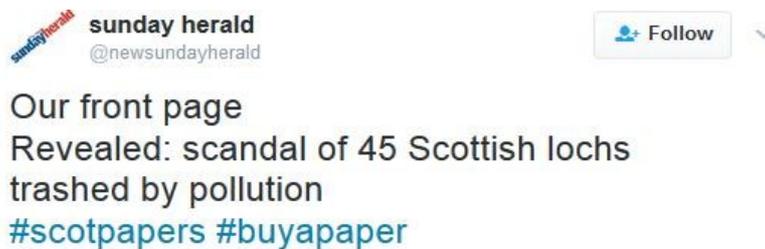


The Global Alliance Against Industrial Aquaculture, 26 February 2017

Toxic Toilets - Salmon Farms Pollute Scotland's Lochs

Exclusive information obtained via FOI from the Scottish Environment Protection Agency (SEPA) reveals how Scottish salmon farms are polluting Scotland's pristine marine environment with toxic chemicals[1]. The Sunday Herald [reported](#) on their front page today:



"At least 45 lochs around Scotland's coast have been contaminated by toxic pesticides from fish farms that can harm wildlife and human health, according to data released by the Scottish Environment Protection Agency," [reported](#) award-winning journalist [Rob Edwards](#). "Levels of chemicals used to kill the sea lice that plague caged salmon have breached environmental safety limits more than a hundred times in the last 10 years. The chemicals have been discharged by 70 fish farms run by seven companies. The pollution has been condemned as a 'toxic timebomb' by environmental campaigners, who are lodging a formal complaint with the European Commission".

Dr Richard Luxmoore, senior nature conservation adviser to The National Trust for Scotland, told [The Sunday Herald](#). "The environmental standards have been put there for a good reason. It is highly worrying that they have been breached so many times. This is yet more evidence that the chemical warfare waged by fish farms against sea lice has essentially been lost and the application of toxins to kill them is spiralling out of control."

Dr Sam Collin from the Scottish Wildlife Trust told [The Sunday Herald](#): “It’s worrying that there have been so many breaches of the standards for its use. This particular chemical stays in the marine environment for a long time and is capable of causing harm to a wide variety of sea life, in particular invertebrates such as shellfish.”

"SEPA is permitting salmon farmers across Scotland to pollute with impunity," said Don Staniford of the [Global Alliance Against Industrial Aquaculture](#). "Breaches of environmental standards for chemical pollution under salmon farms are now becoming standard practice as SEPA shamefully turns a blind eye. The alarming rise in Emamectin use is now becoming a public health issue with the Veterinary Medicines Directorate reporting at least six cases of Emamectin contamination of farmed salmon since 2005. The safest way to avoid chemical contamination is to boycott farmed salmon. [Just say no to drugs, say no to Scottish salmon.](#)"

The data shows over 130 breaches of SEPA's Environmental Quality Standards for the toxic chemicals Emamectin benzoate and Teflubenzuron since 2001 [1]. The worst contamination (measured in terms of a breach of the EQS) was [Marine Harvest's salmon farm in Loch Shell, Harris](#), which breached the EQS for Teflubenzuron by a staggering 527 times in January 2012 and Loch Duart's Badcall salmon farm in Eddrachillis Bay, Highland, which breached the EQS for Teflubenzuron by a staggering 500 times in December 2012.

Scottish Sea Farms breached the EQS for Teflubenzuron at their Teisti Geo in Clift Sound, Shetland, by 385 times in 2013. In 2015, the use of Teflubenzuron was "[withdrawn from the market after scientists found that that it can leak into lochs and kill crabs, shrimps and lobsters](#)".



In terms of breaches of the EQS for Emamectin benzoate the worst salmon farm was Spelve A (Balure) operated by Scottish Sea Farms on the Isle of Mull which breached the EQS by 15 times in June 2016. Marine Harvest's salmon farm at Duich in Loch Duich (a [Special Area of Conservation](#)) breached the EQS by 8 times in February 2016.

Breaches of EQS for Chemicals in Sediments					
Submitted By	Active Ingredient	Sample Date	Site Name	Receiving Water	Local Authority
Loch Duart Ltd	Teflubenzuron	07-Dec-12	Badcall Site 11 (Eilean Riabh	Eddrachillis Bay	Highland
Scottish Sea Farms Ltd	Teflubenzuron	11-Jun-13	Teisti Geo	Clift Sound	Shetland Islands
Wester Ross Fisheries Ltd	Teflubenzuron	06-Apr-11	Ardmair (Isle Martin)	Loch Broom	Highland
Marine Harvest (Scotland)	Teflubenzuron	10-Jan-12	Mid Loch Shell / Pairc - West	Loch Shell	Eilean Siar
Scottish Sea Farms Ltd	Teflubenzuron	11-Jun-13	Holms Geo (Site 3)	Clift Sound	Shetland Islands
Loch Duart Ltd	Teflubenzuron	04-Dec-12	Drumbeg (Loch Dhrombaig)	Eddrachillis Bay	Highland
Scottish Sea Farms Ltd	Teflubenzuron	22-Jan-13	Slocka (Site C)	Ronas Voe	Shetland Islands
Wester Ross Fisheries Ltd	Teflubenzuron	13-Mar-13	Ardmair (Isle Martin)	Loch Broom	Highland
Loch Duart Ltd	Teflubenzuron	04-Dec-12	Droighniche	Eddrachillis Bay	Highland
Scottish Sea Farms Ltd	Teflubenzuron	18-Oct-13	Loura Voe (Site 3)	Dury Voe	Shetland Islands
Wester Ross Fisheries Ltd	Teflubenzuron	13-Mar-13	Ardmair (Isle Martin)	Loch Broom	Highland
Loch Duart Ltd	Teflubenzuron	31-Dec-12	Calbha Site 5 (Calbha Beag)	Eddrachillis Bay	Highland
The Scottish Salmon Comp	Teflubenzuron	15-Jan-14	Tuath (Rubha na Gall)	Loch Tuath	Argyll and Bute
Scottish Sea Farms Ltd	Emamectin Benz	24-Feb-09	Spelve B (Dalnaha)	Loch Spelve	Argyll and Bute
Scottish Sea Farms Ltd	Emamectin Benz	30-Jun-16	Spelve A (Balure)	Loch Spelve	Argyll and Bute
Scottish Sea Farms Ltd	Emamectin Benz	24-Jul-07	Achintraid (Kishorn Site 1)	Loch Kishorn	Highland
Marine Harvest (Scotland)	Emamectin Benz	03-Feb-16	Duich	Loch Duich	Highland
Marine Harvest (Scotland)	Emamectin Benz	21-Apr-08	Portnalong	Loch Bracadale	Highland
Lighthouse Caledonia Ltd	Emamectin Benz	14-Oct-08	St Molios	Lamlash Bay	North Ayrshire
Marine Harvest (Scotland)	Emamectin Benz	08-May-12	Duich	Loch Duich	Highland
Marine Harvest (Scotland)	Emamectin Benz	21-Mar-07	Gorsten	Loch Linnhe	Highland
Marine Harvest (Scotland)	Emamectin Benz	18-Nov-14	Duich	Loch Duich	Highland

Read the data in full [online here](#) and see Note [1] for an explanatory note on how to decipher the data (summaries of the data are available [online here](#) and [online here](#)).

The Sunday Herald [reported today](#) that the following 45 lochs were contaminated:

Highland: Inner Sound, Loch a Chairn Bhain, Loch Alsh, Loch Bracadale, Loch Broom, Loch Duich, Loch Ewe, Loch Kishorn, Loch Laxford, Loch Nevis, Loch Torridon, Sound of Raasay

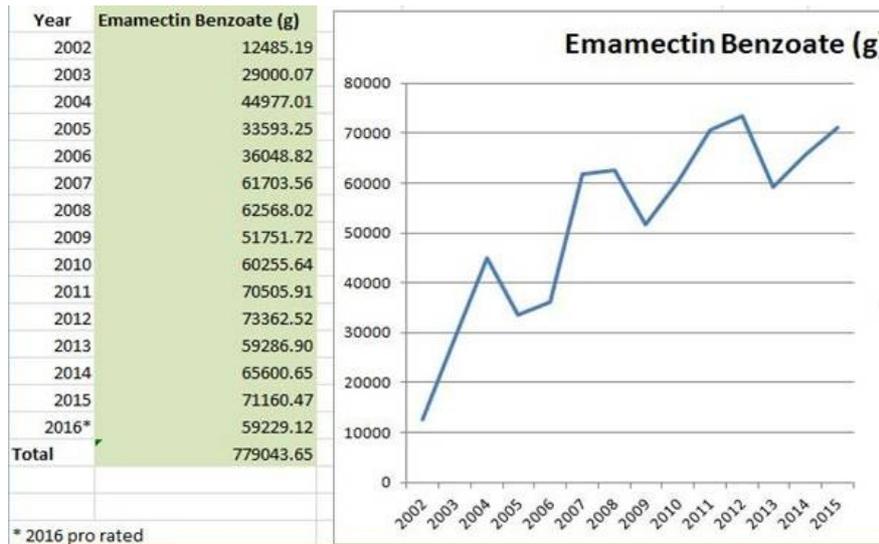
Argyll & Bute: Firth of Lorn, Kilbrannan Sound, Loch Craignish, Loch Creran, Loch Fyne, Loch Spelve, Loch Tuath, Shuna Sound, Sound of Gigha, Sound of Jura, Sound of Mull,

Shetland: Cat Firth, Clift Sound, Clousta Voe, Colla Firth, Dury Voe, Lax Firth, Off Lunnans, Olnafirth, Ronas Voe, Swarbacks Minn, The Deeps

Outer Hebrides: East Loch Tarbert, Loch Boisdale, Loch Erisort, Loch Roag, Loch Seaforth, Loch Skipport

North Ayrshire: Lamlash Bay

Last month, The Sunday Times [revealed](#) that the use of toxic chemicals on Scottish salmon farms had risen by 1000% in the last decade. Emamectin benzoate use increased six-fold between 2002 and 2015 (12 kg in 2002 compared to 71 kg in 2015) with salmon farms operated by Scottish Sea Farms and Marine Harvest dominating the [Top 20 uses of Emamectin benzoate](#) [2].



"Toxic chemicals from salmon farms have flooded Scottish lochs for over three decades contaminating shellfish and the seabed," continued Staniford. "Scotland's pristine marine ecosystems are being corroded by the chemical wastes from salmon farms which [now discharge the sewage equivalent of 17.8 million people](#) - that's over three times the population of Scotland. Scottish salmon farming is a toxic time-bomb which is certain to explode if the Government continues to support a [doubling of aquaculture by 2030](#)."



A scientific paper [published in Environmental Science & Technology in October 2016](#) revealed how Emamectin benzoate "may cause collateral damage" in shellfish such as lobsters (read more via "[Anti-sea lice drugs may pose hazard to non-target crustaceans](#)" and [Scientific Backgrounder: Ecotoxicity & Chemicla Resistance](#)).

According to SEPA's '[Scottish Pollutant Release Inventory](#)', Emamectin benzoate "is a pesticide which works by interfering with nerve impulses in the body" and "exposure to Emamectin benzoate may also cause tremors".

How might exposure to it affect human health?

Emamectin benzoate can enter the body either by inhalation of air containing emamectin benzoate, ingestion of contaminated food or water, or by dermal contact with emamectin benzoate. There is little evidence as to the full effects of exposure to emamectin benzoate on human health. However, exposure to emamectin benzoate may cause irritation of the respiratory tract, eyes and skin. Animal studies suggest that exposure to emamectin benzoate may also cause tremors. The International Agency for Research on Cancer has not designated emamectin benzoate in terms of its carcinogenicity. However, exposure to emamectin benzoate at normal background levels is unlikely to have any adverse effect on human health.

The UK's Veterinary Medicines Directorate (VMD) has reported Emamectin contamination of farmed salmon on numerous occasions in the last decade [3]. In December 2016, the VMD [reported](#):

Farmed Fish				
Farmed Trout	Dieldrin 160 ug/kg 1601659		Great Britain	Awaiting investigation report.
Farmed Salmon	Emamectin 120 ug/kg 1601859	N/A	Great Britain	Linked with 1601858 and 1601857. The investigation established that there was an error in the biomass calculation which led to an incorrect split of the medicated feed between the cages being treated and resulted in an overdose. The farm has implemented additional control check points with regard to biomass calculations to prevent this type of error re-occurring in future. The farmer has been given written advice on the requirements for responsible use of veterinary medicines.
Farmed Salmon	Emamectin 150 ug/kg 1601858	N/A	Great Britain	Linked with 1601859 and 1601857. The investigation established that there was an error in the biomass calculation which led to an incorrect split of the medicated feed between the cages being treated and resulted in an overdose. The farm has implemented additional control check points with regard to biomass calculations to prevent this type of error re-occurring in future. The farmer has been given written advice on the requirements for responsible use of veterinary medicines.
Farmed Salmon	Emamectin 170 ug/kg 1601857	N/A	Great Britain	Linked with 1601858 and 1601859. The investigation established that there was an error in the biomass calculation which led to an incorrect split of the medicated feed between the cages being treated and resulted in an overdose. The farm has implemented additional control check points with regard to biomass calculations to prevent this type of error re-occurring in future. The farmer has been given written advice on the requirements for responsible use of veterinary medicines.

GAAIA has asked for a review of the VMD's refusal to name the companies involved. In 2012, GAAIA [revealed](#) other cases of Emamectin contamination of farmed salmon - including:

2012 - Scottish Salmon Company, Lamlash Bay, Isle of Arran, North Ayrshire

2010 - Lakeland Marine, Bagh Dail Nan Cean, Loch Melfort, Argyll & Bute

2009 - Skelda Salmon, Sian Bay in Setter Voe, Shetland

2006 - Scottish Sea Farms, Hoy, Orkney

2005 - Marine Harvest, Loch Shell, Outer Hebrides

Read the FOI documents disclosed by the Scottish Government in 2012 [online here](#) and see Note [3] for more details.

Today (26 February), GAAIA also published other documents obtained from SEPA via FOI which [revealed](#):

- almost a fifth (18%) of marine salmon farms were classified by SEPA as failing and responsible for "at least one significant breach"

- Norwegian-owned Marine Harvest is the worst operator with 13 "failing" salmon farms in 2015 (that's 27% of the 49 marine salmon farms it operates)

- 2015 is the worst year with 51 marine salmon farms rated as "poor" (up from 37 in 2014)

- The 16 worst salmon farms included four sites operated by Cooke Aquaculture, four by the Scottish Salmon Company, three by Grieg Seafood, three by Marine Harvest, one by Scottish Seafarms and one by Wester Ross Fisheries

Read press release and media backgrounder via "[Failing Fish Farms - 18% rated "poor" by SEPA in 2015](#)"

Data on non-compliances of chemical residues in sediment under salmon farms included:

2015:

Marine Harvest:

CAR/L/1028518	Marulaig Bay MCFF, Loch Boisdale, South Uist
Marulaig Bay marine cage fish farm is Poor for 2015 due to a cage edge Emamectin Benzoate residue failure and a breach in the stocking density licence condition. SEPA is working with the operator to improve licence compliance and reduce the environmental impact from the farm.	

CAR/L/1004080	Scotasay MCFF, East Loch Tarbert
Scotasay marine cage fish farm is Poor for 2015 due to repeated exceedence of the licenced azamethisphos discharge limit. The situation arose from an administrative error which has now been resolved.	

2014:

Marine Harvest:

CAR/L/1009963	Seaforth MCFF, Loch Seaforth, Isle of Harris
---------------	--

The operator exceeded their permitted use of sea louse medicine Emamectin Benzoate (Slice). SEPA is working with the operator to prevent any future recurrence.

2013:

Marine Harvest:

Camas Glas MCFF, Loch Sunart

Late reporting of monitoring data. Exceedence of sediment SLICE EQS.

Loch Duart:

CAR/L/1001808 Eilean Riabhach MCFF (Site 11), Badcall Bay

Teflubenzuron treatment completed 10/11/12, residue sampled 27 days later on 7/12/12, within the 10-30 day window. Reported to SEPA within 16 weeks of sampling on 2/4/13. The average of the far field replicates exceeded the far field PNEC.

Company applied for an Operator initiated variation to remove Teflubenzuron from this sites licence on 27/8/13 this was granted on 9/12/13.

Emamectin Benzoate treatment completed 26/7/12, seabed residue sampled 191 days later on 2/2/13 outwith the 80-169 day window

Loch Duart:

CAR/L/1001826 Loch Dhrombaig MCFF, Eddrachillis Bay

Calicide far field sample results greater than 2 times EQS so classed as significant breach.

2012:

Loch Duart:

CAR/L/1001808 Eilean Riabhach MCFF (Site 11), Badcall Bay

Borderline sea bed survey undertaken in accordance with the Licence conditions by the operator on 17 July 2012.

Residue returns following treatment with Emamectin in Sept 2011, Teflubenzuron in Nov 2011 and Teflubenzuron in May 2012 due to be reported to SEPA in accordance with conditions of Licence not submitted.

Residue returns following treatment with Emamectin in Jan 2012 due to be reported to SEPA in accordance with conditions of Licence not submitted within required timescale. Results comply with the conditions of the licence.

Marine Harvest:

CAR/L/1004218 Mid Loch Shell East MCFF, Loch Shell

This site is poor due to an unsatisfactory benthic seabed survey and a far field exceedence was recorded in the slice residual survey.

2011:

Loch Duart:

CAR/L/1003892 Rubh an Aiseig MCFF (Site 1), Loch Laxford

This site is not compliant because of an unsatisfactory seabed survey undertaken in accordance with the licence conditions by the operator on 24/08/2011 and reported to SEPA outwith the required timescale on 16/01/2012.

In addition to the above the salmon were treated with Emamectin on 14/09/2010, the residue was sampled in accordance with the licence conditions by the operator on 18/01/2011 return received by SEPA outwith the required timescale on 10/11/2011, exceedence at far field site.

This FOI data is posted online via [SEPA's disclosure log](#) (F0187239).

GAAIA is [co-ordinating a protest in Edinburgh on 16 March](#) outside a conference "celebrating" 25 years of the "international success" of "sustainable" salmon. For more details read: ["Celebrate" 25 years of "international success of Scottish salmon"?!.](#)



For more background read:
["25 Reasons to Boycott Scottish Salmon"](#)
["25 Years of Scottish Salmon Shame"](#)

Contact:

Don Staniford: 07771 541826 (dstaniford@gaaia.org)

Notes to Editors:

[1] Download an Excel spreadsheet made available by SEPA via FOI on 16 December 2016 [online here](#) (download summaries of the data [online here](#) and [online here](#)).

Here's an extract from a [SEPA document](#) defining EQS's for Emamectin benzoate and Teflubenzuron in sediment:

Table 9b Operational Sediment Quality Standards used by SEPA for regulating the use of chemicals in aquaculture

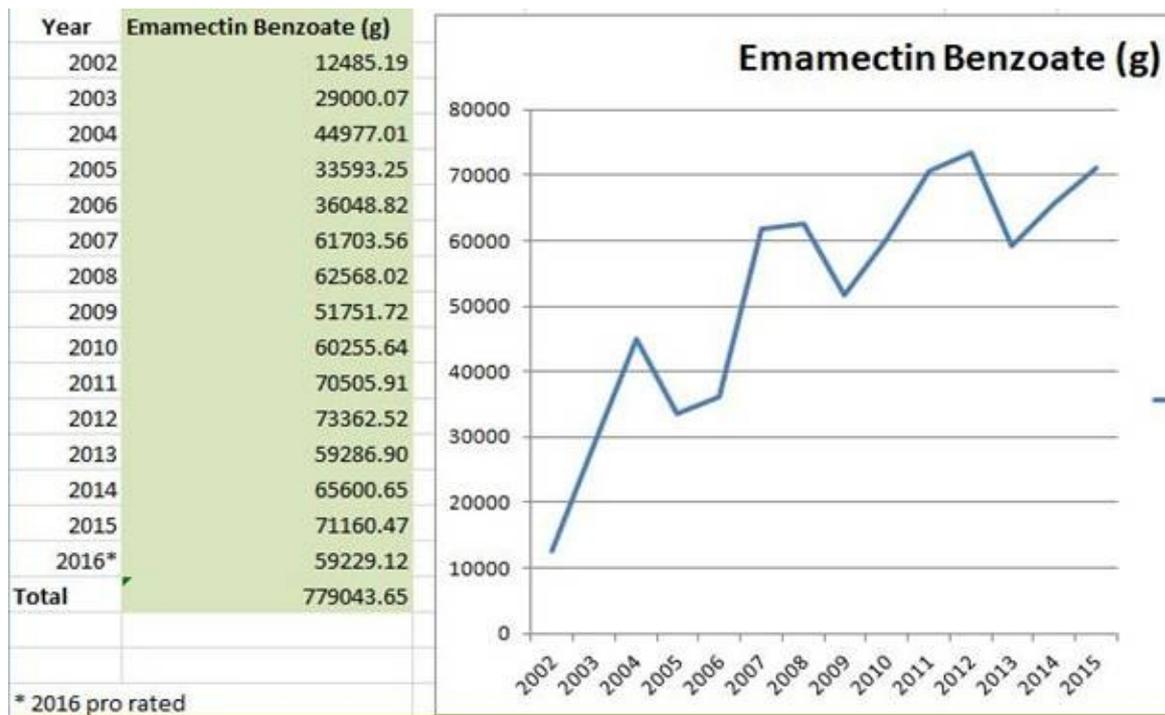
Substance	Sediment Quality Standard				Reference
	Freshwater		Marine		
	AA	MAC	AA	MAC	
Slice (active ingredient: Emamectin Benzoate)	-	-	-	0.763 µg/kg-wet weight (5cm core depth outside zone of effects area. 100m from edge of cages, increased up to 150m where strong directional currents exist)	SEPA Recommendation (1999)
Calicide (active ingredient: Teflubenzuron)	-	-	10.0 mg/kg-dry weight (5cm core depth applied within the immediate under cage impact zone, up to 25m from cage edges)	2.0 µg/kg-dry weight (5cm core depth outside zone of effects area. 100m from edge of cages, increased up to 150m where strong directional currents exist)	SEPA Policy 29 (1999)

Data on chemical residues on sediments under salmon farms is also published [online via the Scotland's Aquaculture web-site](#).

[2] Note the Emamectin usage data obtained from SEPA and [published via the Sunday Times on 1 January 2017](#):

Includes:

- Emamectin benzoate use increased six-fold between 2002 and 2015 (12 kg in 2002 compared to 71 kg in 2015)



Top 20 Uses of Emamectin Benzoate (2002-2016)					
Year	Em benz (g)	Site Name	Operator	Receiving Water	Local Authority
01-Dec-11	1474	Vidlin North	Scottish Sea Farms Ltd	Vidlin Voe	Shetland Islands
01-Jun-04	1313	Scallastle Bay	Scottish Sea Farms Ltd	Sound of Mull	Argyll and Bute
01-Jan-13	1272	Camas an Leim (Torridon)	Marine Harvest (Scotland) Ltd	Loch Torridon	Highland
01-Dec-11	1200	Bellister	Scottish Sea Farms Ltd	Dury Voe	Shetland Islands
01-Dec-03	1190	Binna Ness	Scottish Sea Farms Ltd	Stromness Voe	Shetland Islands
01-May-12	1175	Invasion Bay	Marine Harvest (Scotland) Ltd	Loch Sunart	Highland
01-Mar-11	1088	Ardgour (Linnhe)	Marine Harvest (Scotland) Ltd	Loch Linnhe	Highland
01-Feb-13	1064	Ardgour (Linnhe)	Marine Harvest (Scotland) Ltd	Loch Linnhe	Highland
01-Jun-04	1055	Greshornish	Marine Harvest (Scotland) Ltd	Loch Snizort	Highland
01-Jul-04	1050	Eishort	Marine Harvest (Scotland) Ltd	Loch Eishort	Highland
01-Dec-04	1049	Skipport Outer (Ornish)	Marine Harvest (Scotland) Ltd	Loch Skipport	Eilean Siar
01-Aug-11	1045	Ardgour (Linnhe)	Marine Harvest (Scotland) Ltd	Loch Linnhe	Highland
01-Oct-09	1007	Druimyeon Bay	The Scottish Salmon Company Ltd	Sound of Gigha	Argyll and Bute
01-Nov-11	1001	Maol Ban	Marine Harvest (Scotland) Ltd	Inner Sound	Highland
01-Dec-04	996	Gorsten	Marine Harvest (Scotland) Ltd	Loch Linnhe	Highland
01-Aug-04	978	Duich	Marine Harvest (Scotland) Ltd	Loch Duich	Highland
01-Mar-09	975	Gorsten	Marine Harvest (Scotland) Ltd	Loch Linnhe	Highland
01-Dec-04	975	Ardgour (Linnhe)	Marine Harvest (Scotland) Ltd	Loch Linnhe	Highland
01-Jun-04	969	Skipport Outer (Ornish)	Marine Harvest (Scotland) Ltd	Loch Skipport	Eilean Siar
01-Jun-12	945	Scallastle Bay	Scottish Sea Farms Ltd	Sound of Mull	Argyll and Bute

Read online via "[Scottish Salmon's Lethal Legacy](#)"

[3] Here's an appeal to the Veterinary Medicines Directorate over their refusal to disclose the names of the companies involved in Emamectin contamination of farmed salmon in 2016:

From: Don Staniford [mailto:salmonfarmingkills@gmail.com]

Sent: 20 February 2017 22:41

To: 'ati@vmd.defra.gsi.gov.uk'

Cc: 'Lewsey, David'

Subject: Addendum: Review request re. FOI on Emamectin non-compliant cases for farmed salmon (1601857, 1601858 & 1601859) - VMD ref: ATI437

Please pass this onto Mike Griffiths who is conducting the internal review.

Please also note a FOI reply from the Scottish Government in 2012 which disclosed specific names of companies involved in Emamectin contamination of farmed salmon.

GAAIA publicly reported on this issue via FishyLeaks in September 2012: "[Media Backgrounder: Chemical Culture in Scotland](#)" (cited in a press release: "[Scottish Salmon's Toxic Toilets Named & Shamed!](#)").

The "[Media Backgrounder: Chemical Culture in Scotland](#)" included:

Chemical Contamination of Scottish Farmed Salmon:

In June 2012, the UK's Veterinary Residues Committee reported contamination of Scottish farmed salmon with Emamectin – prompting an investigation by Marine Scotland:

VRC/12/17v2

VETERINARY RESIDUES COMMITTEE: JUNE 2012

NATIONAL STATUTORY SURVEILLANCE SCHEME FOR VETERINARY RESIDUES IN ANIMALS AND ANIMAL PRODUCTS: 2012

Members are asked to:

i) Note the results of the 2012 surveillance programme since the last meeting, in particular the following:

One sample of salmon muscle contained a residue of **emamectin** at a concentration of 150 µg/kg.

FISH

Avermectins

Salmon

One sample of salmon muscle contained a residue of **emamectin** at a concentration of 150 µg/kg. Officers from Marine Scotland have been asked to carry out a follow-up investigation and the results will be reported to a later meeting of the Committee.

APPENDIX 2

NATIONAL SURVEILLANCE SCHEME 2012 - RESULTS OF FOLLOW-UP INVESTIGATIONS: 18 MAY 2012

Follow-up investigation results received since the last meeting are in bold text.

Species & Matrix	Residue detected & concentration (RM Ref)	Products used	Actives	Cause of residue
Fish				
Salmon Muscle	Emamectin 150 µg/kg (1209457)			Awaiting investigation results

Online via: <http://www.vmd.defra.gov.uk/VRC/pdf/papers/2012/vrc1217.pdf>

The VRC also reported in their 2005 'Annual Report on Surveillance for Veterinary Residues in Food':

Emamectin residues were detected in 4 of 175 salmon muscle samples tested (2.29%). These were at concentrations of between 110 and 120 µg/kg. It was found that the samples were of fish that were not ready for market, so the residues were not of health concern for consumers.

Online via:

<http://collections.europarchive.org/tna/20100907111047/vmd.gov.uk/vrc/reports/vrcar2005.pdf>

GAAIA filed a FOI request in August with Marine Scotland and the Veterinary Medicines Directorate. On 3 September, Marine Scotland provided a 149 page dossier of information on Emamectin contamination of Scottish farmed salmon since 2005 including cases involving Marine Harvest, Scottish Sea Farms, Skelda Salmon and the Scottish Salmon Company.

In 2005, following a site visit to Marine Harvest's salmon farm at Shell in the Western Isles, Emamectin contamination was reported by the Veterinary Medicines Directorate:

Case No.: **20050872** Date of Visit: **06 July 2005**
 Business No.: **FB0119** Site No.: **FS0108**
 Business Name: **Marine Harvest (Scotland) Ltd** Site Name: **Shell**

 Veterinary Medicines Directorate National Surveillance Scheme for Residues in Fish Primary sample		Directive 96/23/EC Sample Ref. No. (FIM NO) 0508471	
To: FRS		Please collect in: June	
the following sample and send to: Laboratory of the Government Chemist			
Place of sampling: Any Suitable Farm			
Sample type: Muscle		Species type: Salmon Any	
For use by Collecting Officer only Please use black ink and BLOCK letters			
Please record full details of sample:			
Case/Pen Number	Name of Site	Site Number (FS Number)	Company (FB Number)
66	SHELL	0108	0119
Important: If sample cannot be taken, give reasons and return top two copies to the Veterinary Medicines Directorate, Woodham Lane, New Haw, Addlestone, Surrey, KT15 3LS. Tel: 01932 336911 ext. 8328			
Remarks: vm00060341 oc			
Name of collecting officer in BLOCK letters please: YVONNE MCMURCHIE		 0508471	
Date of collection: 06/07/05		Date of despatch to Lab: 12/7/05	
For Laboratory use ONLY			
Sample ID: 1370500		Sample weight: 10g	
1. Ivermectin	Screening: -ve		Confirmatory:
	Name: NL05	Date: 19/9/05	Name: NL05
2. Emamectin	Screening: +ve		Confirmatory: +ve 110µg/kg
	Name: NL05	Date: 19/9/05	Name: NL05



Setting standards
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ANALYTICAL RESULTS:

Sample Number	Description	Test	Confirmed Result $\mu\text{g}/\text{kg}$
V0508471	Salmon muscle	Emamectin IB _a	110

REPORT DATE: 19 September 2005

Report prepared by:

Report authorised by:



Anna Pålsson
Veterinary Residues Team, LGC



Selma Teixeira
Veterinary Residues Team, LGC

In June 2006, the Scottish Government's Fisheries Research Services laboratory reported Emamectin contamination in four samples of farmed salmon sourced from a site in the Sound of Hoy in Orkney operated by the Norwegian-owned Scottish Sea Farms:



FISHERIES RESEARCH SERVICES

To:	[Redacted]	From:	Sonia Morrice
Address:	Scottish Sea Farms, Shetland	Tel:	01224 295635
Country:		Our Ref:	AH-FF-061-042-007
Fax No:	01595 860309	Date:	27 June 2006
Copy To: (And Fax No)		No of Pages:	3

Message:

Dear [Redacted]

As requested, attached is a copy of the Certificate of Analysis for the Emamectin samples from Sound of Hoy.

Regards





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SOUND OF HOY
R50691

Certificate of Analysis

Report number: FA20/06/28

CUSTOMER: Veterinary Medicines Directorate
Woodham Lane, New Haw, Addlestone, Surrey, KT15 3NB

SAMPLE DETAILS AND RESULTS:

VMD Sample Reference (RIM Form Number)	Sample Type	LGC LIMS Number
0518169	Salmon muscle	V0518169
0518170	Salmon muscle	V0518170
0518171	Salmon muscle	V0518171
0518172	Salmon muscle	V0518172

ANALYSIS REQUIRED:

Emamectin B1a

METHOD(S) USED:

LGC Method Screen - VMD/C1-2015 Confirmation - VMD/C1-3015

Duplicate samples were extracted with acetonitrile. Extracts were cleaned up by alumina chromatography followed by solid phase extraction using C18 cartridges. Samples were dried at 50°C under nitrogen and re-suspended in 1ml of acetonitrile.

Samples were quantified against the spiked matrix curve. Analytical recovery is determined by comparing the slope of this curve and that of matrix-matched standards (post-extraction spikes).

The detection capability (CC β) was calculated as 120 µg/kg in salmon muscle on the day of analysis.

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ANALYTICAL RESULTS:

Sample Number	Description	Test	Confirmed Result µg/kg
V0518169	Salmon muscle	Emamectin B1 _a	120
V0518170	Salmon muscle	Emamectin B1 _a	110
V0518171	Salmon muscle	Emamectin B1 _a	100
V0518172	Salmon muscle	Emamectin B1 _a	110

REPORT DATE: 2 March 2006

Report prepared by:



Deborah Hart
Veterinary Residues Team, LGC

Date: 2 March 2006

Report authorised by:



Selina Teixeira
Veterinary Residues Team, LGC

Date: 2 March 2006

Sonia Morrice

From: Sonia Morrice
Sent: 09 March 2006 16:25
To: Maggie Green (Maggie Green)
Subject: Emamectin in salmon

Hi Maggie

I received the paperwork for the emamectin positives from Steph. All four related to the same site - Hoy A, belonging to Scottish Sea Farms. I have checked our case record for the visit. Mike Bland visited on the 3rd November and checked the medicines records. It is noted on the case sheet that a Slice treatment had been administered in July. I have spoken to the site contact who has confirmed that the site was treated for Slice in July (8-14th) and again in October (22 - 29th). I suspect that the latest treatment had not been entered in the treatment record (otherwise Mike would have noted it) - however we can not be certain. It is now in the record, a copy of which is to be faxed to me. The fish are still on site - harvesting has not started yet but is due to start in April.

I plan to send the results out by post. Please let me know if you wish us to take any further action.

> From: Green, Maggie
 > Sent: 07 March 2006 12:59
 > To: Hunt, Stephanie
 > Cc: Rubidge, Janet
 > Subject: RE: Salmon emamectin

>

> Steph,
 >
 > Slice which contains emamectin has a zero withdrawal period. I
 > suspect these fish were not going to be harvested immediately. We
 > need to remind FRS to check the medicines records before sampling so
 > they don't sample fish that have just been treated. Hopefully now we
 > have 'avermectins' on the RIM forms instead of 'ivermectin' this type
 > of problem will not occur in future.

>
 > However, there was some intelligence about a year to 18 months ago
 > that farmers were using products containing this active that aren't
 > authorised in the UK. Can you speak to or e-mail FRS about the
 > possibility of illegal medicines being used i.e. did the sampling
 > officer check the medicine records? The results would suggest that
 > they didn't as otherwise they would know emamectin had been used
 > rather than ivermectin. Ideally we need to know what product was used and when the fish were
 slaughtered.

From: Green, Maggie [mailto:m.green@vmd.defra.gsi.gov.uk]
Sent: 27 March 2006 11:41
To: 'Sonia Morrice'
Cc: Rubidge, Janet, [REDACTED] Crutcher, Eric
Subject: RE: Emamectin in salmon

Sonia,

Thanks for the information on when the sampling was carried out in relation to the treatment with SLICE. If the residue was in excess of the MRL in the fish on 3 November then a nil withdrawal period would appear to be inadequate. I am copying in our colleagues in our Suspect Adverse Reaction Scheme and also our licensing Branch. Can you confirm that it was SLICE being used and not an imported generic treatment. I know that FRS inspectors had previously found an emamectin treatment from China on one site.

Regards,

Maggie

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

From: Sonia Morrice [mailto:S.Morrice@marlab.ac.uk]
Sent: 21 March 2006 08:00
To: 'Green, Maggie'
Subject: RE: Emamectin in salmon

Hi Maggie

Thanks for the clarification. Maybe we're cynical up here but if I was using an illegal lice treatment I might try to cover it up by using a legal one as well!

Further incidents of Emamectin contamination were reported in 2009 – including one case at double the Maximum Residue Limit (MRL) at a site in Sian Bay in Setter Voe in Shetland operated by Skelda Salmon:

FORM B

**DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS
SCOTTISH EXECUTIVE ENVIRONMENT AND RURAL AFFAIRS
DEPARTMENT,
NATIONAL ASSEMBLY FOR WALES AGRICULTURE DEPARTMENT**

**THE FOOD SAFETY ACT 1990
THE ANIMALS AND ANIMAL PRODUCTS (EXAMINATION FOR
RESIDUES AND MAXIMUM RESIDUE LIMITS) REGULATIONS 1997 (AS
AMENDED)**

**(Regulation 16)
REFERENCE ANALYSIS CERTIFICATE**

To.....

of.....

Reference analysis of the official sample described below has confirmed that it contains a residue of:

- d) an authorised substance at a concentration exceeding the relevant maximum residue limit.

as indicated in box 10 overleaf.

Signature of analyst Date: 24 June 2009

Analyst at LGC
An approved laboratory for the purposes of the Regulations.

Name (in block letters) LOUISE CLIFFORD

Official address Queens Road, Teddington, Middlesex, TW11 0LY

1. Sample Reference No.	0909538
2. Sample type and amount	Muscle, not known
3. Date of collection	14 05 09
4. Method of collection	Not known
5. Species and sex	Salmon, not known
6. Age (months) approx.	Not known
7. Tested for	Avermectins
8. Relevant Maximum residue limit (if applicable)	100 µg/kg
9. Primary analysis result	Positive Emamectin
10. Reference analysis result	210 µg/kg
11. Laboratory Ref. No.	V0909538

In 2010, the Veterinary Medicines Directorate reported two cases of Emamectin contamination at Lakeland Marine's farm at Bagh Dail Nan Cear:

VMD ref VMD11310A

Marine Scotland Science ref, case 20100361

Report for Veterinary Medicines Directorate (VMD) – follow up investigation following positive samples attained on a fish farm site for emamectin benzoate (active ingredient of SLICE)

Introduction

In reference to positive samples being attained for emamectin benzoate above the Maximum Residue Limit (MRL) (sample ref's 0927638 and 0927639) at the site known as Bagh Dail Nan Cear (Marine Scotland ref. FS0805) a follow-up investigation on site was conducted on the 8th of February 2010. The following is a brief report on the investigation's findings -

Report

Inspectors present – Daniel J Pendrey and Andrew S Mayes
Company representative for Lakeland Marine Farm Ltd (Marine Scotland ref. FB0349) – Iain Webster

The positive samples were attained from Atlantic salmon (*Salmo salar*) in cages three and six. The inspectors were informed that these cages had not been harvested or moved since the positive samples had been taken. The fish on site should all be harvested by late summer 2010.

Medicine records were being kept and maintained correctly. The marketing authorisations in place for SLICE were PMF 01310050 and PMF 01310051 as recorded in the treatment record. A SLICE treatment was recorded as having been administered between the 13th of November 2009 and the 19th of November 2009. All cages on site were recorded as having been treated during these dates and at that time the fish were approximately 3Kg average weight and had been input to the site late in 2008.

The substance was administered as an in-feed treatment and the Veterinary Instruction (VI) was available for the treatment. However, the VI for the site appeared to have been supplemented by a proportion of the VI allocation for another of the company's sites known as Ardmaddy PMF ref. 01310050.

The treatment was reportedly administered within the seven day period for which SLICE is to be given. The medicated feed was reportedly stored in feed hoppers and stored correctly.

Additional information

The inspectors present were informed that due to fish health issues on site the original plan to feed the fish with SLICE was put back. As a consequence the company made a decision to transfer some of the VI treatment allocation from another site. Based on the numbers on site and the average weights it was estimated by the inspectors that the biomass on site at the time of treatment was below the biomass against which the VI was given.

In summary, it appears there has been a miscalculation by the company with regard to the biomass to be treated. Therefore, a higher dosage of active ingredient was administered with the likely result being the substance tested for being above the MRL.

DJP and ASM 18th February 2010



In April 2012, the VMD reported another case of Emamectin contamination at a site in Lamlash Bay on the Isle of Arran operated by the Scottish Salmon Company:

From: Brailsford, Carol [c.brailsford@vmd.defra.gsi.gov.uk]
Sent: 27 April 2012 10:32
To: Duguid S (Sonia) (MARLAB)
Cc: Russell, Sandra; Hunt, Stephanie
Subject: FW: Confirmed positive - 1209487
Attachments: 1209487 [S12-004656].pdf

Hi Sonia,
 A copy of the paperwork for a salmon sample found to non-compliant for emamectin 150 ug/kg, is attached.
 Please could you arrange for a follow-up inspection to take place as soon as possible.
 Thanks
 Carol

Carol Brailsford | Residues Surveillance | Veterinary Medicines Directorate
 Direct Dial: +44 (0)1932 338330 | Fax: +44 (0)1932 336618 | E-mail: c.brailsford@vmd.defra.gsi.gov.uk
 www.vmd.gov.uk



ANALYTICAL RESULTS:

Sample Number	Description	Emamectin - Screen result (µg/kg)	Confirmed Result (µg/kg)
S12-004656	Salmon, Muscle & skin	Positive	150

REPORT DATE: 26 April 2012

Veterinary Medicines Directorate
 National Surveillance Scheme for Residues in Fish
Primary sample

To: FRS Please collect in: Any Month
 the following sample and send to: FERA, Room 50G30, Sand Hutton, York, YO41 1LZ
 Place of sampling: Any Suitable Farm

Sample type: Muscle & Skin Species type: Salmon Any

For use by Collecting Officer only Please record full details of sample: **Please use black ink and BLOCK letters**

Cage/Pen Number	Name of Site	Site Number (FS Number)	Company (FB Number)
<u>10</u>	<u>Lamlash</u>	<u>0623</u>	<u>0169</u>

Important: If sample cannot be taken, give reasons and return top two copies to the Veterinary Medicines Directorate, Woodham Lane, New Haw, Addlestone, Surrey, KT15 3LS. Tel: 01932 336911 ext. 8328

Remarks: Potential withdrawal for morzz.

Name of collecting officer in BLOCK letters please: D. TOMLINSON
 Date of collection: 27.3.12 Date of dispatch to Lab: 31/12

Barcode:

For Laboratory use ONLY

"Test for"	Screening		Confirmatory	
	Name	Date	Name	Date
1. <u>Avermectins</u>				
2.				

Q12/S12-004656-000
 Sample from: Salmon Muscle & Skin
 Agent Type:

A follow up investigation by Marine Scotland included:

marine scotland
science



VMD investigation – follow up of positive for Emamectin – Lamlash, 16/05/2012

Following notification from VMD that a muscle sample taken at the Scottish Salmon Company (FB0169) site Lamlash (FS0423) was over the maximum residue limit (MRL) for Emamectin an investigation was conducted to determine the cause. The salmon muscle sample (RIM 1209487) was taken by Marine Scotland Science (MSS) Fish Health Inspector David Tomlinson, at Lamlash on 27 March 2012. The sample was processed by the Food and Environment Research Agency (FERA) and found to have a residue level of 150µg/kg of Emamectin, therefore being above the MRL.

On 16 May 2012 an unannounced inspection was conducted at the Lamlash site by MSS Fish Health Inspectors Sonia Duguid and David Tomlinson. 125,000 Atlantic salmon of an average weight of 3.5kg were on site at the time of the investigation.

Medicine records were checked for the site and all requirements of the Veterinary Medicines Regulations in respect of administration of medicines were maintained. Two treatments of Slice had been administered over the last few months – the first was administered between 19-25 December 2011 and the second between 19-25 March 2012. The second treatment finished only two days prior to the positive sample being taken. Veterinary instructions were inspected for both treatments and found to be present and correct. Both veterinary instructions stated a 'zero withdrawal'. Two Alphamax treatments had also taken place on site this year – on 13 February 2012 and 8 May 2012. Although the official withdrawal for the slice treatments was zero, the company has customers in the USA and therefore has a company policy of a 60 day (not degree day) withdrawal for Slice. Under the company policy withdrawal, the site was under withdrawal at the time the sample was taken, and in fact still at the time of the investigation. It was clear from both the records and the farm software which cages were under the company imposed withdrawal.

It is my opinion that the most likely cause of the sample testing above the MRL is due to the difficulties involved in treating aquaculture animals in general. There is always a natural variation in fish weight in populations, which makes calculation of biomass problematic and therefore the administration of an exact dose of medicine impossible. There will also be variations in appetite between fish in a cage, making it extremely difficult to administer an exact dose of an oral medicine. It was recommended that the company submit a suspect adverse reaction report.


Sonia Duguid
1 June 2012

Read the dossier in full [online here](#)

The Scottish Government's FOI reply dated 3 September 2012 is forwarded in the next email.

My additional point here is that company specific information has already been provided by the Scottish Government (as have SEPA - cited in my review request of 11 February 2017).

GAAIA argues that a precedent has been set or at least a bar showing the level of transparency expected of Government bodies has already been established.

The VMD's refusal to disclose exactly the same type of information disclosed by the Scottish Government (GAAIA cannot see any substantive differences) is therefore out of kilter and hence unreasonable.

Please overturn the VMD's initial refusal and make it right.

Indeed, should the VMD reiterate their refusal to disclose the information then GAAIA would have no alternative but to appeal the unreasonable decision and to secure the information via the Scottish Government (assuming they have access) thus embarrassing the VMD. Surely it is far better to disclose the information now?

Don

Don Staniford

Director, Global Alliance Against Industrial Aquaculture (GAAIA):
<http://www.salmonfarmingkills.com>

From: Don Staniford [<mailto:salmonfarmingkills@gmail.com>]

Sent: 11 February 2017 09:00

To: 'ati@vmd.defra.gsi.gov.uk'

Cc: 'Lewsey, David'

Subject: Review request re. FOI on Emamectin non-compliant cases for farmed salmon (1601857, 1601858 & 1601859) - VMD ref: ATI437

Please consider this a formal request for a review of the FOI filed by GAAIA on 20 January 2017 (enclosed below).

The reply by David Lewsey (copied in here) is unacceptable and unreasonable.

Section 30 of the FOIA should not be used as a cloak of confidentiality for all commercially sensitive issues. It is obvious that the company involved in this case does not want any publicity and that disclosure would damage its reputation.

However, giving a blanket exemption establishes a dangerous precedent and allows companies carte blanche to do as they please behind the scenes safe in the knowledge that any breaches of the law/rules will not be reported publicly.

In this particular case, the unnamed company has clearly used a toxic chemical (Emamectin benzoate) contrary to the rules and has breached the VMRs. Moreover, illegal residues of that toxic chemical has been publicly reported as being detected in farmed salmon by the VMD's surveillance testing.

Hence, the argument in favour of naming and shaming the company concerned is strong. This is an obvious food safety issue and it seems clear that the contaminated farmed salmon made it into the food chain for human consumption. Indeed, in view of the fact that many

consumers freeze salmon it can be argued that this case is a legitimate health issue and there should be a product recall and Rapid Food Alert issued in the UK and in the European Union.

Whilst the VMF refuses to disclose the name of the company concerned, the Scottish Environment Protection Agency does divulge names in relation to Emamectin contamination (the same chemical involved in this case).

For example, here's recent information obtained via FOI from SEPA (both sites are identified as operated by Marine Harvest) for non-compliances in 2015:

CAR/L/1028518	Marulaig Bay MCFE, Loch Boisdale, South Uist
Marulaig Bay marine cage fish farm is Poor for 2015 due to a cage edge Emamectin Benzoate residue failure and a breach in the condition. SEPA is working with the operator to improve licence compliance and reduce the environmental impact from the farm	

Moreover, the SEPA FOI documents detailed an administrative error for another chemical (azamethiphos):

CAR/L/1004080	Scotasay MCFE, East Loch Tarbert
Scotasay marine cage fish farm is Poor for 2015 due to repeated exceedence of the licecnd azamethiphos discharge limit. The situation arose from an administrative error which has now been resolved.	

And here's a non-compliance entry for 2014 (again, the operator is identified by SEPA in other documents released by SEPA via FOI as Marine Harvest):

CAR/L/1009963	Seaforth MCFE, Loch Seaforth, Isle of Harris
The operator exceeded their permitted use of sea louse medicine Emamectin Benzoate (Slice). SEPA is working with the operator to prevent any future recurrence.	

Another non-compliance by Marine Harvest for 2013 reads (SLICE is the trade name for Emamectin benzoate - the toxic chemical involved in this case):

Camas Glas MCFE, Loch Sunart
Late reporting of monitoring data. Exceedence of sediment SLICE EQS.

And here's another non-compliance for 2013 involving both Teflubenzuron and Emamectin benzoate (the company involved was named by SEPA as Loch Duart):

CAR/L/1001808	Eilean Riabhach MCFE (Site 11), Badcall Bay
Teflubenzuron treatment completed 10/11/12, residue sampled 27 days later on 7/12/12, within the 10-30 day window. Reported to SEPA within 16 weeks of sampling on 2/4/13. The average of the far field replicates exceeded the far field PNEC. Company applied for an Operator initiated variation to remove Teflubenzuron from this sites licence on 27/8/13 this was granted on 9/12/13. Emamectin Benzoate treatment completed 26/7/12, seabed residue sampled 191 days later on 2/2/13 outwith the 80-169 day window	

And another non-compliance for 2013 (Loch Duart is the company named by SEPA):

CAR/L/1001826	Loch Dhrombaig MCFF, Eddrachillis Bay
Calicide far field sample results greater than 2 times EQS so classed as significant breach.	

Here's a non-compliance for 2012 (Loch Duart is the company named by SEPA):

CAR/L/1001808	Eilean Riabhach MCFF (Site 11), Badcall Bay
Borderline sea bed survey undertaken in accordance with the Licence conditions by the operator on 17 July 2012. Residue returns following treatment with Emamectin in Sept 2011, Teflubenzeron in Nov 2011 and Teflubenzeron in May 2012 due to be reported to SEPA in accordance with conditions of Licence not submitted. Residue returns following treatment with Emamectin in Jan 2012 due to be reported to SEPA in accordance with conditions of Licence not submitted within required timescale. Results comply with the conditions of the licence.	

And another for 2012 (Marine Harvest is the company named by SEPA):

CAR/L/1004218	Mid Loch Shell East MCFF, Loch Shell
This site is poor due to an unsatisfactory benthic seabed survey and a far field exceedance was recorded in the slice residual	

And here's a non-compliance for 2011 (Loch Duart is the company named by SEPA):

CAR/L/1003892	Rubh an Aiseig MCFF (Site 1), Loch Laxford
This site is not compliant because of an unsatisfactory seabed survey undertaken in accordance with the licence conditions by the operator on 24/08/2011 and reported to SEPA outwith the required timescale on 16/01/2012. In addition to the above the salmon were treated with Emamectin on 14/09/2010, the residue was sampled in accordance with the licence conditions by the operator on 18/01/2011 return received by SEPA outwith the required timescale on 10/11/2011, exceedance at far field site.	

This FOI data is already posted online via [SEPA's disclosure log](#):

F0187239	Fish Farms - CAS Failing Sites	03/02/2017
<ul style="list-style-type: none">• Description: 1. Please provide information and data on fish farm compliance since 2011. 2. In terms of "number-crunching exercises" I am asking if any collation (e.g. time-trend analysis and company/industry ranking) has been carried out - and therefore be made available. If it does not exist then it does not exist. 3. Re. internal memos what other documents are held by SEPA? Please just focus on the sites ranked as "Poor" or "Very Poor". 4. Re. SEPA Monitoring Reports, if the request needs to be narrowed, just focus on Marine Harvest sites ranked as "Poor" in 2016.• Information: Please refer to the attached response letter and released information.• Related documents:<ul style="list-style-type: none">◦ F0187239 EIR Response Redacted◦ Release		

The VMD's withholding of similar information is therefore unjustifiable as judged against SEPA's disclosure protocol.

Our Reply

Correspondence plus copies of the written advice and other details

You may find it helpful to know that the FOIA gives you an entitlement to information rather than documents and it is in this context that we want to be as open as possible in answering your request. The Act itself also requires us to help people obtain the information they are looking for.

Advice and other details

The results were discussed with the company who confirmed that the veterinary medicine, Slice, had been administered in accordance with the veterinary instruction with no withdrawal period indicated. Following an internal investigation, the company found that there appeared to be an error in the biomass calculation, which resulted in an incorrect split of the medicated feed between cages being treated. Due to this being down to human error, the company did not submit an a suspect adverse reaction report.’

Names of the companies involved

In these circumstances, we are not releasing the information you request. We judge that the exemption at section 30 of the FOIA applies in this case. Section 30 is concerned primarily with preserving the integrity of certain proceedings and investigations that public authorities have the power or duty to conduct.

After careful consideration we conclude that the public interest in withholding the information strongly outweighs that for disclosure in this case. The VMD is responsible for coordinating the enforcement of the Veterinary Medicines Regulations (VMRs). It will investigate any suspected breaches of the VMRs either found through its surveillance programme or reported by members of the public, veterinary surgeons, farmers, pharmacists and other veterinary medicine retailers. It takes the necessary enforcement action in accordance with our Enforcement Strategy.

The purpose and method of enforcement, which we set out in the strategy, is to secure compliance with the requirements of the VMRs. In keeping with Defra’s approach to better regulation and enforcement we recognise that the best way to achieve compliance is to ensure, by guidance and advice, that those carrying out regulated activities understand their responsibilities. We therefore seek to work with businesses and individuals to assist them in complying with the legislation through the provision of advice and guidance.

We judge that such collaboration could diminish if we placed certain information in the public domain. This would mean the VMD was less able to address suspected breaches of the VMRs, and that part of VMD’s role as regulator to protect the public interest would be less effective.

Information releasable to the public

Information we disclose in response to this FOIA request is releasable to the public. In keeping with the spirit and effect of the FOIA and the government’s Transparency Agenda,

we may place this information disclosed to you on GOV.UK, in due course. We will not place information identifying you on the GOV.UK website.

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Our Service

If you are unhappy with the service you have received in relation to your request and wish to make a complaint, you may request an internal review within two calendar months of the date of this e-mail. If you would like to request an internal review please write to the VMD via ati@vmd.defra.gsi.gov.uk.

If you are not content with the outcome of the internal review you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at:

Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF

Many thanks
David Lewsey
Freedom of Information Officer
VMD

From: Lewsey, David
Sent: 20 January 2017 08:18
To: 'Don Staniford'
Subject: RE: FOI on Emamectin non-compliant cases for farmed salmon (1601857, 1601858 & 1601859) - VMD ref: ATI437

Dear Don

Thank you for your email below, dated 20 January 2017.

We are dealing with it under the Freedom of Information Act 2000.

As required by the legislation, we aim to answer your request within 20 working days following the date we received it.

If for any reason we are unable to meet this deadline we will keep you fully informed of the reasons for this.

Please could you confirm you have received this e-mail and if you have any queries please contact me quoting ATI437.

Many thanks

David Lewsey

Freedom of Information Officer

From: Don Staniford [<mailto:salmonfarmingkills@gmail.com>]

Sent: 20 January 2017 05:46

To: Lewsey, David

Subject: FOI on Emamectin non-compliant cases for farmed salmon (1601857, 1601858 & 1601859)

David,

Further to your FOI reply (VMD ref: ATI429) and to the information you directed me to: <https://www.gov.uk/government/statistics/residues-of-veterinary-medicines-in-food-2016>

From the information uploaded in December 2016, I see there are three non-compliant samples for Emamectin in farmed salmon:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/579748/97653_1-v4-2016_Published_Results_Paper.pdf

NATIONAL STATUTORY SURVEILLANCE SCHEME FOR VETERINARY RESIDUES IN ANIMALS AND ANIMAL PRODUCTS: 2016

RESIDUES DETECTED ABOVE THE REFERENCE POINT TO DATE: 31 OCTOBER 2016

Sample	Analysed for	No. of analyses	No. of Non-compliant samples	Reference Point µg/kg/l	Concentrations above the Reference Point µg/kg/l (more than one substance may be found in one sample)
Calf Kidney	Antimicrobial (Screen 1)	76	2	800 1000	1600 (chlortetracycline) 5900 (tomicosin)
Calf Kidney	Antimicrobial (Screen 4)	70	1	1000	4700 (dihydrostreptomycin)
Calf Kidney	Florfenicol	69	1	300	380 (florfenicol)
Cattle Kidney	Antimicrobial (Screen 1)	831	1	100	1100 (sulfadiazine)
Cattle Kidney	Metals	57	4	1000 500	1000, 1280 (cadmium) 600, 1100 (lead)
Cattle Kidney	NSAIDs	446	1	65	130 (meloxicam)
Cattle Liver	Avermectins	246	1	100	190 (ivermectin)
Cattle Liver	Glucocorticoids	279	3 substances in 1 sample	Presence Presence 10	19.1 (cortisol) 88.2 (cortisone) 1.03 (prednisone)
Cattle Urine	Steroids (Screen 1)	1736	34 substances in 33 samples	Presence Presence Male 0.5 / Female 5	2.0, 2.4, 2.5, 2.8, 3.1, 3.6, 4.9 (alpha-boldenone) 0.38 (beta-boldenone) 0.81, 0.79, 1.1, 1.4, 2.1, 4.1, 5.3, 5.3, 5.9, 6.5, 6.7, 7.1, 7.1, 7.3, 7.8, 7.9, 8.9, 9.3, 9.6, 12, 20.5, 23, 33 (alpha-nortestosterone)
Cattle Serum	Oestriol	649	2	0.4 0.4	960 (alpha-estradiol) 130 (beta-estradiol)
Cattle Urine	Testosterone	746	1	Presence	16 (testosterone)
Cattle Urine	Zeranol	573	10	Presence Presence	1.5, 1.6 (taleranol) 1.97, 2.3, 2.5, 3.09, 3.7, 3.9, 4.8, 18.3 (taleranol & zeranol)
Sheep Kidney	Antimicrobial (Screen 1)	2248	1	1000	11300 dihydrostreptomycin
Sheep Kidney	Metals	41	7	1000 500	1600, 1700, 1800, 1800, 2300, 2400 (cadmium) 1500 (lead)
Sheep Liver	Anthelmintics	858	5	1500	1631, 1909, 3800, 3700, 5800 (closantel)
Sheep Liver	Avermectins	392 GB	1	100	580 (ivermectin)
Sheep Urine	Steroids (Screen 1)	430	39 substances in 38 samples	Male 1 / Female 5 Presence	1.5, 2.0, 2.2, 2.2, 2.3, 2.4, 2.4, 2.4, 2.5, 2.5, 2.5, 2.6, 2.6, 2.6, 2.7, 2.9, 3.0, 3.1, 3.2, 3.4, 3.4, 3.6, 4, 4.6, 4.7, 4.9, 4.9, 5.7, 6.1, 6.2, 7.4, 8.3, 9.6, 11, 12, 14 (alpha-boldenone) 0.81 (beta-boldenone) 0.85, 1.3 (beta-nortestosterone)
Sheep Urine	Zeranol	57	1	Presence	2.8 (taleranol & zeranol)
Pig Kidney	Antimicrobials	1121	3	100 100	140, 990 (sulfadiazine) 166 (sulfadimethoxine)
Pig Kidney	Nitrofurans	244	1	1	8.5 (semicarbazide)
Horse Kidney	Metals	1	1	1000	17000 (cadmium)
Broiler Liver	Coccidiostats	501	2	Presence	5.7, 10 (salinomycin)
Cattle Milk	Antimicrobial (Screen 1)	387	1	4	44.3 (amoxicillin)
Farmed Salmon	Avermectins	73	3	100	120, 150, 170, (emamectin)
Farmed Trout	OC/PCBs	6	1	10	160 (dieldrin)
Hen Egg	Coccidiostats	450	2	150 2	370 (lasalocid) 15 (monensin)

Last updated: DECEMBER 2016

Could you please provide information including the names of the companies involved?

Please provide any correspondence on this issue as well as any other information on these non-compliant cases in farmed salmon (namely 1601857, 1601858 & 1601859).

The following information is provided via

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/579748/97653_1-v4-2016_Published_Results_Paper.pdf (p15)

Dear Don

Thank you for your email dated 4 December 2016.

We are dealing with it under the Freedom of Information Act 2000 (FOIA).

Your Request

You asked for information on chemical residues in farmed salmon during 2014, 2015 and 2016. You asked us to list all sampling tests and results - indicating country of origin, species of salmon, the supermarket or retail outlet, the chemical/chemicals detected, levels found, MRLs and limits of detection. And to provide specific details of all positive sampling results including laboratory reports, analyses, correspondence, letters to supermarkets and salmon farming companies and any other information pertaining to chemicals in farmed salmon since 2014.

Our Reply

Sampling tests and results

We publish the results of the Residue Surveillance Schemes on www.gov.uk and you can find them using the following link:

<https://www.gov.uk/government/statistics?departments%5B%5D=veterinary-medicines-directorate>.

These reports contain the country of origin; the chemical and level detected; the action level, and the outcome of any investigations into the causes of these residues.

Under section 21 of the FOIA we do not have to provide the information you request because it is accessible to you via a website. Section 21 recognises that the right of access is supplementary to the many ways in which public authorities already provide information to members of the public.

The limit of detection

We cannot release the limit of detection without breaching the confidentiality of commercially sensitive data of the laboratory carrying out the tests. In the competitive world of laboratory testing, it is widely accepted that competitors could use the knowledge of other laboratory's detection limits to identify opportunities for them to develop competitor testing. We consider that release of detection limits could serve to weaken a laboratory's position since it releases market-sensitive information of potential usefulness to competitors.

Companies are obliged to provide this information to the VMD as part of the regulatory system. Such information is vital for the VMD and we must be able to ensure that laboratories provide us accurate information in the knowledge that we will not release that information. Publishing detection information on a particular test could undermine our stakeholders' trust in the regulatory process as well as the laboratory's commercial position. This could lead to laboratories becoming unwilling to carry out testing for us, which would have a detrimental affect on human and animal welfare.

We consider such factors weigh against the public interest in disclosing the limits of detection. In these circumstances, we consider that Section 43 of the FOIA would apply to such information and that it would not be in the public interest to release it. Section 43 exempts information whose disclosure would be likely to prejudice the commercial interests of any person.

Specific details of all positive sampling results

You may find it helpful to know that the FOIA gives you an entitlement to information rather than documents and it is in this context that we want to be as open as possible in answering your request. The Act itself also requires us to help people obtain the information they are looking for. All the information you request – other than the limits of detection – is contained in the published reports above. The other information in the documents we hold relates to the administrative process by which we manage the surveillance programme. We do not hold any letters to supermarkets and salmon farming companies.

Copyright

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Information releasable to the public

Information we disclose in response to this FOIA request is releasable to the public. In keeping with the spirit and effect of the FOIA and the government's Transparency Agenda, we may place this information disclosed to you on GOV.UK, in due course. We will not place information identifying you on the GOV.UK website.

Our Service

If you are unhappy with the service you have received in relation to your request and wish to make a complaint, you may request an internal review within two calendar months of the date of this e-mail. If you would like to request an internal review please write to the VMD via ati@vmd.defra.gsi.gov.uk.

If you are not content with the outcome of the internal review you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at:

Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF

Many thanks
David Lewsey
Freedom of Information Officer
VMD

From: Don Staniford [<mailto:salmonfarmingkills@gmail.com>]
Sent: 05 December 2016 17:57
To: Lewsey, David
Subject: RE: FOI on farmed salmon & chemical residues (2014-2016) - VMD ref: ATI429

Thanks.

From: Lewsey, David [<mailto:d.lewsey@vmd.defra.gsi.gov.uk>]
Sent: 05 December 2016 09:34
To: salmonfarmingkills@gmail.com
Subject: FOI on farmed salmon & chemical residues (2014-2016) - VMD ref: ATI429

Dear Don

Thank you for your email below, dated 4 December 2016.

We are dealing with it under the Freedom of Information Act 2000.

As required by the legislation, we aim to answer your request within 20 working days following the date we received it.

If for any reason we are unable to meet this deadline we will keep you fully informed of the reasons for this.

Please could you confirm you have received this e-mail and if you have any queries please contact me quoting ATI429.

Many thanks

David Lewsey

From: Don Staniford [<mailto:salmonfarmingkills@gmail.com>]
Sent: 04 December 2016 19:49

