call sign:LAGS IMO#: 9258703 |

If necessary please continue on a separate sheet and tick this box

15. Details of Operator or Vessel Undertaking Discharge

Please provide details for each of the deposits listed in Section 10 above:

| Deposit | Name and Address |
|---------|---|
| 1 | M/V Ronja Viking Solvtrans AS Brunholmgata 2 6004 Ålesund |
| 2 | M/V Rune Viking Johnson Marine Ltd Marine Park Vidlin ZE2 9QB |
| 3 | M/V Norholm Details already submitted with previous applications |
| 4 | M/V Ronja Nordic Details already submitted with previous applications |
| 5 | M/V Ronja Settler Details already submitted with previous applications |

If necessary please continue on a separate sheet and tick this box

16. Monitoring of Deposit(s)/Discharge

(a) Do you propose to monitor the deposit(s)/ discharge? YES NO

(b) Nature of monitoring (eg. visual observation or scientific survey):

Visual observation of plume dispersal and regular benthic sampling regime will assess benthic community.

(c) Details of any scientific survey (eg. fluorimetric measurement of concentrations):

<http://publicaccess.argyll-bute.gov.uk/online-applications/simpleSearchResults.do?action=firstPage>

17. Consultation with Conservation Bodies

Please provide details of any consultation with Conservation Bodies and, if appropriate, include copies of any correspondence with your application.

Are any parts of the proposed deposit/discharge operations located within the boundaries of a designated conservation area? YES NO

If YES, please indicate approximate distance of the operations from the boundary of the nearest conservation area(s)

Has an Environmental Impact Assessment (EIA)/Environmental Statement (EA) been undertaken to support any application? YES NO

If YES, is a copy of the EIA/ES included with this application? YES NO

If the EIA/ES has been undertaken but has not been included with this application, please provide an explanation below.

<http://publicaccess.arqyll-bute.gov.uk/online-applications/simpleSearchResults.do?action=firstPage>

Is the EIA/ES available for public inspection? YES NO

If YES, at what locations:

See above link

Marine Laboratory, PO Box 101, 375 Victoria Road,
Aberdeen AB11 9DB
www.scotland.gov.uk/marinescotland



Declaration

I declare to the best of my knowledge and belief that the information given in this form and related papers is true.

WARNING
It is an offence under the Act under which this application is made to fail to disclose information or to provide false or misleading information.

Signature  1 Date

Name in BLOCK LETTERS

Position within company (if appropriate)

Please check carefully the information you have given and that all the enclosures (including copies) have been included.

**Application for Discharge of Treatment Agents in the
Territorial Sea and UK Controlled Waters Adjacent to
Scotland**
(ML-004)

Marine (Scotland) Act 2010

It is the responsibility of the applicant to obtain any other consents or authorisations that may be required.

Under Part 4, Section 54 of the Marine (Scotland) Act 2010 and Section 101 of the Marine and Coastal Access Act 2009 all information contained within or provided in support of this application will be placed on the Public Register. There is no national security grounds for application information not going on the Register under the 2010 Act. Under the 2009 Act, application information goes on the Register unless the Secretary of State determines that it's disclosure in the Register would be contrary to the interests of national security.

Public Register

Is there any information contained within or provided in support of this application that you consider should not be included on the Public Register on the grounds that its disclosure

- (a) would be contrary to the interests of national security?; or YES NO
- (b) would adversely affect the confidentiality of commercial or industrial information where such confidentiality is provided by law to protect a legitimate commercial interest? YES NO

1. Project Title and Payment Details

Please give a brief identifiable description, including location, of the project:

Wellboat treatment with sea lice anti-parasitic, Loch Snizort East, Skye Area

Payment: Enclosed payment BACS OR Invoice

2. Applicant Details

Title [redacted] Initials [redacted] Surname [redacted]

Trading Title (if appropriate) GREIG SEAFOOD SHETLAND LTD

Address GREMISTA, LERWICK, SHETLAND

Name of contact (if different)

Position within Company (if appropriate)

Telephone No. (inc. dialing code) [redacted]

Fax No. (inc. dialing code) (01595) 741806

Company Registration No. 159110 Email [redacted]@griegseafood.com

Is the licence Applicant the proposed licensee? YES NO
If NO, please complete Section 3 below.

3. Proposed Licensee Details

Title [redacted] Initials [redacted] Surname [redacted]

Trading title (if appropriate) GRIEG SEAFOOD SHETLAND LTD.

Address AS ABOVE

Name of contact (if different) [redacted]

Position within Company (if appropriate) [redacted]

Telephone No. (inc. dialing code) [redacted]

Fax No. (inc. dialing code) 01595741806

Company Registration No. 159110 Email [redacted]@griegseafood.com



5. Best Practicable Environmental Option (BPEO) Assessment

Has a BPEO been carried out?

YES NO

6. Details of Current Licence (if any)

- (a) Licence reference number
- (b) Expiry date
- (c) If no current licence exists, please give reference number(s) for any previous licence(s) held for this operation

7. Licence Start Date

- (a) When do you wish the licence to start?
(At least 8 weeks are normally required to process the application)
- (b) When are deposit operation(s) likely to be completed?
(Licences are generally issued for a period of 12 months)
- (c) Does the application cover an emergency operation?
(If YES, please explain in the covering letter) YES NO

8. Discharge Location Details

| Site name | Zone | Coordinates | Water Depth (m) | Distance from Land (m) | Tidal Streams/ Residual Currents (if known) |
|-----------------------------|------|-------------|-----------------|------------------------|---|
| Loch Snizort East FS1309 | | NG370603 | ~45 | ~200 | |

9. Rationale for Proposed Discharge

WELLBOATS FORM A VITAL PART OF SEA LICE MANAGEMENT. THEY OFFER A CONTROLLED ENVIRONMENT FOR TREATING FISH AND ALLOW THE FARMER TO ROTATE THE USE OF AVAILABLE SEA LICE ANTI-PARASITIC TREATMENTS.

10. Details of Material(s) to be Discharged (Please provide Material Safety Data Sheets for each chemical to be discharged).

| Proprietary Name of Chemicals or Agents | Chemical Name of Chemicals or Agents |
|---|--------------------------------------|
| SALMOSAN/SALMOSAN VET | AZAMETHIPHOS |
| AMX | DELTAMETHRIN |
| EXCIS | CYPERMETHRIN |
| INTEROX PARAMOVE 50 | HYDROGEN PEROXIDE |
| | |

11. Post treatment of Chemical(s) or Agent(s) to be Discharged

Will there be any treatment of the agents used prior to deposit/discharge?

YES NO

If YES, please give details below:

| |
|--|
| |
|--|

12. Details of Scale of Deposit(s)/Discharge(s)

| Deposit | Date of Deposit (Approx.) | Duration of Deposit | Weight/Volume of Agent Deposited | Total Volume (including solvent) |
|---------|--|--|--|--|
| 1 | PERIODICALLY AVERAGING 1 – 2 X YEAR | 15 MIN EVERY 4-6HRS, 4-6 DEPOSITS EVERY 24HRS, 12-24 DEPOSITS PER WHOLE SITE TREATMENT | TYPICALLY: 50-200g SALMOSAN 200ml AMX 500ml EXCIS <3200l H ₂ O ₂ | 1000m ³ at: 0.05-0.2ppm 0.2ppm 0.5ppm 1600ppm |

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Aberdeen AB11 9DB
www.scotland.gov.uk/marinescotland



13. Details of Deposit/Discharge Procedure(s)

Please provide details for each of the deposits listed in Section 10 above:

| Deposit | Origin of Deposit | Method of Deposit | Mode of Deposit | Depth of Deposit | Rate of Deposit |
|---------|-------------------|-------------------|-----------------|--------------------|--------------------------|
| 1 | VESSEL | DISCHARGE PUMP | PIPELINE | SUBSURFACE 1-2m | 3-4000m ³ /hr |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |

If necessary please continue on a separate sheet and tick this box

16. Monitoring of Deposit(s)/Discharge

(a) Do you propose to monitor the deposit(s)/ discharge? YES NO

(b) Nature of monitoring (eg. visual observation or scientific survey):

(c) Details of any scientific survey (eg. fluorimetric measurement of concentrations):

17. Consultation with Conservation Bodies

Please provide details of any consultation with Conservation Bodies and, if appropriate, include copies of any correspondence with your application.

Are any parts of the proposed deposit/dischage operations located within the boundaries of a designated conservation area? YES NO

If YES, please indicate approximate distance of the operations from the boundary of the nearest conservation area(s)

Has an Environmental Impact Assessment (EIA)/Environmental Statement (EA) been undertaken to support any application? YES NO

Declaration

I declare to the best of my knowledge and belief that the information given in this form and related papers is true.

WARNING

It is an offence under the Act under which this application is made to fail to disclose information or to provide false or misleading information.

Signature

[Redacted Signature]

Date

30/08/
2017

Name in BLOCK LETTERS

[Redacted Name]

Position within company
(if appropriate)

[Redacted Position]

Please check carefully the information you have given and that all the enclosures (including copies) have been included.



Scottish Natural Heritage
Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad

Marine Scotland – Licensing Operations Team
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

FAO: [Redacted]

2 September 2016

Your Refs:

05995 - Ardintoul, Loch Aish
05996 - Cairidh, Isle of Skye
05997 - Camus Glas, Loch Sunart
06000 - Ewe, Loch Ewe
06003 - Glencripesdale, Loch Sunart
06009 - Invasion Bay, Loch Sunart
06014 - Torridon, Loch Torridon
06018 - Sconser, Isle of Skye
06021 - Moal Ban, Loch na Cairidh
06027 - Portnalong, Loch Harport

Dear Madam,

Marine (Scotland) Act 2010, Part 4 Marine Licensing Wellboat discharge

Thank you for your recent consultations regarding wellboat licences at various fish farms within SNH South Highland Area. Please treat this as our response for all of the above listed consultations and any future applications which meet the criteria outlined below. We are happy to discuss any issues raised and would still wish to be consulted on non-standard or novel cases.

Summary

We understand that it is your policy not to grant well boat discharge licences where the volumes of chemicals or specified time-frames differ from the corresponding SEPA CAR licence. Assuming that to be the case, we advise that, outside designated sites, discharge of those chemicals from a well boat alongside the cages would not raise any additional natural heritage issues and we would have no objection to the granting of the license.

Within designated sites significant effects are possible but we are not in a position to provide you with detailed advice. We recommend dialogue between MS-LOT, SNH and SEPA as the best way to resolve any outstanding issues.

Scottish Natural Heritage, King's House, The Green, Portree, Isle of Skye, IV51 9BS
Tel: 01478 612625 www.snh.gov.uk

Dualchas Nàdair na h-Alba, Taigh an Rìgh, An Àilean, Port Rìgh, An t-Eilean Sgitheanach, IV51 9BS
Fòn: 01478 612625 www.snh.gov.uk

Appraisal of the impacts of the proposal and advice

Accuracy of information provided by the applicant

We are not routinely consulted on CAR licences for fish farms and do not have full access to SEPA's database, so we are not in a position to advise whether the information provided by the applicant is accurate. We understand that the CAR information that you use is obtained direct from the applicant and therefore there is the possibility (which we have seen in a minority of cases) for the applicant to provide you with an out-of-date CAR licence. There is also the possibility that SEPA may alter the CAR licence part way through the Marine Licence period (e.g. to restrict biomass). In our view it is the applicant's responsibility to ensure that any discharge is consistent with both the latest CAR licence and Marine Licence. You may wish to highlight this to applicants.

Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)

Within SACs and SPAs the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply. Consequently, Marine Scotland is required to consider the effect of the proposal on the site before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<http://www.snh.gov.uk/docs/A423286.pdf>).

SEPA consider the effect of all proposed CAR amendments on SACs and have Habitats Regulations Appraisals (HRA) for each SAC, with sections relating to each fish farm site. They also have generic HRA for SPA bird species as well as otters and seals. Significant changes are assessed and the relevant HRA updated. SEPA have indicated to us that they are happy to provide you with copies of these assessments via the SEPA Marine Science aquaculture staff (Naveed Bhatti or Mhairi Wilson, both based in the SEPA Dingwall office). We recommend that you obtain copies in order to decide whether you wish to adopt their scientific appraisal as part of your HRA.

The SEPA HRA assessments that we have seen consider the effect of sea lice chemicals but do not specifically consider wellboat discharges. It seems likely that the chemical discharge plume from a wellboat will vary in comparison with a discharge plume from a tarpaulin. However we do not have technical expertise to assess whether any differences are significant or whether they fall within the tolerances of the existing dispersion modelling. We recommend that you clarify this aspect with SEPA modellers.

SEPA are unlikely yet to have specifically considered the effects of chemicals on the features of proposed marine SACs and SPAs (such as harbour porpoise in Inner Hebrides and Minches proposed Special Area of Conservation (pSAC)). However since the Scottish Government has a policy of protecting such sites as if they were designated these also need to be included in your HRA. It seems likely to us that features will be protected by the existing safeguards built into CAR. However we recommend that you confirm this understanding with SEPA.

Use of wellboats may slightly increase boat traffic around the fish farms and this would not be assessed as part of CAR. However collision and disturbance risks for harbour porpoise from vessels of the type specified are unlikely to be significant although they may contribute to potential cumulative effects. In our view, no additional management is required for vessel activity providing best practice is followed. Further advice is available in '*Inner Hebrides and the Minches proposed SAC - Advice to support management*' at www.snh.gov.uk/docs/A1918723.pdf

In a similar way, we would not consider collision and disturbance risks for seals, otters and seabirds to be significant where these are features of SACs and SPAs, providing best practice is followed.

Marine Protected Areas (MPAs)

Where proposals lie within Nature Conservation Marine Protected Area (NC MPA) the requirements of the Marine (Scotland) Act 2010 apply. Consequently, Marine Scotland is required to consider the effect of the proposal on the NC MPA before it can be consented.

SEPA have confirmed that they will consider impacts on the MPA when a new CAR variation is submitted. However, in most cases the MPAs will have been designated subsequent to the last CAR licence so that assessment won't yet have been carried out. Also in the majority of cases impacts on the MPA features can be regarded as existing and part of the base-line condition of the feature at the time of designation. In our view, while wellboat discharges are capable of affecting the protected features of the NC MPA, these effects are insignificant. Further assessment is therefore not required.

An exception may occur where features have conservation objectives to 'recover' rather than 'maintain' (the latter applies to the majority of features). For example maerl beds in Wester Ross MPA. It would be sensible to discuss those particular cases with SNH and SEPA. However it seems likely that any impacts will relate primarily to the discharge rather than how it is discharged and therefore would be best tackled via CAR.

Non-designated sites

Outside designated sites we advise that the discharge of chemicals from a well boat alongside the fish farm cages would not raise any additional natural heritage issues beyond those already considered by SEPA as part of the CAR process and we would have no objection to the granting of the license.

Yours sincerely,

Alex Turner
Area Officer
Skye and Lochalsh, South Highland
alex.turner@snh.gov.uk

From: [Roddy MacMinn](#)
To: ["Marine Licencing \(MSLOT\) \(ms.marinelicensing@scotland.qsi.gov.uk\)"](mailto:ms.marinelicensing@scotland.qsi.gov.uk)
Subject: 06216 - Reibinish, East Loch Tarbert - Wellboat Discharge - Scottish Salmon Company - SNH Response March 2017
Date: 14 March 2017 11:05:00

Dear MSLOT

Thank you for your recent consultation.

In our view a marine licence application to allow the discharge of chemicals from wellboats, where there are **no changes to levels of chemicals used within existing CAR licences**, will not raise any additional natural heritage issues which have not already been considered through CAR.

We therefore do not need to be consulted on any Marine Licences for wellboat discharges unless:

- a) Marine Scotland considers that there will be Likely Significant Effect (LSE) on a European designated site (SAC or SPA)
- b) Marine Scotland considers that the activity is capable of affecting, other than insignificantly, the protected features of a Nature Conservation MPA
- c) The wellboat discharge varies from the existing approved CAR licence; or
- d) There is no CAR licence in place / chemicals are proposed which are not licensable under CAR.

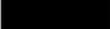
From the information provided it does not appear to be the case that this application meets any of the above criteria? Therefore we are content for Marine Scotland to proceed to a determination without further reference to SNH.

With best wishes

Roddy

**Roddy MacMinn | Operations Officer | Scottish Natural Heritage |
32 Francis Street | Stornoway | Isle of Lewis | HS1 2ND | Tel: 01851 705258**

From: [Donna Yule](#)
To: ["MS.MarineLicensing@gov.scot"](mailto:MS.MarineLicensing@gov.scot)
Subject: RE: 06267 - Scottish Sea Farms Ltd - Wellboat - Westerbister Scapa Flow, Orkney – Consultation – Response Required by 23 March 2017
Date: 22 March 2017 10:23:00
Attachments: image001.png

Dear 

SNH ref: CNS/MFF/ORK/Westerbister (CLC145091)

Thank you for consulting SNH on this application from Scottish Sea Farms Ltd for a Marine Licence for the discharge of waste sea lice treatment chemicals from wellboats at the new Westerbister salmon farm in Orkney.

We have previously advised SEPA on the CAR licence application on 17 February 2016, and have no additional comments to make with respect to this Marine Licence application for use of wellboats to administer the specified treatments.

Point to note: The Westerbister site does lie within the recently designated area Scapa Flow pSPA although this does not affect our advice regarding the use of wellboats at this site.

Kind regards
Donna

Donna Yule
Operations Officer, Orkney

Scottish Natural Heritage | 54-56 Junction Road | Kirkwall | Orkney | KW15 1AW
Direct dial: 01856 886157
Extension: 7206157
e-mail: Donna.yule@snh.gov.uk

From: [REDACTED]@gov.scot
To: NORTH; MS.FPPlanning@gov.scot
Subject: 06267 – Scottish Seafarms Ltd - Wellboat - Westerbister Scapa Flow, Orkney - Licence Issue
Date: 05 April 2017 11:08:06
Attachments: image001.png
Final Licence.pdf

Dear Sir/Madam

Attached you will find a Scottish Seafarms Ltd - Wellboat - Westerbister Scapa Flow, Orkney

Should you have any further questions, please do not hesitate to contact me.

Kind Regards

[REDACTED]

[REDACTED]
[REDACTED]

Marine Scotland - Marine Planning & Policy

Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

Direct Line: +44 [REDACTED]
General Queries: +44 (0)1224 295 579
Fax: +44 (0)1224 295 524
Email: [REDACTED]@gov.scot
Website: <http://www.gov.scot/Topics/marine/Licensing/marine>

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

LICENCE FOR DISCHARGE OF USED CHEMICALS FROM WELLBOATS

Licence Number: 06267/17/0

Reference Number: 06267

The Scottish Ministers (hereinafter referred to as "the licensing authority") hereby authorise:

Scottish Sea Farms Ltd
South Shian
Connel
by Oban
Argyll
PA37 1SB

to deposit in the sea the chemicals or agents particulars of which are described in Part 1 of the attached Schedule. The licence is subject to the conditions of use set out, or referred to, in Part 2 of the said Schedule.

This licence is valid from 05 April 2017 until 04 April 2020

Signed: _____
[REDACTED]

For and on behalf of the licensing authority

Date: 05 April 2017

Part 1 – Particulars

1. Name and address of the person(s) discharging the used chemical(s) or agent(s):

The licensee will discharge the used chemical(s) or agent(s)

2. Name and address of any other agents acting on behalf of the licensee (if appropriate):

As per licensee

3. Name(s) of the vessel(s) to be employed to undertake the discharge operations:

See Annex One of this licence to discharge for a list of authorised vessels.

The agent or licensee must notify the licensing authority immediately if a vessel not listed on the licence is to be used for the discharge of used chemical(s) or agent(s). The information required by the licensing authority regarding the additional vessel(s) will be the same as the information already provided for the vessels on the existing licence. **Discharge operations using any additional vessel(s) may only commence if a revised licence, including details of the additional vessel(s), is issued by the licensing authority.**

4. Location of discharge of the used chemical(s) or agent(s):

Westerbister, Scapa Flow at a point located by the coordinates

58° 54.38' N, 002° 57.10' W

5. Description of the chemical(s) or agent(s):

Excis (1% w/w cypermethrin – cis 40 : trans 60)
ALPHA MAX/AMX (1% deltamethrin)
Salmosan/Salmosan Vet/Azasure (50% w/w azamethiphos)
Hydrogen peroxide

As described in the application dated 20 January 2017 and supporting documentation.

6. Quantity for discharge within the period of validity of the licence:

As described in Condition 12, Condition 13, Condition 14 and Condition 15 in Part 2 of the licence.

Part 2 - Conditions

1. The licensee shall notify the licensing authority, at least two working days in advance of starting the operation, with the date and time of commencement of all operations undertaken under the authority of this licence and the product name and quantity of chemical(s) or agent(s) intended for discharge. Details of chemical(s) or agent(s) discharged shall also be recorded and reported in accordance with Condition 11 of the licence.
2. The treatment of fish should be carried out in such a way as to minimise the discharge of chemical(s) or agent(s).
3. "Force majeure" may apply when, due to stress of weather or any other cause, it is necessary to discharge the chemicals or agents at a location other than that specified in Part 1 of the Schedule because the safety of human life, or a vessel or vehicle, is threatened. If chemicals or agents are discharged in an unauthorised area, full details of the circumstances shall be immediately notified to the licensing authority (see also notes appended to the Schedule).
4. Under the authority of this licence, the discharge of chemical(s) or agent(s) is only permitted if the location described in Part 1, section 4 of the Schedule is an operational and stocked fish farm. Furthermore, the said discharge is only permitted in respect of the treatment of fish being reared at the fish farm site at the location described in Part 1, section 4 of the Schedule, at the time of discharge.
5. The licensee shall ensure that no dead fish are discharged to the water environment at any time. Any dead fish shall be disposed of above the Mean High Water Springs in an appropriate manner.
6. The licensee shall ensure that works will only be carried out in accordance with the Treatment Procedure (dated 06 March 2014) as provided with the application and Marine Scotland Licensing Operations Team (MS-LOT) shall be informed if alterations are made to the treatment procedure. Copies of the treatment procedure must be kept with copies of the licence.
7. Only those chemicals or agents described in Part 1, section 5 of the Schedule (the authorised deposits) shall be discharged under authority of the licence and all associated tank/hopper washings shall be discharged at the location(s) specified in Part 1, section 4 of the Schedule.
8. The method of discharge shall be:

Pumped discharge via pipe/hatches from Wellboat at a depth of surface to 2 metres below sea surface.

9. Only those persons acting on behalf of, and authorised by, the agent or the licensee shall undertake the discharge operations.
10. The licensee shall provide the Master(s) of the vessel(s) employed to undertake the discharge operations with a copy of the licence. The licensee shall also ensure that copies of the licence and all other relevant documents, including the treatment procedure (dated 06 March 2014) are available for inspection by any authorised Enforcement Officer at:
- a) the premises of the licensee; and
 - b) on board the vessel(s) employed to undertake the discharge operations.
11. The licensee shall ensure that a log of operations is maintained and kept on board the discharge vessel(s) throughout each discharge operation, and be available for inspection by an authorised Enforcement Officer. The logs shall be retained for a period of six calendar months following expiry of the licence.
- For each discharge operation, the following information must be recorded:
- a) the name of the vessel;
 - b) the name of the product and its active ingredient;
 - c) the quantity (volume) of the product scheduled for discharge;
 - d) the date, time and position of each discharge operation;
 - e) the weather, including wind strength and direction, sea and tidal state throughout each discharge operation;
 - f) the rate of discharge during each discharge operation, if appropriate, and the duration of each discharge operation if the rate of discharge is not constant, the maximum and mean rates of discharge should be indicated);
 - g) report on each discharge operation, including details of any problems; and an explanation for any delays; and
 - h) the signature of the Master at the foot of each page of each record.

The above information can be entered on the discharge vessel log of operation form. The licensee shall provide to MS-LOT at three monthly intervals or on request from MS-LOT, a copy of all or any part of the records specified above.

12. The licensee shall ensure that:
- a) subject to condition 12 b), the total quantity of cypermethrin as contained in the trade product Excis, discharged in any consecutive 3 hour period beginning at the time of the

- first release of Excis as part of any specific treatment, shall not exceed 30.89 grams (this is equivalent to 3089 millilitres of Excis).
- b) Cypermethrin, as contained in the trade product Excis, shall not be discharged if deltamethrin, formulated as AMX™ 10mg/ml concentrate solution for fish treatment or as ALPHA MAX™ marketed by Pharmaq AS, has been discharged at the premises in the previous 3 hours.
13. The licensee shall ensure that the total quantity of azamethiphos, as contained in the trade product Salmosan or Salmosan Vet or Azasure, discharged in any consecutive 24 hour period beginning at the time of the first release of Salmosan or Salmosan Vet or Azasure as part of any specific treatment, shall not exceed 500.4 grams (this is equivalent to 1000.8 grams of Salmosan or Salmosan Vet or Azasure).
14. The licensee shall ensure that:
- a) subject to condition 14 b), the total quantity of deltamethrin, formulated as AMX™ 10mg/ml concentrate solution for fish treatment or as ALPHA MAX™ marketed by Pharmaq AS, discharged in any consecutive 3 hour period beginning at the time of the first release of deltamethrin, formulated as AMX™ 10 mg/ml concentrate solution for fish treatment or as ALPHA MAX™ marketed by Pharmaq AS, as part of any specific treatment shall not exceed 11.58 grams (this is equivalent to 1158 millilitres of AMX™ or ALPHA MAX™).
- b) Deltamethrin, formulated as AMX™ 10mg/ml concentrate solution for fish treatment or as ALPHA MAX™ marketed by Pharmaq AS, shall not be discharged if cypermethrin, as contained in the trade product Excis, has been discharged at the premises in the previous 3 hours.
15. Hydrogen peroxide may be discharged at any time provided its actual use is recorded and reported in accordance with Part 2, section 11 of this licence.
16. In the event of the licensee becoming aware of any changes to the information on which the issue of the licence was based, the licensing authority shall be immediately notified of the details.
17. The licensee shall ensure that where any of the chemical(s) or agent(s) listed in Condition 12, 13 and 14 are also authorised for discharge to the water environment following bath treatment at the fish holding cages at the site described in Part 1, section 4 under an authorisation granted by Scottish Environment Protection Agency then the quantity of that chemical or agent discharged over the time period specified in the relevant condition by the method specified in Condition 8 and from the cages over the same time period shall not exceed the total quantity specified in the relevant condition.
18. The licensee shall ensure that the chemical(s) or agent(s) listed above shall only be discharged following treatment of fish within the vessel(s) listed in Part 1, section 3.

19. If a new licence is required, the licensee shall make an application at least twelve weeks before the expiry date of this licence. **This licence shall not continue in force after the expiry date of 04 April 2020.**

NOTES

1. You are deemed to have satisfied yourself that there are no barriers, legal or otherwise, to the carrying out of the licensed operations. The issue of the licence does not absolve the licensee from obtaining such authorisations, consents etc which may be required under any other legislation.
2. In the event that the licensee wishes any of the particulars set down in the Schedule to be altered, the licensing authority shall be immediately notified of the alterations. It should be noted that changes can invalidate a licence, and that an application for a new licence may be necessary.
3. Under Section 30 of the Marine (Scotland) Act 2010, the licensing authority may vary, suspend or revoke the licence, if it appears to the authority that there has been a breach of any of the provisions of the licence or for any other reason that appears to be relevant to the authority.
4. Under Section 39 of the Marine (Scotland) Act 2010, it is an offence to carry on a licensable marine activity or cause or permit any other person to carry on such an activity without a marine licence or fails to comply with any condition of a marine licence. It is a defence for a person charged with an offence under Section 40 in relation to any activity to prove that the activity was carried out for the purpose of saving life, or for the purposes of securing the safety of a vessel, aircraft or marine structure ('*force majeure*'), and that the person took steps within a reasonable time to provide full details of the incident to the licensing authority. (Under Annex II, Article 7 of the Convention for the Protection of the Marine Environment of the North-east Atlantic, the licensing authority is obliged to immediately report '*force majeure*' incidents to the Convention Commission).
5. All correspondence or communications relating to the licence should be addressed to:

Licensing Operations Team
Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

Tel: (01224) 295579
Fax: (01224) 295524

ANNEX ONE

Vessels authorised to be used for chemical discharge at licensed **Scottish Sea Farms Ltd** sites.

| | | | |
|---------------------------|---------------------------|-------------------------|-------------------------------|
| <i>a) Froyfisk</i> | <i>b) Froyhav</i> | <i>c) Gripfisk</i> | <i>d) Norholm</i> |
| <i>e) Ronja</i> | <i>f) Ronja Atlantic</i> | <i>g) Ronja Carrier</i> | <i>h) Ronja Commander</i> |
| <i>i) Ronja Harvester</i> | <i>j) Ronja Nordic</i> | <i>k) Ronja Pioneer</i> | <i>l) Ronja Settler</i> |
| <i>m) Ronja Skye</i> | <i>n) Ronja Superior</i> | <i>o) Ronja Viking</i> | <i>p) Roy Kristian</i> |
| <i>q) Victoria Lady</i> | <i>r) Victoria Viking</i> | <i>s) Migdale</i> | |

The agent or licensee must notify the licensing authority immediately if a vessel not listed on the licence is to be used for the discharge of used chemical(s) or agent(s). The information required by the licensing authority regarding the additional vessel(s) will be the same as the information already provided for the vessels on the existing licence. **Discharge operations using any additional vessel(s) may only commence if a revised licence, including details of the additional vessel(s), is issued by the licensing authority.**

Signed: _____



For and on behalf of the licensing authority

Date: 05 April 2017

From: [REDACTED]@gov.scot
To: NORTH
Subject: 06332 - Loch Duart Ltd - Wellboat discharge, Torr Mor, Clashnessie Bay - Consultation - Response Required by 18 May 2017
Date: 11 May 2017 14:52:10
Attachments: image001.png
Loch Duart Torr Mor signed application form.pdf
Application Form Wellboat Licence_Loch Duart Torr Mor_Attachment 1_Chart....pdf

Dear Sir/Madam,

Apologies for the short turnaround but I would be grateful if a response could be provided as soon as possible. I would be grateful if you are able to provide a response before 18th May, however if you have any issue with this please contact me on the number below.

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

06332 - Loch Duart Ltd - Wellboat discharge, Torr Mor, Clashnessie Bay

CO-ORDINATES 58° 14.926' N 005° 15.368' W

A marine licence has been requested under the above Act to discharge waste sea lice treatment chemicals from wellboats below the level of Mean High Water Springs has been applied for at the above site.

Circulation of large quantities of information duplicated in these applications has been a cause for concern amongst consultees in the past, therefore only the application and chart has been included for comment. Please don't hesitate to contact Marine Scotland - Licensing Operations Team (MS-LOT) should you have any additional requests. You may, for example, wish to see the CAR licence that licences the discharge of the chemicals from the cages, prior to passing comment.

Should you have any comments on these proposals, I would be grateful if they could be forwarded to me in an electronic format (MS.MarineLicensing@gov.scot) or as a hard copy within 14 days of the date of this email.

If you require an extension to the consultation period, please inform me in writing as soon as possible and within 7 days of this email. A maximum two week extension to the consultation period will only be granted where significant concerns are raised.

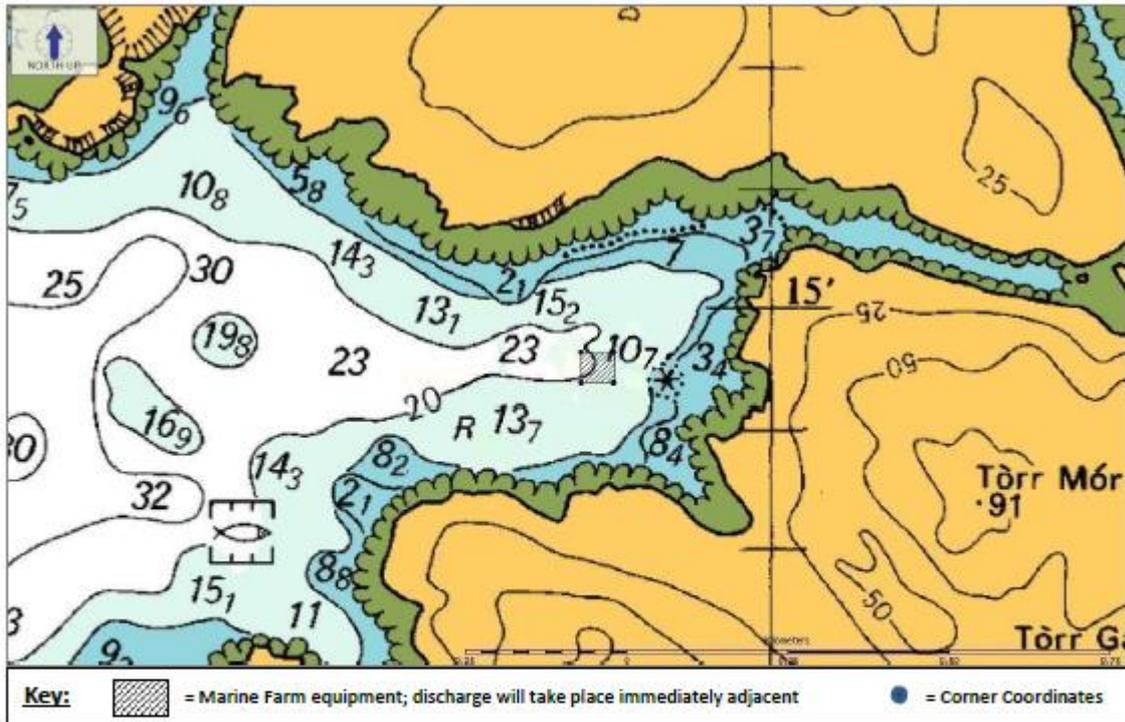
If an extension request or a written reply to this consultation is not received within 7 days, it will be assumed that you are content with the proposals.

Marine Scotland - Licensing Operations Team will send you a copy of any licence that is subsequently issued for the proposed works.

Kind regards,

[REDACTED]
Marine Scotland - Marine Planning & Policy

Chart Extract



| Location | Latitude | Longitude |
|-----------|---------------|----------------|
| NW Corner | 58° 14.926' N | 005° 15.368' W |
| NE Corner | 58° 14.927' N | 005° 15.316' W |
| SW Corner | 58° 14.907' N | 005° 15.366' W |
| SE Corner | 58° 14.908' N | 005° 15.315' W |

Marine Licence Application for Discharge of Treatment Agents from a Wellboat

Version 1.0

Marine (Scotland) Act 2010

It is the responsibility of the applicant to obtain any other consents or authorisations that may be required.

Under Section 54 of the Marine (Scotland) Act 2010, all information contained within and provided in support of this application will be placed on a Public Register. There are no national security grounds for application information not going on the Register under the 2010 Act

6. Wellboat Discharge Details

a) Brief description of the discharge including rationale for discharge :

This application is for permission to utilize licensed medicinal products for the treatment of Atlantic salmon in a wellboat as part of an integrated pest management plan for the control of sea lice or amoebic gill disease. Products that may be used contain the active ingredients azamethiphos (Salmosan Vet, Salmosan), hydrogen peroxide (Paramove 50), and deltamethrin (AMX). The ability to utilize these treatments in a wellboat if required will allow optimal management of fish health and welfare in Clashnessie Bay (FHI Reg. No. FS0933).

(b) Proposed start date (Target duration for determination of a marine licence application is 14 weeks):

j 24/04/2017

(c) Proposed completion date:

30/11/2019

d) Location:

The discharge is proposed to take place immediately alongside marine farm equipment moored at the Torr Mor site, Clashnessie Bay, with corner coordinates as follows:

Latitude and Longitude co-ordinates (WGS84) defining the proposed discharge point (continue on Appendix D1 Additional Co-ordinates form if necessary):

| Latitude | | | | | | | | | Longitude | | | | | | | | | | | |
|----------|---|---|---|---|--|---|---|---|-----------|---|---|---|---|---|---|--|---|---|---|----|
| 5 | 8 | ° | 1 | 4 | | 9 | 2 | 7 | 'N | 0 | 0 | 5 | ° | 1 | 5 | | 3 | 1 | 6 | 'W |
| 5 | 8 | ° | 1 | 4 | | 9 | 0 | 8 | 'N | 0 | 0 | 5 | ° | 1 | 5 | | 3 | 1 | 5 | 'W |
| 5 | 8 | ° | 1 | 4 | | 9 | 2 | 6 | 'N | 0 | 0 | 5 | ° | 1 | 5 | | 3 | 6 | 8 | 'W |
| 5 | 8 | ° | 1 | 4 | | 9 | 0 | 7 | 'N | 0 | 0 | 5 | ° | 1 | 5 | | 3 | 6 | 6 | 'W |

e) Water depth and distance from land:

| Water Depth (metres) | Distance from Land (metres/kilometres) |
|----------------------|--|
| 16.4m CD | 100m (minimum distance to MLWS) |

(f) Is the discharge site located within the jurisdiction of a statutory harbour authority?

YES NO

If YES, please specify statutory harbour authority

(g) Potential impacts the works may have (including details of areas of concern e.g designated conservation and shellfish harvesting areas) and proposed mitigation in response to potential impacts (continue on separate sheet if necessary):

The proposed works involve the occasional and temporary presence of a wellboat vessel at the site and associated discharge of licensed medicinal products. Potential impacts and associated mitigation are listed below:

- Water column & benthic impacts from discharge of licensed medicines: An assessment of environmental safety for these products has been conducted by SEPA and discharge permitted under the existing CAR License. As such, no negative impacts are identified. Furthermore, the controlled conditions afforded by wellboat treatment should benefit efficacy of any treatments carried out, minimizing the overall quantities of any medicines discharged.
- Other marine users: Wellboat operations will be occasional in frequency, short in duration and replace operation of other vessels for conventional tarpaulin treatments. As such, no negative interactions with other users of the area surrounding the farm are anticipated.
- Adjacent Freshwater Pearl Mussel SAC interests: There will be no impact on freshwater systems from wellboat treatment operations occurring in the marine environment. The option to treat under controlled wellboat conditions will benefit health management for farms in the area, and as such any risk of potential interaction with wild salmonids as host of Freshwater Pearl Mussel larvae will be minimized.
- Assynt-Coigach National Scenic Area: As above proposed wellboat presence will be occasional and temporary, and in the immediate vicinity of the existing marine farm permitted in the area. As such no negative visual impacts are anticipated.

7. Details of Treatment Agent(s) to be Discharged (Please provide Material Safety Data Sheets for each chemical to be discharged).

| Proprietary Name of Treatment Agent(s) | Chemical Name of Treatment Agent(s) |
|--|-------------------------------------|
| Salmosan Vet, Salmosan | Azamethiphos |
| Paramove | Hydrogen Peroxide |
| AMX | Deltamethrin |
| - | - |
| - | - |

Marine Scotland, 375 Victoria Road, Aberdeen, AB11 9DB
<http://www.gov.scot/Topics/marine/Licensing/marine>



8. Details of Discharge (Please provide details for each of the deposits listed in Section 7 above):

| Deposit | Date of Discharge (approx.) | Duration of Discharge (minutes) | Weight/Volume of Agent (grams/cubic metres) | Total Volume (including solvent) (cubic metres) |
|---------|---------------------------------------|---------------------------------|---|---|
| 1 | Periodically 24/04/17 to end of cycle | 10 mins | 40g / 3hr, 120g / 24hr | 400 |
| 2 | Periodically 24/04/17 to end of cycle | 20 mins | 3 cubic meters | 1000 |
| 3 | Periodically 24/04/17 to end of cycle | 20 mins | 2g / 3hr | 1000 |
| 4 | - | - | - | - |
| 5 | - | - | - | - |

9. Details of Discharge Procedure (Please provide details for each of the deposits listed in Section 7 above):

| Deposit | Method of Deposit | Mode of Deposit | Depth of Deposit (metres) | Rate of Deposit (litres or cubic metres per second/minute/hour) |
|---------|-------------------|-----------------|---------------------------|---|
| 1 | Discharge pump | Valve | 2 - 3 | 2400 cubic meters per hr |
| 2 | Discharge pump | Valve | 2 - 3 | 3000 cubic meters per hr |
| 3 | Discharge pump | Valve | 2 - 3 | 3000 cubic meters per hr |
| 4 | - | - | - | - |
| 5 | - | - | - | - |

10. Details of Vessel(s) Undertaking Discharge (continue on a separate sheet if necessary):

| Vessel Name | Registration Details/Call Sign (if appropriate) | Name and Address of Operator |
|---------------------|--|---|
| MV Ronja Commander | IMO 9276183 | Marine Harvest (Solvtrans) Blar Mhor Industrial Estate Fort William PH33 ?PT Scotland |
| MV Ronja Pioneer | IMO 9345520 | Marine Harvest (Solvtrans) Blar Mhor Industrial Estate Fort William PH33 ?PT Scotland |
| MV Ronja Challenger | IMO 9765067 | Marine Harvest (Solvtrans) Blar Mhor Industrial Estate Fort William PH33 ?PT Scotland |

Marine Scotland, 375 Victoria Road, Aberdeen, AB11 9DB
<http://www.gov.scot/Topics/marine/Licensing/marine>



| | | |
|--------------------|-------------|---|
| MV Inter Caledonia | IMO 9745756 | Marine Harvest (Intership) Blar Mhor Industrial Estate Fort William PH33 ?PT Scotland |
| MV Migdale | IMO 9220689 | Migdale Transport Ltd Dornoch Road, Bonar Bridge Sutherland IV24 3EB Scotland |
| MV Viking Atlantic | IMO 9167954 | Johnson Marine Ltd Marine Park, Vidlin Shetland ZE2 9QB |
| MV Solundoy | IMO 9158654 | Johnson Marine Ltd Marine Park, Vidlin Shetland ZE2 9QB |

11. Scotland's National Marine Plan

Have you considered the application with reference to Scotland's National Marine Plan?

YES NO D

If YES, provide details of considerations made including reference to the policies that have been considered:

Chapter 7 Aquaculture Objective 1 - The option to undertake treatments in a controlled wellboat environment if required supports the objective of sustainable and economically viable aquaculture production, whilst minimizing environmental impacts through optimal treatment efficacy and reduced medicinal discharges.
Chapter 7 Aquaculture Policy 11- The ability to perform treatments in wellboats represents optimization of equipment and activities to minimize emissions.
Chapter 7 Aquaculture Key Issues:
7.5 & 7.8 - The proposal supports economic benefit to rural & coastal communities in Highland & Islands regions directly through successful operation of the marine farm and through the supply chain e.g. charter of wellboat vessels.
7.12 - The proposal will be of benefit to an integrated plan for the management of sea lice.
7.16 - The application supports a strategic approach to health management, providing another management tool, should promote treatment efficacy and is for the licensing of discharge from a wellboat as referenced.
7.18 - The proposal should minimize potential for interaction with other sectors such as wild fish interests by optimizing sea lice control options available.

Marine Scotland, 375 Victoria Road, Aberdeen, AB11 9DB
<http://www.gov.scot/Topics/marine/Licensing/marine>



1. Applicant Details

Title [REDACTED] Initials [REDACTED] Surname [REDACTED]

Trading Title (if appropriate): Loch Duart Ltd

Address: Badcall Salmon House, Scourie, By Lairg, Sutherland IV27 4TH

Name of contact (if different): n/a

Telephone No. (inc. dialing code) [REDACTED]

Email [REDACTED]@lochduart.com

From: Kate Thompson
Sent: 18 May 2017 11:38
To: Liam Wright
Cc: Tamara Lawton; Sue Agnew
Subject: Query re well boat application - Clashnessie bay fishfarm
Importance: High

Hi Liam,

Hope all well with you.

As Sue is currently fully occupied with AECs, I have been passed a consultation from Marine Scotland regarding application for administration of chemical treatments at Torr Mor, Clashnessie. Based on the FHI Reg Number given in the application (FS0933) the farm in question is http://aquaculture.scotland.gov.uk/data/site_details_record.aspx?site_id=FS0933 named Clashnessie Bay. However, I am a bit confused as the data for this site refer to an old CAR licence (CAR/L/1015768/v3 issued on 23/8/2008 and with Licence Site ID OLD1 Oldany). However, within the "Consultation" box in the application form, the applicant refers to CAR/L/1090313. In Scotland's Aquaculture this is shown as issued 30/6/2011 with site ID TMOR1 Torr Mor (see http://aquaculture.scotland.gov.uk/data/licence_conditions_record.aspx?licence_id=CAR/L/1090313&sepa_site_id=TMOR1) In the Scotland's Aquaculture website, this licence is not shown against any site and GeoView (NMPi layers) shows site FS0933, named Clashnessie Bay, as an active site at NC088336 with an inactive site reference FS1273 named Torr Morr slightly to SE at NC090335. When I click on the link to Scotland Aquaculture it comes up with no details found for this site (i.e. FS1273).

In checking through eRDMs to try to get background on this, I found attached response re the original application for CAR/L/1090313 and also to a more recent planning application relating to proposed change in configuration at a site identified as holding CAR licence CAR/L/1015768. These highlight concerns about impact on FWPM in neighbouring SACs

The treatments and dosages for which the operator is now seeking a marine licence to administer using a well boat are in line with CAR/L/1090313, but not CAR/L/1015768/v3 (which does not include any use of Azamethiphos) and, as outlined above, I'm confused as to which CAR licence and site is being referred to. Normally, when we get such applications here, where it is clear which site is being referred to and what current treatments are permitted within CAR I would send a response something like:

"Thank you for consulting SNH on this application from xxx for a Marine Licence for the discharge of waste sea lice treatment chemicals from wellboats at their SIT NAME salmon farm in Orkney.

The application indicates that the types of chemicals and their maximum permitted quantities and rates of discharge are identical to those already specified within the existing CAR licence (CAR REF) for this site and that, following treatments, the residual chemicals will be discharged to the environment from within the farm cages, as would be the case with in-cage treatment.

We have previously advised SEPA on the CAR licence application and have no additional

comments to make with respect to this Marine Licence application for use of wellboats to administer the specified treatments.”

My questions are:

- 1) Should I be concerned about what is actually being requested here (in which case I would propose to go back to MS seeking clarification)?
- 2) If we are satisfied that we know which site this refers to, and what the current CAR licence permits, would a response as above be appropriate or should we be reiterating concerns about FWPM etc ?

I'm copying in Tamara, as well as Sue, as I think she may also have previously handled aquaculture casework in this area and may perhaps be able to shed some light as to what is actually in place

MS are asking for rapid response on this (we received consultation on 11th and they are asking if we can respond before tomorrow). However, as today is the first day I've been able to get into internet to try to work out which site/CAR I we are looking at, I'm going to go back to MS and advise that it will be next week before we can respond.

I'll also put this advice request through CMS.

From: Liam Wright
Sent: 18 May 2017 12:17
To: Kate Thompson
Cc: Tamara Lawton; Sue Agnew
Subject: RE: Query re well boat application - Clashnessie bay fishfarm

Hi Kate,

I wouldn't worry about getting too bogged down in the detail with this. I think the sites in Eddrachillis Bay get rotated and there have been various CAR iterations over the years, so I imagine this is why it all seems a bit confusing and doesn't quite add up.

No need to worry about the discharge of chemicals in relation to the FWMP.

I think it would be fine for you just to say that provided the discharges are in line with the current CAR licence for this site then we would have no further comments to make and leave it at that. Most case officers are just responding with a no comment as standard for wellboat discharges as the discharges have already been consented by SEPA through CAR. In the foreseeable future wellboat licencing is going to be amalgamated with the CAR process so this will simplify things going forward.

Hope this helps but happy to discuss further.

From: [Kate Thompson](#)
To: [Liam Wright](#)
Cc: [Tamara Lawton](#); [Sue Agnew](#)
Subject: RE: Query re well boat application - Clashnessie bay fishfarm
Date: 18 May 2017 12:29:15

Hi Liam,

I'd be more than happy with that if ops colleagues in the area are content; I usually just run a [quick](#) check to ensure that chemicals and dosages being asked for in the ML application are in line with relevant CAR Licence, but from what you say perhaps we should be leaving that to MS and making the response more generic. Certainly in this case, trying to do that check has generated lots of confusion for me (not helped by not knowing the area in question).

It will certainly be helpful when the two processes are amalgamated.

Cheers

Kate

Kate Thompson

Operations Officer, Orkney, NINH

Direct Dial 01856 886156 **Kirkwall Office** 01856 875302

From: [Tamara Lawton](#)
To: [Kate Thompson](#)
Cc: [Sue Agnew](#); [Liam Wright](#)
Subject: RE: Query re well boat application - Clashnessie bay fishfarm
Date: 18 May 2017 12:53:11
Attachments: A2072039.obr

Hi Kate, I have attached Alex's generic response for wellboat licences, if that's useful. I have also used it for wellboat licence applications. It does have a bit of a South Highland focus as it refers to the porpoise SAC, but could be adapted for this application.

Cheers,
Tamara

From: MS.MarineLicensing@gov.scot [mailto:MS.MarineLicensing@gov.scot]

Sent: 30 May 2017 13:53

To: SOUTH_HIGHLAND; MS.FFPlanning@gov.scot

Subject: 06024 & 06026 – Marine Harvest (Scotland) Ltd – Wellboat Discharge, Linnhe, Loch Linnhe & Leven, Loch Leven - Consultation – Response Required by 13 June 2017

Dear Sir/Madam,

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

06024 – Marine Harvest (Scotland) Ltd – Wellboat Discharge, Linnhe, Loch Linnhe

06026 – Marine Harvest (Scotland) Ltd – Wellboat Discharge, Leven, Loch Leven

CO-ORDINATES

06024: 56° 43.820' N 005° 14.988' W

06026: 56° 41.350' N 005° 07.964' W

A marine licence has been requested under the above Act to discharge waste sea lice treatment chemicals from wellboats below the level of Mean High Water Springs has been applied for at the above 2 sites.

Circulation of large quantities of information duplicated in these applications has been a cause for concern amongst consultees in the past, therefore only the application and chart has been included for comment. Please don't hesitate to contact Marine Scotland - Licensing Operations Team (MS-LOT) should you have any additional requests. You may, for example, wish to see the CAR licence that licences the discharge of the

chemicals from the cages, prior to passing comment.

Should you have any comments on these proposals, I would be grateful if they could be forwarded to me in an electronic format (MS.MarineLicensing@gov.scot) or as a hard copy within 14 days of the date of this email.

If you require an extension to the consultation period, please inform me in writing as soon as possible and within 14 days of this email. A maximum two week extension to the consultation period will only be granted where significant concerns are raised.

If an extension request or a written reply to this consultation is not received within 14 days, it will be assumed that you are content with the proposals.

Marine Scotland - Licensing Operations Team will send you a copy of any licence that is subsequently issued for the proposed works.

Kind regards,



[Marine Scotland](#) - Marine Planning & Policy

Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)1224 295 579

Fax: +44 (0)1224 295 524

Email: ms.marinelicensing@gov.scot

Website: <http://www.gov.scot/Topics/marine/Licensing/marine>

From: Stephen Austin
To: [REDACTED]@gov.scot"; MS.MarineLicensing@scotland.gsi.gov.uk
Subject: RE: 05886 Variation - Marine Harvest (Scotland) Ltd - Wellboat Discharge - Port na Cro, Shuna Sound - Consultation - Response Required by 16 May 2017
Date: 02 June 2017 10:44:00
Attachments: image001.png

Hi [REDACTED]

05886 Variation - Marine Harvest (Scotland) Ltd - Wellboat Discharge - Port na Cro, Shuna Sound

Thank you for consulting SNH on the above mentioned variation. SNH have no comments to make in relation to the proposed increases of Azamethiphos, Cypermethrin and Deltamethrin.

Thanks

Stephen

Stephen Austin | Operations Officer | Scottish Natural Heritage
Cameron House | Albany Street | Oban | Argyll | PA34 4AE | Tel 0300 244 9360 | Mobile [REDACTED]

Stephen Austin | Oifigear Obraichean | Dualchas Nàdair na h-Alba
Taigh Chamshron | Sràid Albany | An t-Òban | Earra- Ghàidheal | PA34 4AE | Fòn: 0300 244 9360 | Fòn-Iaimhe [REDACTED]

From: [Tamara Lawton](#)
To: "MS.MarineLicensing@gov.scot"
Subject: RE: 06024 & 06026 - Marine Harvest (Scotland) Ltd - Wellboat Discharge, Linnhe, Loch Linnhe & Leven, Loch Leven - Consultation - Response Required by 13 June 2017
Date: 15 June 2017 16:50:00
Attachments: image001.png

Dear [REDACTED] thank you for your consultation on the marine licence request for wellboat discharge on Loch Linnhe and Loch Leven.

We understand that it is your policy not to grant well boat discharge licences where the volumes of chemicals or specified time-frames differ from the corresponding SEPA CAR licence. Assuming that to be the case, we advise that, outside designated sites, discharge of those chemicals from a well boat alongside the cages would not raise any additional natural heritage issues.

Kind regards,
Tamara

Tamara Lawton
Operations Officer
Scottish Natural Heritage/Dualchas Nàdair na h-Alba
17 Pulteney Street/17 Sràid Pholtanaidh
Ullapool/Ulapul
Wester Ross/Ros an Iar
IV26 2UP
01854 613418

From: [Tamara Lawton](#)
To: ["MS.MarineLicensing@gov.scot"](mailto:MS.MarineLicensing@gov.scot)
Subject: RE: 06010v - Marine Harvest (Scotland) Ltd - Wellboat Variation - Kingairloch, Loch a choire, Loch Linnhe - Consultation - Response Required by 18 July 2017
Date: 17 July 2017 12:58:00
Attachments: image001.png

Dear [REDACTED] many thanks for your email consultation on the wellboat variation licence application for the above site.

Outside designated sites, we advise that the discharge of chemicals from a well boat alongside the fish farm cages would not raise any additional natural heritage issues beyond those already considered by SEPA as part of the CAR process and we would have no objection to the granting of the licence.

Kind regards,
Tamara

Tamara Lawton
Operations Officer
Scottish Natural Heritage/Dualchas Nàdair na h-Alba
17 Pulteney Street/17 Sràid Pholtanaidh
Ullapool/Ulapul
Wester Ross/Ros an Iar
IV26 2UP
01854 613418



Scottish Natural Heritage
Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdar air fad airson Alba air fad

[REDACTED]
Marine Scotland – Licensing Operations Team
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

18 July 2017
Your Ref: 05997v

Dear [REDACTED]

Marine Harvest (Scotland) - Wellboat Licence variation - Camus Glas, Loch Sunart

Thank you for your recent consultation regarding a wellboat licence variation for the above fish farm.

Summary

We understand that it is your policy not to grant well boat discharge licences where the volumes of chemicals or specified time-frames differ from the corresponding SEPA CAR licence. Assuming that to be the case, we advise that within designated sites significant effects are possible but we are not in a position to provide you with detailed advice.

Appraisal of the impacts of the proposal and advice

Sunart Special Area of Conservation (SAC)

Within SACs the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply. Consequently, Marine Scotland is required to consider the effect of the proposal on the site before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<http://www.snh.gov.uk/docs/A423286.pdf>).

SEPA consider the effect of all proposed CAR amendments on SACs and have Habitats Regulations Appraisals (HRA) for each SAC, with sections relating to each fish farm site. Significant changes are assessed and the relevant HRA updated. SEPA have indicated to us that they are happy to provide you with copies of these assessments via the SEPA Marine Science aquaculture staff. We recommend that you obtain copies in order to decide whether you wish to adopt their scientific appraisal as part of your HRA.

The SEPA HRA assessments that we have seen consider the effect of sea lice chemicals but do not specifically consider wellboat discharges. It seems likely that the chemical discharge plume from a wellboat will vary in comparison with a discharge plume from a tarpaulin. However we do not have technical expertise to assess whether any differences are

Scottish Natural Heritage, 17 Pulteney Street, Ullapool, Ross-shire, IV26 2UP
Tel: 01854 613418 Fax: 01854 613 419 www.snh.gov.uk

Dualchas Nàdair na h-Alba, 17 Sràid Pulteney, Ullapul, Siorrachd Rois IV26 2UP
Fòn: 01854 613418 Facs: 01854 613 419 www.snh.gov.uk

significant or whether they fall within the tolerances of the existing dispersion modelling. We recommend that you clarify this aspect with SEPA modellers.

Loch Sunart Marine Protected Area

Where proposals lie within Nature Conservation Marine Protected Area (NC MPA) the requirements of the Marine (Scotland) Act 2010 apply. Consequently, Marine Scotland is required to consider the effect of the proposal on the NC MPA before it can be consented. SEPA have confirmed that they will consider impacts on the MPA when a new CAR variation is submitted. In the majority of cases impacts on the MPA features can be regarded as existing and part of the base-line condition of the feature at the time of designation. In our view, while wellboat discharges are capable of affecting the protected features of the NC MPA, these effects are insignificant. Further assessment is therefore not required.

Yours sincerely,

Tamara Lawton
Operations Officer
South Highland
tamara.lawton@snh.gov.uk



Scottish Natural Heritage
Dualchas Nàdair na h-Alba

All of nature for all of Scotland
Nàdair air fad airson Alba air fad

Marine Scotland – Licensing Operations Team
Scottish Government
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

1 August 2017

Your Ref: 06384/06380/06378/06381/06383 - Scottish Sea Farms - Wellboat Discharge - Shetland, Various Sites

FAO: [REDACTED]

Dear Sir/Madam,

Marine (Scotland) Act 2010, Part 4 Marine Licensing
Wellboat discharge

Thank you for your recent consultation.

Summary

We provide this advice on the understanding that it is your policy to grant wellboat discharge licences only where the types and volumes of chemicals or specified timeframes match those permitted by the corresponding SEPA CAR licence.

We therefore advise that the proposed discharge has already been considered by SEPA through the CAR licencing process and deemed unlikely to cause any significant natural heritage effects.

We recommend you consult with SEPA in order to:

- 1) ensure that the information supplied by the applicant is accurate and confirms with the most up-to-date CAR licence
- 2) confirm that you are content with SEPA's assessment of any effects on Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), where this is relevant (Annex 1).
- 3) confirm that you are content with SEPA's assessment of any effects on NC MPAs, where this is relevant. (Annex 2)

Scottish Natural Heritage, Ground Floor, Stewart Building, Alexandra Wharf, Lerwick,
Shetland, ZE1 0LL
Tel: 01595 693345 north@snh.gov.uk www.snh.gov.uk

Yours sincerely,

Juan

Juan Brown
Operations Officer
Scottish Natural Heritage, Ground Floor, Stewart Building, Alexandra Wharf, Lerwick,
Shetland ZE1 0LL
Tel 01595 693345

- a) **Annex 1. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)**
- b) Within SACs and SPAs the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply. Consequently, Marine Scotland is required to consider the effect of the proposal on the site before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<http://www.snh.gov.uk/docs/A423286.pdf>).
- c) SEPA consider the effect of all proposed CAR licences and amendments on SACs and have Habitats Regulations Appraisals (HRA) for each SAC, with sections relating to each fish farm site. They also have a generic HRA for SPA bird species as well as otters, harbour porpoise and seals. SEPA have indicated to us that they are happy to provide you with copies of these assessments via the SEPA Marine Science aquaculture staff (Mhairi Wilson, based in the SEPA Dingwall office).
- d) We recommend that you obtain copies in order to decide whether you wish to adopt their scientific appraisal as part of your HRA.
- e) We recommend that you seek clarification from SEPA that their HRA assessments are adequate to include the effects of wellboat discharges.

- f) The Scottish Government has a policy of protecting proposed marine SACs and SPAs (such as harbour porpoise in Inner Hebrides and Minches proposed Special Area of Conservation (pSAC)).
- g) We therefore recommend that you seek clarification from SEPA that the CAR licence addresses this requirement satisfactorily. It seems likely to us that features will be protected by the existing safeguards built into CAR.

h) Annex 2. Marine Protected Areas (MPAs)

- i) Where proposals lie within a Nature Conservation Marine Protected Area (NC MPA) the requirements of the Marine (Scotland) Act 2010 apply. Consequently, Marine Scotland is required to consider the effect of the proposal on the NC MPA before it can be consented.
- j) SEPA consider the impact of chemical discharges on the MPA through the CAR licencing process. SEPA have indicated to us that they are happy to provide you with copies of these assessments via the SEPA Marine Science aquaculture staff.
- k) We recommend that you obtain copies in order to decide whether you wish to adopt their MPA assessment.
- l) We recommend that you seek clarification from SEPA that their assessments are adequate to include the effects of wellboat discharges.
- m) In some cases the most up-to-date CAR licence may pre-date MPA designation. In such cases SEPA will not yet have undertaken an assessment. However, in the majority of these cases any pre-existing discharges will be regarded as part of the baseline condition of the MPA at the time of designation. Therefore while these wellboat discharges are capable of affecting the protected features of the NC MPA, as the impacts form part of the baseline condition these effects are likely to be considered insignificant.

T: +44 (0)1224 295579
E: ms.marinelicensing@gov.scot

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING LICENCE

FOR DISCHARGE OF USED CHEMICALS FROM WELLBOATS

Licence Number: 06440/17/0

Reference Number: 06440

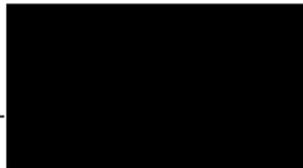
The Scottish Ministers (hereinafter referred to as "the licensing authority") hereby authorise:

The Scottish Salmon Company
Mid Strome
Lochcarron
Ross-Shire
IV54 8YH

to deposit in the sea the chemicals or agents particulars of which are described in Part 1 of the attached Schedule. The licence is subject to the conditions of use set out, or referred to, in Part 2 of the said Schedule.

This licence is valid from 29 August 2017 until 28 August 2020.

Signed:



For and on behalf of the licensing authority

Date: 29 August 2017

Part 1 – Particulars

1. Name and address of the person(s) discharging the used chemical(s) or agent(s):

The licensee will discharge the used chemical(s) or agent(s)

2. Name and address of any other agents acting on behalf of the licensee (if appropriate):

As per licensee

3. Name(s) of the vessel(s) to be employed to undertake the discharge operations:

See Annex One of this licence to discharge for a list of authorised vessels.

The agent or licensee must notify the licensing authority immediately if a vessel not listed on the licence is to be used for the discharge of used chemical(s) or agent(s). The information required by the licensing authority regarding the additional vessel(s) will be the same as the information already provided for the vessels on the existing licence. **Discharge operations using any additional vessel(s) may only commence if a revised licence, including details of the additional vessel(s), is issued by the licensing authority.**

4. Location of discharge of the used chemical(s) or agent(s):

Loch Tuath, Isle Of Mull at a point located by the coordinates:

56° 29.58' N 006° 11.64' W.

5. Description of the chemical(s) or agent(s):

Excis (1% w/v cypermethrin – cis 40 : trans 60)
ALPHA MAX or AMX (1% deltamethrin)
Salmosan or Salmosan Vet or Azasure (50% w/w azamethiphos)
Hydrogen peroxide

As described in the application dated 28 June 2017 and supporting documentation.

6. Quantity for discharge within the period of validity of the licence:

As described in Condition 12, Condition 13, Condition 14 and Condition 15 in Part 2 of the licence.

Part 2 - Conditions

1. The licensee must notify the licensing authority, at least two working days in advance of starting the operation, with the date and time of commencement of all operations undertaken under the authority of this licence and the product name and quantity of chemical(s) or agent(s) intended for discharge. Details of chemical(s) or agent(s) discharged must also be recorded and reported in accordance with Condition 11 of the licence.
2. The treatment of fish must be carried out in such a way as to minimise the discharge of chemical(s) or agent(s).
3. "Force majeure" may apply when, due to stress of weather or any other cause, it is necessary to discharge the chemicals or agents at a location other than that specified in Part 1 of the Schedule because the safety of human life, or a vessel or vehicle, is threatened. If chemicals or agents are discharged in an unauthorised area, full details of the circumstances must be immediately notified to the licensing authority (see also notes appended to the Schedule).
4. Under the authority of this licence, the discharge of chemical(s) or agent(s) is only permitted if the location described in Part 1, section 4 of the Schedule is an operational and stocked fish farm. Furthermore, the said discharge is only permitted in respect of the treatment of fish being reared at the fish farm site at the location described in Part 1, section 4 of the Schedule, at the time of discharge.
5. The licensee must ensure that no dead fish are discharged to the water environment at any time. Any dead fish must be disposed of above the Mean High Water Springs in an appropriate manner.
6. The licensee must ensure that works will only be carried out in accordance with the Treatment Procedure (dated 02 November 2016) as provided with the application and Marine Scotland Licensing Operations Team (MS-LOT) must be informed if alterations are made to the treatment procedure. Copies of the treatment procedure must be kept with copies of the licence.
7. Only those chemicals or agents described in Part 1, section 5 of the Schedule (the authorised deposits) shall be discharged under authority of the licence and all associated tank/hopper washings must be discharged at the location(s) specified in Part 1, section 4 of the Schedule.
8. The method of discharge must be:
 - Pumped discharge via pipe/hatches from Wellboat at a depth of surface to 2 metres below sea surface.

9. Only those persons acting on behalf of, and authorised by, the agent or the licensee shall undertake the discharge operations.
10. The licensee must provide the Master(s) of the vessel(s) employed to undertake the discharge operations with a copy of the licence. The licensee must also ensure that copies of the licence and all other relevant documents, including the treatment procedure (dated 02 November 2016) are available for inspection by any authorised Enforcement Officer at:
- a) the premises of the licensee; and
 - b) on board the vessel(s) employed to undertake the discharge operations.
11. The licensee must ensure that a log of operations is maintained and kept on board the discharge vessel(s) throughout each discharge operation, and be available for inspection by an authorised Enforcement Officer. The logs must be retained for a period of six calendar months following expiry of the licence.

For each discharge operation, the following information must be recorded:

- a) the name of the vessel;
- b) the name of the product and its active ingredient;
- c) the quantity (volume) of the product scheduled for discharge;
- d) the date, time and position of each discharge operation;
- e) the weather, including wind strength and direction, sea and tidal state throughout each discharge operation;
- f) the rate of discharge during each discharge operation, if appropriate, and the duration of each discharge operation if the rate of discharge is not constant, the maximum and mean rates of discharge must be indicated);
- g) report on each discharge operation, including details of any problems; and an explanation for any delays; and
- h) the signature of the Master at the foot of each page of each record.

The above information can be entered on the discharge vessel log of operation form. The licensee must provide to MS-LOT at three monthly intervals or on request from MS-LOT, a copy of all or any part of the records specified above.

12. The licensee must ensure that:
- a) subject to condition 12 b), the total quantity of cypermethrin as contained in the trade product Excis, discharged in any consecutive 3 hour period beginning at the time of the first release of Excis as part of any specific treatment, must not exceed 28.5 grams (this is equivalent to 2850 millilitres of Excis).

- b) Cypermethrin, as contained in the trade product Excis, must not be discharged if deltamethrin, formulated as AMX™ 10mg/ml concentrate solution for fish treatment or as ALPHA MAX™ marketed by Pharmaq AS, has been discharged at the premises in the previous 3 hours.
13. The licensee must ensure that the total quantity of azamethiphos, as contained in the trade product Salmosan or Salmosan Vet or Azasure, discharged in any consecutive 24 hour period beginning at the time of the first release of Salmosan as part of any specific treatment, must not exceed 154.2 grams (this is equivalent to 308.4 grams of Salmosan or Salmosan Vet or Azasure).
14. The licensee must ensure that:
- a) subject to condition 14 b), the total quantity of deltamethrin, formulated as AMX™ 10mg/ml concentrate solution for fish treatment or as ALPHA MAX™ marketed by Pharmaq AS, discharged in any consecutive 3 hour period beginning at the time of the first release of deltamethrin, formulated as AMX™ 10 mg/ml concentrate solution for fish treatment or as ALPHA MAX™ marketed by Pharmaq AS, as part of any specific treatment must not exceed 10.68 grams (this is equivalent to 1068 millilitres of AMX™ or ALPHA MAX™).
- b) Deltamethrin, formulated as AMX™ 10mg/ml concentrate solution for fish treatment or as ALPHA MAX™ marketed by Pharmaq AS, must not be discharged if cypermethrin, as contained in the trade product Excis, has been discharged at the premises in the previous 3 hours.
15. Hydrogen peroxide may be discharged at any time provided its actual use is recorded and reported in accordance with Part 2, section 11 of this licence.
16. In the event of the licensee becoming aware of any changes to the information on which the issue of the licence was based, the licensing authority must be immediately notified of the details.
17. The licensee must ensure that where any of the chemical(s) or agent(s) listed in Condition 12, 13 and 14 are also authorised for discharge to the water environment following bath treatment at the fish holding cages at the site described in Part 1, section 4 under an authorisation granted by Scottish Environment Protection Agency then the quantity of that chemical or agent discharged over the time period specified in the relevant condition by the method specified in Condition 8 and from the cages over the same time period must not exceed the total quantity specified in the relevant condition.
18. The licensee must ensure that the chemical(s) or agent(s) listed above must only be discharged following treatment of fish within the vessel(s) listed in Part 1, section 3.
19. If a new licence is required, the licensee must make an application at least twelve weeks before the expiry date of this licence. This licence shall not continue in force after the **expiry date of 28 August 2020**.

NOTES

1. You are deemed to have satisfied yourself that there are no barriers, legal or otherwise, to the carrying out of the licensed operations. The issue of the licence does not absolve the licensee from obtaining such authorisations, consents etc which may be required under any other legislation.
2. In the event that the licensee wishes any of the particulars set down in the Schedule to be altered, the licensing authority must be immediately notified of the alterations. It should be noted that changes can invalidate a licence, and that an application for a new licence may be necessary.
3. Under Section 30 of the Marine (Scotland) Act 2010, the licensing authority may vary, suspend or revoke the licence, if it appears to the authority that there has been a breach of any of the provisions of the licence or for any other reason that appears to be relevant to the authority.
4. Under Section 39 of the Marine (Scotland) Act 2010, it is an offence to carry on a licensable marine activity or cause or permit any other person to carry on such an activity without a marine licence or fails to comply with any condition of a marine licence. It is a defence for a person charged with an offence under Section 40 in relation to any activity to prove that the activity was carried out for the purpose of saving life, or for the purposes of securing the safety of a vessel, aircraft or marine structure (*force majeure*), and that the person took steps within a reasonable time to provide full details of the incident to the licensing authority. (Under Annex II, Article 7 of the Convention for the Protection of the Marine Environment of the North-east Atlantic, the licensing authority is obliged to immediately report *force majeure* incidents to the Convention Commission).
5. All correspondence or communications relating to the licence should be addressed to:

Licensing Operations Team
Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen
AB11 9DB

Tel: 01224 295579



T: +44 (0)1224 295579
E: ms.marinelicensing@gov.scot

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

LICENCE FOR DISCHARGE OF USED CHEMICALS FROM WELLSBOATS

Licence Number: 06369/17/0

Reference Number: 06369

The Scottish Ministers (hereinafter referred to as "the licensing authority") hereby authorise:

**The Scottish Salmon Company
Mid Strone
Lochcarron
Ross-Shire
IV54 8TH**

to deposit in the sea the chemicals or agents particulars of which are described in Part 1 of the attached Schedule. The licence is subject to the conditions of use set out, or referred to, in Part 2 of the said Schedule.

This licence is valid from 18 September 2017 until 17 September 2020

Signed:



For and on behalf of the licensing authority

Date: 18 September 2017

ANNEX ONE

Vessels authorised to be used for the discharge of used sealice treatment chemicals at licensed **The Scottish Salmon Company** sites under the following licences:

| | | |
|-----|------------|-------------------|
| 1. | 05206/17/0 | 29 October 2017 |
| 2. | 05209/17/0 | 29 October 2017 |
| 3. | 05443/17/0 | 27 May 2018 |
| 4. | 05950/17/0 | 18 December 2019 |
| 5. | 06198/17/0 | 25 May 2020 |
| 6. | 06199/17/0 | 08 June 2020 |
| 7. | 06200/17/0 | 25 May 2020 |
| 8. | 06201/17/0 | 25 May 2020 |
| 9. | 06202/17/0 | 25 May 2020 |
| 10. | 06214/17/1 | 29 March 2020 |
| 11. | 06216/17/1 | 29 March 2020 |
| 12. | 06218/17/1 | 29 March 2020 |
| 13. | 06219/17/1 | 29 March 2020 |
| 14. | 06307/17/0 | 20 July 2020 |
| 15. | 06340/17/0 | 13 August 2020 |
| 16. | 06399/17/0 | 23 August 2020 |
| 17. | 06368/17/0 | 28 August 2020 |
| 18. | 06394/17/0 | 28 August 2020 |
| 19. | 06402/17/0 | 28 August 2020 |
| 20. | 06440/17/0 | 28 August 2020 |
| 21. | 06363/17/0 | 29 August 2020 |
| 22. | 06364/17/0 | 29 August 2020 |
| 23. | 06365/17/0 | 29 August 2020 |
| 24. | 06367/17/0 | 07 September 2020 |
| 25. | 06372/17/0 | 07 September 2020 |
| 26. | 06395/17/0 | 07 September 2020 |
| 27. | 06401/17/0 | 07 September 2020 |
| 28. | 06460/17/0 | 12 September 2020 |
| 29. | 06369/17/0 | 17 September 2020 |

| | | |
|---------------------------|---------------------------|---------------------------|
| <i>a) Ronja Viking</i> | <i>b) Ronja Nordic</i> | <i>c) Ronja Settler</i> |
| <i>d) Ronja Supporter</i> | <i>e) Norholm</i> | <i>f) Viktoria Viking</i> |
| <i>g) Gripfisk</i> | <i>h) Robris</i> | <i>i) Viktoria Lady</i> |
| <i>j) Ronja Pioneer</i> | <i>k) Rostein</i> | <i>l) Rohav</i> |
| <i>m) Sordyro</i> | <i>n) Viking Atlantic</i> | |

marinescotland



T: +44 (0)1224 295579 F: +44 (0)1224 295524
E: M5.MarineLicensing@scotland.gsi.gov.uk

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

LICENCE FOR DISCHARGE OF USED CHEMICALS FROM WELLBOATS

Licence Number: 05354/17/0

Reference Number: 05354

Scottish Ministers (hereinafter referred to as "the licensing authority") hereby authorise:

**Scottish Sea Farms Ltd
South Shian
Connel
by Oban
Argyll
PA37 1SB**

to deposit in the sea the chemicals or agents particulars of which are described in Part 1 of the attached Schedule. The licence is subject to the conditions of use set out, or referred to, in Part 2 of the said Schedule.

This licence shall be valid from 27 September 2017 until 19 December 2017

Signed: _____



For and on behalf of the licensing authority

Date: 27 September 2017

Part 1 – Particulars

1. Name and address of the person(s) discharging the used chemical(s) or agent(s):

The licensee will discharge the used chemical(s) or agent(s)

2. Name and address of any other agents acting on behalf of the licensee (if appropriate):

As per licensee

3. Name(s) of the vessel(s) to be employed to undertake the discharge operations:

See Annex One of this licence to discharge for a list of authorised vessels.

The agent or licensee must notify the licensing authority immediately if a vessel not listed on the licence is to be used for the discharge of used chemical(s) or agent(s). The information required by the licensing authority regarding the additional vessel(s) will be the same as the information already provided for the vessels on the existing licence. **Discharge operations using any additional vessel(s) may only commence if a revised licence, including details of the additional vessel(s), is issued by the licensing authority.**

4. Location of discharge of the used chemical(s) or agent(s):

Kerrera B, Firth of Lorn, at a point located by the coordinates:

56° 25.16' N 005° 30.76' W

5. Description of the chemical(s) or agent(s):

Excis (1% w/v cypermethrin – cis 40 : trans 60)
ALPHA MAX (1% deltamethrin)
Salmosan or Salmosan Vet (50% w/w azamethiphos)
Hydrogen peroxide

As described in the application dated 29 July 2014 and supporting documentation.

6. Quantity for discharge within the period of validity of the licence:

As described in Condition 12, Condition 13, Condition 14 and Condition 15 in Part 2 of the licence.

ANNEX ONE

Vessels authorised to be used for chemical discharge at licensed **Scottish Sea Farms** sites.

| | |
|--------------|----------------|
| • 06384/17/1 | 29 August 2020 |
| • 06383/17/0 | 29 August 2020 |
| • 06381/17/0 | 29 August 2020 |
| • 06380/17/0 | 29 August 2020 |
| • 06378/17/0 | 29 August 2020 |
| • 06377/17/0 | 09 August 2020 |
| • 06379/17/0 | 09 August 2020 |
| • 06382/17/0 | 09 August 2020 |
| • 06385/17/0 | 09 August 2020 |
| • 06386/17/0 | 09 August 2020 |
| • 06332/17/0 | 18 May 2020 |
| • 06267/17/0 | 4 April 2020 |
| • 06203/17/0 | 25 May 2020 |
| • 06096/16/0 | 19 Dec 2019 |
| • 05887/16/0 | 20 April 2019 |
| • 05856/16/0 | 20 April 2019 |
| • 05855/16/0 | 20 April 2019 |
| • 05654/16/1 | 19 Jan 2019 |
| • 05612/15/0 | 21 Jan 2019 |
| • 05425/16/2 | 13 April 2018 |
| • 05424/16/1 | 13 April 2018 |
| • 05423/16/1 | 13 April 2018 |
| • 05422/16/1 | 13 April 2018 |
| • 05421/16/1 | 13 April 2018 |
| • 05420/16/1 | 13 April 2018 |
| • 05419/16/1 | 13 April 2018 |
| • 05418/16/1 | 13 April 2018 |
| • 05416/16/2 | 13 April 2018 |
| • 05414/16/1 | 13 April 2018 |
| • 05413/16/1 | 13 April 2018 |
| • 05412/16/1 | 13 April 2018 |
| • 05411/16/1 | 13 April 2018 |
| • 05410/16/1 | 13 April 2018 |
| • 05409/16/1 | 13 April 2018 |
| • 05408/16/1 | 13 April 2018 |
| • 05407/16/1 | 13 April 2018 |
| • 05361/15/0 | 22 June 2018 |
| • 05360/16/0 | 19 Dec 2017 |
| • 05359/16/1 | 19 Dec 2017 |
| • 05358/16/0 | 19 Dec 2017 |
| • 05357/16/0 | 19 Dec 2017 |
| • 05356/16/0 | 19 Dec 2017 |
| • 05355/16/0 | 19 Dec 2017 |
| • 05354/17/0 | 19 Dec 2017 |
| • 05353/16/0 | 19 Dec 2017 |
| • 05352/16/0 | 19 Dec 2017 |
| • 05351/16/0 | 19 Dec 2017 |
| • 05350/16/0 | 19 Dec 2017 |

- | | | | |
|--------------------|--------------------|--------------------|------------------|
| a) Oylaks | b) Ronja Pacific | c) Gripfisk | d) Norholm |
| e) Ronja | f) Ronja Atlantic | g) Ronja Carrier | h) Migdale |
| i) Ronja Harvester | j) Ronja Nordic | k) Ronja Pioneer | l) Ronja Settler |
| m) Ronja Skye | n) Ronja Superior | o) Ronja Viking | p) Roy Kristian |
| q) Victoria Lady | r) Victoria Viking | s) Ronja Commander | |

The agent or licensee must notify the licensing authority immediately if a vessel not listed on the licence is to be used for the discharge of used chemical(s) or agent(s). The information required by the licensing authority regarding the additional vessel(s) will be the same as the information already provided for the vessels on the existing licence. **Discharge operations using any additional vessel(s) may only commence if a revised licence, including details of the additional vessel(s), is issued by the licensing authority.**

Signed: _____



For and on behalf of the licensing authority

Date: 27 September 2017

From: MS.MarineLicensing@gov.scot [mailto:MS.MarineLicensing@gov.scot]
Sent: 22 January 2018 13:44
To: SOUTH_HIGHLAND; MS.FFPlanning@gov.scot
Subject: 06575 - Grieg Seafood Shetland Limited - Wellboat Discharge - Loch Snizort East, Skye - Consultation - Response Required by 19 February 2018

Dear Sir/Madam,

MARINE (SCOTLAND) ACT 2010, PART 4 MARINE LICENSING

Grieg Seafood Shetland Limited - Wellboat Discharge - Loch Snizort East, Skye

CO-ORDINATES 57° 33.362' N 006° 23.909' W

Please note: the co-ordinates noted in the attached application form show the boundary of the marine farm. The co-ordinates noted above is for the wellboat discharge.

A marine licence has been requested under the above Act to discharge waste sea lice treatment chemicals from wellboats below the level of Mean High Water Springs has been applied for at the above site.

Circulation of large quantities of information duplicated in these applications has been a cause for concern amongst consultees in the past, therefore only the application and chart has been included for comment. Please don't hesitate to contact Marine Scotland - Licensing Operations Team (MS-LOT) should you have any additional requests. You may, for example, wish to see the CAR licence that licences the discharge of the chemicals from the cages, prior to passing comment.

Should you have any comments on these proposals, I would be grateful if they could be forwarded to me in an electronic format (MS.MarineLicensing@gov.scot) or as a hard copy within 14 days of the date of this email.

If you require an extension to the consultation period, please inform me in writing as soon as possible and within 14 days of this email. A maximum two week extension to the consultation period will only be granted where significant concerns are raised.

If an extension request or a written reply to this consultation is not received within 14 days, it will be assumed that you are content with the proposals.

Marine Scotland - Licensing Operations Team will send you a copy of any licence that is subsequently issued for the proposed works.

Kind regards,



Marine Scotland - Marine Planning & Policy

Scottish Government | Marine Laboratory | 375 Victoria Road | Aberdeen | AB11 9DB

General Queries: +44 (0)131 244 1734

General Email: MS.marinelicensing@gov.scot

Website: <http://www.gov.scot/Topics/marine/Licensing/marine>

To: MS.MarineLicensing@scotland.gsi.gov.uk (MS.MarineLicensing@scotland.gsi.gov.uk)
Subject: 06397 - The Scottish Salmon Company - Wellboat Discharge - Taranish, East Loch Roag, Isle of Lewis

Dear Sir/Madam

Marine (Scotland) Act 2010, Part 4 Marine Licensing
06397 – The Scottish Salmon Company - Wellboat discharge – Taranish, East Loch Roag, Isle of Lewis

Thank you for your recent consultation.

Summary

We provide this advice on the understanding that it is your policy to grant wellboat discharge licences only where the types and volumes of chemicals or specified timeframes match those permitted by the corresponding SEPA CAR licence.

We therefore advise that the proposed discharge has already been considered by SEPA through the CAR licencing process and deemed unlikely to cause any significant natural heritage effects.

We recommend you consult with SEPA in order to:

- 1) ensure that the information supplied by the applicant is accurate and confirms with the most up-to-date CAR licence
- 2) confirm that you are content with SEPA's assessment of any effects on Special Areas of Conservation (SACs) and Special Protection Areas (SPAs), where this is relevant (Annex 1).
- 3) confirm that you are content with SEPA's assessment of any effects on NC MPAs, where this is relevant (Annex 2).

Annex 1. Special Areas of Conservation (SACs) and Special Protection Areas (SPAs)

Within SACs and SPAs the requirements of the Conservation (Natural Habitats, &c.) Regulations 1994 as amended (the "Habitats Regulations") apply. Consequently, Marine Scotland is required to consider the effect of the proposal on the site before it can be consented (commonly known as Habitats Regulations Appraisal). The SNH website has a summary of the legislative requirements (<http://www.snh.gov.uk/docs/A423286.pdf>).

SEPA consider the effect of all proposed CAR licences and amendments on SACs and have Habitats Regulations Appraisals (HRA) for each SAC, with sections relating to each fish farm site. They also have a generic HRA for SPA bird species as well as otters, harbour porpoise and seals. SEPA have indicated to us that they are happy to provide you with copies of these assessments via the SEPA Marine Science aquaculture staff (Mhairi Wilson, based in the SEPA Dingwall office).

- We recommend that you obtain copies in order to decide whether you wish to adopt their scientific appraisal as part of your HRA.
- We recommend that you seek clarification from SEPA that their HRA assessments are adequate to include the effects of wellboat discharges.

The Scottish Government has a policy of protecting proposed marine SACs and SPAs (such as harbour porpoise in Inner Hebrides and Minches proposed Special Area of Conservation (pSAC)).

- We therefore recommend that you seek clarification from SEPA that the CAR licence addresses this requirement satisfactorily. It seems likely to us that features will be protected by the existing safeguards built into CAR.

Annex 2. Marine Protected Areas (MPAs)

Where proposals lie within a Nature Conservation Marine Protected Area (NC MPA) the requirements of the Marine (Scotland) Act 2010 apply. Consequently, Marine Scotland is required to consider the effect of the proposal on the NC MPA before it can be consented.

SEPA consider the impact of chemical discharges on the MPA through the CAR licencing process. SEPA have indicated to us that they are happy to provide you with copies of these assessments via the SEPA Marine Science aquaculture staff.

- We recommend that you obtain copies in order to decide whether you wish to adopt their MPA assessment.
- We recommend that you seek clarification from SEPA that their assessments are adequate to include the effects of wellboat discharges.

In some cases the most up-to-date CAR licence may pre-date MPA designation. In such cases SEPA will not yet have undertaken an assessment. However, in the majority of these cases any pre-existing discharges will be regarded as part of the baseline condition of the MPA at the time of designation. Therefore while these wellboat discharges are capable of affecting the protected features of the NC MPA, as the impacts form part of the baseline condition these effects are likely to be considered insignificant.

Yours faithfully

Christine

Christine Moody | Support Officer | Scottish Natural Heritage |
32 Francis Street | Stornoway | Isle of Lewis | HS1 2ND | Tel: 01851 705258

Cairistiona Moody | Oifigear Taic | Dualchas Nàdair na h-Alba
32 Sràid Fhrangain | Steòrnabhagh | Eilean Leòdhais | HS1 2ND | Fòn: 01851 705258

Appendix: FOI correspondence (in chronological order)

From: Don Staniford [mailto:salmonfarmingkills@gmail.com]

Sent: 27 March 2018 09:37

To: 'FOI'

Subject: FOI re. well boat chemicals and 'Clean Treat' system since 1 Jan 2017

Please provide information on the use of chemicals via well boats including the 'Clean Treat' system since 1 January 2017.

Please include data on the use of Azamethiphos, Deltamethrin, Hydrogen Peroxide and any other chemicals used via well boats.

Please include correspondence with salmon farming and chemical companies (including Benchmark - the manufacturer of 'Clean Treat'), Government agencies such as SEPA and Marine Scotland and internal SNH correspondence.

Please include discussions regarding the 'Clean Treat' system in particular and the treatment, capture and disposal of chemicals used via well boats.

As context, Fish Update [reported](#) (23 March 2018):

Eco friendly cleaner a ‘game changer’

by [Jenny Hjul](#)

THE Clean Treat system, developed by Benchmark to improve the environmental footprint of sea lice treatments, has been hailed by senior fish vets as a possible ‘game changer’.

John Marshall of Benchmark told the Fish Veterinary Society’s annual conference, held near Edinburgh this week, that the technology was the result of 10 years’ work and had now been deployed aboard two vessels, both operating in Norway.

The system removes all trace of chemicals from bath treatment water, and can be installed on well boats or on purpose built or specially adapted barges.

Launched last year, Clean Treat is a three-step process: the treatment water containing medicines goes through a pre-filter to remove organic matter and detritus. It then passes through primary, secondary and tertiary purification stages, with the medicine level checked at each step.

Then, in an onboard lab, a chemist samples and releases the water when there is no detectable level of medicines present.

The chemical residues removed from treatment water are solidified and then disposed of in one of the world’s three specialised incinerators designed for such waste.

The second vessel fitted with Clean Treat left for Norway on Tuesday, said Marshall, and is due to go into action at the end of March.

Stationed in a fjord, it can purify 1,200 m³ an hour, increasing the capacity of the previous Clean Treat boat, and will have a rota of chemists working in its detection lab as it undergoes tests.

Benchmark is still collaborating with industry partners to further optimise the system, and the commercial scale field trials in Norway will test new products.

Clean Treat is suitable for most currently available bath treatments for sea lice, and it has the potential to work on compounds not previously used in aquaculture.

Asked whether farmers’ practice of reducing sea lice medicines, because of their possible effect on the environment, would now be reviewed in light of Clean Treat’s cleansing abilities, Marshall said: ‘It does open the door to medicines we haven’t even considered before...this is making a real impact on the industry.’

As well as engaging in conversations over changing the types of medicines farmers could use, Benchmark has also been in talks with the Aquaculture Stewardship Council.

At least two new products could be brought to the market as a result of Clean Treat, said Marshall, who added that its benefits could also apply to AGD treatments.

Ronnie Soutar, president of the FVS and recently appointed head of veterinary services at Scottish Sea Farms, said the technology 'seems to be a game changer'.

Marshall said the vessel en route to Norway is an adapted oil sector boat, fitted out to accommodate the Clean Treat systems, and with plenty of accommodation to house the teams of scientists involved in the trials.

Clean Treat would ideally be delivered as a service rather than sold to individual farmers, he said.

<https://www.fishupdate.com/eco-friendly-cleaner-game-changer/>

According to [Benchmark's web-site](#):

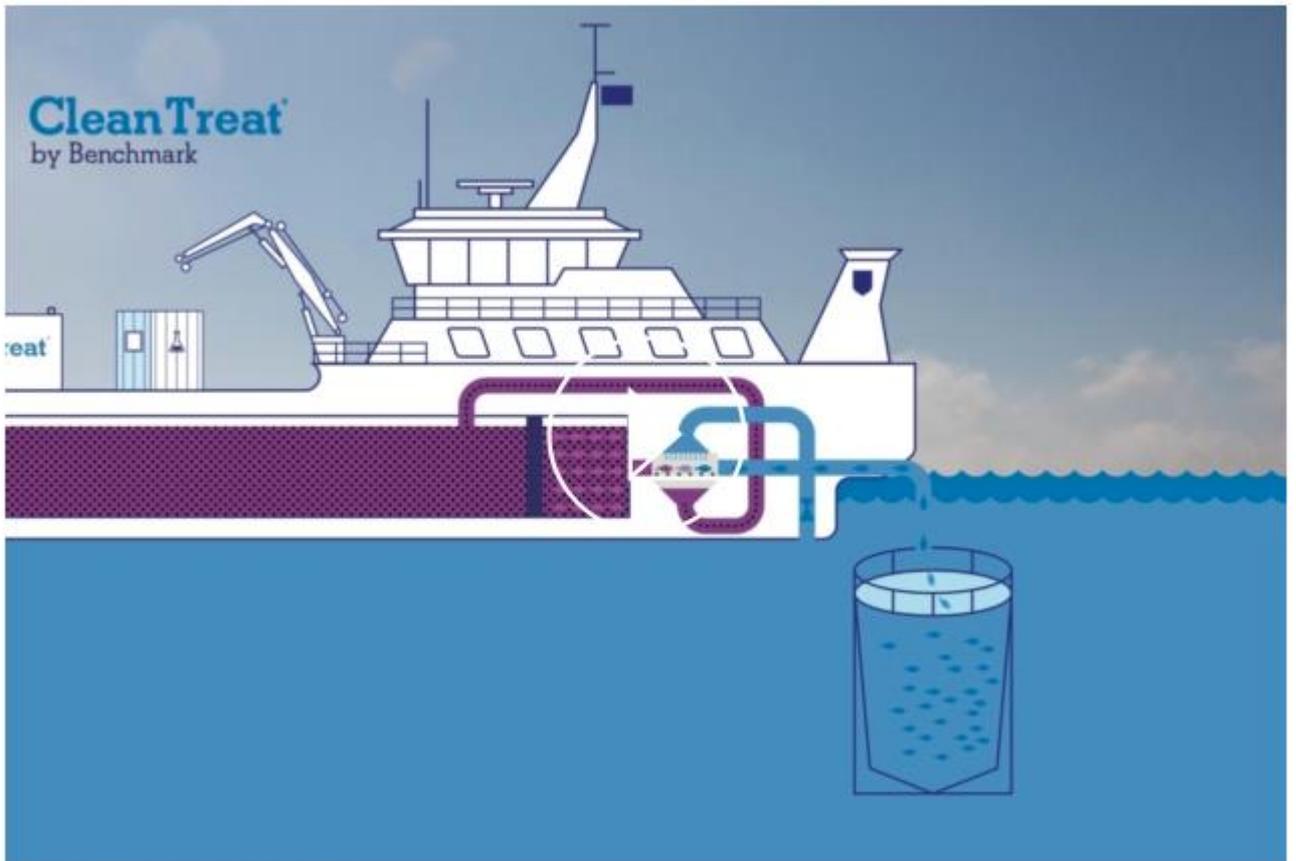
What is CleanTreat?

It is a purification system that cleanses the treatment water after delousing in well boats, ensuring the water is cleaned of all medicated particles before it is released into the environment. It also prevents treated lice from going back into the environment so that they do not spread resistance.

CleanTreat can be used on well boats, tankers, platforms and landbases and is effective against most available bath treatments for sea lice.

Chemical based bath treatments that are released into the environment - particularly the fjords in Norway - is one of the biggest objections to the salmon farming industry. CleanTreat solves this environmental challenge.

Click the video below to watch the process.



The CleanTreat process

Please consider this a request for information under the relevant Freedom of Information and Environmental Information Regulations including both the Freedom of Information (Scotland) Act 2002 and the Environmental Information (Scotland) Regulations 2004 (as well as any other new or other regulations which may be appropriate).

Please provide this information electronically via email.

Please acknowledge receipt of this FOI request.

Many thanks and I look forward to a response shortly.

Best fishes,

Don

Don Staniford

Director, Scottish Salmon Watch: <https://scottishsalmonwatch.org/>

Please don't hesitate to contact us if you have any questions about our response or any problems with the attached documents.



Information Request Information Request
- Mr Staniford - Collat- Mr Staniford - SNH F

Yours sincerely,

Rhoda Davidson
Information Officer

From: FOI Helpdesk [mailto:FOI.Mail@sepa.org.uk]
Sent: 27 April 2018 15:33
To: Salmonfarmingkills@gmail.com
Subject: SEPA Response - [F:0188668]



Dear Mr Staniford

REQUEST FOR INFORMATION

Please refer to the enclosed response in relation to your request for information. We apologise for the slight delay in providing this response.



Release.zip



F0188668 EIR
Response.pdf

Regards

Alison Ewing

SEPA Access to Information team

Email: foi@sepa.org.uk

Tel: 01786 457700



To Marine Scotland

From: Charlotte Maddocks

charlotte.maddocks@marineharvest.com

Email msmarinelicensing@gov.scot

Marine Harvest (Scotland) Ltd.
Stob Ban House,
Glen Nevis Business Park
Fort William, PH33 6RX
Telephone 01397 701 550
Mobile
Fax 01397 701 174

Date: 26th August 2017

We intend to discharge the following in accordance with consent conditions

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Biomass | Date | |
|--|--------------|-------------------|------------------------|---------|----------|-----------|
| | | | | | Start | End |
| Caolas a Deas East, Loch Shell CAR/L/1120220; | Salmosan Vet | Azamethiphos | 400g per 24 hours | ~700T | 26.08.17 | ~29.08.17 |



To Marine Scotland

From: Charlotte Maddocks

charlotte.maddocks@marineharvest.com

Email MS.Marinelicensing@gov.scot

Marine Harvest (Scotland) Ltd.
Stob Ban House,
Glen Nevis Business Park
Fort William, PH33 6RX
Telephone 01397 701 550
Mobile
Fax 01397 701 174

Date: 22nd August 2017

We intend to discharge the following in accordance with consent conditions

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Biomass | Date | |
|---|-------------|-------------------|----------------------------------|---------|------------|-----------|
| | | | | | Start | End |
| Noster CAR/L/1009974/VN10 & MPSv5; Seaforth CAR/L/1009963/VN12 & MPSv4; Trillichean Mor CAR/L/1003016 | Salmosan | Aamethiphos | 170g; 190g and 190g respectively | 200T | 24/08/2017 | ~26/08/17 |

Treatment boat - Inter Caladonia well boat



To Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen AB11 9DB

From: Ray Waddell
ray.waddell@marineharvest.com

Email ms.marinelicensing@gov.scot

Marine Harvest (Scotland) Ltd.
Farms Office, Blar Mhor Industrial Estate
Fort William, PH33 7TP
Telephone 01397 701 550
Mobile
Fax 01397 701 174

Date: 25th January 2017

We intend to discharge the following used chemical from the wellboat Inter Caledonia in compliance with licence conditions.
Actual times of discharge are subject to weather and workload.

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Date | |
|-----------------------|-------------------------------|-------------------|------------------------|-----------------------|------------|
| | | | | Start | End |
| Loch Hourm 06008/16/0 | Salmosan Vet (Fish Vet Group) | Azimethiphos | 1760.00 | 0900hrs 27/01/2017 | 31/01/2017 |



To Marine Scotland
Marine Laboratory
375 Victoria Road
Aberdeen AB11 9DB

From: Ray Waddell

ray.waddell@marineharvest.com

Email ms.marinelicensing@gov.scot

Marine Harvest (Scotland) Ltd.
Farms Office, Blar Mhor Industrial Estate
Fort William, PH33 7TP
Telephone 01397 701 550
Mobile
Fax 01397 701 174

Date: 3rd February 2017

We intend to discharge the following used chemical from the wellboat Inter Caledonia in compliance with licence conditions.
Actual times of discharge are subject to weather and workload.

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Date | |
|---------------------|-------------------------------|-------------------|------------------------|-----------------------|------------|
| | | | | Start | End |
| Cairidh 05996/16/0 | Salmosan Vet (Fish Vet Group) | Azimethiphos | 220g | 0900hrs 04/02/2017 | 07/02/2017 |
| Maol Ban 06021/16/0 | Salmosan Vet (Fish Vet Group) | Azimethiphos | 2530g | 0900hrs 04/01/2017 | 26/02/2017 |
| Soonser 06018/16/0 | Salmosan Vet (Fish Vet Group) | Azimethiphos | 1210g | 1400hrs 04/02/2017 | 26/02/2017 |



Marine Harvest Ltd
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX

Tel:
Email: sabina.wilinska@marineharvest.com

To: Stephen MacIntyre
Marianne MacPherson
SEPA Fort William

From: Sabina Wilinska

Email: EPiwesthighands-argyll@sepa.org.uk
RegistryDingwall@sepa.org.uk

Date: 06th January 2017

We intend to discharge the following in compliance with consent conditions:

| Site Name | Site | Therapeutant | Active Ingredient | Quantity (up to) Grams | Biomass (T) | Start | End |
|-----------|-------------------|--------------|-------------------|------------------------|-------------|-------------|--------------|
| Shuna | CAR/L/1109 280 | Salmosan | Azamethiphos | 2240g | 229T | 9th January | 20th January |



Marine Harvest Ltd
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX

Tel:
Email: sabina.wilinska@marineharvest.com

To: Stephen MacIntyre
Marianne MacPherson
SEPA Fort William

From: Sabina Wilinska

Email: WestHighlandArgyll@sepa.org.uk
RegistryDingwall@sepa.org.uk

Date: 19th April 2017

We intend to discharge the following in compliance with consent conditions:

| Site Name | Site | Therapeutant | Active Ingredient | Quantity (up to) g of active ingredient | Biomass (T) | Start | End |
|----------------|----------------|---------------|-------------------|---|-------------|-----------------|-----------------|
| Maclean's Nose | CAR/L/100 2965 | Salmosan 880g | Azamethiphos | 440g | 30T | 21st April 2017 | 22nd April 2017 |



Marine Harvest Ltd
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX

Tel:
Email: sabina.wilinska@marineharvest.com

To: Stephen MacIntyre
Marianne MacPherson
SEPA Fort William

From: Sabina Wilinska

Email: EPWesthighlands-argyll@sepa.org.uk
RegistryDingwall@sepa.org.uk

Date: 06th January 2017

We intend to discharge the following in compliance with consent conditions:

| Site Name | Site | Therapeutant | Active Ingredient | Quantity (up to) Grams | Biomass (T) | Start | End |
|-----------|-------------------|--------------|-------------------|------------------------|-------------|-------------|--------------|
| PNG | CAR/L/1000 800 | Salmosan | Azamethiphos | 4160g | 338T | 9th January | 20th January |



Marine Harvest Ltd
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX

Tel:
Email: sabina.wilinska@marineharvest.com

To: Stephen MacIntyre
Marianne MacPherson
SEPA Fort William

From: Sabina Wilinska

Email: EPWesthighlands-argyll@sepa.org.uk
RegistryDingwall@sepa.org.uk

Date: 06th January 2017

We intend to discharge the following in compliance with consent conditions:

| Site Name | Site | Therapeutant | Active Ingredient | Quantity (up to) Grams | Biomass (T) | Start | End |
|-----------|-------------------|--------------|-------------------|------------------------|-------------|-------------|--------------|
| BDNC | CAR/L/1004 226 | Salmosan | Azamethiphos | 2660g | 547T | 9th January | 20th January |



To Marine Scotland

From: Charlotte Maddocks
charlotte.maddocks@marineharvest.com

Email msmarinelicensing@gov.scot

Marine Harvest (Scotland) Ltd.
Stob Ban House,
Glen Nevis Business Park
Fort William, PH33 6RX
Telephone 01397 701 550
Mobile
Fax 01397 701 174

Date: 19th June 2017

We intend to discharge the following in accordance with consent conditions

| Site | Theraputant | Active Ingredient | Quantity (up to) grams | Biomass | Date | |
|--|--------------|-------------------|-----------------------------------|---------|------------|-----|
| | | | | | Start | End |
| North Shore West CAR/L/1004085; North Shore East CAR/L/1129789; Tabhigh CAR/L/1129793/VN01 | Salmosan Vet | Azamethiphos | 220g;220g; 240g repectively | 2500T | 21/06/2017 | |



Marine Harvest Ltd
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX

Email: sabina.wilinska@marineharvest.com

To: Stephen MacIntyre
Marianne MacPherson
SEPA Fort William

From: Sabina Wilinska

Email: WestHighlandArgyll@sepa.org.uk
RegistryDingwall@sepa.org.uk

Date: 26th May 2017

We intend to discharge the following in compliance with consent conditions:

| Site Name | Site | Therapeutant | Active Ingredient | Quantity (up to) Grams | Biomass (T) | Start | End |
|------------|----------------|----------------|-------------------|------------------------|-------------|----------------------|----------------------|
| Camus Glas | CAR/L/100 9965 | Salmosan 1760g | Azamethiphos | 880g | 104T | 28 th May | 31 st May |



Marine Harvest Ltd
Stob Ban House
Glen Nevis Business Park
Fort William
PH33 6RX

Email: sabina.wilinska@marineharvest.com

To: Stephen MacIntyre
Marianne MacPherson
SEPA Fort William

From: Sabina Wilinska

Email: WestHighlandArgyll@sepa.org.uk
RegistryDingwall@sepa.org.uk

Date: 25th April 2017

We intend to discharge the following in compliance with consent conditions:

| Site Name | Site | Therapeutant | Active Ingredient | Quantity (up to) g of active ingredient | Biomass (T) | Start | End |
|-----------|-------------------|------------------|-------------------|---|-------------|------------|------------|
| Linnhe | CAR/L/1009 970 | Salmosan 200g | Azamethiphos | 100g | 99T | 27th April | 27th April |

I therefore look forward to receiving ALL the information requested.

Thanks.

Best fishes,

Don

Don Staniford

Director, Scottish Salmon Watch: <https://scottishsalmonwatch.org/>

Director, Global Alliance Against Industrial Aquaculture (GAAIA):
<http://www.salmonfarmingkills.com>

Read my blog via <http://donstaniford.typepad.com/my-blog>

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From: Don Staniford [mailto:salmonfarmingkills@gmail.com]
Sent: 01 May 2018 07:56
To: 'ceu@scotland.gsi.gov.uk'
Cc: 'Peter.Millar@gov.scot'
Subject: FOI re. well boat licences to permit discharges of chemotherapeutants

Further to FoI/18/00985, please provide information on well boat licences issued by MS-LOT to fish farm operators to permit the discharge of chemotherapeutants.

Please provide copies of all well boat licences and copies of well boat licence returns detailing chemical use.

As context, the Director of Marine Scotland's letter to the Rural Economy & Connectivity Committee dated 17 April 2018 included:

'Wellboat licences'

Wellboat licences are issued by MS-LOT to fish farm operators to permit the discharge of chemotherapeutants following treatment for sealice in a vessel (a wellboat). Such licences are only issued where a valid Controlled Activity Regulations (CAR) licence has been issued to the relevant fish farm site for discharge of chemotherapeutants following in-cage treatments by SEPA following its consideration of the environmental effects. The volumes permitted for discharge are the same as the CAR volumes and Marine and CAR licences are conditioned to prohibit the release of chemotherapeutant under one regime at the same time as the other, thereby avoiding cumulative effects.

Wellboat licences are issued for three (3) years.

MCA and NLB have confirmed they will not provide routine comment on the applications for 'wellboat licences' as there is not a navigational element.

SEPA has provided standing advice that it has no objection to 'wellboat applications' provided the type and amount of chemical used and discharged will not exceed that specified in the respective CAR licence. An agreed condition is added to licences which prevents the simultaneous discharge from bath treatments.

SNH is consulted where such activity takes place in a European site, and advise of the likely significant effects. SNH directs MS-LOT to advice given by SNH during the CAR licensing process. MS-LOT would look to adopt the 'appropriate assessment' carried out by the SEPA as the competent authority under The Conservation (Natural Habitats, &c.) Regulations 1994. Again, a similar process occurs where SNH advise that an activity may affect the feature of a Marine Protected Area (MPA).

Online via http://www.parliament.scot/S5_Rural/20180502_REC_Committee_-_Public_Papers.pdf

Finally, please clarify whether the use of chemical via well boats is included in the data published via the Scotland's Aquaculture database:
http://aquaculture.scotland.gov.uk/data/fish_farms_monthly_biomass_and_treatment_reports.aspx

i.e. Is well boat chemical use included or not via Scotland's Aquaculture database?

If so, when was well boat chemical use data included?

Please consider this a request for information under the relevant Freedom of Information and Environmental Information Regulations including both the Freedom of Information (Scotland) Act 2002 and the Environmental Information (Scotland) Regulations 2004 (as well as any other new or other regulations which may be appropriate).

Please provide this information electronically via email.

Please acknowledge receipt of this FOI request.

Many thanks and I look forward to a response shortly.

Best fishes,

Don

Don Staniford

Director, Scottish Salmon Watch: <https://scottishsalmonwatch.org/>

Director, Global Alliance Against Industrial Aquaculture (GAAIA):
<http://www.salmonfarmingkills.com>

Read my blog via <http://donstaniford.typepad.com/my-blog>

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From: Access to Information Enquiries [mailto:FOI.Mail@sepa.org.uk]
Sent: 01 May 2018 11:05
To: 'Don Staniford'; Access to Information Enquiries
Subject: RE: SEPA Response - [F:0188668]

Dear Mr Staniford

As explained in the response letter SEPA only holds information in relation to well-boat data where Marine Scotland have shared this information with SEPA.

Kind Regards

Cara Everitt

From: Don Staniford [mailto:salmonfarmingkills@gmail.com]

Sent: 01 May 2018 13:02

To: 'AccessToInformation'

Subject: FOI re. well-boat chemical use data reported via Scotland's Aquaculture database and SPRI

Please provide information on the reporting (or not as the case appears to be) of chemical use in well-boats via Scotland's Aquaculture database and the SPRI.

Please provide copies of any correspondence with Marine Scotland, SNH, the Scottish Government, SSPO, chemical companies, well boat companies and any other parties in relation to the reporting of chemical use in well-boats.

As context please see emails below which includes earlier today from Cara Everitt:

"I have asked colleagues who confirm that it is not included on Scotland's Aquaculture page. However It is included in the [SPRI](#) figures that are published on SEPA's website."

I also note [via a search of the SPRI](#) that data on Azamethiphos use for 2016 is still not available for many sites:

Pollutant Search Results

| | |
|---------------------|--------------|
| Pollutant | Azamethiphos |
| Media | Water |
| Units | Kg |
| Reporting Threshold | 0.001 (2016) |
| Industry Sector | All |

| Year of Return | Registered Company Name (Site Name) | Site Address | Total Release | Return Availability | Site Graph |
|----------------|---|--|---------------|---------------------|---|
| 2016 | The Scottish Salmon Company Ltd Gob a' Bharra North MCFF, Loch Fyne | Loch Fyne, West of Drum Point, Drum, Portavadie, Argyll PA21 2ER | 8.20 | Agreed |  |
| 2016 | The Scottish Salmon Company Ltd Kyles Vuia East MCFF, West Loch Roag | Kyles Vuia, West Loch Roag, South of Euniagh Mor, Great Bernera, Isle of Lewis, Western Isles HS2 9ND | N/A | Agreed |  |
| 2016 | Scottish Sea Farms Ltd Fishnish East MCFF, Sound of Mull (Site B) | Port an t-Sluic, Sound of Mull, East of Fishnish Point, Fishnish, Isle of Mull, Argyll PA65 6BA | 1.60 | Agreed |  |
| 2016 | Scottish Sea Farms Ltd Fishnish West MCFF, Sound of Mull (Site A) | Fishnish Bay, Sound of Mull, East of Rubha na Leitreach, Fishnish, Isle of Mull, Argyll PA65 6BA | N/A | Agreed |  |
| 2016 | Grieg Seafood Shetland Limited East Head of Papa MCFF, East Voe | East Voe, The Deeps, South Ayre, East Head of Papa, Papa, by Scalloway, Shetland ZE1 0XN | N/A | Agreed |  |
| 2016 | Grieg Seafood Shetland Limited East of Langa MCFF, Bur Wick | Bur Wick, East of Langa, Scalloway, Shetland ZE1 0XN | N/A | Agreed |  |
| 2016 | Marine Harvest (Scotland) Ltd Balmeanach Bay MCFF, Sound of Raasay | Balmeanach Bay, Sound of Raasay, East of Balmeanach, Sconser, Isle of Skye IV51 9NH | N/A | Agreed |  |

And for 2017 there is zero data:

Pollutant Search Results

| | |
|---------------------|--------------|
| Pollutant | Azamethiphos |
| Media | Water |
| Units | Kg |
| Reporting Threshold | 0.001 (2017) |
| Industry Sector | All |

| Year of Return | Registered Company Name (Site Name) | Site Address | Total Release | Return Availability | Site Graph |
|----------------|--|---|---------------|---------------------|---|
| 2017 | Cooke Aquaculture Scotland Limited Bastaness MCFF, Mid Yell, Shetland | MID YELL, SHETLAND ZE2 9BN | - | Not Yet Agreed |  |
| 2017 | Marine Harvest (Scotland) Limited Raineach, East Loch Tarbert, Isle of Harris | RAINEACH, EAST LOCH TARBERT, SCALPAY, ISLE OF HARRIS HS4 3YD | N/A | Not Yet Agreed |  |
| 2017 | Marine Harvest (Scotland) Limited Port na Moine North, Loch Craignish, Argyll | PORT NA MOINE NORTH, LOCH CRAIGNISH, ARGYLL | - | Not Yet Agreed |  |
| 2017 | Dawnfresh Farming Ltd Port na Mine MCFF (Etive 3), Loch Etive | Loch Etive, Port na Mine, Taynuilt, Argyll PA35 1HU | - | Not Yet Agreed |  |
| 2017 | Wester Ross Fisheries Limited Isle Martin MCFF, Loch Kanaid | Loch Kanaid, East of Isle Martin , Ardmail, by Ullapool, Highland IV26 2TN | N/A | Not Yet Agreed |  |
| 2017 | Grieg Seafood Shetland Limited North Havra MCFF, Sound of Havra | Sound of Havra, Haddock Sands, North Havra, East of Binna Ness, Scalloway, Shetland ZE2 9GJ | - | Not Yet Agreed |  |
| 2017 | Grieg Seafood Shetland Limited Taing of Railsborough MCFF, Cat Firth | Cat Firth, Taing of Railsborough, Girdsta, South Nesting, Shetland ZE2 9SQ | - | Not Yet Agreed |  |

When will data for 2016 and 2017 be available?

Please consider this a request for information under the relevant Freedom of Information and Environmental Information Regulations including both the Freedom of Information (Scotland) Act 2002 and the Environmental Information (Scotland) Regulations 2004 (as well as any other new or other regulations which may be appropriate).

Please provide this information electronically via email.

Please acknowledge receipt of this FOI request.

Many thanks and I look forward to a response shortly.

Best wishes,

Don

Don Staniford

Director, Scottish Salmon Watch: <https://scottishsalmonwatch.org/>

Dear Mr Staniford,

Please see attached the response to your recent request to the Scottish Government for a review of FOI case FoI/18/00985. This response includes two additional documents.

<< File: FoI1800985 review response.pdf >>

<< File: FOI - 18_00985 - Part 1.pdf >> << File: FOI - 18_00985 - Part 2.pdf >>



FoI - 18_00985 -
Part 1.pdf



FoI1800985 review
response.pdf



FoI - 18_00985 -
Part 2.pdf

Yours sincerely,

Sebastian Howell

From: Daniel.Pendrey@gov.scot [mailto:Daniel.Pendrey@gov.scot]

Sent: 28 June 2018 18:03

To: salmonfarmingkills@gmail.com

Subject: RE: FoI/18/01265 - Response to Information Request

Dear Don Staniford,

Thank you for your request dated 1st May 2018 under the Environmental Information (Scotland) Regulations 2004 (EIRs). Please find your response letter attached.



FoI_18_01265 -
Letter of Response.d

With regard to the requested information, the following link will give you access to view and download the files: <https://www.dropbox.com/sh/a96fujp5m3kggkm/AADwOgnak7P9a88i-USwM87Ia?dl=0>

The link goes to the Scottish Government Dropbox area, a secure place to share large and/or numerous files. Due to the high volume of information and as part of the continuous improvement of our service, we are providing you with the information in one place and at one time (as opposed to many emails). Please download the information from Dropbox.

To access the documents via Dropbox use the above link taking the following steps:

1. Click the Download button at the top right, then Direct download to save all the documents to your PC, if you wish.
2. Alternatively, click a document to view it in your browser and then click the Download button at the top right to save that document to your PC.
3. If you have a Dropbox account you can save the files to your Dropbox.

4. There is a toolbar at the bottom of the screen with options to show a sidebar, Zoom, Page up/down, use Fullscreen or Print.

Regards,

Danny

Daniel J Pendrey

Business and Operational Delivery Section Leader - Marine Scotland Licensing Operations Team
Scottish Government - Marine Laboratory - 375 Victoria Road - Aberdeen - AB11 9DB
Direct Line – 0131 244 4434 Switchboard – 0131 244 2500

Email: daniel.pendrey@gov.scot

Web: <http://www.gov.scot/Topics/marine/Licensing/marine>

From: Don Staniford [mailto:salmonfarmingkills@gmail.com]

Sent: 25 September 2018 17:01

To: 'ceu@scotland.gsi.gov.uk'

Subject: FOI re. chemical treatments in tarpaulins & well boats since 1 January 2013

Please provide an annual breakdown on the use of chemicals on salmon farms via a) tarpaulins; b) well boats since 1 January 2013.

Please include the use of hydrogen peroxide, azamethiphos, cypermethrin, deltamethrin and any other chemical treatments via tarpaulins and well boats.

Please give data for 2013, 2014, 2015, 2016, 2017 and thus far during 2018.

Please also provide any information detailing any breakdown of chemical usage via tarpaulin or well boat in any documents, materials, data, presentations or correspondence.

For example, [via the Scotland's Aquaculture database](#) it seems unclear whether reported use of Azamethiphos at Colonsay in June 2018 is via well boat or tarpaulin:

| Fish Farm Monthly Biomass and Treatments Details | |
|--|-------------------------------|
| Year | 2018 |
| Month | June |
| Submitted By | Marine Harvest (Scotland) Ltd |
| Licence Number | CAR/L/1110925/V5 |
| Licence active at time of report | CAR/L/1110925 |
| Report for Site | COLS1 Colonsay |
| Max licensed biomass on site (tonnes) | 2500 |
| Actual biomass on site (tonnes) | 1683 |
| Biomass Exceedance (tonnes) | 0 |
| Feed (kg) | 278736 |
| Mortalities (kg) | 3962.5284942937 |
| Seallice Treatments Used | |
| Seallice Treatment Product | Quantity Used (grams) |
| Azamethiphos | 3189.9999839068 |
| Cypermethrin | 0 |
| Deltamethrin | 0 |
| Emamectin Benzoate | 0 |
| Teflubenzuron | 0 |
| Data supplied by SEPA on 31/08/2018 | |

| Location Details | |
|-------------------------------------|-----------------------------|
| Receiving Water | East of Colonsay |
| National Grid Reference | NR43459672 |
| View on Map | View on Map |
| Data supplied by SEPA on 31/08/2018 | |

However, a SEPA FOI reply dated 29 May 2018 (via F:0188830) included:

Response

[1] Wellboat chemical use is not reported on Scotland's Aquaculture Website.

Under the terms of Regulation 9 of the EIRs, SEPA has a duty to provide advice and assist. We advise that SEPA does not directly regulate wellboats. It is the requirement of the operator's marine licenses to supply all well boats treatment notifications to Marine Scotland. SEPA is provided information relating to some well boat treatments when when copies of the notifications are provided to SEPA by Marine

Scotland. In accordance with Regulation 14(1)(b) of the EIRs we advise that you may wish to contact Marine Scotland to enquire further on the reporting of well-boat chemical use data. The general enquiries email address for the Scottish Government is ceu@gov.scot

[2] Please refer to the attached 2016 and 2017 correspondence

Please note that personal information has been redacted from the documents in accordance with Regulation 11(2) of the EIRs and Data Protection Principles. We have considered public interest in respect of the withholding of this personal data and have determined that the public interest in withholding this specific information outweighs the public interest in its release in to the public domain. Please note that we have not withheld complete documents which contain such personal data and have released all other information within the document which is not subject to requirements of the Data Protection Act 2018.

[3] Please note that the azamethiphos release to water was reported on the SEPA SPRI website in 2016. You can search and download and view the data on our public website here <http://apps.sepa.org.uk/spria/Search/ByPollutant/Results.aspx?Media=water-d&Pollutant=169&Year=2016&IncludeBrt=Y>

[4] We confirm that Wellboat azamethiphos use will be added to SPRI. Please note that but SEPA has yet to receive the 2017 wellboat use figures from Marine Scotland. SEPA does not hold this information therefore it is excepted under Regulation 10(4)(a) of the Environmental Information Regulations 2004. The text of which is reproduced below;

(4) A Scottish public authority may refuse to make environmental information available to the extent that:-

(a) it does not hold that information when an applicant's request is received.

The exception in regulation 10(4)(a) is subject to the public interest test in regulation 10(1)(b) of the EIRs. As SEPA does not hold the information in question there is no conceivable public interest in requiring that the information be made available. The public interest in making the requested information available is outweighed by that in maintaining the exception in regulation 10(4)(a) of the EIRs.

We advise the information will be available on SEPA's website in the Autumn 2018 (normally published in October).

As context, Fish Farming Expert [reported](#) (25 September 2018):

Norway proposes ban on tarpaulin bath treatments



Fisheries minister Harald Nesvik is proposing to ban the release of lice treatment medicines at many fish farms. Photo: NFD

Norwegian fisheries minister Harald Nesvik is proposing to ban the release of delousing agents at fish farms, effectively outlawing the use of tarpaulin bath treatments.

By Editors

The move follows surprising and controversial early findings in one scientific study that hydrogen peroxide, regarded as the least environmentally harmful of the chemicals used to kill sea lice, can damage shrimp stocks.

“It is important that we have a precautionary approach. We see that there are several challenges associated with the use of hydrogen peroxide and lice treatment. Until we have more knowledge in place, we propose that it is forbidden to release delousing agents at fish farms,” said Nesvik in a press release from the Ministry of Food and Fisheries (NFD).

Use only in a wellboat

The NFD will shortly submit a proposal for interim measures that will mean that medicines for bath treatments for lice can only be carried out in a wellboat, not in a tarpaulin.

The temporary prohibition will apply to treatment in and in connection with farms located in shrimp or spawning grounds, or fewer than 500 metres from such areas. The water used for lice treatment must be transported away from the farm site.

Nesvik met the aquaculture industry last week. The theme of the meeting was the use of wellboats and treatments in the pens at farms.

Sustainable growth

“The government wishes to facilitate sustainable growth in the aquaculture industry. There will always be a certain need to use drugs in farming, but we should not have a use that gives unacceptable effects on the environment,” said Nesvik, whose previous job was as media spokesman for wellboat operator, Sølvtrens.

Hydrogen peroxide is regarded as the greenest lice treatment because it is quickly diluted in the sea after use in fish farms and can break down into water and oxygen within a very short time, depending on conditions.

But an on-going study by Renée Bechmann and colleagues at the International Research Institute of Stavanger (IRIS) showed that half of the deep-water shrimp *Pandalus borealis* that were exposed to a low concentration of hydrogen peroxide for two hours died within three days.

The scientists, who used a concentration of the chemical 100 times smaller than that used in de-lousing operations, have called for the use of chemical to be stopped following the results which they say surprised them.



Guldborg Søvik: Not easy to transfer lab results to the field.

Unpublished research

Guldborg Søvik, a shrimp expert with Norway’s Institute of Marine Research (IMR), said the results were worrying but pointed out that it was not always easy to transfer results from the

From: FOI Helpdesk [mailto:FOI.Mail@sepa.org.uk]
Sent: 03 October 2018 16:22
To: Salmonfarmingkills@gmail.com
Subject: SEPA Response - [F:0189594]



Dear Mr Staniford

REQUEST FOR INFORMATION

Please refer to the enclosed response in relation to your request for information.



SEPA General Data
Reuse Statement v3.



F0189594 EIR
Response.pdf

Regards

Julie OBrien

SEPA Access to Information team

Email: foi@sepa.org.uk

Tel: 01786 457700