



Access to Information
Scottish Environment Protection Agency
Strathallan House
Castle Business Park
Stirling
FK9 4TZ
foi@sepa.org.uk

13 May 2020

Dear Sir/Madam,

Review request re. Use of Formalin on Salmon Farms (F0191629)

Please consider this a formal request for a review of [F0191629 disclosed yesterday \(12 May 2020\)](#).

F0191629	Finfish - Use of Formalin	12/05/2020
<ul style="list-style-type: none">• Description: [1] Please provide information on the use of Formalin on salmon farms and hatcheries since 11 April 2019 .Please include data on the use of Formalin (and Formaldehyde). [2] Please also provide information on any objections, complaints and concerns regarding the use of Formalin on salmon farms and hatcheries. [3] Please provide information on discharges of Formalin, wastewater treatment of Formalin, environmental impacts and any mitigation strategies to deal with the environmental impacts of Formalin use. [4] Please include any emails, discussions and other information in relation to any media coverage including The Sunday Times, The Ferret and The Sunday National: [5] And any emails, discussions and other information in relation to blogs, press releases, Tweets and videos by Scottish Salmon Watch: [6] This FOI request would certainly include any complaints re. the use of Formalin/Formaldehyde by Kames in Loch Tralaig [7] Please also include any photos, videos, sampling results, tests, data and any other information in relation to the use of Formalin (and Formaldehyde) on salmon farms and hatcheries since 11 April 2019.• Information: Please refer to the attached• Related documents:<ul style="list-style-type: none">◊ EIR_Response F0191629 r◊ RELEASE		

In summary, Scottish Salmon Watch asks SEPA to review the FOI response for comprehensiveness and completeness.

Scottish Salmon Watch is highly sceptical that the data provided via the Excel spreadsheet (200306-F0191629-Formaldehyde) details ALL use of Formaldehyde (Formalin) since April 2019. As reference, here's the 22.4 tonnes of Formaldehyde reported to SEPA by seven companies (Mowi, Kames, Scottish Sea Farms, Migdale Smolt, Cooke Aquaculture, Torridon Smolts and The Scottish Salmon Company) at twelve salmon farms (Camas na Mult, Loch Ness; Corrie Kinloch, Loch Shin; Glenfinnan; Invermallie, Loch Arkaig; Loch Avich; Loch Damph (North); Loch Damph (South), Couldron; Loch Frisa; Loch Garry; Loch Lochy; Loch Tralaig; Salachy, Loch Shin) on 29 occasions between April 2019 and December 2019:

1	Site Name	Operator	Licence	Month	Formaldehyde (active ingredient in grams)
2	Loch Lochy	Mowi Scotland Ltd	CAR/L/1002140	Sep-19	3525000
3	Loch Lochy	Mowi Scotland Ltd	CAR/L/1002140	Oct-19	2606000
4	Invermallie, Loch Arkaig	Mowi Scotland Ltd	CAR/L/1002071	Apr-19	2195625
5	Loch Lochy	Mowi Scotland Ltd	CAR/L/1002140	Dec-19	1743750
6	Loch Lochy	Mowi Scotland Ltd	CAR/L/1002140	Aug-19	1612500
7	Camas na Mult, Loch Ness	Mowi Scotland Ltd	CAR/L/1001886	Oct-19	1294000
8	Loch Lochy	Mowi Scotland Ltd	CAR/L/1002140	Jul-19	1087500
9	Glenfinnan	Mowi Scotland Ltd	CAR/L/1008960	Nov-19	1057500
10	Invermallie, Loch Arkaig	Mowi Scotland Ltd	CAR/L/1002071	Nov-19	1012500
11	Glenfinnan	Mowi Scotland Ltd	CAR/L/1008960	Oct-19	825000
12	Loch Tralaig	Kames Fish Farming Ltd	CAR/L/1000233	Nov-19	624000
13	Camas na Mult, Loch Ness	Mowi Scotland Ltd	CAR/L/1001886	Sep-19	618700
14	Loch Tralaig	Kames Fish Farming Ltd	CAR/L/1000233	Dec-19	526000
15	Glenfinnan	Mowi Scotland Ltd	CAR/L/1008960	Dec-19	450000
16	Loch Avich Fish Farm	Kames Fish Farming Ltd	CAR/L/1000235	Sep-19	396000
17	Loch Lochy	Mowi Scotland Ltd	CAR/L/1002140	Nov-19	393750
18	Loch Avich Fish Farm	Kames Fish Farming Ltd	CAR/L/1000235	Oct-19	390000
19	Glenfinnan	Mowi Scotland Ltd	CAR/L/1008960	Sep-19	337500
20	Loch Garry	Mowi Scotland Ltd	CAR/L/1008962	Aug-19	312375
21	Camas na Mult, Loch Ness	Mowi Scotland Ltd	CAR/L/1001886	Nov-19	281250
22	Loch Tralaig	Kames Fish Farming Ltd	CAR/L/1000233	Oct-19	253000
23	Corrie Kinloch, Loch Shin	Migdale Smolt Ltd	CAR/L/1003918	Nov-19	247500
24	Loch Frisa	Scottish Sea Farms Ltd	CAR/L/1000224	Aug-19	152000
25	Salachy, Loch Shin	Cooke Aquaculture Fresh	CAR/L/1002017	Aug-19	114000
26	Glenfinnan	Mowi Scotland Ltd	CAR/L/1008960	Apr-19	112500
27	Loch Garry	Mowi Scotland Ltd	CAR/L/1008962	Sep-19	97125
28	Loch Damph (North)	Torridon Smolts Ltd	CAR/L/1003924	Nov-19	52500
29	Invermallie, Loch Arkaig	Mowi Scotland Ltd	CAR/L/1002071	Oct-19	37500
30	Loch Damph (South), Couldre	The Scottish Salmon Com	CAR/L/1003990	Sep-19	30000

As comparison, here's the 32 reported uses of Formaldehyde to SEPA in 2017 (17 times representing 26.4 tonnes by one company - Mowi - at four salmon farms: Lochy, Garry Glenfinnan and Arkaig) and in 2018 (15 times representing 24.3 tonnes by one company - Mowi - at Lochy, Garry, Glenfinnan and Arkaig) as disclosed via [F0190275 replied to by SEPA on 11 April 2019](#).

					Formaldehyde (active ingredient in grams)
1	Site Name	Operator	Licence	Month	
2	Invermallie, Loch Arkaig	Marine Harvest (Scotland) Ltd	CAR/L/1002071	Sep-18	18750
3	Loch Garry	Marine Harvest (Scotland) Ltd	CAR/L/1008962	Sep-18	140625
4	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Sep-18	1950000
5	Glenfinnan	Marine Harvest (Scotland) Ltd	CAR/L/1008960	Aug-18	225000
6	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Aug-18	1818750
7	Glenfinnan	Marine Harvest (Scotland) Ltd	CAR/L/1008960	Jul-18	375000
8	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Jul-18	2231250
9	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Jun-18	637500
10	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Apr-18	562500
11	Invermallie, Loch Arkaig	Marine Harvest (Scotland) Ltd	CAR/L/1002071	Mar-18	318750
12	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Mar-18	4443750
13	Invermallie, Loch Arkaig	Marine Harvest (Scotland) Ltd	CAR/L/1002071	Feb-18	2456250
14	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Feb-18	3712500
15	Invermallie, Loch Arkaig	Marine Harvest (Scotland) Ltd	CAR/L/1002071	Jan-18	2325000
16	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Jan-18	3093750

					Formaldehyde (active ingredient in grams)
1	Site Name	Operator	Licence	Month	
2	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	May-17	75000
3	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Jun-17	918750
4	Loch Garry	Marine Harvest (Scotland) Ltd	CAR/L/1008962	Jul-17	239063
5	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Jul-17	2193750
6	Glenfinnan	Marine Harvest (Scotland) Ltd	CAR/L/1008960	Aug-17	356250
7	Loch Garry	Marine Harvest (Scotland) Ltd	CAR/L/1008962	Aug-17	547688
8	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Aug-17	4200000
9	Glenfinnan	Marine Harvest (Scotland) Ltd	CAR/L/1008960	Sep-17	1106250
10	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Sep-17	2831250
11	Glenfinnan	Marine Harvest (Scotland) Ltd	CAR/L/1008960	Oct-17	3226875
12	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Oct-17	1725000
13	Glenfinnan	Marine Harvest (Scotland) Ltd	CAR/L/1008960	Nov-17	2212500
14	Invermallie, Loch Arkaig	Marine Harvest (Scotland) Ltd	CAR/L/1002071	Nov-17	1200000
15	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Nov-17	1218750
16	Glenfinnan	Marine Harvest (Scotland) Ltd	CAR/L/1008960	Dec-17	56250
17	Invermallie, Loch Arkaig	Marine Harvest (Scotland) Ltd	CAR/L/1002071	Dec-17	1762500
18	Loch Lochy	Marine Harvest (Scotland) Ltd	CAR/L/1002140	Dec-17	2525000

However, there would appear to be significant gaps in the data. For example, Scottish Salmon Watch has briefly looked at the ['Case Information' published by the Scottish Government's Fish Health Inspectorate](#) for [2019](#) and [2020](#) and has found the following cases where Formalin use is reported but not all these cases were reported by SEPA (please note that this is not an exhaustive list as the 'find' function in the PDF does not pick up all references to 'Formalin'):

[2019:](#)

Case No:	2019-0270	Date of visit:	11/06/2019
Time spent on site:	2 hours	Main Inspector:	
Site No:	FS0375	Site Name:	Loch Damph
Business No:	FB0224	Business Name:	Torndon Smolts Ltd

Additional Case Information:

Fish input 6 days ago from Barvas by lorry. More fish to arrive at the end of June. Previous cycle put to sea in Feb 2019. No reported issues. Small amount of fungus. Formalin water treatment in summer for white spot and costia
Unannounced inspection for VMD. Fish 3g so unable to take samples.

Formalin treatments not recorded in medicine records as a water treatment. No other treatments. Vaccines recorded in book.

Case No:	2019-0352	Date of visit:	21/07/2019
Time spent on site:	1 hour	Main Inspector:	
Site No:	FS0575	Site Name:	Ormsary Smolt Unit
Business No:	FB0061	Business Name:	Landcatch Natural Selection Ltd

Additional Case Information:

One tank inspected. E5, the tank containing the fish for export. No moribund fish observed in this tank. 21601 fish in tank at average weight of 28g.

Morts for E5; 2 over last week.- one of these attributed to fungus. Morts across E tanks low in past week. Peaked in E23; 43 fish/day/tank attributed to fungus and E4; 58/day fungus. Generally 0-20/tank/day attributed to fungus.

Weekly mortals across site; Wk28; 0.29% 6787 - post grading fungus, wk27; 0.15% 3546 fish, wk26; 0.009% 2302 fish, wk25; 0.06% 1472 fish.

trial in treatment for fungus, halimid, formalin and Cress.

Case No:	2019-0495	Date of visit:	11/09/2019
Time spent on site:	2 hours	Main Inspector:	
Site No:	FS0941	Site Name:	FAI Aultbea
Business No:	FB0439	Business Name:	FAI Aquaculture Ltd

Additional Case Information:

FMS - had been written for lump fish currently only fw salmon on site. Future plans for SW salmon would require a new FMS. Currently only salmon on site for work at Ardtoe. Looking to do feed trials in future.

Paperword b [REDACTED], Observed [REDACTED]

Trying to refine the process for the Clean-treat boat is the future focus for the company. .

Salmon being split in next 2 weeks. Came in from Lochialort as parr at 9g on 5th August. Moving out 2nd week Nov to Ardtoe.

VHP - contact details require update along with mort disposal. Review due in July 2019 but planed for September. New VHP to be sent through on completion. Received 9/10/19

Filter intake water to 1 micron, no saprolegnia, Issue with costia prior to reducing filtration on site. Treated on 3rd May with formalin.

Case No:	2019-0583	Date of visit:	09/10/2019
Time spent on site:	4.5 hrs	Main Inspector:	
Site No:	FS0270	Site Name:	Loch Avich
Business No:	FB0134	Business Name:	Kames Fish Farming Ltd

Additional Case Information:

Site started vaccination (PD7) of fish on 4/09/19 (week 36). Formalin treatment started on wk 37 (morts 1%, 3213) but on wk 38 morts suddenly jumped to 5.77% (18477).

Results from FVG from samples taken on the 16th September came back positive for furunculosis on the 19th. FVG also reported haemorrhaging in different organs, including the gills. Internal lesions were not as obvious as external ones. Bacteriology plates cultured by Kames isolated *Aeromonas salmonicida*, causative agent of furunculosis.

FVG issued prescription for Aquatet (Oxytetracycline, mixed at Kames) on 20/09/19 for 10 days of treatment which has appeared to have stopped the infection. Site still doing formalin treatment for saprolegnia.

██████████
Kames Fish Farming Ltd
Kilmelford
Oban
Argyll
PA34 4XA
██████████

FISH HEALTH INSPECTORATE VISIT REPORT

SUMMARY FOR INFORMATION OF SITE OPERATOR

BUSINESS No	FB0134	DATE OF VISIT	09/10/2019
SITE No	FS0270	SITE NAME	Loch Avich
INSPECTOR	██████████	CASE No	20190583

Mortality levels had increased at the site from 1% on week 37 to 5.77% on week 38 and continued to increase to 12.16% by the end of week 40.

Furunculosis and saprolegnia had been confirmed on site by the company prior to inspection. The site had also undergone a 10 day antibiotic (oxytetracycline) treatment 2 weeks earlier and was still carrying out formalin treatments to combat saprolegnia.

Several lethargic fish were observed across site with some also having patches of fungus-like infection around the dorsal fin.

Externally fish 3 and 4 had weak haemorrhaging on the ventral surface with fish 3 also showing weak haemorrhaging around the throat area. Internally all five fish showed weak haemorrhaging on the body wall.

Case No:	2019-0655	Date of visit:	05/11/2019
Time spent on site:	4 hours	Main Inspector:	██████████
Site No:	FS1328	Site Name:	Barcaldine Smolt Unit
Business No:	FB0125	Business Name:	Scottish Sea Farms Ltd

1. Recent treatments (last 4 wks)?	<input checked="" type="checkbox"/>
If yes, detail:	Formalin, Pyceze
If other, detail:	
2. Medicines records available for inspection?	<input checked="" type="checkbox"/>
3. Are records complete and correctly entered?	<input checked="" type="checkbox"/>
4. Are fish in a withdrawal period?	<input checked="" type="checkbox"/>
5. If yes, what treatment(s)?	Formalin, Pyceze

Additional Case Information:

Fish ensiled on site and waste transported by Murdoch and Sons Ltd to Deerdykes composting, Scottish Waters Cumbernauld.

Morts; 0.44% wk 42, 0.11% wk3, 0.65% wk44, 0.02% wk45. Attributed to post vaccine and fungal. 2 tanks treated with formalin and pyceze (Cress). Formalin under prescription. Smolt Unit; SU1Tanks 5,6

Saprolegnia post vaccine. Hoped that would not be issue on site as water is UV treated. Thought time of year (organic matter in water) and post vaccine damage has lead to the sap. Fish are being vaccinated at a larger size than normal as the unit was not ready for fish input. Large size of fish at vaccine has lead to some damage however mortality levels remain low.

First FHI visit to this site since in operation.

Case No:	2019-0743	Date of visit:	10/12/2019
Time spent on site:	3.5 hrs	Main Inspector:	
Site No:	FS0892	Site Name:	Clachbreac
Business No:	FB0061	Business Name:	Landcatch Natural Selection Ltd

Additional Case Information:

Inspection of 2019 S0 stock held in tank B3 which are being exported to France on the 10th and 13th of December 2019 (certificate numbers INTRA.GB.2019.0035001 & 0035004). One lorry transporting fish had 12 separate tank units on it. A total of ~22,440 fish due to be exported on both days with ~1,870 fish/tank on lorry.

Mortality levels low from tank (B3) holding fish for export (Wk 46 - 112, 0.25%, wk 47 - 122, 0.28%, wk 48 - 33, 0.08%), wk 49 - 26, 0.06% per week for tank B3). Movement records and mortality records all well maintained. Site had been treated with formalin in early November for fungus. Fish looked to be in good condition at time of inspection.

[2020:](#)

Case No:	2020-0006	Date of visit:	22/01/2020
Time spent on site:	4 hours	Main Inspector:	
Site No:	FS0866	Site Name:	Loch Garasdale
Business No:	FB0235	Business Name:	Cooke Aquaculture (Freshwater) Ltd

Additional Case Information:

Going to sea 28th March - Stronsay in Orkney.

Fish not vaccinated until 16th of March to prevent fungal issues

Morts are ensiled on site and collected by Hazco for disposal. Collected once a year when site is fallow. Stored in IBCs. Pumped out of IBCs and into a tanker.

Current stock input from Carindow in July 2019.

No issues with previous cycle of fish

Last treatments were post-vaccine for previous cycle - Formalin treatments - 23/3/19 - 30/3/19

Case No:	2020-0010	Date of visit:	21/01/2020
Time spent on site:	6 hours	Main Inspector:	
Site No:	FS0575	Site Name:	Ormsary Smolt Unit
Business No:	FB0061	Business Name:	Landcatch Natural Selection Ltd

Additional Case Information:

Export of 315@58g smolts to Wageningen University in Holland, IntraGB.2020.0001584. Transported by Solway Transport. From tank E1. Vaccinated 20/11/19 and post treated with formalin. Morts in tank low and attributed to fungus.

2020 S1 going to sea starting wk10 to wk17 - going SSC - Lamlash, Loch Duart to Sound of Harris

FVG in for lesions observed mainly in tank X9, suspected bacterial growth, likely Flavobacterium - treatments; florocol, cress and formalin. Morts across the site since vaccination in September about 2.2% in 2020 S1s.

Florocol treatment 16th Jan 2020 - all 2020 S1 tanks treated and currently under treatment finishing on Sunday. Feed mixed on site.

wk3 peak morts in tank X9 -146 for the day all with lesions; 13/1/20, tank X10 338 morts due to lesions

1. Recent treatments (last 4 wks)?		Y
If yes, detail:	Florfenicol, Formalin Cress	
If other, detail:		
2. Medicines records available for inspection?		Y
3. Are records complete and correctly entered?		Y
4. Are fish in a withdrawal period?		Y
5. If yes, what treatment(s)?	florfenicol formalin Cress	

Case No:	2020-0085	Date of visit:	25/02/2020
Time spent on site:	3hrs	Main Inspector:	
Site No:	FS0649	Site Name:	Loch Arkaig
Business No:	FB0119	Business Name:	Mowi Scotland Ltd

Additional Case Information:

Waste incinerated on site unless the incinerator cannot cope with the capacity. Surplus waste is taken away by Billy Bowie and taken to Dundas Chemicals.

Saprolegnia has been confirmed on site. However it is not causing significant mortalities at this time and is currently being treated with Formalin and Cress prior to transfer off site w/b 16/03/2020.

1. Recent treatments (last 4 wks)?		Y
If yes, detail:	Formalin	
If other, detail:	Cress has also been used as a treatment.	
2. Medicines records available for inspection?		Y
3. Are records complete and correctly entered?		Y
4. Are fish in a withdrawal period?		Y
5. If yes, what treatment(s)?	Formalin	
If other, detail:	Fish in withdrawal for Cress.	

Case No:	2020-0096	Date of visit:	25/02/2020
Time spent on site:	2h	Main Inspector:	
Site No:	FS0301	Site Name:	Appleburn Hatchery
Business No:	FB0169	Business Name:	The Scottish Salmon Company

Additional Case Information:

Fish had been recently treated with formalin and Cress.

1. Recent treatments (last 4 wks)?		Y
If yes, detail:	Formalin, Cress	
If other, detail:		
2. Medicines records available for inspection?		Y
3. Are records complete and correctly entered?		Y
4. Are fish in a withdrawal period?		Y
5. If yes, what treatment(s)?	Formalin Cress	

If you look closely at the cases above, you will see missing reports of Formalin (Formaldehyde) use. For example, the FHI visit to Torridon Smolts in June 2019 (Case # 2019-0270) cites "Formalin water treatments in summer for white spot and costia" and concedes that "Formalin treatment not recorded in medicine records as a water treatment". Yet the only report for Torridon Smolts in Loch Damph (as detailed by SEPA via [F0191629](#)) is in November 2019.

Site Name	Operator	Licence	Month	Formaldehyde (active ingredient in grams)
Loch Damph (South), Couldrion	The Scottish Salmon Com	CAR/L/1003990	Sep-19	30000
Loch Damph (North)	Torridon Smolts Ltd	CAR/L/1003924	Nov-19	52500

Formalin was also reported at Landcatch's Ormsary Smolt Unit in a July 2019 FHI inspection report (Case #: 2019-0352). Why is this not reported by SEPA?

Formalin use on 3 May 2019 was reported at FAI Aquaculture's FAI Aultbea during a September 2019 FHI inspection (Case # 2019-0495). Why did SEPA not report this use?

Formalin use at Landcatch's Clachbreac facility was reported "in early November for fungus" cited a FHI visit in December 2019 (Case # 2019-0743). Why has this slipped through SEPA's net?

An inspection of Cooke Aquaculture's Loch Garasdale facility in January 2020 referred to Formalin treatments in March 2019 (Case # 2020-0006). Why was this not reported by SEPA via [F0190275](#) in April 2019?

Another FHI inspection at Landcatch's Ormsary Smolt Unit in January 2020 (Case # 2020-0010) reported recent treatment with Formalin in the last four weeks. So why was this data not disclosed by SEPA via [F0191629](#) yesterday?

And presumably the reported use of Formalin (within the last four weeks) by The Scottish Salmon Company in a FHI inspection visit on 25 February 2020 was too late to be captured by Scottish Salmon Watch's FOI request filed on 28 February 2020?

Please note that [Scottish Salmon Watch's press release in June 2019](#) also detailed cases sourced from the Scottish Government's Fish Health Inspectorate which report the use of Formalin but were NOT reported by SEPA via [F0190275 in April 2019](#).

Here's a list of some recent uses (sourced from the [Scottish Government's Fish Health Inspectorate 'Case Information'](#)):

February 2019 - Loch Duart's Duartmore hatchery in Sutherland
February 2019 - Landcatch's Ormsary Smolt Unit in Argyll
February 2019 - Kames Fish Farming salmon farm in Loch Tralaig in Argyll
January 2019 - Cooke Aquaculture's Ardtaraig Hatchery on Loch Striven in Argyll
January 2019 - Mowi's Inchmore Hatchery in Glenmoriston
November 2018 - Cooke Aquaculture's Yetts O'Muckart salmon farm in Clackmannanshire
November 2018 - Hebridean Smolts' Clachan Hatchery in Loch Carnan in South Uist
October 2018 - Landcatch's Ormsary Smolt Unit in Argyll
October 2018 - Scottish Sea Farms' Knock hatchery on the Isle of Mull
October 2018 - Marine Harvest's Laddie Wood salmon farm in Loch Garry in Lochaber
October 2018 - The Scottish Salmon Company's Kinlochmoidart Hatchery in Highland
August 2018 - Marine Harvest's Glenfinnan salmon farm in Loch Shiel in Lochaber
July 2018 - Marine Harvest's Loch Lochy salmon farm in Lochaber
July 2018 - Marine Harvest's Lochailort Recirculation Hatchery in Lochaber

April 2018 - FAI Aquaculture's Aultbea fish farm in Wester Ross
March 2018 - The Scottish Salmon Company's Langass Hatchery in North Uist
February 2018 - Cooke Aquaculture's Furnace Hatchery on Loch Fyne
December 2017 - Landcatch's Ormsary Smolt Unit in Argyll
November 2017 - Scottish Sea Farms' salmon farm in Loch Ba on the Isle of Mull
November 2017 - Marine Harvest's salmon farm in Loch Lochy in Lochaber
October 2017 - Marine Harvest's Loch Ness salmon farm in Highland
October 2017 - Cooke Aquaculture's "organic" salmon farm at Sallachy in Sutherland
October 2017 - Cooke Aquaculture's Cliff salmon farm in Shetland
October 2017 - Scottish Sea Farms' Loch Frisa salmon farm on the Isle of Mull
October 2017 - Scottish Sea Farms' Knock salmon farm on the Isle of Mull
October 2017 - Marine Harvest's Glenfinnan salmon farm in Loch Shiel in Lochaber
October 2017 - Marine Harvest's salmon farm in Loch Arkaig in Highland
July 2017 - The Scottish Salmon Company's Russel Burn Hatchery on Loch Kishorn

Scottish Salmon Watch's [press release dated 26 June 2019](#) included:

A report - "[The State of Scottish Salmon Farming in 2018](#)" - published by Scottish Salmon Watch in March 2019 detailed 80,000 mortalities at The Scottish Salmon Company's Russel Burn Hatchery in November 2018 with the use of Formalin specifically identified:

Summary:

Significant Health Events [Reported via FHI 'Case Information' in 2018](#)

- 80,000 morts at The Scottish Salmon Company's Russel Burn Hatchery in November 2018 due to fungus ("reportedly from vaccination") and "quality cull" (61,000 euthanized "as they were deformed or not feeding")

Here's details from the [Scottish Government's Fish Health Inspectorate report](#):

Case No:	2018-0628	Date of visit:	27/11/2018
Time spent on site:	4 hours	Main Inspector:	ASM
Site No:	FS0500	Site Name:	Russel Burn
Business No:	FB0169	Business Name:	The Scottish Salmon Company

Additional Case Information:

Ova and fry units being built at the moment. Due to be completed in June 2019. New shed being built and the site name changed. Reminded to contact FHI to change details.
 Most of the old tanks will be replaced with new bigger ones.
 Vaccination reportedly caused fungus on the site shortly before the inspection. The stress of the vaccination process is thought to have reduced immunity. This together with the fact that the smoltification is now brought on with in feed treatment rather than the salt being added to the water. This is meant that the fungal spores are not killed in the water. Salt has been ordered and will added to the water the week of the inspection.
 All fish removed for VMD treated with TMS, Pyceze and Aquacen (Formalin) to combat fungus
 Pre-transfer check (report not yet produced. Check conducted the day before inspection) made by company biologist and advised to move the fish to seawater. Fish will be moved in December 2018, 2 weeks post inspection.

Quality cull conducted in Nov of 4.4% (in 1 day) but not reported to MSS as it is labelled as a quality cull in the mortality record.

Recent (last 4 wks) disease problems?	Y	Any escapes (si
If yes, detail:	Fungus on site reportedly from vaccination (see additional comments)	

Mortality Records	
1. Mortality records available for inspection?	Y
2. How are mortalities disposed of?	Whole fish - Dundas Chemicals
If other detail:	
3. Mortality records complete and correctly entered?	Y
4. Recent mortality (last 4 wks):	80,100 fish due to quality cull and fungus.
5. Evidence of recent increased/atypical mortalities?	Y
If yes, facility nos/no mortality per facility/no stock per facility/reason:	61,000 euthanized in a 'quality cull' as they were deformed or not feeding, 19/11/18, in cage D7. All killed from the same cage. 4.4% in a week.

1. Recent treatments (last 4 wks)?	Y
If yes, detail:	Formalin, Pyceze

Other reported uses of Formalin via the [Scottish Government's Fish Health Inspectorate 'Case Information'](#) included an "accidental overdose" at Marine Harvest's Glenfinnan salmon farm in Loch Shiel in October 2017 "due to human error" leading to 1,343 dead fish and the use of Formalin at Cooke Aquaculture's "organic" salmon farm at Sallachy in Sutherland in 2017. Formalin was also reported as used at [The Scottish Salmon Company's Russel Burn Hatchery](#) in July 2017 following fungus problems causing over 40,000 mortalities.

Scottish Salmon Watch's [press release dated 26 June 2019](#) then cited:

A [Scottish Government Fish Health Inspectorate report in February 2019](#) detailed the use of Formalin at [Loch Duart's Duartmore Hatchery](#):

Case No:	2019-0097	Date of visit:	20/02/2019
Time spent on site:	2 hours	Main Inspector:	
Site No:	FS0062	Site Name:	Duartmore Hatchery
Business No:	FB0398	Business Name:	Loch Duart Ltd

Additional Case Information:

Site inspected following receipt by APHA of a non site-specific welfare complaint regarding Loch Duart. Accompanied APHA vets on visit.

Ova are stripped at Geisgeil Tank Site and transferred to Ormsary Hatchery for fertilisation and incubation. Ova are brought back to Duartmore Hatchery for hatching. Site grows fish to 5g and then transferred to Duartmore for on-growing.

Very few treatments administered per cycle - a couple of treatments with formalin for Costia, but looking at using artificial seawater for this in future.

Mortalities are transferred to Badcall office for uplift to Gray Composting.

Two more [Scottish Government Fish Health Inspectorate reports in February 2019](#) detailed the use of Formalin at Landcatch's Ormsary Smolt Unit "up to twice a week to prevent fungal infections":

Case No:	2019-0060	Date of visit:	25/02/2019
Time spent on site:	2.5 hours	Main Inspector:	
Site No:	FS0575	Site Name:	Ormsary Smolt Unit
Business No:	FB0081	Business Name:	Landcatch Natural Selection Ltd

S0s brought onto site in January 2019.

Formalin prescribed and administered under CASCADE.

Case No:	2019-0061	Date of visit:	25/02/2019
Time spent on site:	1.5 hours	Main Inspector:	[REDACTED]
Site No:	FS0681	Site Name:	Ormsary Hatchery
Business No:	FB0061	Business Name:	Landcatch Natural Selection Ltd

Stock on site currently hatching.
 Some post hatch mortalities observed, low mortality % no clinical signs observed.
 Water treated with Formalin up to twice a week to prevent fungal infections.

Another [Scottish Government Fish Health Inspectorate report in February 2019](#) detailed the use of Formalin by [Kames Fish Farming salmon farm in Loch Tralaig](#):

Case No:	2019-0062	Date of visit:	26/02/2019
Time spent on site:	2.5 hours	Main Inspector:	[REDACTED]
Site No:	FS0468	Site Name:	Loch Tralaig
Business No:	FB0134	Business Name:	Kames Fish Farming Ltd

All waste held at Kames Bay Pier, prior to being transported to Energen for disposal..

Fungus has been present on site during cycle, treated with formalin.

Another [Scottish Government Fish Health Inspectorate report in January 2019](#) detailed the use of Formalin by [Cooke Aquaculture's Ardtaraig Hatchery](#):

Case No:	2019-0018	Date of visit:	22/01/2019
Time spent on site:	6 hrs	Main Inspector:	WJM
Site No:	FS0648	Site Name:	Ardtaraig Hatchery
Business No:	FB0235	Business Name:	Cooke Aquaculture (Freshwater) Ltd

1. Recent treatments (last 4 wks)?	[REDACTED]	Y
If yes, detail:	Formalin	
If other, detail:	[REDACTED]	
2. Medicines records available for inspection?	[REDACTED]	Y
3. Are records complete and correctly entered?	[REDACTED]	Y
4. Are fish in a withdrawal period?	[REDACTED]	Y
5. If yes, what treatment(s)?	Formalin	

Another [Scottish Government Fish Health Inspectorate report in January 2019](#) cited Formalin at Mowi's [Inchmore Hatchery](#):

Case No:	2019-0037	Date of visit:	04/02/2019
Time spent on site:	5.5 hours	Main Inspector:	[REDACTED]
Site No:	FS0226	Site Name:	Inchmore
Business No:	FB0119	Business Name:	Mowi Scotland Ltd

All ova in from Norway - Mowi

import from 19/12/18 - fish split with Finfish. Electronic cert detailed Inverpolly has destination. Consignment was split at Aberdeen airport. Finfish have original copy. Imports team to contact Mowi.

Morts peak; 0.46%/site/week - post vaccine weeks 5 and 6.

Withdrawal for TMS, formalin, pyceze weeks 5 and 6 post vaccine use.

A [Scottish Government Fish Health Inspectorate report in November 2018](#) reported Formalin use at [Cooke Aquaculture's Yetts O'Muckart salmon farm in Clackmannanshire](#):

Case No:	2018-0608	Date of visit:	29/11/2018
Time spent on site:	2.5hours	Main Inspector:	KAS
Site No:	FS0371	Site Name:	Yetts O' Muckart
Business No:	FB0235	Business Name:	Cooke Aquaculture (Freshwater) Ltd

Additional Case Information:

Stocks on site all appeared healthy. Manager stated this has being the best crop of fish through the site so far - fish all from Holmwrangle and will be from Holmwrangle again next year.

Fish will be going off as 2019 s1's in March/April to Ness of Copister

Also stocked in July with s0's from cairndow following problems with water at Cairndow, these fish all went out in October to Stead of Aithness

Vaccinating over last 2 weeks with PD7. First batch vaccinated just about back to taking full feed.

Treated weekly with prophylactic formalin plus post vac formalin dosage at the moment.

6. Any other peaks in mortality during period checked?	Y
If yes, detail:	lesions late August, early Sept - controlled with pyceze and formalin treatment. Mortalities 50-100/tank peak at 500/tank but returned to normal within 2 weeks. No antibiotics used.
7. Have increased (unexplained) mortalities been reported to vet or FHI?	Y
If yes, detail action:	FVG - significant flank lesions

1. Recent treatments (last 4 wks)?	Y
If yes, detail:	Formalin
If other, detail:	[REDACTED]
2. Medicines records available for inspection?	Y
3. Are records complete and correctly entered?	Y
4. Are fish in a withdrawal period?	Y
5. If yes, what treatment(s)?	Formalin

A [Scottish Government Fish Health Inspectorate report in November 2018](#) reported Formalin use at [Hebridean Smolts' Clachan Hatchery in Loch Carnan in South Uist](#):

Case No:	2018-0611	Date of visit:	27/11/2018
Time spent on site:	3 hours	Main Inspector:	JET
Site No:	FS0398	Site Name:	Clachan Hatchery
Business No:	FB0444	Business Name:	Hebridean Smolts Ltd

Additional Case Information:

Water very dark in colour, difficult to observe fish below surface.
 Small number of fish with lesions observed in tanks 5 and 6, very active in water and unable to be caught with hand nets.
 Fish sampled for VMD appeared healthy
 Stock on site hatched at Mingarry Hatchery, then on-grown at Loch Na Shibaidh Mhor and Loch A'Clachan. Moved to Clachan Hatchery for grading and vaccination. Due to move fish to sea sites March - April 2019.
 Formalin treatment prescribed by vet via cascade.

Recent (last 4 wks) disease problems?	<input checked="" type="checkbox"/>	Any escapes (since last visit)?	<input type="checkbox"/>
If yes, detail:	Some fish with lesions on site, low mortality, treated with Formalin and Pyceze, samples to be sent to FVG for further analysis.		

1. Recent treatments (last 4 wks)?	<input checked="" type="checkbox"/>
If yes, detail:	Formalin, T.M.S., Pyceze
If other, detail:	
2. Medicines records available for inspection?	<input checked="" type="checkbox"/>
3. Are records complete and correctly entered?	<input type="checkbox"/>
4. Are fish in a withdrawal period?	<input checked="" type="checkbox"/>
5. If yes, what treatment(s)?	Formalin, T.M.S.

A [Scottish Government Fish Health Inspectorate report in October 2018](#) detailed the use of Formalin at Landcatch's Ormsary Smolt Unit:

Case No:	2018-0437	Date of visit:	23/10/2018
Time spent on site:	1 hour	Main Inspector:	JET
Site No:	FS0575	Site Name:	Ormsary Smolt Unit
Business No:	FB0061	Business Name:	Landcatch Natural Selection Ltd

Recent (last 4 wks) disease problems?	<input checked="" type="checkbox"/>	Any escapes?	<input type="checkbox"/>
If yes, detail:	Fungus infection (saprolegnia) - mainly affecting 2018 S0 stock		

5. Evidence of recent increased/atypical mortalities?	<input checked="" type="checkbox"/>
If yes, facility nos/no mortality per facility/no stock per facility/reason:	S0 stock week 41 increased from 6000/week to 11248/week. Following week dropped back down to 6270/week - Saprolegnia - site has been treating with formalin.

A [Scottish Government Fish Health Inspectorate report in October 2018](#) detailed the use of Formalin by Scottish Sea Farms at their Knock hatchery on the Isle of Mull to treat fungus:

Case No:	2018-0481	Date of visit:	03/10/2018
Time spent on site:	5hrs	Main Inspector:	SAE
Site No:	FS0254	Site Name:	Knock
Business No:	FB0125	Business Name:	Scottish Sea Farms Ltd

Recent (last 4 wks) disease problems? Y

If yes, detail:

5. Evidence of recent increased/atypical mortalities? Y

If yes, facility nos/no mortality per facility/no stock per facility/reason:

6. Any other peaks in mortality during period checked? Y

1. Recent treatments (last 4 wks)? Y

If yes, detail:

If other, detail:

2. Medicines records available for inspection? Y

3. Are records complete and correctly entered? Y

4. Are fish in a withdrawal period? Y

5. If yes, what treatment(s)?

A [Scottish Government Fish Health Inspectorate report in October 2018](#) detailed the use of Formalin by [Marine Harvest's Laddie Wood salmon farm in Loch Garry](#):

Case No:	2018-0491	Date of visit:	08/10/2018
Time spent on site:	4 hrs	Main Inspector:	WJM
Site No:	FS1104	Site Name:	Laddie Wood, Loch Garry
Business No:	FB0119	Business Name:	Marine Harvest (Scotland) Ltd

1. Recent treatments (last 4 wks)? Y

If yes, detail:

If other, detail:

2. Medicines records available for inspection? Y

3. Are records complete and correctly entered? Y

4. Are fish in a withdrawal period? Y

5. If yes, what treatment(s)?

A [Scottish Government Fish Health Inspectorate report in October 2018](#) detailed the use of Formalin by [The Scottish Salmon Company's Kinlochmoidart Hatchery](#):

Case No:	2018-0493	Date of visit:	09/10/2018
Time spent on site:	3 Hrs	Main Inspector:	WJM
Site No:	FS0146	Site Name:	Kinlochmoidart Hatchery
Business No:	FB0169	Business Name:	The Scottish Salmon Company

Additional Case Information:

Slight increased mortalities during week 39 put down to post vaccination. Levels still remained below reporting criteria and dropped back to normal levels following week.

Formalin flushed through a number of tanks (5,6,11,12) for costia

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	<input type="checkbox"/> Y
If yes, detail:	Formalin
If other, detail:	
2. Medicines records available for inspection?	<input type="checkbox"/> Y
3. Are records complete and correctly entered?	<input type="checkbox"/> Y
4. Are fish in a withdrawal period?	<input type="checkbox"/> Y
5. If yes, what treatment(s)?	Formalin used only in tanks 5, 6, 11 & 12

A [Scottish Government Fish Health Inspectorate report in August 2018](#) detailed the use of Formalin at [Marine Harvest's Glenfinnan salmon farm in Loch Shiel](#):

Case No:	2018-0353	Date of visit:	20/08/2018
Time spent on site:	3 hours	Main Inspector:	JET
Site No:	FS0742	Site Name:	Glenfinnan
Business No:	FB0119	Business Name:	Marine Harvest (Scotland) Ltd

Additional Case Information:

23/07/2018 vaccinations carried out (PD3)

Post vaccination treatments of formalin and pyceze administered.

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	<input type="checkbox"/> Y
If yes, detail:	Formalin, T.M.S., Pyceze
If other, detail:	
2. Medicines records available for inspection?	<input type="checkbox"/> Y
3. Are records complete and correctly entered?	<input type="checkbox"/> Y
4. Are fish in a withdrawal period?	<input type="checkbox"/> Y
5. If yes, what treatment(s)?	Formalin, T.M.S.

A [Scottish Government Fish Health Inspectorate report in July 2018](#) detailed the use of Formalin "as biocide" at [Marine Harvest's Loch Lochy salmon farm](#):

Case No:	2018-0281	Date of visit:	03/07/2018
Time spent on site:	2 hours	Main Inspector:	AJW
Site No:	FS0150	Site Name:	Loch Lochy
Business No:	FB0119	Business Name:	Marine Harvest (Scotland) Ltd

Additional Case Information:

Morts currently 0.01% site wk. Looking for further input of 105,000 (41g) wk 6th August and 400,000 from Lochailort this week. Larger stock going off site 23rd July to Muck and Rum. Smaller stock remaining on until October 2018.

Dead fish on site incinerated

12th June; bath treatment formalin and pyceze, post transfer treatment in Q3 fish.

Formalin used as biocide but precautionary 500days applied.

Another [Scottish Government Fish Health Inspectorate report in July 2018](#) detailed the use of Formalin at [Marine Harvest's Lochailort Recirculation Hatchery](#):

Case No:	2018-0282	Date of visit:	03/07/2018
Time spent on site:	6 hours	Main Inspector:	AJW
Site No:	FST269	Site Name:	Lochailort Recirculation Hatchery
Business No:	FB0119	Business Name:	Marine Harvest (Scotland) Ltd

Additional Case Information:

20g fish being moved out to Lochy this week. 80g fish going to sea from next Monday - Eirisort and Muck.

Treatment for gill and gut fungus in fry unit Q1 parr destined for Lochy in October. Formalin and pyceze.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?		Y
If yes, detail:	formalin and pyceze this week in fry unit for gill and gut health	
If other, detail:		
2. Medicines records available for inspection?		Y
3. Are records complete and correctly entered?		Y
4. Are fish in a withdrawal period?		Y
5. If yes, what treatment(s)?	Formalin in Q1 Fry	

A [Scottish Government Fish Health Inspectorate report in April 2018](#) detailed the use of Formalin at [FAI Aquaculture's Aultbea fish farm](#):

Case No:	2018-0084	Date of visit:	18/04/2018
Time spent on site:	4 hours	Main Inspector:	JET
Site No:	FS0941	Site Name:	FAI Aultbea
Business No:	FB0439	Business Name:	FAI Aquaculture Ltd

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	Y
If yes, detail:	Branzil, Formalin, Pyceze	
If other, detail:		
2. Medicines records available for inspection?	<input type="checkbox"/>	Y
3. Are records complete and correctly entered?	<input type="checkbox"/>	Y
4. Are fish in a withdrawal period?	<input type="checkbox"/>	Y
5. If yes, what treatment(s)?	Branzil, Formalin	

A [Scottish Government Fish Health Inspectorate report in March 2018](#) detailed the use of Formalin at The Scottish Salmon Company's Langass Hatchery:

Case No:	2018-0108	Date of visit:	27/03/2018
Time spent on site:	2 hours	Main Inspector:	ALW
Site No:	FS0643	Site Name:	Langass Hatchery
Business No:	FB0169	Business Name:	The Scottish Salmon Company

Additional Case Information:

Site used to produce company's Hebridean strain of fish. Broodstock transferred onto site in late spring. Produce eyed ova for production sites and future broodstock

Select 1,000 viable ova from each family for incubation in specially modified comphatch system (trays divided into smaller compartments). Each family is raised in a separate 1m tank. Numbers reduced to 500 at 10g, 250 at 30g and to final 100 per family prior to transfer to Loch Geireann. At this point the fish are weighed, length noted and individually tagged. The families are then mixed in cages at Loch Geireann.

The site is currently being upgraded with a new incubation and holding shed which will be stocked in the next 5-6 weeks. This new facility will have a dedicated incubation area (comphatch systems, buckets and zuger jars) and 200 1m tanks for on-growing. The tanks are fed by robot with a track above the tanks for the hoppers to move along. The current facility (88 1m tanks) will be dismantled. In addition the square tanks in the other building have been removed and replaced with six 5m tanks and two 4m tanks mainly for holding the broodstock.

Currently have one of the large tanks stocked with 147,000 first feeding fry as reserve fish if needed at another site. Also stripped some sea trout broodfish, but no site was available to grow the ova so the ova were culled.

Broodstock for 2018 and 2019 seasons currently at Treanay, but 2020 broodstock currently at Loch Geireann will transfer to Ormsary Broodstock Unit next month. In the future the site will receive green ova and milt from Hebridean broodstock held at Ormsary. Genetic testing will be undertaken to help improve the line.

Recently had gut fungus in a couple of tanks, but treated with formalin. Fish on site appeared healthy.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?	<input type="checkbox"/>	Y
If yes, detail:	Formalin	

A [Scottish Government Fish Health Inspectorate report in February 2018](#) detailed the use of Formalin at Cooke Aquaculture's Furnace Hatchery on Loch Fyne:

Case No:	2018-0049	Date of visit:	27/02/2018
Time spent on site:	2.5 hours	Main Inspector:	JET
Site No:	FS0339	Site Name:	Furnace (FW)
Business No:	FB0235	Business Name:	Cooke Aquaculture (Freshwater) Ltd

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?		Y
If yes, detail:	Formalin, T.M.S.	
If other, detail:		
2. Medicines records available for inspection?		Y
3. Are records complete and correctly entered?		Y
4. Are fish in a withdrawal period?		Y
5. If yes, what treatment(s)?	Formalin, T.M.S.	

A [Scottish Government Fish Health Inspectorate report in December 2017](#) detailed the use of Formalin at Landcatch's Ormsary Smolt Unit in Argyll:

Case No:	2017-0620	Date of visit:	13/12/2017
Time spent on site:	1 hour	Main Inspector:	AJW
Site No:	FS0575	Site Name:	Ormsary Smolt Unit
Business No:	FB0061	Business Name:	Landcatch Natural Selection Ltd

Additional Case Information:

Fish going from E19. Not vaccinated. Finished vaccinating other fish last week. Some fin rot and fungus in vaccinated fish treated with formalin. E19 no fungus issues and not treated

Site morts 1/12/17- 13/12/17; 1054, 0.08% attributed to fungus, HSS and post vaccination.

A [Scottish Government Fish Health Inspectorate report in November 2017](#) detailed the use of Formalin at [Marine Harvest's salmon farm in Loch Lochy in Lochaber](#):

Case No:	2017-0560	Date of visit:	29/11/2017
Time spent on site:	5 hours	Main Inspector:	JET
Site No:	FS0150	Site Name:	Loch Lochy
Business No:	FB0119	Business Name:	Marine Harvest (Scotland) Ltd

2017 Q4 production, fish stocked May 2017 - October 2017. Fish affected by fungus throughout cycle, weekly mortality between 1000-3000 (0.1% - 0.2%).
A number of fish in cages 25 and 26 (Finfish stock) had visible lesions, however the fish were very active and deep in the water column and so were unable to be caught for further examination.

Recent (last 4 wks) disease problems?	Y	Any escapes (since last visit)?	N
If yes, detail:	RTFS detected in Finfish Hatchery stock (November 2018). Treated with formalin and pyceze.		

[RTFS = Rainbow Trout Fry Syndrome which is "[increasingly causing problems in Atlantic salmon](#)"]

6. Any other peaks in mortality during period checked?	Y
w/b 16/10/2017 4227 (0.9%) attributed to fungus, pox virus and smolting. Stock all sent out to sea by 30/10/2017. Pre-transfer health check carried out, showed stock positive for salmon pox, branchiomonas and Flavobacterium psychrophilum, mortality levels relatively low and fish in acceptable health for transfer.	

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	Y
If yes, detail:	Formalin, T.M.S., Pyceze
If other, detail:	
2. Medicines records available for inspection?	Y
3. Are records complete and correctly entered?	Y
4. Are fish in a withdrawal period?	Y
5. If yes, what treatment(s)?	Formalin, T.M.S.

A [Scottish Government Fish Health Inspectorate report in November 2017](#) detailed the use of Formalin at [Scottish Sea Farms' salmon farm in Loch Ba on the Isle of Mull](#):

Case No:	2017-0549	Date of visit:	07/11/2017
Time spent on site:	2 hours	Main Inspector:	JET
Site No:	FS0429	Site Name:	Loch Ba
Business No:	FB0125	Business Name:	Scottish Sea Farms Ltd

Additional Case Information:

Site has been reduced to 4 cages (16m2)
 Dead fish waste ensiled at Knock hatchery facility and collected for disposal
 Prophylactic formalin and pyceze treatments carried out 2 days after each stocking during October 2017

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	Y
If yes, detail:	Formalin, Pyceze
If other, detail:	
2. Medicines records available for inspection?	Y
3. Are records complete and correctly entered?	Y
4. Are fish in a withdrawal period?	Y
5. If yes, what treatment(s)?	Formalin

A [Scottish Government Fish Health Inspectorate report in October 2017](#) detailed the use of Formalin at [Marine Harvest's Loch Ness salmon farm](#):

Case No:	2017-0436	Date of visit:	09/10/2017
Time spent on site:	3.5 hrs	Main Inspector:	ASM
Site No:	FS0434	Site Name:	Loch Ness
Business No:	FB0119	Business Name:	Marine Harvest (Scotland) Ltd

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	Y
If yes, detail:	Formalin, Pyceze
If other, detail:	
2. Medicines records available for inspection?	Y
3. Are records complete and correctly entered?	Y
4. Are fish in a withdrawal period?	Y
5. If yes, what treatment(s)?	Formalin, Pyceze

A [Scottish Government Fish Health Inspectorate report in October 2017](#) detailed the use of Formalin at [Cooke Aquaculture's Sallachy salmon farm](#) (certified by the Soil Association as "organic"):

Case No:	2017-0443	Date of visit:	24/10/2017
Time spent on site:	2 hours	Main Inspector:	JET
Site No:	FS0887	Site Name:	Sallachy Site
Business No:	FB0235	Business Name:	Cooke Aquaculture (Freshwater) Ltd

Additional Case Information:

Organic site
 Fish became affected by fungal infection (sapronelegia) post grading w/b 25/09/2017. Unable to treat with Pyceze due to Soil Association objection (Organic site status).
 Treated with formalin: Cages 1-3 20/10/17, cages 4-6 21/10/17, cages 7-8 22/10/17, cages 9-10 23/10/17. Approved by Soil Association. Further formalin treatment planned for 25/10/17.

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	<input type="checkbox"/> Y
If yes, detail:	Formalin
If other, detail:	
2. Medicines records available for inspection?	<input type="checkbox"/> Y
3. Are records complete and correctly entered?	<input type="checkbox"/> Y
4. Are fish in a withdrawal period?	<input type="checkbox"/> Y
5. If yes, what treatment(s)?	Formalin

A [Scottish Government Fish Health Inspectorate report in October 2017](#) detailed the use of Formalin at [Cooke Aquaculture's Cliff salmon farm in Shetland](#):

Case No:	2017-0460	Date of visit:	03/10/2017
Time spent on site:	2 hrs	Main Inspector:	WJM
Site No:	FS1095	Site Name:	Cliff Site
Business No:	FB0095	Business Name:	Cooke Aquaculture Scotland Ltd

Recent (last 4 wks) disease problems?	<input type="checkbox"/> Y	Any escapes (si
If yes, detail:	Saprolegnia like skin lesions, most likely secondary to fungal infection	

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	<input type="checkbox"/> Y
If yes, detail:	Formalin
If other, detail:	
2. Medicines records available for inspection?	<input type="checkbox"/> Y
3. Are records complete and correctly entered?	<input type="checkbox"/> Y
4. Are fish in a withdrawal period?	<input type="checkbox"/> Y
5. If yes, what treatment(s)?	Formalin

A [Scottish Government Fish Health Inspectorate report in October 2017](#) detailed the use of Formalin at [Scottish Sea Farms' Loch Frisa salmon farm on the Isle of Mull](#):

Case No:	2017-0456	Date of visit:	10/10/2017
Time spent on site:	2h	Main Inspector:	DJT
Site No:	fs0428	Site Name:	Loch Frisa
Business No:	FB0125	Business Name:	Scottish Sea Farms Ltd

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?		Y
If yes, detail:	Formalin, Pyceze	
If other, detail:		
2. Medicines records available for inspection?		Y
3. Are records complete and correctly entered?		Y
4. Are fish in a withdrawal period?		Y
5. If yes, what treatment(s)?	Formalin	

A [Scottish Government Fish Health Inspectorate report in October 2017](#) detailed the use of Formalin at Scottish Sea Farms' [PRV-infected](#) Knock salmon farm on the Isle of Mull:

Case No:	2017-0455	Date of visit:	10/10/2017
Time spent on site:	5h	Main Inspector:	DJT
Site No:	fs0254	Site Name:	Knock
Business No:	FB0125	Business Name:	Scottish Sea Farms Ltd

16 May 2017 testing for PRV on two tanks following positive results on sea site post transfer, PCR tests on site were positive for PRV but there was no clinical expression however fungus was evident these fish were culled out on site.

Treatments and Medicines Records

1. Recent treatments (last 4 wks)?		Y
If yes, detail:	Formalin, Pyceze	
If other, detail:		
2. Medicines records available for inspection?		Y
3. Are records complete and correctly entered?		Y
4. Are fish in a withdrawal period?		Y
5. If yes, what treatment(s)?	Formalin	

A [Scottish Government Fish Health Inspectorate report in October 2017](#) detailed the use of Formalin at Marine Harvest's Glenfinnan salmon farm in Loch Shiel:

Case No:	2017-0494	Date of visit:	23/10/2017
Time spent on site:	3.5 hours	Main Inspector:	ALW
Site No:	FS0742	Site Name:	Glenfinnan
Business No:	FB0119	Business Name:	Marine Harvest (Scotland) Ltd

Additional Case Information:

Current stock due to go out to sea sites next month. Fish will be transferred to East Loch Tarbert, Gorsten, Marulaig, Skipport, Stulaigh and Torridon. Fish are transferred via lorry to Mallaig onto Wellboat.
 Site stocked with Q4 generation, but will produce Q3 and Q4 next year. Q3s will only be on site for approx 6 weeks.
 Fish were vaccinated on site with PD3 vaccine. Fish are treated with formalin and pyceze to control fungus. Accidental overdose in one cage during treatment with formalin for fungus due to human error (dosing pump not working correctly).
 Increase in mortality in cage 11 over a couple of weeks, but has reduced to expected levels now.

5. Evidence of recent increased/atypical mortalities?
 If yes, facility nos/no mortality per facility/no stock per facility/reason:
 P11 / 1,343 / 75,000 / overdose during formalin/pyceze treatment.

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	Y
If yes, detail:	Formalin, Pyceze
If other, detail:	
2. Medicines records available for inspection?	Y
3. Are records complete and correctly entered?	Y
4. Are fish in a withdrawal period?	Y
5. If yes, what treatment(s)?	Formalin

A [Scottish Government Fish Health Inspectorate report in October 2017](#) detailed the use of Formalin at [Marine Harvest's salmon farm in Loch Arkaig](#):

Case No:	2017-0495	Date of visit:	24/10/2017
Time spent on site:	4.5 hours	Main Inspector:	ALW
Site No:	FS0649	Site Name:	Loch Arkaig
Business No:	FB0119	Business Name:	Marine Harvest (Scotland) Ltd

Additional Case Information:

Fish from Inverpollly and Lochailort Recirc Unit. Fish probably going out to sea sites in Loch Linnhe, but not certain. No longer holding fish for River Lochy Association.
 Currently grading and vaccinating with Winvil 3 vaccine. Started post vaccination treatments with formalin and pyceze to prevent fungus. Have four mobile pens to move fish around site.

Treatments and Medicines Records	
1. Recent treatments (last 4 wks)?	Y
If yes, detail:	Formalin, Pyceze
If other, detail:	
2. Medicines records available for inspection?	Y
3. Are records complete and correctly entered?	Y
4. Are fish in a withdrawal period?	Y
5. If yes, what treatment(s)?	
If other, detail:	Formalin

A [Scottish Government Fish Health Inspectorate report in July 2017](#) detailed the use of Formalin at [The Scottish Salmon Company's Russel Burn Hatchery on Loch Kishorn](#):

Case No:	2017-0315	Date of visit:	28/07/2017
Time spent on site:	0	Main Inspector:	PMM
Site No:	FS0500	Site Name:	Russel Burn
Business No:	FB0169	Business Name:	The Scottish Salmon Company

Additional Case Information:

Mortalities post vaccination, formalin treatment conducted and numbers dropped to normal levels.

Case No:	2017-0315	Site No:	FS0500	Date of visit:	28/07/2017
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Start date:	End date: (if applicable)	Size of fish:	Average weight of affected population:	Species:	Yearclass:	Timescale	Mortality rate recorded(%)	Explained/unexplained:	If explained, select reason(s):
17/07/2017	27/07/2017	5g to smolting	40g	SAL	2017 presmolt	Weekly	4.42	Explained	Fungus

Total mortality during event (if available):	Additional information (e.g. action taken by company):	Action taken by FHI (include case no where applicable):
40,873	Mortality event attributed to fungus post vaccination. Affected stock were treated with formalin and numbers have dropped.	No further action required. Mortalities dropping to normal levels post treatment.

Please also note that SEPA admitted in July 2019 via [F0190713](#) that it had no record of Formalin use by The Scottish Salmon Company at Russel Burn:



Mr D Staniford
Salmonfarmingkills@gmail.com

Our Ref: F0190713

If telephoning ask for:
 Cara Everitt

19 July 2019

Dear Mr Staniford

REQUEST FOR INFORMATION

Thank you for your recent request, received by SEPA on 24 June 2019 in which you asked for the following information:

1) Russel Burn Hatchery (The Scottish Salmon Company) is not listed in the Excel spreadsheet F0190275 sites as one of the 184 fish farms licensed to use Formaldehyde (Formalin) but it seems clear that it is being used.

Here's a video showing vats of Formaldehyde at the hatchery in June 2019:
<https://vimeo.com/344042944>

A report - "The State of Scottish Salmon Farming in 2018" - published by Scottish Salmon Watch in March 2019 detailed 80,000 mortalities at The Scottish Salmon Company's Russel Burn Hatchery in November 2018 with the use of Formalin identified:

Here's details from the Scottish Government's Fish Health Inspectorate report:

2) Re. the Excel spreadsheet detailing reported use of Formaldehyde in 2017 and 2018 (F0190275-Formaldehyde) surely there are other companies using it? Marine Harvest is the only company reporting use:
For example, if you trawl through the Fish Health Inspectorate's 'Case Information' (online here) you will see numerous cases reporting the use of Formalin (cases which are not reported as in #2 above).

We have applied the exemption under Section 39(2) of the Freedom of Information (Scotland) Act 2002 as we have determined that the information sought in your request is environmental information. We are therefore handling your request under the terms of the Environmental Information (Scotland) Regulations 2004 (EIRs). In this case the public interest in maintaining this exemption and in dealing with the request in line with the requirements of the EIRs outweighs any public interest in disclosing the information under FOISA.

Response

We can confirm that the figures supplied for the previous request (reference F0190275) is the only information held by SEPA regarding the use of Formaldehyde (Formalin) at fish farms. <http://apps.sepa.org.uk/disclosurelog/#>

It is hard to escape the conclusion that salmon farming companies are not reporting all use of Formalin (Formaldehyde) which would appear to run counter to the terms of SEPA's regulations.

[F0191629 disclosed by SEPA on 12 May 2020](#) included the statement that "operators are required to record each individual use of formaldehyde" and the claim that "these records are audited as part of SEPA's routine compliance inspections":

The Ferret response - 28 June 2019

A spokesperson from SEPA, said:

"Every day SEPA works to protect and enhance Scotland's environment.

"Uncontrolled releases of formaldehyde have the potential to cause significant harm to the environment. It is therefore important to ensure that formaldehyde is stored, handled and used appropriately to minimise the risk of any uncontrolled releases.

"The use of formaldehyde is authorised at the Russel Burn hatchery by SEPA and the operators are required to record each individual use of formaldehyde. These records are audited as part of SEPA's routine compliance inspections.

"We take any allegations of environmental breaches very seriously and as an evidenced based organisation we would always take action to investigate where information comes to light. We would therefore encourage anyone with information of non-compliance to contact SEPA, in confidence, via the Pollution Hotline 0800 80 70 60."

So in other words, The Scottish Salmon Company failed to report the use of Formalin (Formaldehyde) at Russel Burn and were therefore guilty of non-compliance?

Furthermore, this 'response' to the Ferret (presumably to Billy Briggs who [wrote up a story published on 30 June 2019](#)) surely did not magic itself out of the air without an email or any internal discussion? Could you please provide the email correspondence (as requested on 28 February 2020)?

Please also provide information relating to records of Formaldehyde (Formalin) use and audits as part of SEPA's routine compliance inspections which reference Formaldehyde (Formalin). Please include any letters, emails and other information to non-compliance and failure to record and report the use of Formaldehyde (Formalin).

Please also include the emails and any other information pertaining to the reporting of Formaldehyde (Formalin) use by companies. For example, the data detailed in the Excel spreadsheet must surely have originated from the companies themselves but that information is not disclosed.

[F0191629 disclosed by SEPA on 12 May 2020](#) includes the statement on 19 July 2019 to The Sunday Times (again presumably to Billy Briggs who [authored an article published on 21 July 2019](#)) that monthly records of chemical use are "submitted as part of the operators data returns":

Sunday times response - 19 July 2019

THE SUNDAY TIMES : LOCH ARKAIG

A spokesperson from SEPA, said:

"Every day SEPA works to protect and enhance Scotland's environment.

"Formaldehyde is authorised under strict limits at Loch Arkaig. The use of chemicals at the site are controlled by the site licence. The records below outline monthly use at the site, as submitted as part of the operators data returns. Chemical records are audited as part of SEPA's routine compliance inspections and the site's current compliance is rated as 'excellent'."

Car license CAR/L/1002071. Data returns highlight use as outlined below:

Month and year	Formaldehyde (active ingredient in grams) total
May 2017	-
June 2017	-
July 2017	-
Aug 2017	356,250
Sep 2017	1,106,250
Oct 2017	3,226,875
Nov 2017	2,212,500
Dec 2017	56,250
Jan 2018	-
Feb 2018	-
Mar 2018	-
Apr 2018	-
May 2018	-
June 2018	-
July 2018	-
Aug 2018	-
Sep 2018	18,780
Oct 2018	206,250
Nov 2018	393,750
Dec 2018	1,258,125
Jan 2019	675,000
Feb 2019	1,350,000
Mar 2019	2,291,250
Apr 2019	2,295,625
May 2019	-

Please therefore provide copies of the operator data returns where Formaldehyde (Formalin) is cited. If an operator failed to report the use of Formaldehyde (Formalin) but corrected this at a later date via email, letter, phone call or other way please provide details.

Scottish Salmon Watch is of the view that this information should have been provided via [F0191629 disclosed by SEPA on 12 May 2020](#) and therefore asks for it to be released as part of your review.

If you consider this information outside the scope of [F0191629](#) please consider this a new FOI request. Please provide a receipt for this FOI request.

Scottish Salmon Watch finds it perplexing that only Mowi/Marine Harvest officially reported the use of Formaldehyde (Formalin) to SEPA prior to August 2019 (as detailed via both [F0190275](#) and [F0191629](#)) and finds it difficult to believe that Mowi was the only company using the cancer-causing chemical. Indeed, Scottish Salmon Watch cannot help but speculate that our [press release dated 26 June 2019](#) triggered the reporting of Formaldehyde (Formalin) use by other companies (i.e. their non-reporting became an issue which they were prompted to remedy and may have back-dated or corrected monthly operator data returns).

In fact, here's the reports of Formaldehyde (Formalin) use as disclosed by SEPA via [F0191629](#) by Cooke Aquaculture, Scottish Sea Farms, Kames, The Scottish Salmon Company, Migdale Smolts and Torridon Smolts which all post-date [Scottish Salmon Watch's June 2019 press release](#):

Site Name	Operator	Licence	Month	Formaldehyde (active ingredient in grams)
Salachy, Loch Shin	Cooke Aquaculture Freshwater Ltd	CAR/L/1002017	Aug-19	114000
Loch Frisa	Scottish Sea Farms Ltd	CAR/L/1000224	Aug-19	152000
Loch Avich Fish Farm	Kames Fish Farming Ltd	CAR/L/1000235	Sep-19	396000
Loch Damph (South), Coudron	The Scottish Salmon Company Ltd	CAR/L/1003990	Sep-19	30000
Loch Avich Fish Farm	Kames Fish Farming Ltd	CAR/L/1000235	Oct-19	390000
Loch Tralaig	Kames Fish Farming Ltd	CAR/L/1000233	Oct-19	253000
Loch Tralaig	Kames Fish Farming Ltd	CAR/L/1000233	Nov-19	624000
Corrie Kinloch, Loch Shin	Migdale Smolt Ltd	CAR/L/1003918	Nov-19	247500
Loch Damph (North)	Torridon Smolts Ltd	CAR/L/1003924	Nov-19	52500
Loch Tralaig	Kames Fish Farming Ltd	CAR/L/1000233	Dec-19	526000

Could you therefore also please re-check your records for reported uses of Formaldehyde (Formalin) prior to April 2019? Please consider this a new FOI request or consider as part of this review.

In terms of the non-disclosure of 35 emails (including email chains and seven additional attachments) please re-consider this refusal. SEPA's letter dated 12 May 2020 argued:

In addition we confirm that SEPA received a series of emails relating to the use of Formalin/Formaldehyde by Kames in Loch Tralaig dated between 11 April 2019 and 28 February 2020. Please refer to the enclosed seven documents containing copies of the eight SEPA responses to the emails.

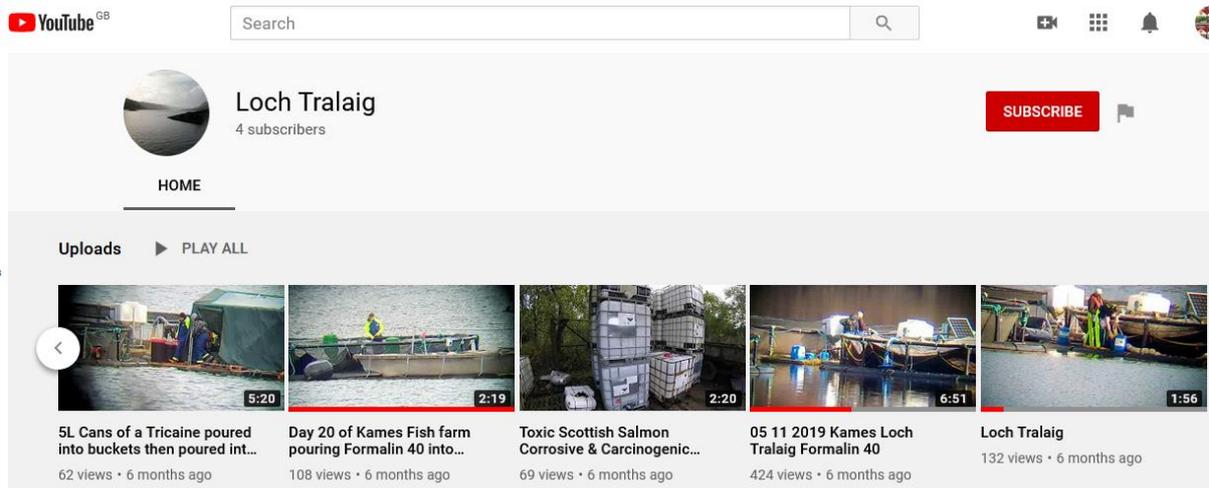
We have withheld the 35 email including email chains and seven additional attachments from third parties to SEPA relating to the use of Formalin/Formaldehyde by Kames in Loch Tralaig dated between 11 April 2019 and 28 February 2020. The information has been withheld under Regulation 10(5)(f) of the Environmental Information Regulations 2004. The text of which is reproduced below;

- (5) A Scottish public authority may refuse a request to make environmental information available to the extent that its disclosure would, or would likely to prejudice substantially-
- (f) the interests of the person who provided the information where that person-
- (i) was not under, and could not have been put under, any legal obligation to supply the information;
- (ii) did not supply it in circumstances such that it could, apart from these Regulations, be made available; and
- (iii) has not consented to its disclosure

We note the information was voluntarily provided to SEPA, as the third parties were under no legal obligation to supply the emails or attachments. We considered if the correspondence could be released with personal data redacted in accordance to regulations 11(1) and 11(2), however following redaction of

the emails and attachments it was deemed likely the content could allow the identity of individuals to be ascertained or inferred. The release would be likely to prejudice substantially the likelihood of future similar correspondence from third parties to be supplied to SEPA. The Public Interest Test was carried out in relation to the information to be withheld under Regulation 10(5)(f) of the EIRs. In this case, we recognise that Regulation 10(2)(b) requires SEPA to apply a presumption favour of disclosure. The public interest in favour of disclosure is outweighed by that in favour of withholding. Requests for such information are considered by SEPA on a case by case basis. In this case, it was determined that the public interest would not be served by the release of the information at this time.

Scottish Salmon Watch understands that "the information was voluntarily provided to SEPA" and also notes that video evidence detailing the use of Formalin by Kames has already been [publicly posted by a user called 'Loch Tralaig' on You Tube.](#)



Has SEPA even contacted this third party to ask about disclosure? As part of this FOI review could you please contact the third party to formally request that all the information is disclosed. The current disclosure only gives a partial insight into the complaints and repeated emails to SEPA over a prolonged period in 2019 and 2020. SEPA's censorship of the documents is unreasonable and runs counter to the principles of Freedom of Information.

Moreover, the partial information disclosed by SEPA suggests that Kames has failed to report ALL use of Formalin (Formaldehyde) in Loch Tralaig. For example, this undated 'SEPA Environmental Event Report' stems from a complaint filed on 2 July 2019:

SEPA Environmental Event Report

Action

Description

[REDACTED] for the past 3 months water levels have been extremely low. [REDACTED] says the loch has been 'dead' for the last two months, the water is stinking, and [REDACTED] hasn't seen any of the wildlife [REDACTED] normally sees regularly (Ospreys, eagles, otters, fish, smolt). [REDACTED].

[REDACTED] concerned that the deterioration may have been caused either by the fish farm increasing its capacity by 300% or by the hydro scheme abstracting too much water.

[REDACTED] aware SEPA monitors water quality monthly, but says the samples are taken at a freshwater inlet. [REDACTED] thinks sampling should be done at the fish farm instead.

2/7/19 14:30 [REDACTED] called complainant to discuss

10/7/2019 [REDACTED] visits Kames for Loch Tralaig record inspection.

13.08.2017 [REDACTED] calls looking for update. [REDACTED] returns call. [REDACTED] very angry and frustrated re perceived impact on loch and lack of action from SEPA. [REDACTED] makes lots of allegations re poor mgmt from fish farm and severe impact on loch, saying [REDACTED] would make a complaint about SEPA's action to date. Agreed in end that [REDACTED] would email to lay out situation in its entirety and SEPA would then call [REDACTED] to discuss.

16/09/2019 - [REDACTED] has obtained information from Kames about production and tonnages of food used etc. [REDACTED] prepares a response and sends to complainant which results in further discussion. Complainant reiterates concerns about production rates and records to SEPA, what the fungus disease was and whether or not it is possible it could be affecting native fish stocks. Loch levels in Tralaig have been fluctuating widely of late as SSE is operating reservoir at a lower starting position than normal to offset renewable energy generation from wind to water. This may be impacting on food available in littoral zone but not sure if this could be proven. Complainant concerned over use of same volumes of chemicals in a loch with reduced water levels and wants this to be remodelled. Also has concerns about smell/odours from fish farm and chemical/formalin use at site. SSE has stopped flushing sluice gates at Loch Tralaig about three years ago and this may be resulting in less juveniles making it into the loch to grow to adult size. Not sure how this relates to loch ecology and impact on fish populations and further investigation is likely required.

Waiting for further response from [REDACTED] to obtain further information from Kames/Fish Farm Operator and [REDACTED] to consider what other work could be done, speak with [REDACTED] and get water level data from [REDACTED] as this has still not been forthcoming.

An email dated 5 September 2019 from SEPA's Benedict Tustin disclosed via [F0191629](#) refers to the use of "repeat Formalin treatments" in the 2018-2019 cycle:

From: Tustin, Benedict
Sent: 05 September 2019 10:48
To: [REDACTED]
Subject: 20190905 [REDACTED] - CARL1000233 [REDACTED] RE: Loch Tralaig

Kames Fish Farming has operated a fish farm on the loch since 1978 and although the number of cages in use on the loch has increased this is not indicative of an increase in annual production. The site is licensed for a maximum standing biomass of 7.5 tonnes and an annual production limit of 20 tonnes and company records indicate that the maximum biomass in 2017-18 was 6 tonnes with an annual production of 6.7 tonnes and for 2018-19 this was 6.5 tonnes with an annual production of 7.1 tonnes. The site used 28 tonnes of food between August 2017 and February 2018 and 42.9 tonnes between August 2018 and April 2019. The 2018-19 cycle was 46 days longer than the previous one and an outbreak of fungus resulted in higher mortalities being experienced over this growing cycle which will account for increased feed use and operator activity.

The fungal outbreak required the use of repeat formalin treatments but the maximum amount being used within a 24 hour period of 150 litres is within SEPA authorised limits. Maximum treatment volumes were determined through modelling to ensure that the treatment quantity cannot exceed environmental quality standards. SEPA is currently reviewing the use of treatment medicines/chemicals at both marine and freshwater fish farm sites and this may result in some changes to the types that can be used and in what quantities. No changes are proposed in the interim and the outcome of our review is likely to require further discussions with the Veterinary Medicines Directorate (VMD) and industry. Veterinary surgeons are currently able to prescribe the use of [formaldehyde](#) containing products in aquaculture for the prevention of disease.

So why has Kames only reported the use of Formaldehyde three times during 2019 all after SEPA's email of September in October, November and December 2019?

Site Name	Operator	Licence	Month	Formaldehyde (active ingredient in grams)
Loch Tralaig	Kames Fish Farming Ltd	CAR/L/1000233	Nov-19	624000
Loch Tralaig	Kames Fish Farming Ltd	CAR/L/1000233	Dec-19	526000
Loch Tralaig	Kames Fish Farming Ltd	CAR/L/1000233	Oct-19	253000

Another email refers to "discussions at a national/UK level with the Veterinary Medicines Directorate (VMD) about formalin and other chemicals used in freshwater and marine aquaculture".

From: [REDACTED]
Sent: Wednesday, November 06, 2019 11:50 AM
To: [REDACTED]
Subject: RE: Apologies for .. well you know

[REDACTED]
Following our discussion this morning I have left a message for [REDACTED] of Argyll & Bute Council Environmental Health to contact me.

SEPA has begun investigating the use of formalin at this site including volume and timings although this is not something that we can resolve or conclude immediately.

I have requested additional ecology work and this has to be planned although initial results phytoplankton sampling undertaken this summer did not indicate any impact on loch ecology from the presence/activities of the fish farm. I'm pretty sure I referred to this in my original email to you but I am not able to locate a copy of that correspondence at the moment on our files. I did mistakenly misinterpret their biomass/production figures in that email as we subsequently discussed on the phone.

We may need to obtain copies of video footage and a statement from yourself depending on the outcome of our investigations.

SEPA is already involved in discussions at a national/UK level with the Veterinary Medicine Directorate (VMD) about formalin and other chemicals used in freshwater and marine aquaculture. I am not directly involved in these

discussions but I will be made aware of any outcomes that affect day to day use of chemical treatments for fish welfare or disease issues.

Where is the information relating to "discussions at a national/UK level"? Scottish Salmon Watch is of the view that this information should have already been disclosed via [F0191629](#). Please reconsider this non-disclosure via this review or treat as a new FOI.

Finally, please note that Scottish Salmon Watch's [letter to SEPA, Scottish Ministers and the VMD dated 26 June 2019](#) included the recommendation that a public register be established; namely:



Scottish Ministers: scottish.ministers@gov.scot
Scottish Environment Protection Agency: terry.ahern@sepa.org.uk
Veterinary Medicines Directorate: postmaster@vmd.defra.gsi.gov.uk

26 June 2019

Public Register of ALL toxic chemical use on Scottish salmon farms & Immediate Ban on Carcinogenic Formaldehyde (Formalin)

Scottish Salmon Watch asks for inter-governmental co-operation to establish a public register of ALL toxic chemicals used on Scottish salmon farms.

As far as we understand it, only data detailing use of the sea lice chemicals Azamethiphos, Cypermethrin, Deltamethrin, Emamectin Benzoate and Teflubenzuron is [published via the Scotland's Aquaculture web-site](#) (and even here the use of Azamethiphos and Deltamethrin via well boats is [understand to be unreported](#) although we believe this anomaly may soon be rectified).

Data on the use of [Hydrogen Peroxide](#) (which has [sky-rocketed over the last decade](#) - along with the [use of sea lice chemicals](#)), [Antibiotics](#) and other toxic chemicals such as the carcinogenic [Formaldehyde \(Formalin\)](#) is not routinely published except [via Freedom of Information](#).

The [confusion](#) regarding the use of [Formaldehyde \(Formalin\)](#) as [either a biocide or prescribed by a veterinarian via the 'Cascade'](#) illustrates the need for clarity in reporting and the urgent need for a public register.

The use of [Formaldehyde \(Formalin\)](#) by salmon farms in Scotland is an interesting case study which warrants further investigation.

The letter concluded:

Surely the Scottish Government together with the VMD and SEPA should report the use of Formaldehyde (Formalin) via a public register?

Finally, in view of serious health concerns surrounding its carcinogenicity as well as welfare and environmental concerns, Scottish Salmon Watch calls for an immediate ban on the use of Formaldehyde (Formalin) on Scottish salmon farms.

Please provide a receipt for this FOI review request.

Yours sincerely,

Don Staniford

Director, Scottish Salmon Watch